FINAL REPORT

MAINSTREAMING SAFEGUARD POLICY COMPLIANCE WITHIN COMMUNITY-DRIVEN DEVELOPMENT INITIATIVES (CDDs) IN WORLD BANK - FUNDED OPERATIONS

AN EXPLORATORY STUDY FOCUSING ON AFRICA

MAY 2001



FINAL REPORT FOR THE WORLD BANK

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Table of Contents

i

1	Inti	roduc	tion	1
2	Fig	hting	against poverty through CDDs	2
	2.1	The c	concept of CDDs	3
	2.2	Stage	s of development in a CDD intervention	5
	2.3	Safeg	guard Policies and their Relevance for CDDs	9
3	Org	ganiza	ational Framework	15
			nal Context	
	3.2	Local	Context	20
4	Pro	cedu	res	25
	4.1	Gene	ral Guideline for EA-Procedure of CDD	25
			Screening	
			Environmental Review (ER) / Environmental	
			Impact Assessment (EIA)	32
		4.1.3	Mitigation Management	34
	4.2	Envir	onmental Monitoring	36
			oaches for EA-Management	
		4.3.1	Strategic Environmental Assessment (SEA)	38
		4.3.2	Community Environmental Empowerment	
			through Participatory Rural Appraisal (PRA)	
			and Participatory Learning and Action (PLA)	39
		4.3.3	Community Based Environmental Meetings	
			(CBEMs)	
			Do More Good Approach	
		4.3.5	Linkages to other Initiatives	44

	Pro	ocedure in CDDs	45
	5.1	Networking	45
	5.2	Development of Environmental Information Systems	46
	5.3	Capacity Building	47
		5.3.1 Identifying Deficencies – Training Needs	
		Assessment	48
		5.3.2 Developing Relevant Training Capacity	49
		5.3.3 Using Guidelines	51
	5.4	Awareness Raising	54
6	Per	spectives	55
	6.1	Case Studies	55
	6.2	Future Actions	55
7	Rih	liography	57
,	DIO	nogrupny	
Ar	nnex	cl: Example Checklists and Guidelines	
Α	1:	a) Project Examples for EA categories	
		b) Generic Project Screening List	
Α	2:	Checklist for Screening and Scoping Exercises	
Α	3:	Example of a Generic Environmental Review (ER) C	hecklist
Α	4:	Technical Guidelines for Mitigation Management for subproject types	different
Ar	nex	Cll: Case Study on the Safeguard Compliance in the ZAMS Zambia Social Investment Fund	SIF –

5 Supporting Activities for Implementing the EA-

List of Abbreviations

CAP/CDD Community Action Program / Community Driven Development

CBEM Community Based Environmental Meeting

CBO Community Based Organization

EA Environmental Assessment

EIA Environmental Impact Assessment
EIS Environmental Information System

EMP Environmental Mitigation Plan / Environmental Management Plan

EMU Environmental Management Unit

ER Environmental Review
ETT Environmental Task Team

GIS Geographical Information System

IU Implementation Unit

LEAP Local Environmental Action Plan

MoE Ministry of Environment

NEAP National Environmental Action Plan NGO Non-Governmental Organization

OM Operational Manual

OP/BP/GP Operational Policy/ Bank Procedures/ Good Practice

PRA/PLA Participatory Rural Appraisal / Participatory Learning and Action

PRSP Poverty Reduction Strategy Paper
SEA Strategic Environmental Assessment

ToR Terms of Reference
ToT Training of Trainers

ZAMSIF Zambia Social Investment Fund

1 Introduction

The CDDs¹ are a rather new funding instrument of the World Bank that focuses on community² empowerment through capacity building and needs-oriented development expressed through the implementation of a large number of microprojects. These microprojects are usually small infrastructure projects but can also take the form of training, natural resource management and other types of community action. Project beneficiaries, mainly local government and communities, are being empowered through their active involvement in project planning, implementation, management and monitoring.

As with all other World Bank interventions safeguard compliance is equally mandatory for this project type being characterized by a high level of decentralization in decision making.

The purpose of this exploratory study is to investigate ways and suggest mechanisms to ensure safeguard compliance through EA³ procedures in the overall CDDs program approaches. It is set out to sketch possible approaches on how to comply with the Banks' safeguard requirements on one side and how to build environmental assessment and review capacity in the client country's on the other, in order to gradually decentralize and deconcentrate environmental know how, EA tools and decision making power. It suggests a comprehensive set of elements that will not be applicable in all detail in all countries. In many countries it will be necessary and feasible to opt for the implementation of only a subset of the procedures and supporting activities suggested here.

The first section of this report is a generic approach which was discussed in detail with World Bank staff in May 2000 and January 2001 and "tested" in

² Same as in the "Sourcebook on Community Driven Development in the Africa Region Community Action Programs" from December, 2000 the term community is used in this report referring to the lowest unit level of planning. This could correspond in urban areas to neighbourhood groups in rural areas of a village for example.

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¹ Community Action Programs (CAP) as they are called in the African Context, or Community Driven Development (CDD) for the other regions/countries. We are refering within this study only to CDD, because this the bankwide applied more general term. However, the term CAP is still can prevail.

The term "Environmental Assessment - EA" is used in this context according to "The World Bank's Operational Manual", dated January 1999, as follows: "EA evaluates a project's potential environmental risks and impacts in its area of influence. The breath, depth, and type of analysis undertaken in this process depend upon the nature, the scale and the potential environmental impact of the proposed sub-/project. Depending on the individual case, a range of instruments can be used to satisfy the Bank's EA requirements: environmental impact assessment (EIA), regional or sectoral EA, environmental audit, hazard or risk assessment and environmental management plan (EMP)."

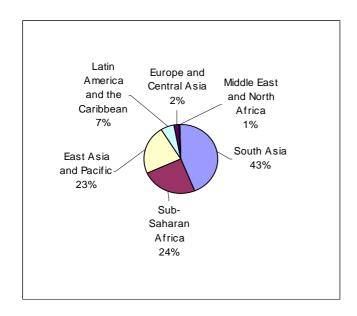
Zambia with the staff from the Zambia Social Investment Fund, ZAMSIF in Mai of 2001. A detailed description of the ZAMSIF, their EA management, comments on lessons learned can be found as annex II to this report.

2 Fighting against poverty through CDDs

The poverty situation in many developing countries is still acute. In spite of the efforts of donors and recipient countries only slight improvements in the living conditions could be reached, severe inequalities in the distribution of wealth and opportunities still persist among the countries and their populations.

According to the World Development Report 2000 the developing worlds poor are distributed according to the following figure.

Figure 2-1: Distribution of population living on less than \$1 a day, 1998 (1.2 billion)



Source: World Bank: World Development Report 2000/2001 p. 4

Empowerment of the poor is seen as the path to better utilize the potential for growth and poverty reduction. This is heavily influenced by state and social institutions and as well the self help capacity of the population. Community

Driven Development Projects are considered to be the answer to a large share of the most pressing needs of the poor.

2.1 The concept of CDDs

The new World Bank funding instrument, CDDs focuses on community empowerment through capacity building and needs-oriented development. CDDs usually accompany other World Bank financed interventions in the same country on the meso and macro level aiming at the overall goal which is a reduction of poverty.

CDDs build upon the experience of the Social Funds, that were created first in the mid-eighties to solve specific and urgent problem situations as quickly as possible through technical assistance projects. Social Funds proved to be quite successful when it came to spending and targeting. With time the Social Funds developed into a very flexible funding mechanism with a rather limited anchorage, though, in the clients' country political and administrative structure. Learning from this experience, the CDD intervention type is now designed to be closer aligned to the client country's public administration system. It includes a strong capacity building component both for the public (national, regional and local government) and the private sector (local consulting know how, NGOs, CBOs and communities), thus laying the essential groundwork for successful and sustainable decentralization.

According to the PRSP sourcebook (and its chapter on CDD) of December 2000, CDDs are defined as the exercise of community control over decisions and resources directed at poverty reduction and development. The aim of CDDs is to promote security, opportunity and empowerment for all members of the community through:

- strengthening of accountable, inclusive community groups
- supporting broad based participation by poor people in strategies and decisions which affect them
- facilitating access to information and linkages to the market and
- improving governance, institutions and policies so that local and central governments and service providers, including NGOs and the private sector, become responsive to community initiative

The twelve key principles that community empowerment relies upon are listed in the CAP technical sourcebook. The most important ones in this context are the following:

- CDDs empower communities by giving the communities untied funds
 which allow them to choose their own priorities and implement their own
 programs.
- Even when starting small on a pilot basis and growing gradually, the aim is to **cover communities across entire countries** within a short time.
- The decentralization supported by CDDs should be based on the principle of **subsidiarity**. Responsibility for tasks should be devolved to the lowest level of government that can deal effectively with them. (Decentralization is a learning process. Wherever appropriate and feasible capacity building must complement decentralization)
- To promote local "ownership", communities and local governments must contribute to project costs, apart from helping with design, implementation, operation, maintenance and monitoring.

Just like social funds, CDDs are a funding instrument for a large number of subprojects that are to benefit local governments and small communities. Modern social funds and CDDs have evolved from a limited infrastructure orientation in the past to an expanded multisectionial and capacity building outcome focus.

Examples for subproject types (expected) to be financed under Social Funds and CDDs are⁴:

- social infrastructure and communal activities
 - construction, rehabilitation or extension of schools, clinics and health centers
 - water and solar energy supply for public buildings
 - assistance programs for AIDS patients
 - improvement in natural resource management
- economic infrastructure
 - road construction, rehabilitation or improvement
 - construction of bridges and overpasses
 - construction and rehabilitation of water reservoirs for irrigation
 - agricultural depots and markets
 - communal granaries
 - income generation
 - dip tanks, community cattle feedlots
 - factory shells

⁴ cf. Operational Manual: "Community Action Program Social Development Fund, Zimbabwe" p. 6 f.

