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Environmental Assessment of Social Fund Projects

In many developing countries, Social Funds (SFs) have become a major source of development finance at the community level. Set up as financial intermediaries to channel resources from international donors to small, poor and vulnerable communities. SFs finance up to several thousand subprojects annually, such as school and health clinics, village water supply and sanitation, rural roads, rural electrification, and small irrigation works. Subproject proposals are submitted by local communities or their representatives and evaluated against specific criteria.

Many subprojects financed by SFs raise only minor or no environmental issues. However, experience shows that SFs need to establish simple environmental assessment procedures to avoid causing adverse harm to the environment and human health. This Update discusses why such procedures are needed and how they might be integrated into the Social Fund Project Cycle.

Background

Social Funds (SFs) are financial intermediaries that channel resources to poor and vulnerable beneficiaries for small-scale projects, based on pre-determined eligibility criteria. These projects are proposed, designed, and implemented by public or private agencies, such as local governments, NGOs or community groups themselves. SFs were designed to alleviate the impact on the poor from employment losses and income reductions caused by the debt crisis and related structural adjustment measures of the late 1980s and early 1990s in Latin America. Bolivia led the way with the creation of its Emergency SF (FSE) in 1986, less than a year after the start of a comprehensive economic reform program.

The number of SF projects in the World Bank's lending portfolio has grown significantly in recent years. At the end of fiscal year 1996, the Bank had approved 51 SF projects in 34 countries with 40 active projects amounting to a portfolio of about US \$ 1.2 billion. In fiscal 1996 alone, commitments for SF projects exceeded half a billion US dollars accounting for about 37 percent of cumulative Bank SF commitments over the period 1987 to end of the fiscal 1996. In virtually all SFs, external financing is also provided by regional development banks and a variety of multilateral and bilateral donors.

SF subprojects provide critically important social services to relatively poor beneficiaries in all the countries where they operate, principally in areas such as infrastructure, health and education. When these funds were first implemented in the late 1980s, most project components were not considered to have significant environmental impacts. Today, however, the large number and increasing diversity of fund projects require closer environmental evaluation, and most SFs are subject to environmental screening and review processes.

Environmental impacts related to SF projects include, increased soil erosion and associated degradation of water quality from road construction and rehabilitation, threats to human health from increasing applications of pesticides and contamination of drinking water systems by human and animal waste. This Update provides a closer examination of these issues and provides clear, practical guidance on how to design and implement these projects in a more environmentally sustainable manner.

SF activities

SFs operate with a mandate to deliver social services while minimizing administrative costs. Roughly one-third of total project costs are allocated to economic

infrastructure projects, and a similar proportion to health, nutrition, population and education projects. These activities include helping municipalities and community groups assume responsibility for providing basic health and education services as well as local water supply, sanitation, and rural road projects. The remaining one-third of project budgeting covers activities such as training or microfinance.

The growth and expansion of these funds into numerous countries over the last several years is paralleled by a shift from the original objective of providing short-term emergency assistance towards longer term goals. For example, portfolios in many infrastructure sectors are expanding to include rural roads, small scale irrigation, etc. This shift presents new challenges to ensure that the benefits they provide are sustainable (see Box 1).

It is now apparent that SFs must develop better methods to classify subprojects in their portfolio, according to potentially significant adverse environmental impacts. Review of Bank SF appraisal documents (referred to as Staff Appraisal Reports - SARs) and specific SF Operational Manuals indicates that in a number of cases potentially adverse environmental impacts were

Box 1. Environmental sustainability with sanitation projects in the El Salvador Social Fund (FIS)

In El Salvador, a recent study conducted in the country attempted to determine the acceptance and use of latrines. Throughout the country, FIS has been supporting the construction and technology transfer of composting latrines. Composting latrines are built with two “composting” or anaerobic chambers that are used alternately to ensure the proper breakdown of parasitic pathogens. The promotion of this type of latrine is logical, each household can take advantage of the byproduct of night soil. When properly maintained and used, this source of nutrients is available for local household gardens. Not only is the health of the household improved, but supplemental food crops can be grown, without requiring the additional expense of fertilizer application. Unfortunately, it was found that only 40 percent of the surveyed latrines were being used properly. People were not keeping the anaerobic compost chamber closed for the required time period and often emptied the waste and used it as night soil before the pathogens were killed. These survey results suggest that although the latrines were being constructed according to standard guidelines, their use and maintenance were far from acceptable. In an undesirable twist of circumstances, the promotion and use of these compost latrines may be contributing to increased exposure to harmful pathogens, not reduction.