- infrastructure for soil and water conservation
 - environmental rehabilitation
 - watershed management and erosion prevention
 - agro-forestry
 - wildlife management
 - alternative energy sources
- improved agricultural production systems and practices

The beneficiaries should be as much as possible involved in the design, implementation and monitoring of their development process that is stimulated through CDD matching grant financing. CDDs thus involve a different group of "principal actors" than before in the more traditional World Bank interventions, meaning that a more diverse group and an increased number of people are accountable for project success or failure and for adherence to the World Bank's funding principles such as the ten mandatory Safeguard Policies.

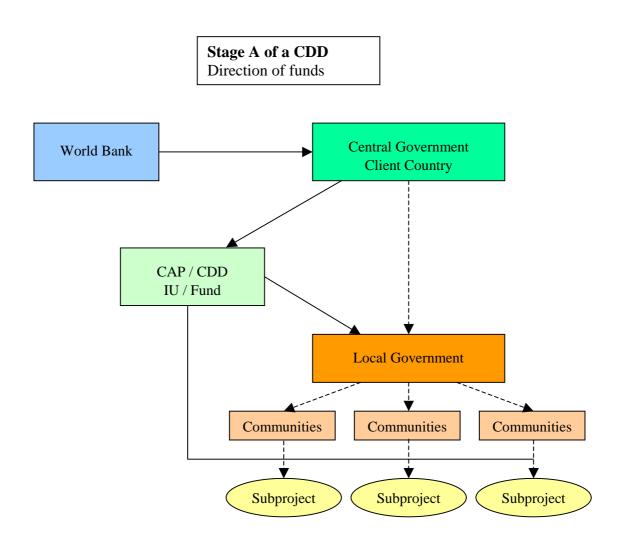
2.2 Stages of development in a CDD intervention

Since CDDs are new World Bank instruments, the discussion about their scope, appropriateness and best practice implementation is still ongoing. Few CDDs are up and running yet. Some CDDs are nation-wide, others stimulate a development process only in certain regions of the beneficiary country. Single-sector-CDDs are just as possible as are approaches facilitating microproject funding across all sectors.

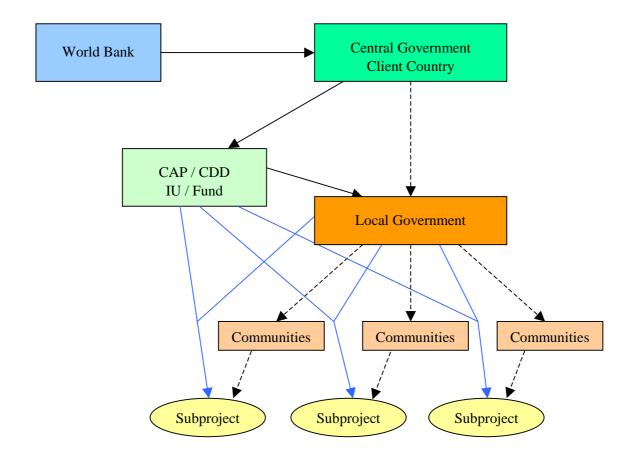
An important feature that characterizes CDDs is that they are learning experiences themselves. The empowerment of the client/beneficiary that comes with the implementation of the process is at least as important a factor as the successful project/subproject completion itself.

In general terms a CDD would go through three stages or sequences in the course of its implementation. These stages correspond to the advancement of the capacity building and decentralization process.

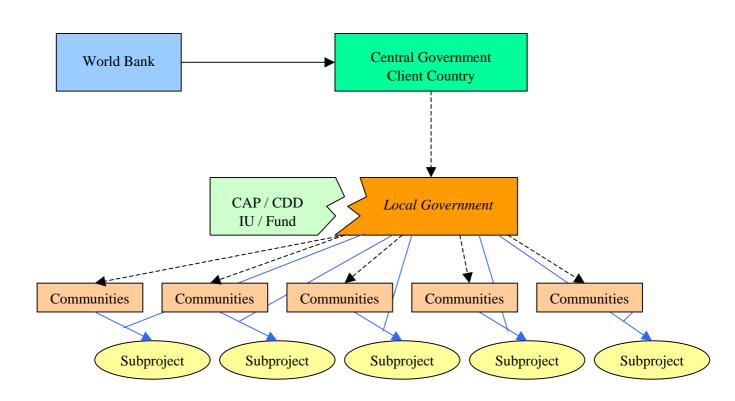
Figure 2-2: Three stages of CDD evolvement



Stage B of a CDD Direction of funds



Stage C of a CDD Direction of funds



2.3 Safeguard Policies and their Relevance for CDDs

Compliance with the following ten safeguard policies has always been mandatory for Social Funds just like now for CDDs. The EA process shall be used as an umbrella process to check for environmental soundness and compliance with all safeguards.⁵

Environmental Safeguard Policies	Social Safeguard Policies	Legal Safeguard Policies
 Environmental Assessment Natural Habitat	Cultural PropertyIndigenous Peoples	 Projects in Disputed Areas Projects on International Waterways
Pest ManagementForestry	• Involuntary Resettlement	
Safety of Dams		

Social Funds and CDDs will fall within the new category F of financial intermediaries. In the past those type of projects were classified as Cat. C, meaning no or negligible environmental impacts were expected. Therefore, no environmental assessment procedures were usually integrated in these programs.

In the recent years Social Funds have been evaluated especially with regard to their contribution to poverty reduction, administrative efficiency and target group orientation. With so far only the Latin America and Caribbean Region's evaluation on safeguard compliance in several different project types, none of which was a social fund or a CDD, it would be useful to include into the social fund evaluations undertaken an analysis of their EA/Safeguard compliance to be

⁵ Even all ten safeguard policies have the same status as the most prominent OP 4.01 on environmental assessment, there is no point do develop seperate procedures to ensure compliance with them. The EA mechanisms are known and developed in almost every country and can be used as an procedural instrument to check compliance with all 10 safeguard policies.

able to draw conclusions on institutional capacity required and necessary steps to improve current practice for CDDs.

Many Social Fund/CDD subprojects raise only minor or no environmental concerns. However, some type of subprojects (e.g. small-scale embankments, irrigation or rural road projects) may have substantial environmental ramifications and can result in adverse impacts in case mitigation measures are not adequately implemented. Because CDDs usually fund a large number of small subprojects, the question of cumulative impacts merits special consideration. While individual subprojects may have a negligible impact, the cumulative effect of many small subprojects in a particular area may be significant.

6 The construction of a small road itself may have negligible impacts, but it may lead to an influx of settlers, or simply facilitate the extraction of natural resources by providing access to trucks or may spread deseases. Irrigation subprojects can indirectly result in health problems, as water stagnation and a proliferation of aquatic weeds can stimulate the outbreak of certain waterborne diseases, such as malaria and schistosomiasis (bilharzia).

⁷ For example, the World Bank social fund in Ethiopia funded many small-scale irrigation subprojects, which together may have a considerable effect on water storage. Similarly, large numbers of tubewells in a limited area may significantly affect groundwater levels by depleting aquifers, even though the effect of a single tubewell in a small community may be negligible.

Also, experience elsewhere has shown that even apparently environmentally benign projects have the capacity for inflicting environmental damage if not properly designed or inadequately followed up with training and awareness activities.⁸

Given the large number of subprojects and actors involved, clear, comprehensible efficient procedures to check for safeguard compliance need to be put in place. Corresponding considerations should ideally be incorporated from the earliest stage of project planning.

The following table summarizes the content and indicates the relevance of each of the safeguard policies in the CDD context.

Examples from World Bank EA Report Social Investment Program Project (SIPP) Bangladesh, May 1999, p.10

⁸ Afforestation projects seem to be invariably benign, but even these can inflict environmental damage. In the Mekong Delta in Viet Nam, for example, funded replanting with mangrove tree seedlings has gone hand-in-hand in some areas with the clearing of natural (forest) vegetation

Table 1-1: An Overview of World Bank Environmental, Social and Legal Safeguard Policies and their CDD Relevance9

No.	Safeguard Policies	Summary	CDD Relevance
Envir	onmental Safegua	rd Policies:	
4.01 OP/BP /GP ¹⁰	Environmental Assessment	 These EA policies and procedures represent the indispensable umbrella process to ensure compliance of Bank-funded operations with all other safeguard policies. It provides the framework for diagnosing the current situation, predicting the likely developments and the likely impacts of the project as submitted to assessment and for recommending measures to prevent or mitigate the most adverse impacts. It details that environmental consequences should be recognized early in the project cycle and taken into account in project selection, siting, planning, and design by preventing, minimizing, mitigating or compensating for adverse environmental impacts and enhancing positive impacts, and includes the process of mitigating and managing environmental impacts throughout project implementation. 	fully relevant main instrument for ensuring environmental sound implementation of projects. compliance with all other safeguard policies have to be checked through the EA instrument as umbrella policy.
4.04 OP	Natural Habitats	 Aims to support the protection, maintenance, and rehabilitation of natural habitats. The Bank does not support projects involving the significant conversion of natural habitats unless there are no feasible alternatives for the project and its siting and comprehensive analysis demonstrate that overall benefits from the project substantially outweigh the environmental costs. Bank-financed projects that are identified by an EA as involving the significant conversion or degradation of critical natural habitats must include mitigation measures acceptable to the Bank. Projects with natural habitat components must incorporate appropriate environmental expertise in the project cycle to ensure the design and implementation of mitigation measures, including any necessary capacity-building on the borrower's side. This policy applies to subprojects under sectoral loans or loans to financial intermediaries. 	fully relevant to be applied within EAprocess all subprojects located in or close to natural habitats subprojects should also be financed which support the protection and maintenance of natural habitats

⁹ Source: 'The Environmental and Social Review of World Bank-Financed Activities in Africa' (5/09/00), and 'Environmental Assessment at the World Bank', CD-Rom Version 1.0, 1999 The World Bank

¹⁰ OP: Operational Policy; BP: Bank Procedures; GP: Good Practices

4.09 OP	Pest Management	 Aims to promote the use of biological or environmental control methods and reduce the use of synthetic chemical pesticides in Bank-financed agricultural and public health projects respectively Should biological or environmental methods prove themselves to be ineffective, the Bank may finance the use of pesticides, the procurement of which is contingent on a risk assessment and set criteria for pesticide selection and use In Bank-financed projects, pest management is carried out by the borrower in the context of the project's environmental assessment. An assessment is made of the capacity of the country's regulatory framework and institutions to promote and support safe, effective, and environmentally sound pest management. 	relevant • typically FI subprojects may include the application of pesticides, at a small or medium scale possible subprojects might address pest control and rodent extinction for sanitary reasons. Also, in health protection activities, DDT can potentially be procured, e.g. for malaria vector control.
106	I		1
4.36 OP	Forestry	 Aims to reduce deforestation, promote reforestation, enhance the environmental contribution of forested areas, reduce poverty and encourage economic development. The Bank will not finance commercial logging operations or acquisition of equipment for use in primary moist tropical forests. In forests of high ecological value, the Bank will finance only preservation and light, nonextractive use of forest resources. The Bank's lending operations in the forest sector are conditional on government commitment to sustainable management and conservation-oriented forestry, which would require the client country to: adopt a suitable policy, legal and institutional framework adopt a comprehensive forestry conservation and development plan establish institutional capacity Exclusively environmentally protective investment projects or investment projects supportive of small farmers are distinguished from all other forestry operations and may be appraised on their own social, economic and environmental merits. They may only be pursued in the context of broad sectoral reforms. 	generally FI subprojects will not address commercial logging in forests of high ecological value. However, CDD sub-projects may include funding of agricultural activities within a very short distance of primary forests. In some extreme cases, there is a risk that encroachment of primary forests could be facilitated by a CDD sub-project.

4.37 **Safety of Dams** This policy is concerned with the safety of new and existing dams on which a Bank-financed project is not relevant directly dependent. The policy distinguishes between the (i) construction of new dams and (ii) existing OP dams and dams under construction (DUC). large dam projects (e.g. with a height of more then 15 (i) New Dams Small dams (normally less than 15 meters in height) generic dam safety measures designed by qualimeters) will not be financed under a CDDs: fied engineers are usually adequate. however, dam schemes for For large dams (15 meters or more in height or between 10 and 15 meters with special design comirrigation and micro-hydroplexities) the Bank requires reviews by an independent panel of experts throughout investigation, depower can have significant sign and construction of the dam and the start of operations; preparation and implementation of deimpacts that need to be adtailed plans; and periodic safety inspections of the dam after completion. dressed through an EA The panel's primary purpose is to review and advise the borrower on matters relative to dam safety and other critical aspects of the dam, its appurtenant structures, the catchment area, the area surrounding the reservoir, and downstream areas. The borrower normally extends the panel's composition and TOR beyond dam safety to cover such areas as project formulation, technical design, construction procedures, and associated works such as power facilities, river diversion during construction, shiplifts, and fish ladders. (ii) Existing Dams and Dams under Construction (DUC) The Bank frequently finances projects that do not include a new dam but rely on the performance of an existing dam or a DUC. Typical projects are: power stations or water supply systems that draw directly from a reservoir controlled by an existing dam or a DUC; diversion dams or hydraulic structures downstream from an existing dam or DUC; and irrigation or water supply projects that will depend on the storage and operation of an existing dam or DUC for their supply of water and could not function if the dam failed. For such projects, the Bank requires that the borrower engage independent dam specialists to account for the necessary safety assessments. In the course of project processing, project appraisal is carried out by an appraisal team which reviews all project information relevant to dam safety, including cost estimates; construction schedules; procurement procedures; technical assistance arrangements; environmental assessments; and the plans for construction supervision and quality assurance, instrumentation, operation and maintenance, and emergency preparedness. The team also reviews the project proposal, technical aspects, inspection reports, panel reports, and all other borrower action plans relating to dam safety.

Social	Safeguard Poli		
	Sajoguai a I ou		
cies:	C II ID 1		f.:11-:1
Operational Policy Note No. 11.03/ To be issued as 4.11 OP/BP	Cultural Property	 Bank policy aims to assist in the preservation of cultural property where part of a Bank-financed operation, and to avoid its elimination. The Bank normally declines to finance projects that will significantly damage nonreplicable cultural property, and assists only those projects that are sited or designed so as to prevent damage. 	fully relevant • possible subproject: all structural engineering activities on potential archaeological sites
/GP			
4.12 OD ¹¹	Indigenous Peoples	 This policy purports to ensure that indigenous people benefit from development projects and to avoid or mitigate adverse effects on indigenous people caused by Bank-assisted activities. Special action is required where Bank investments affect indigenous peoples, tribes, ethnic minorities, or other groups whose social and economic status restricts their capacity to assert their interests and rights in land and other productive resources. The Bank addresses issues on indigenous peoples through (a) country economic and sector work, (b) 	relevant but only in very few cases, especially in Sub- Saharan Africa, depending upon the region
		technical assistance and (c) investment project components or provisions. Addressing issues pertaining to indigenous peoples must be based on the informed participation of the indigenous people themselves. • Issues concerning indigenous peoples can arise in a variety of sectors that concern the Bank; those involving, for example, agriculture, road construction, forestry, hydropower, mining, tourism, education, and the environment should be carefully screened. Issues related to indigenous peoples are commonly identified through the environmental assessment or social impact assessment processes, and appropriate measures should be taken under environmental mitigation actions. The Bank policy advocates the design of indigenous peoples development plans.	

¹¹ OD: Operational Directive

4.30 OD	Involuntary Resettlement	 This Bank policy aims to ensure that the population displaced by a project receives benefit from it. It secures involuntary resettlement as an integral part of project design and should be dealt with from the earliest stages of project preparation, according to a set of policy considerations/ procedures. Involuntary resettlement as referred to in this policy covers both: (a) the involuntary displacement (physical and non-physical) of affected people that arises from change in land use or water use, loss of productive assets or loss of income or means of livelihood, whether or not the people must move to another location, and (b) the measures for mitigating the impacts of displacement. The policy applies whether or not the Bank itself is financing part of the project that may require involuntary resettlement, and it covers resettlement resulting from activities that are not part of the Bank-financed project but are necessary to achieve the objectives of the project. Policy-congruent resettlement planning involves a number of components, one of which is concerned with environmental protection and management. The screening process for an environmental assessment (EA) normally classifies projects involving involuntary resettlement as Category A. The EA of the main investment requiring the resettlement should thus cover the potential environmental impacts of the resettlement. The resettlement plan must be developed in coordination with the EA and define the boundaries of the relocation area, and calculate incremental population density per land unit. In agricultural projects, if the incoming resettled population is large in relation to the host population, such environmental issues as deforestation, overgrazing, soil erosion, sanitation, and pollution are likely to become serious and plans should either include appropriate mitigating measures or should allow for alternative sites to be select	 Under this safeguard policy generally large Cat. A projects are addressed, which would not be subject of FI financing However, theoretically involuntary resettlement may occur, when a community decides to locate a project on its territory with the consequence, that some people will have to be displaced Also, some issues of lan dispute can trigger the policy

Lega	Legal Safeguard Policies:				
7.60 OP	Projects in Disputed Areas	This policy is designed to reduce or minimize those problems affecting relations between the Bank and its member countries or between the borrower and one or more neighboring countries that may arise over projects in disputed areas.	relevant • even though typical FI projects are unlikely to be located in disputed areas		
7.50 OP	Projects on International Waterways	 This policy covers the following types of international waterways: (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 in (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. The policy applies to the following types of projects: (a) hydroelectric, irrigation, flood control, navigation, drainage, water and sewage, industrial, and similar projects that involve the use or potential pollution of international waterways as described above; and (b) detailed design and engineering studies of projects under above (a), including those to be carried out by the Bank as executing agency or in any other capacity. The international aspects of Bank-supported projects on international waterways, as defined above, are to be dealt with at the earliest possible opportunity and, where appropriate, other riparians are notified of the proposed project and its project details. Any proposed project's potential to harm the interest of other riparians through deprivation of water, pollution, or otherwise is determined and effected riparians are notified. 	typically FI subprojects will not address such projects which have impacts on a neighbouring country possible subprojects: irrigation project using water from an international waterway wastewater projects discharging in an international waterway flood control at international waterway		

3 Organizational Framework

Decentralization generally based on the principle of subsidiarity is one of the key principles of CDDs. The same applies to the EA management of CDDs. The different procedural functions, described in chapter 4, screening, scoping, assessment, permitting, monitoring and reviewing, ought to be assumed by communities, or local, regional or national government, wherever appropriate.

According to the understanding of CDDs, the bulk of the EA work should be done at the community and local government level, namely by the same actors that design and implement the corresponding subprojects. National governments, on the other hand, should concentrate on legislation, setting of standards, regulating, reviewing and macro-planning (the so-called "white-collar" orientation), rather than delivering services themselves (sometimes referred to as "blue-collar" orientation).

The exact implementation structure and its corresponding organizational framework of CDDs including their EA management will vary from country to country and should be defined at the very time when the program of each national CDD is designed. This chapter discusses briefly what a general institutional framework could look like and which functions would be best attributed to each level. In this context it is worth noting that CDDs go through a development process themselves when being implemented which passes from stage A to stage C, as explained above. In the initial stage A communities will typically rely on a temporary, comprehensive, multisectoral social or other fund, financed by donors. Figure 3-1 shows an example of an organizational chart at the time of stage A.