Box 2. Environmental concerns of social fund projects—small scale irrigation schemes in Ethiopia

In Ethiopia, a third of the Social Fund portfolio is earmarked for increasing agricultural productivity through the construction of microdams and small scale irrigation schemes. These subprojects are desperately needed, since much of the northern part of the country remains prone to famine year after year. Initial planning of these subprojects did not identify any major environmental issues since in terms of cost and complexity to other large scale dam projects funded by the Bank over the past thirty years, these were all minor projects. However, a closer examination of these projects shed important insight into significant environmental concerns.

The construction of 15 to 20 meter high earth dam heads creates reservoirs of standing water. Below the dam, irrigation canals are built to deliver water to 100 to 150 hectares of farm land. The infrastructure will contribute to a second season of agricultural production (by providing reservoir water to the fields below during the dry season). Key environmental sustainability concerns include:

- **Watershed management.** Practical watershed management practices for erosion control were lacking. Sedimentation on the reservoir bottom would, in several years time, result in reduced water capacity and subsequent reduced water flow to the irrigation canals.
- **Human health.** The creation of small reservoirs provides very favorable conditions for expansion of two prevalent diseases in the region, malaria and schistosomiasis. The malaria mosquito vectors thrive in such favorable standing water habitats. The introduction of rapidly reproducing snail populations of the variety that spread schistosomiasis has already been documented in other irrigation projects in the country. Current in-country experts feel that more research is required to gain a better understanding of these potential health concerns.
- **Agricultural inputs.** Expansion of agriculture production into a two cropping system requires use of appropriate seed varieties which often require increased use of both pesticides and fertilizers. It is important to realize that the use of pesticides can pose two significant threats; adverse health effects for farm workers and others exposed to pesticides, and contamination of the environment and organisms exposed to these chemicals.

The Ethiopian Social Rehabilitation and Development Fund (ESRDF) has recently reevaluated these subprojects to incorporate better environmental considerations to address the above issues. The objective is to promote more effective and sustainable projects.

overlooked or not fully appreciated (see Box 2—Environmental Concerns Ethiopia small scale irrigation). Furthermore, in those instances where subproject environmental impacts were identified, delineation of specific impacts was difficult since specific subprojects are not known until after funds are implemented.

Applicability of World Bank environmental policies

SF projects, like all projects considered for financing by the Bank, are subject to Operational Directive (OD) 4.01 on EA. Other ODs and Operational Policies (OPs) may be of relevance to SF projects. These include Pesticide Management (OD 4.03), Natural Habitats (OP 4.04), Water Resources Management (OP 4.07), Indigenous Peoples (OD 4.20), Involuntary Resettlement (OD 4.30), Forestry (OP 4.36), and Cultural Property (OD 11.03).

Most SF subprojects will fall into EA category B, which means that all subprojects must undergo environmental analysis to determine potentially adverse impacts and their mitigation measures. The reason for this classification is that although many subprojects have no adverse environmental impacts, some subprojects might result in significant adverse impacts if appropriate mitigation measures are not implemented. During project preparation, Task Managers should seek expert environmental guidance to review the proposed EA and determine the extent of impacts associated with each category of subproject to be financed.

SFs finance a variety of geographically dispersed subprojects to be submitted by potential beneficiaries over the fund lifetime. The long term success of these projects is closely associated with sustainability, and minimizing environmental impacts.

SF project cycle and EA

Since SFs differ from standard Bank lending operations, the normal EA process must be adapted to SFs. The major steps in SF projects include **targeting, promotion, project formulation, appraisal, approval, implementation and monitoring and evaluation**. A general framework for undertaking EA within the SF project cycle is provided in Figure 1.