Ministry of Corresponding Ministry World Bank / Donor Environment / Env. Agency Operational Management Unit Finance and Administration Unit Central Fund Monitoring and Evaluation Unit Environmental Management NGOs Private Sector **Local Government Municipal Government** CDD Administration ETT CDD Administration ETT Communities / CBOs Communities / CBOs **ETT** ETT:Environmental Task Team

Figure 3-1: CDD Sample Organizational Chart with EA-Management

3.1 National Context

The Fund or the Implementation Unit (IU) of the CCD program will be set up under a corresponding national ministry. This could be for instance the Ministry of Finance or the Ministry of Planning. In any case, and especially when it comes to the EA procedure, the Ministry of Environment (or whatever other entity is entrusted with environmental issues on a national level) needs to assume an important role. This ministry or environmental agency is generally in charge of setting the environmental standards, providing environmental know how and sometimes also ensuring that international/national environmental laws and regulations are observed. Therefore it falls within its competence to be part of the EA for CDD programs. Other ministries may be involved in the implementation and approval of certain subproject types, that could also include some EA functions, as well. Consultants, universities and NGOs can also be important players in the capacity building process and could, for example, undertake EA studies.

The EA management of a CDD has to be developed in full compliance with the EA regulations in the respective country. Most countries have nowadays regulations on EA, however they may often only apply for bigger projects.

National CDD Implementation Unit / Central Fund

Different from the practice in most Social Funds, it is recommended that the CDD Central Fund does not carry out the EA work itself. It should rather provide guidance and oversee the EA process for the entire program. In most countries, even in those with considerable EA capacity, those subprojects that will have only minor impacts on the environment will not be addressed by the EA regulatory framework of the country, and if so, little attention is usually paid. Therefore, the national CDD Central Fund will probably, from the very onset, need to set its own procedures and standards. Since CDDs Central Funds should not turn into parallel institutions in a country, this task of environmental mainstreaming should always be closely coordinated with the national environmental ministry/agency. This way it can be best assured that the then applied procedures and standards at the local level will be consistent with sectoral and regional proceedings and that information on best practice will be easier made available nationwide.

The CDD Central Fund should be a pure management unit and function as a catalyst and source for the financing of the initiation of necessary processes at

different levels of government. Necessary EA management tasks on the program level should best be sourced out to suitable agencies. This way these agencies will develop much needed EA capacity. Such areas of competence could furthermore include the development and implementation of training measures for local governments and communities, development of practical manuals and guidelines, environmental reviews of the entire portfolio, and other tasks whenever regarded necessary. The CDD Central Fund should cooperate closely with the Environmental Ministry/Agency and support it to carry out the functions attributed to it with regard to the EA management of the CDD program (cf. table below). In a more mature stage of the CDD program or in countries with highly developed capacities at the local level, the MoE and its related agencies should take over full responsibility for the management of the EA review process in the country.

Communities might be reluctant to spend any shares of their budget allocation to pay external EA studies on their proposed subproject/s, especially when environmental advocacy work has not had much impact yet. As a consequence there is a risk that the EA process will not be appropriately applied or reduced to a minimum. Therefore, it would be recommendable that at stage A these EA studies are funded from a separate budget line in the CDD program.

It is also suggested that the CDD Central Fund duly incorporates a standard set of environmental clauses into the financing contracts with local governments and communities to better assure safeguarding of environmental aspects.¹² These contractual clauses could be specifically phrased for different categories of subprojects.

The entire environmental review process should be incorporated in the Operational Manual of the program. Checklists may be included as annexes to the OM. However, it is important that these procedures are somewhat flexible and can be adopted to the stage of development achieved, such forming a complex step by step learning-by-doing approach.

The CDD Central Fund needs to be adequately staffed to fulfill its environmental mandate. There exists a number of possible options on the design of institutional arrangements of a CDD Central Fund depending on the individual case. No single solution for building up the environmental know how and fulfil the required tasks will be appropriate for all countries. The optimal set

18

¹² Cf. the recommendations given on subproject implementation as mentioned in the ENVIRONMENTAL GUIDELINES FOR SOCIAL FUNDS FOR LATIN AMERICA REGION, WORLD BANK 1998, p. 39

up will often be a result of complex institutional considerations. However, it seems likely that given the size and variety of the multisectoral tasks of the CDD Central Fund a separate internal Environmental Management Unit (EMU) will be justified. The environmental functions, unlike other operational aspects, need to be taken into consideration in almost every sector and for every operational level. Therefore the EMU will have to work closely together with the other sectoral units within the CDD Central Fund and, as stated above, with the environmental institutions at all administrative levels. It is also likely that the CDD Central Fund will have regional offices, in which case the environmental responsibility needs to be allocated in line with the principle of subsidiarity.

Ministry of Environment (MoE) / Environmental Agency

The central environmental ministry with its related operational units/institutions (such as environmental protection agencies) should play a key role in the EA management on the program level of a CDD. As for most other aspects of a CDD, the national environmental legislation, relevant regulations and execution for EA all proceed differently. Many countries will need to improve and update their EA regulatory framework and standards with respect to the type of projects implemented under a CDD including a simple "permitting system". The MoE should be involved in designing environment know how training programs at all levels. This should be done through a cascade of train of trainers (ToT). Generally, the training will be assigned to appropriate institutions within the country, such as universities, NGOs, and possibly other government agencies or institutions of the private sector such as consulting companies.

Monitoring and evaluation of single subprojects should generally be assigned to the local level. However, the MoE could undertake aggregated environmental reviews of CDDs for whole sectors and regions to ensure that sectoral and regional CDD developments are in line with desired standards and defined environmental strategies.

As CDDs tend to be rather long-term interventions with a national coverage and cross-sectoral significance, they may form a vehicle not only for community empowerment and decentralization, but also for sectoral reforms and achievements. With respect to the environment there is a chance that

19

At the end of 1997, 22 out of 48 African countries had enacted some form of environmental legislation dealing with EIA issues, cf. WORLD BANK AFTE 1 1999, COMPENDIUM AND ANALYSIS OF EIA LEGISLATION OF SELECTED SUB-SAHARAN COUNTRIES (draft)

- the environmental information base (GIS), that would also serve for the EAprocess, is generally updated and probably improved
- strategic linkages between the CDD and a NEAP (that, in turn, would give an impetus to the preparation of a LEAP) are developed and that consistency (or at least backward and forward linkages) of CDDs with national environmental strategies and regional land use plans are ensured
- environmental awareness campaigns are effectively promoting environmentally beneficial ("do more good") subprojects
- local governments gain competence in environmental assessment and management

At the start of a CDD it could be useful to carry out a Strategic Environmental Assessment (SEA) study for the entire CDD program to help design an optimal environmental management system and assure necessary institutional arrangements from the very onset. A SEA could furthermore prepare the data basis and guidelines for each sector and each region, so that EA management for future subprojects at the local level would be made a lot easier. The coordination of such a SEA should be the responsibility of the MoE.

The CDD Central Fund will in most cases have to support the afforementioned functions of the MoE (by means of financing) and insist on their compliance.

3.2 Local Context

The empowerment and capacity building of local governments and communities in order to enable them to define, plan and promote their own development are key objectives of a CDD. Subprojects should thus be implemented with the capacity of the local level. To be in line with the general approach of CDDs the basic EA tasks should therefore also be assumed at the local level. For more specialized EA tasks environmental experts either at higher administrative levels or working independently would have to be called upon.

Chapter 4 outlines in detail, what the different EA steps and their responsibilities in the project cycle would be and suggests procedures for its implementation.

Local and Municipal Governments

Local and municipal governments can submit subproject proposals just like communities/CBOs themselves. In this case the local/municipal governments

ought to manage the entire EA-cycle as described in the next subchapter "Communities".

In general, local and municipal governments should give out environmental permits for certain subprojects, and monitor and evaluate their implementation according to the stipulated national regulation of procedures and responsibilities and/or to those of the CDD program. It may be useful for local/municipal governments to fulfil their environmental tasks creating specialized environmental task teams, if not already existing.

In most cases local and municipal governments will need to assist the communities in the implementation of CDD sub-projects. To this end an important capacity building effort will need to be put in place. This will first focus on improving the local/municipal governments' environmental capacity and then proceed to training representatives of the communities. This training can and needs to be delivered in close coordination with other capacity building necessary for any decentralized development such as needs assessment, priorization of needs, sub/project design and implementation, budgeting, administration and maintenance and monitoring and corrective measures to name but a few.

Local governments and, if applicable, regional offices of the Central Fund, that have received first hand training should assist municipalities and communities in fulfilling their tasks.

As a general rule, even where the local government assists communities in their development the responsibility should stay with the community, while the local government remains accountable to the communities.

Where local governments do not exist or are practically non-functional, they could be temporarily replaced by local development committees to be set up.

If regional/provincial governments exist in a country the CDD and the respective EA management have to be designed accordingly. The OM and the SEA should define the best arrangements.

Communities

The overall objective of CDDs is the empowerment of communities to enable them to take their development in their own hands. This includes not only all related skills of project management but also the compliance with any corresponding EA process. Responsibilities for the different EA tasks will be split up between local/municipal governments and communities differently in every country. In countries where local governments are basically non-functional, it can be advisable to delegate EA management to the communities in charge of project implementation anyway.

Depending upon the individual case the involvement of individual community representatives, CBOs or large parts of the entire communities will be addressed through awareness raising campaigns.

The ultimate goal would be that environmentally educated community members are fully participating in project selection and implementation process, that their points of view will be heard and procedures at this level are established to ensure that the safeguard issues are properly managed. Larger communities should also establish Environmental Task Teams (ETT), who have the responsibility for managing the EA tasks as outlined in chapter 4. This ultimate aim has to be approximated gradually. Local governments, which should receive first hand training and perhaps regional offices of the CDD Central Fund should assist the communities in their tasks.