All SFs operate with a well defined management and administrative mandate which is detailed in an Operational Manual. This Manual identifies all project implementation steps and related procedures, review requirements, and accountability. Some SFs have developed helpful guidelines for potential beneficiaries to better understand the nature of demand driven projects and the procedures related to project approval. For example, the El Salvador Social Fund (FIS) has recently made public a useful Manual of Administrative Procedures for Project Formulation and Implementation.

Targeting. The first step in the SF project cycle is targeting activities to ensure that SF subprojects reach poor communities. This process identifies intended beneficiaries using tools such as national poverty maps to locate communities in greatest need within the country.

In addition to identifying beneficiaries, most SFs also allocate funds between subproject types based on poverty and geographic needs. Subproject allocations are also concerned with community-based needs and demands, activities of other governmental and nongovernmental organizations, and the capacity of the SF to reach needy communities.

Promotion. Poor communities often have little opportunity to learn about the existence of programs designed to help them. Therefore, SFs have established means of disseminating information to intended beneficiaries about the types of projects eligible for financing, the mechanisms for submitting proposals and the selection criteria.

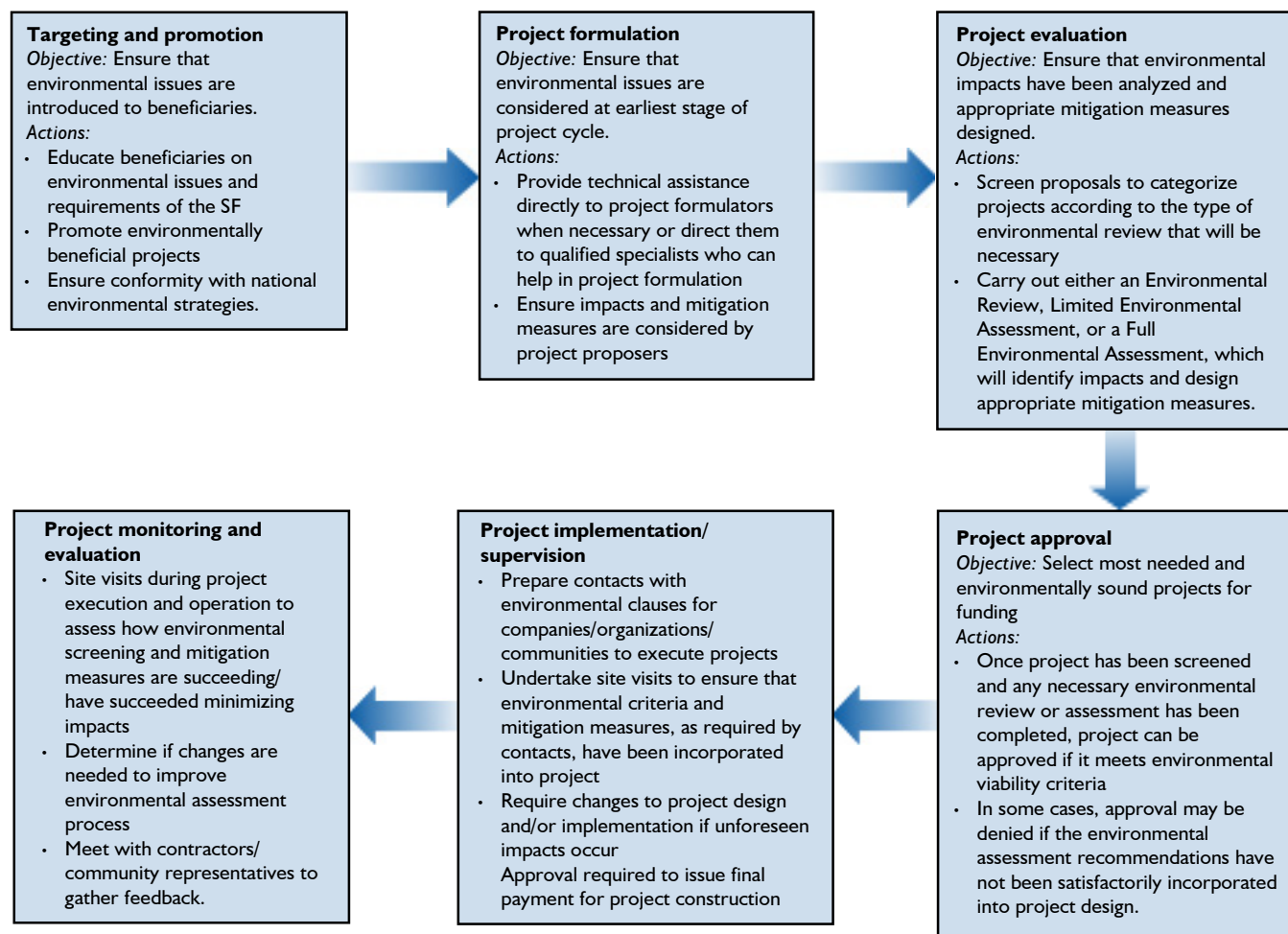
Ensuring that environmental issues are taken into account during this phase is very important. Training and awareness programs can assist local beneficiaries to understand the need for environmentally sustainable projects (and where relevant, their relationship to national environmental policies and strategies). These activities should also be directed at intermediaries such as NGOs or other executing agencies. Raising awareness can be achieved via the national media (primarily radio), local government, indigenous leaders, religious organizations, local NGOs and community cooperative associations (see section below on training).

Project formulation. This step includes the identification of fundable projects (throughout the lifetime of the fund) and transformation of project concepts into feasible application documents. Project formulation may be undertaken by a variety of actors, from local community-based organizations to NGOs and governmental organizations. Recipient communities must also demonstrate some ability to successfully implement and sustain subprojects.

This step is designed to ensure that proposals meet all eligibility and application criteria and will be ready for appraisal and technical evaluation. It is at this point in the fund project cycle that environmental impacts can be identified, and alternative sites and/or designs and mitigation measures developed.

The EA process needs to become standard practice during this part of the project cycle and will require SF staff, or delegated authorities, to undertake initial environmental reviews or a limited or full EA. These processes are discussed in more detail in Box 3.

Figure 1. Environmental assessment process of a social fund subproject



Appraisal. SF subproject proposals must be formally submitted to the appropriate SF administrative office for appraisal. The appraisal process is initiated with an examination for eligibility under the Operational Guidelines of each fund (which may include environmental criteria). Depending on the type of subproject, additional technical feasibility information may be required. In many cases, particularly in more complex projects, fund staff undertake a field visit and submit a report. When additional technical or feasibility studies are required, the SF should have funds available to commission these studies.

The SF environmental specialist or delegated authority should review the EA documents to determine the acceptability of suggested mitigation measures. If the quality of environmental analysis is unsatisfactory, specific guidance for upgrading the EA should be provided. Where a full EA has been undertaken, it is mandatory for the SF environmental specialist or delegated authority to undertake a field visit. In those cases with obvious and significant environmental problems, the subproject

should not be allowed to pass through appraisal until these problems are adequately resolved.

Implementation. Upon approval, administrative procedures are required for management review, procurement, disbursements, contracting and allocation of funds. Most of the arrangements associated with construction and implementation are typically contained in a legal contract signed between the fund and the implementing agency. It is critical that the results of the EA be incorporated into the legal contract. Consequently, mitigation measures, design specifications and supervision requirements need to be reflected in the contract.

Monitoring and Evaluation. Project monitoring is required to ensure that contractual obligations are being met by the executing agencies and the contractor. Monitoring usually includes field visits to assess progress with implementation. This provides an opportunity to ensure that all design standards, including environmental contractual obligations and mitigation measures, are being properly implemented.