Communities should be sensitized to realize the long-term benefits of environmental supportive subprojects.

The following table summarizes necessary EA tasks and the responsibilities of the different actors.

Table 2-1: Summary of proposed EA management functions with attribution to the different institutional levels

Institution	Proposed Possible Functions
Central Government Ministry of Environment (MoE) Env. Agency	 develop EA regulatory framework and standards including a clear permitting system for subprojects develop an EA information base carry out environmental training programs for local levels monitor and evaluate the EA implementation of the subprojects on a sectoral and regional base coordinate the Strategic Environmental Assessment (SEA) for the entire CDD Program develop strategic linkages between a CDD and a NEAP and LEAPs and ensure that CDDs are consistent with national environmental strategies develop environmental awareness campaigns and promote the identification of environmental beneficiary subprojects
CDD Central Fund Environmental Management Unit	 guide and oversee the EA-process for all CDD financed subprojects develop operational EA procedures and standards for subprojects in coordination with MoE and mainstream into the project cycle prepare a standard set of environmental clauses to be incorporated in the contract with the implementing institution (municipality, local government), if needed for different categories of subprojects (environmental accountability) carry out portfolio environmental reviews give guidance on EA to communities and local governments finance full EA studies, when carried out externally promote implementation subprojects in the field of environment and natural resources management

Institution	Proposed Possible Functions
Local/Municipal Government Environmental Task Team	 assist communities in the EA work approve/permit subprojects monitor and evaluate the implementation of subprojects if subprojects are carried out at this level, they should also: manage all EA work for subprojects: screening, EIA/ER, mitigation carry out environmental monitoring enhance environmental beneficiary subprojects at the local level report to higher administrative level
Communities CBOs	Communities might need to be assisted by local/municipal governments to carry out EA work, namely: • manage all EA work for subprojects: screening, EIA/ER, mitigation • carry out environmental monitoring • enhance environmental beneficiary subprojects • report to the local government (local MoE)

4 Procedures

The objective of mainstreaming environmental management principles and activities in the project cycle should be considered as a cornerstone for the promotion of a sustainable development and as an effective strategy for addressing poverty among both rural and urban communities. The challenge consists in developing an effective delivery of environmental management knowledge, skills and supporting resources to the key stakeholders, the communities and the intermediaries.

Compliance with the Safeguard Policies is mandatory for all Bank-funded activities including CDDs. The mechanism of Environmental Assessment (EA) is the umbrella process to be applied in order to check compliance with all ten Safeguard Policies. Even all safeguard policies have an equal status in the World Bank, they can only be mainstreamed in such programs in one procedural way, which is the EA process.

In this chapter general procedural guidelines for mainstreaming EA mechanisms in a CDD and some possible approaches to positively influence this process are outlined. The suggested approaches are

- strategic environmental assessments (SEAs)
- community sensitization tools (PRA/PLA)
- community based environmental meetings (CBEM)
- promotion of environmentally beneficial subprojects including local environmental action plans (LEAPs) and
- linkages to other initiatives.

4.1 General Guideline for EA-Procedure of CDD

The following general guidelines explain the typical EA steps necessary for mainstreaming safeguard policy compliance like screening, scoping, environmental review (ER), environmental impact assessment (EIA) and the environmental mitigation plan (EMP)¹⁴. As these guidelines are described,

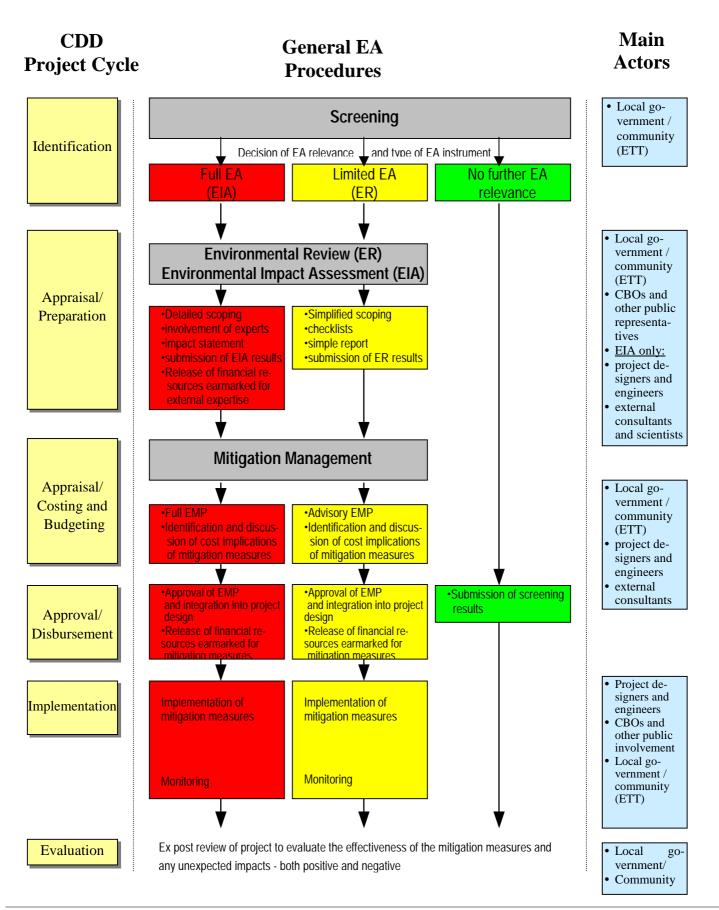
EMP usually refers to Environmental Management Plan applying for Category A or large Category B projects. In this context where we are dealing with numerous small subprojects

ideally they should work in a more mature stage of the program and this will have to be reached in a learning by doing, iterative way. Implementing these functions on the ground will require their definition in the Operational Manual of each CDD. Environmental issues provide a unique opportunity to redefine development in a more sustainable way than it had been defined up to now.

Figure 4-1 on the following page shows the different EA tasks to be built into the general CDD subproject cycle and who would be responsible for these tasks.

EMP is used for a simple Environmental Mitigation Plan, which can, as a consequence, also be considered to be an Environmental Management Plan.

Figure 4-1: CDD Project Cycle and Mainstreaming of Environmental Procedures



4.1.1 Screening

Environmental screening ensures that proposed projects undergo the appropriate type of environmental assessment (EA)¹⁵ and to the correct extent. Subproject proposals should be screened for potential environmental impacts meeting the procedural requirements of the donor and of the client country.

Environmental screening entails classifying a subproject proposal into one of several categories of likely environmental impacts, and serves two important purposes. On the one hand, it helps to identify early in the subproject cycle those subprojects with potential environmental impacts so that adequate attention can be given to the development of appropriate mitigation measures or that the project will be rejected completely. On the other hand, an effective screening may identify subprojects which have few or no environmental consequences so that they can be excluded from unnecessary and costly environmental reviews.

The screening process should also determine, which safeguard policies of the World Bank are of relevance for the subproject.

Screening Input (Baseline Information)

Often, the screening decision depends substantially on the project type and design, whereas the significance of the potential impacts are a function of the natural and socio-cultural surroundings. Depending on the project type the collection of the following set of data could therefore be useful for the screening decision (cf. chapter 5.2 "Development of Environmental Information Systems" for technical advice):

- the type, the components and the dimension of needed space, emissions, expected consumption of water and energy,
- the geographical location,
- the physical environment and the sensitivity of the significant natural environmental factors against impacts,
- the social and health conditions,
- the nature and magnitude of existing loads.

Screening can be accomplished using a generic checklist (like in annex 1 b) that serves all types of subprojects where little or no subproject-specific information is provided.

EA Sourcebook Update No. 2 "Environmental Screening", p. 1 (THE WORLD BANK, ENVIRONMENT DEPARTMENT, 1993)

Screening Output (Recording)

- the key environmental issues
- type and scale of the CDD subprojects,
- nature and magnitude of the potential impacts and, if possible at this early stage, proposals for alternatives,
- relevance of any safeguard policy¹⁶
- screening decision
- project category,
- further EA and safeguard relevance and instruments required.

Screening Decision

The main screening output is the decision on the EA relevance of the subproject and, consequently, whether the EA instruments will need to be applied further. In order to stay in line with the World Bank screening categories we recommend the use of the same classification system:

- 1. no further environmental assessment,
- 2. environmental review (ER)¹⁷,
- 3. environmental impact assessment (EIA).

Addionally, we suggest the introduction of a forth category, namely

4. exclusion for non-compliance with safeguard policies, with other national policies or because the subprojects are considered critical.

These EA categories could be labeled in a straight forward manner as C, B, A, X. However, this could lead to a confusion, because it would be a different classification of project types to that used now. The subprojects that can be financed under CDDs will typically be either categories B (less adverse environmental impacts) or category C (negligible or without negative impacts)

¹⁶ The use of a screening form at desk appraisal to check about the applicability of any of the 10 safeguard policies is recommended

29

Some guidelines divide this classification into two classes: Environmental Review (ER) for a very simple analysis and Limited Environmental Assessment (LEA), which stands between an ER and a full EIA (Kenneth Green: Env. Guidelines for Social Funds 1998 or EA for the SIPP Bangladesh 1999). We believe this is not straight forward and one category would serve the purpose. The instrument of an environmental review should be used in a flexible way, that it covers all possible scope of an environmental analysis less then a full EIA.

projects according to current World Bank EA category definitions¹⁸. Depending on the sensitivity of the location and the size of the project some category C subprojects would require an environmental review and some category B subprojects would need a full EIA study. Therefore, in order to comply with the existing project categorization, a better option would be to distinguish subcategories B1 and B2 and C1 and C2.

Within this second screening option, a full EIA study, would be required for projects categorized as A and B1. A limited EIA, called Environmental Review (ER), would be applied for a subproject categorized as B2 and C1. Subprojects categorized as C2 would not need any further EA appliance.