Box 3. Procedures for social fund EA

A set of screening processes will improve the ability of the Funds to identify potentially adverse subprojects. According to informal procedures, checklists should be used to classify subprojects into one of four categories:

- (i) No impacts
- (ii) Subprojects that may create a few minor and easily recognizable environmental problems
- (iii) Subprojects with minor environmental problems that require site visits to include construction modifications to minimize or eliminate impact
- (iv) Subprojects with potentially significant direct or indirect adverse impacts.

The subprojects in the last three categories will then require a different set of EA responses. The (ii) category subprojects can be mitigated with standard and simple design corrections, often accomplished through a desk top *environmental review*. Category (iii) subprojects require a *limited environmental assessment* (LEA) that combines best professional knowledge input from specialists together with site visits. Category (iv) subprojects require an *environmental impact assessment* (EIA). A highly skilled environmental expert or team of experts is often required to spend significant time on the EIA, and a TOR and contract may be necessary.

The evaluation of SF projects, from an environmental perspective, can usually be accomplished with little additional expense if proper guidance is provided to staff who routinely make field visits to examine the progress of projects. However, it is important to have some environmental capacity available for monitoring, either within the SF, contracted out to specialists, or by arrangement with Government ministries or departments. Development and use of standardized monitoring checklists or schedules is useful. These need to be completed in parallel with the reporting cycle and submitted to the SF environmental specialist or oversight agency.

Most SFs have some kind of evaluation process to determine the extent of beneficiary use and satisfaction with the project, as well as the physical state of the project. The evaluation process should provide some insight into how environmental impacts were reduced. Beyond the evaluation of individual projects, SFs should periodically evaluate their portfolio to determine factors such as: success of mitigation measures; incidence of unanticipated impacts becoming significant; impacts (positive and negative) on quality of life or health; and quality of coordination with relevant agencies. However, for all of these factors, practical indicators are needed (see more detailed discussion on indicators below).

Management Issues

The previous sections provided procedural guidance on EA, but procedures are ineffective in the absence of a well designed management structure. Successful SF EA planning and implementation requires a large array of actors and supporters. These include representatives of donor institutions, Fund Directors and their staff, national and local authorities, and community representatives and local contractors. These parties need to understand their specific roles and responsibilities for effective EA (see Box 4). Additional management considerations include institutional structure and staffing, training and capacity building, public involvement, use of appropriate indicators, and promotion of environmentally beneficial improvements.

Institutional and Staffing Considerations

A range of institutional structures for undertaking the environmental review function within SFs are possible. The environmental capacity could be mandated to relevant fund units, or as is more often the case, the responsibility of a separate environmental unit (or individual). Such units are often detached from the mainstream SF operations. However, this arrangement diminishes their role and effectiveness and recommendations made by the unit are often ignored. Environmental issues need to be considered at almost every stage of the project cycle, and relevant expertise is generally poorly represented within SFs. While there is no universal solution, it is preferable that the environmental unit is not tied to a single operational unit and is high enough in the institutional hierarchy to have overarching responsibilities. A unit attached to the Directors office is often a good solution.

Because of personnel and resource constraints, it will rarely be possible to staff an environment unit with more than one or two persons. In smaller SFs it may even be justifiable to have this position filled on a part-time basis by a consultant or appropriately trained member of the fund staff. Some funds have a special environmental unit (such as, the Honduras SF, FHIS; the El Salvador SF, FIS; and the Nicaragua FISE) and others have hired one or several environmental specialists under contract (the Nicaragua FISE and the Panama SF, FIS).

Training and capacity development

It is important to provide general environmental awareness training for all staff and more specialized training for those individuals directly responsible for EAs. It is also important to enhance environmental awareness among beneficiaries and government agencies. Senior management must be persuaded of the importance of

Box 4. Roles and responsibilities of key social fund planners and implementers for environmental assessment

Bank Task Managers

Leaders in the process of designing Social Funds in each country, often involved from the time of original inception to ultimate approval and implementation. Full administrative responsibilities for all operational requirements. Need to understand environmental issues better so that Fund operations address these issues from the start.

Environmental Advisors

Professionals who are called in to assist in formulating environmental guidance. Should have familiarity with types of Social Fund schemes and practical knowledge of how Funds operate. Environmental advisors with sector experience need to fine tune their technical inputs to satisfy national management and technical staff.

Social Fund Management

The Director and senior deputies from various line departments of the Fund. Often are overwhelmed by the burden of implementation and tend to focus on narrow roles. These leaders need to become more aware of the environmental issues and provide support for practical reviews and internal training.

Social Fund Technical Staff

The operational professionals who are responsible for implementing all services. Usually a multidisciplinary group of experts, with little formal training and understanding of environmental issues related to the Fund activities. Require exposure to principals of environmental assessment and impact.

National Environmental Authorities

Line agencies mandated through legislation with primary environmental regulatory responsibility. Often not familiar with peculiar needs and focus of Social Funds and consequently not capable of meeting demands for Fund environmental assessments. Need better orientation to Social Funds and environmental issues.

Nongovernmental Organizations

Often key groups working on behalf of beneficiary or community groups. Provide technical, financial and logistical support and act as intermediaries between the Fund and beneficiaries. Lack understanding of environmental concerns regarding schemes. Exposure to environmental issues as related to local level concerns important.

Target Community Groups and Beneficiaries

The projects are demand driven and meet community needs as determined from a diverse portfolio of potential projects. Knowledge of environmental issues is regularly absent. The promotional process needs to provide some initial insight to these issues and project design should reflect these concerns. Local level awareness training needed.

Contractors

Project implementors who provide services. Need exposure and training to environmental issues with practical design and construction guidance.

environmental issues to project outcomes, which in turn should gain their endorsement for integrating environmental concerns into project planning and implementation.

Improving the understanding of environmental issues amongst SF staff is best achieved by demonstrating the environmental aspects of their areas of responsibility. Training for departmental technical staff should help to develop an integrated understanding of environmental issues in relation to the project cycle. In those funds that rely on decentralized regional project offices, there is also the need for regional training to integrate central administrative and technical staff with their counterparts in the field. Regional workshops are suitable for training the various parties associated with beneficiary programming, such as local government officials and staff, community leaders, NGO representatives and contractors. This

should focus on environmental issues related to improved project formulation and design at the local level.

The recent shift towards decentralization of programming for SF projects, enables beneficiaries to have more financial and administrative control throughout the project cycle. Part of this mandate includes building capacity among beneficiaries to assume responsibility for administration and decision-making. Transfer of skills to the community level for preparation of proposals, including the ability to undertake rudimentary environmental evaluations, is becoming increasingly important. Access to SFs will be linked to improving the ability and capability of target communities to manage the environmental screening process. Training at the local level is facilitated by a high level of public consultation.

Public involvement

The extent and timing of involvement of local communities in SF activities varies. However, the earlier a consultation process begins, the greater the probability that stakeholders will be adequately represented. A primary objective of consultation is to encourage people to discuss all issues and concerns. The challenge is to provide mechanisms compatible with local culture and customs and provide an appropriate setting for stakeholders to voice concerns.

Public consultation is an essential part of the EA. The premise of public consultation is: (a) if the citizens are informed about a project and given the opportunity to raise concerns, those most interested will respond; (b) most citizens have access to some form of communication media; (c) citizens who participate are accustomed to the democratic process of discussion. Unfortunately, in many of the communities affected by SF projects, these premises are not necessarily valid and citizen participation must be facilitated.

Large meetings are usually inappropriate fora for consultation at the community level. Smaller meetings and interviews with key individuals is often more useful. All communities have social groups through which they normally organize activities, such as work groups,

religious groups, savings societies, women's groups, schools or small enterprise groups. In general, new or organizational fora with which people are unfamiliar should be avoided in preference for existing social groupings within which people feel comfortable.

Indicators of SF environmental performance

Most evaluations focus on the performance of a project in achieving its objectives and its economic and financial efficiency. Performance is measured by comparing whether implementation proceeded as expected and on schedule, and determining if the outputs were achieved according to project plans and within budget. In SFs, examples of outputs have traditionally been the number of rural road projects completed, number of latrines built, population served by water projects, etc. Associated inputs that have needed evaluation included the amount of funding provided for each project, man-hours required to complete projects, and so forth.