To avoid confusion with existing categorization, we consider the best option to be a third option, namely to call the screening category after the EA instrument to be applied and label it with the appropriate colour of the subproject "EA decision corridor" as explained in the following table.

Table: EA Categorization and Decision Corridor

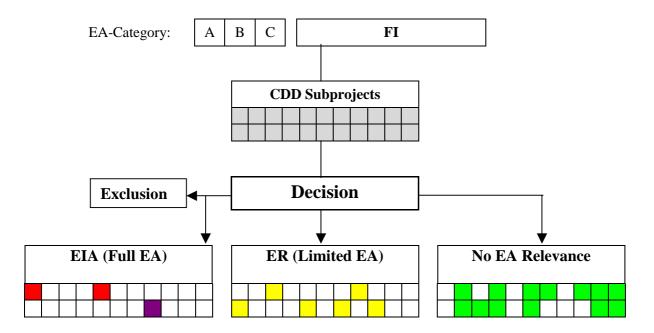
EA Instrument	Project Cat. Option 1	Project Cat. Option 2	Project Cat. Option 3
Exclusion	X	X	purple: exclusion
Full EIA	A	B1 and A	red: EIA
Environmental Review	В	B2 and C1	yellow: ER
(Limited EIA)			
No EA relevance	C	C2	green: none

Most subprojects will not need a full EIA. Projects requiring this kind of analysis will tend to be quite large and are not likely to be financed under the given budget and community management capacity limitations. The majority of the subprojects will either need to undergo an environmental review or will have no further EA relevance. It should not be forgotten that EA categorization may be subject to change in the further EA cycle and should therefore be monitored together with overall project monitoring activities.

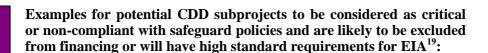
Depending on the project type, its size and the sensitivity of the project site, the decision making will be guided as shown in the following figure.

¹⁸ EA Sourcebook Update No. 2 "Environmental Screening", p. 3 f. (THE WORLD BANK, ENVIRONMENT DEPARTMENT, 1993)

Figure 4-2: Screening Decision Model



At the project identification stage it will become clear that the typical category A projects are not likely to be financed under CDDs facilities. Depending on the sensitivity of the proposed site and on the compliance or lack of compliance with all safeguard policies, some subprojects will be excluded right away. Others may first undergo a detailed EIA that will ascertain whether the expected negative impact of the project in question can be prevented to a satisfactory extent.



- Commercial logging operations or acquisition of equipment for use in primary moist tropical forests²⁰
- Projects involving the significant conversion of natural habitats unless there
 are no feasible alternatives for the project and its siting and a

¹⁹ Depending on the sensitivity of the proposed site, however, the corresponding subproject might still be financed, especially if the expected negative impact can be prevented to a satisfactory extent.

²⁰ OP 4.36 World Bank safeguard policy on forestry

- comprehensive analysis demonstrates that overall benefits from the project substantially outweigh the environmental costs²¹
- Subproject activities conflicting with archaeological and/or historical sites or existing cultural and social institutions²²
- Subproject activities in densely populated areas, where resettlement may be required or potential pollution impacts and other disturbances may significantly affect communities²³
- Subproject activities endangering safe drinking water supply along watercourses, in aquifer recharge areas or in reservoir catchments used for potable water supply²⁴
- Subproject activities on lands or waters containing valuable resources jeopardizing other uses such as fisheries, minerals, medicinal plants, prime agricultural soils etc.²⁵

Annex AIa provides a list of examples for subproject categorization.

4.1.2 Environmental Review (ER) / Environmental Impact Assessment (EIA)

Environmental Review (ER) is a limited EA that does generally not require any specialist expert environmental know how. It may be completed through a participatory process lead by the ETT of the beneficiary community/local government. No specific EIA-type study will normally be required. Depending on a simple scoping exercise by using checklists, the ER will go beyond the screening stage by considering data on the proposed site and the type and scale of the proposed subproject. The main output of an ER will be the description of the impacts associated with the subproject's activities and of the appropriate mitigation measures to be built into the project design.

The benefits for conducting an environmental review at the local level are:

- verification and highlighting of the potential environmental significance of projects at an early stage in the project cycle;
- inclusion of technical input into the design of an environmentally sound project from the onset;

²⁴ idem

²¹ OP 4.04 World Bank safeguard policy on natural habitats

²² EA Sourcebook Update No. 2 "Environmental Screening" (THE WORLD BANK, ENVIRONMENTAL DEPARTMENT, 1993)

²³ idem

²⁵ idem

• Economy of financial and human resources from not conducting an EA of those projects that are likely to have only limited environmental significance.

For the ER more or less complex checklists can be used (example in annex I A3). A simplified report using appropriate forms will conclude the ER including the related scoping, its impact assessment and the recommendations on the mitigation management (for mitigation management cf. chapter 4.1.3).

The Environmental Impact Assessment (EIA) shall identify, describe and assess in an appropriate manner, the direct and indirect effects of a CDD subproject for all environmental aspects addressed in the scoping process with priorization of the impacts. An EIA requires the preparation of a complete environmental impact statement report. Emphasis in the document should be given to the mitigation management. It shall follow where applicable national EIA requirements.

An EIA requires the know how of an environmental expert or a team of experts and usually it is a lengthier process. Several site visits would need to be carried out, subproject-specific measures would have to be planned, and a detailed monitoring plan developed. Writing precise Terms of Reference (ToRs) for the EIA are of key importance. The assessment study itself would probably be contracted out and implemented by a third party, and the involvement of the corresponding line ministry would be an integral part of the study.

What are the main differences between ER and EIA?

ER	EIA	
 needs less people and requires little or no institutional involvement 	needs more people and requires institutional involvement	
• needs less expert involvement	• needs expertise of environmental specialists, often subcontracted to external consultants	
 only environmental factors will be discussed that are defined in the scoping terms as being the most significant 	needs to address all environmental factors	
reviewing can be done by using checklists	• one or more expertise assessment is necessary to fulfill the tasks of an EIA	

ER	EIA	
accountability can be ensured by short standard reports	full impact statements are neces sary for ensuring accountability	
• can be done within a couple of days	need weeks to months until completed	

Scoping

Scoping is a process which determines the further environmental assessment requirements such as investigations and expected results of an Environmental Review (ER) and Environmental Impact Assessment (EIA) of CDD subprojects. Scoping is regarded to be an important step in the EA process because it relies upon participatory elements, which contribute valuable information for both an ER and an EIA (an example checklist for the scoping excercise is provided in annex I A2)

Participation

The key element of the scoping process is public involvement. The general public/beneficiaries should have the chance to express their opinion on the proposed subproject's potential impacts on their natural, social and cultural environment.

Public participation during the scoping exercise serves also to receive comments and to prepare the Terms of Reference (ToR).

Public participation can be organized as a "scoping round table" bringing together the key actors including representatives from next higher government level, project designers, environmental experts, ETT and community representatives. Often CBOs or other local groups represent the public in such cases.

4.1.3 Mitigation Management

Objectives of Mitigation

The development of measures to eliminate, offset or reduce negative impacts to an acceptable level during the implementation and operation of the project is the essential reason for mitigation management in the EA process. The main objectives of mitigation measures are briefly defined below in a descending order of priority.²⁶ One example for technical guidelines for mitigation measures of small-scale projects are attached in annex I A4.

Priorities for mitigating adverse impacts on the local level are:

- avoidance: avoiding projects or activities that could result in adverse impacts; avoiding certain types of resources or areas considered to be environmentally sensitive. This approach is most effective when applied in the earliest stages of project planning.
- prevention: measures aimed at impeding the occurrence of negative environmental impacts and/or preventing such an occurrence having harmful environmental and social impacts.
- minimization: limiting or reducing the degree, extent, magnitude, or duration of adverse impacts. Mitigation can be achieved by scaling down, relocating, or redesigning elements of a project.

Measures with less priority and less likely to be used:

- rehabilitation: repairing or enhancing affected resources, such as natural habitats or water sources, particularly when previous development has resulted in a significant resource degradation.
- restoration: restoring affected resources to an earlier (and possibly more stable and more productive) state, typically "background/pristine" condition.
- compensation: creation, enhancement, or protection of the same type of resource at another location, to compensate for resources lost to development, if the impact could not be minimized to a satisfactory extent.

Preparation of an Environmental Mitigation Plan (EMP)²⁷

The integration of mitigation measures into CDDs subprojects implementation is supported by defining clearly the environmental requirements within an environmental mitigation plan (EMP). The EMP is the link between the mitigation measures specified in the ER or EIA and the implementation activities. An EMP can consist of several ones of elements ranging from consultantion of manuals and guidelines, expert advice up to a detailed mitigation plan. A full but simple EMP should normally be prepared for a project were an EIA is applied, if not already included in the EIA report. The

²⁷ cf. in this context footnote 14

²⁶ EA Sourcebook Update No. 25 "Environmental Management Plans" (THE WORLD BANK, JANUARY, 1999, p. 2)

EMP should be prepared by the project designers and the ETTs, external know how may be called upon from time to time.

A detailed EMP basically should:²⁸

- identify feasible and cost effective measures to reduce potentially significant adverse environmental and social impacts to acceptable levels;
- briefly describe each mitigation measure with reference to the impact to which it relates and the conditions under which it is required;
- provide designs, equipment descriptions, and operating procedures which elaborate on the technical aspects of implementing the various measures;
- evaluate the significance of secondary impacts where mitigation measures may result.

In the case of an ER-project the ETT will need to make sure in cooperation with the project designers that appropriate mitigation measures are incorporated in its design. These should be accompanied by relevant technical drawings. ETTs will need to be trained to make cost estimates for proposed mitigation measures. Technical guidelines for mitigation measures for the different project types including cost ranges should be made available to the ETTs. The preparation of the EMP should be done parallel to the project design stage so that any necessary changes are duly taken into account by the project designers.