An enormous challenge to SFs is to shift to measuring environmental performance by using key indicators. For example, evaluation of water supply projects should consider the effects on the environment and health of populations. To do so however simple and practical indicators must be developed (see Figure 2).

Figure 2. Simple and practical indicators for water supply subprojects

	<i>Basic question</i>	<i>Indicators</i>	<i>Type of monitoring</i>
Spring-fed water	Is water supply intake sufficiently protected from contamination?	Runoff flows into spring	Inspection
		Agricultural is undertaken above spring	
		Animal access prevented	
	Are proper measures in place for drainage and runoff?	Standing water pools Breeding mosquitos	Inspection
Well water	Are proper measures in place for water quality?	Disinfection	Collect sample
		Monitoring-physical, chemical Bacterial	
	Is there proper construction to protect from percolation contamination?	Sanitary seal	Inspection
	Are proper measures implemented for water quality?	Disinfection Monitoring-physical, chemical, bacterial	Collect sample

Box 5. Examples of community-based environmentally beneficial projects

Forestry/Reforestation

These programs afford local communities two major benefits, the expansion of existing forest cover to stabilize soils and improve microwatershed conservation and production of firewood supplies. The former activities may involve various forms of reforestation or agroforestry, techniques that are designed to both improve tree cover or by using combinations of tree and crops, improve crop production in a mixed planting project. The result will be erosion control, soil conservation and land reclamation. The objective is to provide self reliant fuel that requires little capital expenditures and does not require large demands of time and maintenance. All of these activities require nurseries, seedling distribution, technical assistance and provision of basic supplies such as shovels, axes, and hoes. In some cases, these programs might also include parallel charcoal production (preferably with improved charcoal kilns) and improved cooking stoves (see below).

Improved Pasture and Grazing

Another environmentally beneficial project is the implementation of “silvipasture” programs. This practice includes controlled grazing of vegetation and is important in areas where range lands have been depleted as a result of overgrazing. Steps in these activities may include reducing the number of animals grazing in a particular area, preventing further erosion and repairing erosion damage, improving fodder production by reseeding or replanting, and adopting a good set of management practices which can include providing water, rotating grazing stock by use of fences, changing grazing patterns, etc. The inputs require a greater degree of technical assistance in the form of extension work, which often is beyond the scope of quick delivery of services as part of SFs. However, the demand for these projects is growing.

Improved Cooking Stoves

Another approach in reducing the demand for firewood, improving the health of mothers and their children and decreasing household expenditures on wood is the introduction of more efficient cooking stoves. These stoves are designed to improve the way the wood is burned by providing ways to regulate air intake and combustion. The flow of air and gases is designed to concentrate heat on the cooking surface. A chimney is usually incorporated into the design to prevent back draft and indirectly significantly reduce the risk of acute respiratory infections. The history of promoting improved cooking stoves in Latin America has a mixed review. In some countries and regions, there has been a high degree of acceptance, while in others a low. Many factors complicate the acceptability of a cooking stove: cost, type of materials needed for construction, size and type of wood available, family size, cooking practices, and types of dishes to be prepared. One very important lesson learned is that there is no one universally acceptable stove. Training and extension must be part of the program to help educate the households members about how these stoves improve both the health of the family and environment.

Box 6. Guidance for successful environmental sustainability in social funds

Environmental Policy and Procedures

- Does the Fund use subproject environmental appraisal checklists?
- Is the current subproject appraisal process and standard forms satisfactory in identifying environmental issues and developing mitigation measures?
- Have linkages between the Social Fund and other supportive agencies and institutions dealing with environmental issues been established?

Management and Administration

- Have environmentally beneficial projects been incorporated into the Social Fund portfolio? Is there an annual target established to ensure that these subprojects are implemented?
- Does sufficient material exist for promotional officers to assist in the promotion of environmentally beneficial projects at the community level?
- Does a well designed plan and organizational structure exist for supporting environmental review for the Social Fund? Have terms of reference been developed for this support?
- Have practical indicators been identified to use in the monitoring and evaluation process?

Capacity Building

- Has a short workshop been designed to inform senior management about environmental issues?
- Has a training plan been identified for project officers to improve environmental review for the appraisal process?
- Are regional workshops planned to provide environmental awareness training to regional staff, local beneficiaries, and other interested parties?

Using the Social Funds for Environmentally Beneficial Improvements

The evolution of Social Funds in certain countries has been associated with growing demands to implement community based environmentally beneficial schemes. Beneficiaries are using the Social Fund to deliver otherwise unavailable opportunities for a myriad of projects, such as reforestation, improved pastures, improved cooking stoves, alternative energy, soil conservation etc.

In Honduras, the Fund established a goal of incorporating a specified number of environmentally beneficial projects into the annual portfolio. The Zambia Environment Support Program intends to implement projects to communities through the Social Fund Project Cycle and administrative structure. There is growing recognition that the Funds have greater potential to improve community natural resources, and many of the newer

emerging SFs have identified these as concrete targets. Specific examples of these opportunities are presented in Box 5.

Conclusions

With the expansion and growth of the SF portfolio, it is becoming clear that each Fund needs to develop mechanisms to ensure that environmental issues are properly addressed throughout the entire project cycle. Task Managers and fund senior managers should ideally incorporate these considerations from the earliest stages of project planning (see Box 6). Furthermore, midterm evaluations need to include a review of the Funds environmental and social performance. As the funds mature and the Bank's management experience grows, adequate attention to such issues will enhance the long-term sustainability of subprojects.

Previously published EA Sourcebook Updates

<i>Number and Title</i>	<i>Date</i>	<i>Number and Title</i>	<i>Date</i>
1 The World Bank and Environmental Assessment: An Overview	Apr. 93	12 Elimination of Ozone Depleting Substances	Mar. 96
2 Environmental Screening	Apr. 93	13 Guidelines for Marine Outfalls and Alternative Disposal and Reuse Options	Mar. 96
3 Geographic Information Systems for Environmental Assessment and Review	Apr. 93	14 Environmental Performance Monitoring and Supervision	Jun. 96
4 Sectoral Environmental Assessment	Oct. 93	15 Regional Environmental Assessment	Jun. 96
5 Public Involvement in Environmental Assessment: Requirements, Opportunities and Issues	Oct. 93	16 Challenges of Managing the EA Process	Dec. 96
6 Privatization and Environmental Assessment: Issues and Approaches	Mar. 94	17 Analysis of Alternatives in Environmental Assessment	Dec. 96
7 Coastal Zone Management and Environmental Assessment (also in Arabic)	Mar. 94	18 Health Aspects of Environmental Assessment	Jul. 97
8 Cultural Heritage in Environmental Assessment (also in Arabic)	Sep. 94	19 Assessing the Environmental Impact of Urban Development	Oct. 97
9 Implementing Geographic Information Systems in Environmental Assessment	Jan. 95	20 Biodiversity and Environmental Assessment	Oct. 97
10 International Agreements on Environment and Natural Resources: Relevance and Application in Environmental Assessment (<i>second edition</i>)	Mar. 96	21 Environmental Hazard and Risk Assessment	Dec. 97
11 Environmental Auditing	Aug. 95	22 Environmental Assessment of Mining Projects	Mar. 98
		23 Economic Analysis and Environmental Assessment	Apr. 98

This *Update* was prepared by Ken Green with valuable assistance from Douglas Graham and other World Bank environment specialists. The *EA Sourcebook Updates* provide guidance for conducting environmental assessments (EAs) of proposed projects and should be used as a supplement to the *Environmental Assessment Sourcebook*. The Bank is thankful to the Government of Norway for financing the production of *Updates*. Please address comments and inquiries to Colin Rees, Managing Editor, *EA Sourcebook Updates*, Environment Department, The World Bank, 1818 H St. NW, Washington, D.C., 20433, Room No. MC-5-143, (202) 458-2715.