4.2 Environmental Monitoring

Monitoring measures systematically the performance of a subproject, the achievement of set results and the implementation of planned activities. It forms part of the overall subproject management. It is a central element of a learning by doing approach gathering continously coherent data for decision making on possible adjustments in project design and implementation. Its conclusions will need to be reflected in possible revisions of the operational manual or in an adjusted capacity building program to overcome identified weaknesses.²⁹

Environmental monitoring on the local level involves the review of the environmental impacts of a subproject and a check on whether and how well mitigation measures, as set out in the EMP, are being implemented during construction. This task should be performed by the ETTs of the communities

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²⁸ EA Sourcebook Update No. 25 "Environmental Management Plans" THE WORLD BANK, JANUARY 1999, p. 2 f.)

January 1999, p. 2 f.)

29 Update Technical Sourcebook CAPs, Chapter 6, Information and Feedback Systems for Enhanced Accountability and Learning by Doing, December 2000

and cross-checked by the local government. ETTs should be trained in the application of standard environmental monitoring indicators (e.g. performing basic water quality tests).

The monitoring results of the communities have to be reported to the local government. Local governments should be equipped and trained to use the database management technology. Environmental monitoring should be integrated as one element of the standard Monitoring and Evaluation system of a CDD.

Specialized monitoring for a region or a sector may also be contracted out to professionals and should be coordinated by the MoE and the CDD Central Fund. Routine monitoring needs to be coordinated with the general project monitoring undertaken by beneficiaries and/or subproject management. Monitoring sometimes tends to have its own dynamic and grows into an effort of unjustifiable proportions. The standard requirements of any monitoring carried out therefore apply to the environmental monitoring as well. It needs to be

- pragmatic, in a sense that it is oriented towards recognized and expectied weaknesses and problems
- strategic, based on a predefined system of data collection processing and interpretation
- transparent and generally accessible
- functional, to reach efficiency and to avoid the creation of useless "data cemeteries"
- sustainable, so that through monitoring an understanding of and learning from project management and its requirements is enhanced
- complementary to the activities and to other monitoring steps and to other monitoring done by other projects and partners.

4.3 Approaches for EA-Management

This chapter discusses some possible approaches to support the operational mainstreaming of the safeguard policies into the CDD programs.

4.3.1 Strategic Environmental Assessment (SEA)

Strategic Environmental Assessment (SEA) is an instrument to analyze upfront impacts of plans or programs in a certain sector (Sectoral Environmental Assessment) or for a distinctly spatial setting (Regional Environmental Assessment). Both types allow for comprehensive assessment of environmental issues in a cumulative way and can be used to establish a sound development policy in addressing issues related to policy and planning and the legal and institutional framework. A SEA offers opportunities, in a planning stage where major strategic decisions have yet to be made in order to prepare for environmentally sound strategies.

CDDs are designed to be multisectoral and multiregional development programs in a given country. We suggest using the instrument of a Strategic Environmental Assessment, when preparing a CDD, combining sectoral and regional EA approaches to reach a comprehensive analysis.

Using the scenario technique, a SEA forecasts possible long-term developments. A SEA should be regarded as a process making use of participatory methods to include key stakeholders.

Major objectives of a SEA would be the

- assessment of cumulative, secondary and long-term impacts of the entire program
- collection of environmental data and setting up an environmental information system
- determination of ecological sensitive areas critical for certain development activities
- definition of the necessary policy, legal and institutional and management framework for the program to effectively ensure environmental management and safeguard compliance
- preparation of environmental mitigation guidelines and standards for different sectors and subprojects
- definition of necessary capacity building initiatives

- definition of a (environmental) monitoring and evaluation system for the entire program
- provision of a basis for cross-sectoral and regional collaboration and cooperation
- coordination with other environmental strategies, programs and projects.

Such a comprehensive SEA process at the beginning of the program would initially be costly and time consuming, but it would be the best way to allow for a rather consistent implementation of the EA process and coordinating it with other environmental strategies of the country. The EA work of single subprojects should be alleviated and speeded-up by such a preparatory SEA. A SEA would not necessarily slow down the process of CDD implementation, because it can be carried out in parallel to the start up of the program. These advantages of a SEA probably will quickly compensate the upfront investment.

As outlined in chapter 3, a SEA should be coordinated by the Ministry of Environment involving stakeholders from all government levels important for the environmental management of the program. The management structure of the SEA process has to be determined within the ToR for the study. The SEA should specify the general procedural recommendations outlined in the present study on a country basis.³⁰

It would be recommendable that the Bank promotes the launching of one pilot SEA for one country to be used as an example for other CDD programs. Such a model would show clearly, whether an instrument of such complexity could be successfully applied on a multisectoral and multiregional scale. If so, it could serve as an example for others and could substantially reduce work input by international consultants when preparing SEAs for other countries.

4.3.2 Community Environmental Empowerment through Participatory Rural Appraisal (PRA) and Participatory Learning and Action (PLA)

Participatory rural appraisal (PRA) and participatory learning and action (PLA) are tools to promote and enable community involvement. Whereas PLA is defined as "the involvement of end-users and learning from experience" PRA is a more general term describing a set of techniques that enable local people to

³⁰ as an example of a SEA the EIA study for the Zambia Social Investment Fund, May 2000, could serve, however this study has a more limited scope than the intended above

³¹ http://www.undp.org (United Nations Development Program, Evaluation Office)

"share, enhance and analyze their knowledge of life and conditions, to plan and to act." Numerous publications and manuals on these methods and corresponding variations exist.

It is important to note in this context that communities will only become involved when they foresee and experience the development process as being in their favor. This goes especially for the settings where CDDs operate, namely those that are characterized by high levels of poverty.

Communities greatly vary in their participatory traditions and understanding. The methods applied to get the process started will therefore have to take into account these differences in order to keep the dynamic going.

Consultation and cooperation with and inclusion of the concerned communities will be the best guarantee for a needs-oriented approach and for a detailed information input into the EA process. Especially the environmental knowledge of indigenous people can prove highly valuable, but the social hierarchies and information channels will need to be taken into account when gathering the information. Data on local conditions and past experiences therefore will shed light on potential environmental problems. Anyone using these techniques should be aware that the information collected not only represents an inventory of the physical environment but also gives a social community profile.

Who will manage the PRA/PLA?

During stage A of the CDD implementation the Central Fund will have to promote community empowerment. Communities will need to be informed how to become involved and how to access the CDD facilities. Together with efficient information campaigns through the media and through visits to the communities the Central Fund, local government, or subcontracted NGOs will have to explain the rules of the CDD. Part of this campaigning can already be environmental awareness raising and capacity building. These should not be single events, quite the contrary. The communities will probably need to be assisted in the process of filing a microproject application and its implementation and will need to be revisited.

During the following stages B and C, and especially when more detailed environmental knowledge will be required, be it for the subproject design, be it for the EA process and/or for the monitoring of corresponding mitigation

³² Chambers (1992), cited in CIDA (1997; p. 16)

measures, the main promoters of environmental awareness should be the specially trained ETTs on the local government and community level.

When should PRA/PLA take place in the EA process?

Best practice within EA participation principle is to start with community empowerment at the earliest stages in project planning, ideally when ranking development priorities of the community. Participatory techniques can best be applied throughout the project cycle to ensure that the ownership of the subproject is indeed with the community. Most of the information needed for screening of subprojects may come from local know how or a systematic gathering of local environmental information. Usually local communities are quite aware of the environmental requirements in their immediate surroundings even though the need to make a living might make them act in detriment to the environment (for example indigenous people selling tropical forests or slash and burn agriculture).

Therefore environmental awareness raising and capacity building are activities that will need to run parallel throughout the CDD implementation process and will need to be checked regularly regarding their accuracy and quality.

What endangers CDDs and with them the EA Procedures?

Capture of funds and political interference by traditional or political elites is an immanent problem within development projects.³³ EA procedures, namely the management and implementation of mitigation measures, run the risk of being torpedoed with the effect of not being realized.

The exclusion of vulnerable groups (women, ethnic and religious minorities, landless farmers, migrants and day laborers) due to a possible lack of organization and legitimate representation can equally foil the EA procedure. In some regions migrations have completely distorted traditional rural structures. ³⁴ Even though men keep the power of decision making, are the only ones to own property and have access to credit, they might be away for many months at a time making any decisions on the communities development virtually impossible.

34 IFAD (N.N.)

41

³³ The World Bank AFR Technical Sourcebook on CAPs

To reduce such risks, it is recommended to

- promote training of leadership and organizing and management of groups
- identify and build up within the target group/community some "environmental specialists" (ETTs)
- get the local communication channels (especially radio) interested in the communities thereby promoting awareness raising and networking through learning from experience
- allow for reasonable local exceptions due to prevailing social or cultural differences from the mainstream.

4.3.3 Community Based Environmental Meetings (CBEMs)

The Community Based Environmental Meeting (CBEM) is a vehicle for an efficient and locally "owned" participation process. Therefore it plays an important part in the participatory approach of CDDs.

What purpose do CBEMs serve?

Its main purpose is to work out locally appropriate procedures for the EA of CDD projects/subprojects. A second purpose, equally important, is to get the participating communities to approach sustainability in their development. In this context it can be very helpful to establish a link with the Agenda 21 process and use the opportunities provided by the introduction of the environmental issues to think about the overall concept of development from the perspective of the corresponding communities. Local Environmental Action Plans (LEAPs) can prove to be a constructive vehicle in this process³⁵.

Who are the actors of CBEMs?

CBEMs bring together the participants of the EA process. These participants should represent all interested parties involved in the CDDs EA process. Depending on the specific EA tasks the participants may come from various institutions/organizations. Usually they will be representants from the community, the ETT of either the local government or a single community or both, CBOs, if applicable those experts who are/were involved in the subproject and regional/national/international environmental Depending on the project size (subproject or CDD in general) participation of

³⁵ For instance the preparation of Community Environmental Action Plans is supported through the Environmental Support Program (ESP) in Zambia.

the next higher level of government (CDD Central Fund, MoE etc.) might be called upon as well.

CBEMs take place whenever needed, i.e. parallel to important EA steps such as screening or scoping for CDD subprojects. CBEMs can take up different forms. They could be organized as a "scoping round table", as a general discussion round table or as a planning workshop.

4.3.4 "Do More Good" Approach

With the Bank's focus on shifting towards programmatic policy-based lending, the understanding of environmental policy linkages and the tools for the integration of environmental considerations into upstream policy work should receive increased attention to complement the role of safeguards³⁶. The Bank's envisaged shift from the "Do No Harm" approach exemplified in the Safeguards towards a "Do More Good" approach of the new Bank policies should also be addressed in the design of a CDD. The proposed instrument SEA can serve to link both policy orientations.

On the local level such a "Do More Good" policy translates into the promotion of environmentally beneficial subprojects that have the potential to improve the living conditions of the people. The capacity building program on EA management should give considerable attention to this issue. The CDD Central Fund could prepare special brochures and information material promoting environmentally beneficial projects³⁷: Examples for such projects are

"Environmental" infrastructure projects

If well designed and managed, these subproject types can help to decrease the contamination of rivers, streams and the landscape leading to better public health conditions resulting from:

- latrines
- waste water treatments
- waste deposits

6 ---

³⁶ Toward an Environmental Strategy for the World Bank Group, Washington 2000, p. 15

The Community Action Program in Zimbabwe has produced a very illustrative and good natural resources management handbook. Also the Zambian Social Investment Fund is using an environmental training manual containing environment and natural resources management project profiles.

Natural resources management projects

- sustainable catchment management of natural resources
- soil and moisture conservation
- water conservation
- sustainable pasture and grazing management
- appropriate cropping systems and practices
- reforestation of degraded and deforested areas
- sustainable forestry
- wildlife management in protected areas
- renewable energy sources
- mining area rehabilitation
- ecotourism
- reduction of existing loads

Another instrument for the "do more good approach" could be the promotion of Local Environmental Action Plans (LEAPs).

4.3.5 Linkages to other Initiatives

As CDDs aim to reach full national and sectoral coverage they will need to coordinate their activities with other programs and projects to enable synergies and to avoid duplication of efforts. Countries that benefit from CDDs are usually countries with a rather high incidence of poverty and, as a result, a large number of project interventions from other donors. The assessment and the harmonization with other environmental initiatives and strategies can be an assignment of a SEA. Regular coordination should best be taken up by the CDD management on strategic issues and by the field staff and the local government on operational matters.

5 Supporting Activities for Implementing the EA-Procedure in CDDs

5.1 Networking

As a result of decentralization processes and community empowerment the nature of the relationship between communities and local governments on one side and the central government on the other side will necessarily change.

In this context networking is an important factor when building "platforms" for the exchange of experiences, for assuring that everybody plays the role assigned to them and for the pooling of scarce resources by promoting joint efforts. This streamlining will prevent differences in strategies, approaches and adverse methods that could lead to a duplication of efforts and a useless waste of funds.

Where could local governments / communities get help when starting up the EA procedure?

Local governments when processing funding requests for CDD matching funds can exchange information and advice with:

- other/neighboring local governments
- NGOs/CBOs
- local and national/international experts

These groups of people can sometimes provide more appropriate advice at a local level than some central government bodies.

How to arrange Networking?

Generally speaking, personal contact is one of the most sustainable ways of networking. Local governments could simply consult on an informal level with their counterparts from other local governments. Another option would be to institutionalize some regular communication and information exchange. In some countries local governments write up their development plans, often with the assistance of a donor's program supporting the decentralization process. In doing so local governments can establish valuable contacts with their "sister" local governments, since all planning has to come bac together fitting into national planning exercises. Another example for more formalized networking

on a personal contact basis are the above mentioned community-based environmental meetings (cf. ch.4.3.3 "Community Based Environmental Meetings (CBEMs)"). Even though by and large it can be assumed that people in the communities know each other, at the occasions of the CBEMs some special qualifications and know how of individual community members might be discovered.

Another increasingly useful tool is the internet. May be not in many countries as of yet, but changes do take place in this respect. Small internet cafes are spreading even in smaller towns. Naturally, minimum technical requirements have to be met. These are a reliable power system, stable phone lines and decentralized servers, computer equipment and operators reading and writing English and/or French. IT offers an ever expanding opportunity enabling communities to deal with environmental (and other) issues knowledgeably and efficiently. Local authorities, NGOs, the environmental task team (ETT) and others involved in the EA procedure can not only communicate far more efficiently through internet or any intranet but can also be connected to relevant databases.

The internet-based networking on the community level offers many advantages, namely:

- to become an important tool speeding up the decentralization process
- to facilitate a "learning by doing" approach
- to achieve that the EA procedure becomes more effective and transparent
- and will additionally create a demand for a range of new qualification and job opportunities.

5.2 Development of Environmental Information Systems

For assessing the environmental issues of CDD projects environmental data has to be collected, evaluated and documented. The idea is to build up a basic environmental information platform on different levels that should be interrelated. SEA (cf.. ch. 4.3.1) if implemented within CDDs, will be the appropriate EA instrument for establishing such data platform.

It will be convenient that the process of collection, evaluation and documentation of environmental data will be initiated by the national MoE in close cooperation with the Environmental Unit within the national CDD Central Fund. Communities/local governments should provide all relevant safeguard related data to the central government or the environmental unit of the CDD

Central Fund. Useful participation techniques (e.g. PRA) for introducing and gathering local know how may be used. It is also important to give a feed back to the communities and not to use them only to provide data. If this was to occur the data provide will soon loose out on reliability and accuracy.

A valuable technique for the collection, use and documentation as well as exchange of environmental data is an Environmental Information System (EIS), usually known as Geographical Information System (GIS). Depending on the technical infrastructure and know how, building up an EIS will probably be best placed on the national level, if there is not one existing already. Then, the quality and the usefulness of the available information should be evaluated and possibly adjusted to the national/CDD requirements. At a further CDD implementation stage B or C, the CDD could finance GIS capacity training, as well as possibly hard- and software on the local level.

5.3 Capacity Building

Capacity building being part of the World Bank's Operational Policies on EA, is one of the most important actions within the implementation of the EA procedure.

To manage capacity building effectively, training needs should be assessed and a capacity building plan/strategy needs to be designed. This plan should outline overall goals and requirements when it comes to human and financial resources as well as logistics required. Its curriculum though will need to be kept sufficiently flexible for it to be able to respond to training needs arising in the process of CDD implementation. It should include initial training and sensitization and specialized modules to further the understanding of the complexities of environmental management involved in microproject implementation and operation. Care should be taken so that the different players receive the training with the corresponding degree of detail according to their involvement and tasks within the process. After a period of time the practical experience that participants will have gained will provoke new questions pertaining to specific problems occurring in practice.

One important factor that needs to be kept in mind is the fluctuation of people formerly trained. Key personnel of local governments might get transferred to other jobs, community leaders and members might move on to somewhere else or, increasingly impacting, they might pass away due to the high incidence of

HIV/AIDS. New community members/local government staff will need to replace them. They in turn will need to be prepared for their roles to play.

Depending on the individual country this capacity building initiative should be streamlined by the MoE or CDD Central Fund but implemented and enriched according to the local requirements by the decentralized entities. It would be useful to include the communities as far as possible in the monitoring of the results and achievements of the capacity building.

National and regional environmental experts working together with training design and training organization specialists might need to be come in here.

5.3.1 Identifying Deficencies – Training Needs Assessment

The emphasis in CDDs is on learning by doing. Obviously no community could be excluded from microproject matching grant funding on the grounds of inadequate capacity to implement them.³⁸ Solving the problems that are associated with the EA procedure, however, will more than likely need more knowledge and skills than are readily available at the local level. These deficiencies need to be identified continuously throughout the capacity building process.

The training needs assessment at the local level can follow the lines of the subsequent checklist:³⁹

- Is the community / local government aware of the major environmental issues in the vicinity ?
- is there any know how of environmental action planning and dealing with environmental issues?
- does the community have any environmental management activities incorporated in their daily/weekly/monthly/yearly programs?
- has the community / local government been sensitized to environmental issues in the vicinity before preparation/implementation of the subprojects either by the CDD itself or by other programs working with communities on similar issues?
- are there any other organizations working on environmental/natural resource management issues?

20

³⁸ THE WORLD BANK Technical Sourcebook on CDDs December 2000

³⁹ Cf. ZAMSIF EIA May 2000, p. 38

 are there other projects of various kinds being implemented in the region and what are their environmental concerns/EA procedures (cumulative effects)?

5.3.2 Developing Relevant Training Capacity

Decentralization requires improved municipal capacity and should lead to better and more needs oriented services provided through the local government. By doing so, the local environment stands a chance to be improved as well. In most cases though a lack of know how, skills, management experience and sometimes initiative will be evident at the local level. As a consequence their capacity and responsiveness to communities claims needs to be built up systematically.

Who should be trained for environmental management and what skills are important to learn?

Environmental training should qualify the ETT members to manage an EA on the local level. It is important to be very clear beforehand in who should receive the training. Generally it is those that will later on deal directly with the issues treated. Sometimes meal and seating allowances paid out during courses and meetings are to the detriment of the training results. Courses that way are being so attractive that senior officals will attend instead of those that should really be trained.

An important qualification to acquire will be how to screen subprojects and how to prepare scoping TORs. The qualification for preparing an ER or a limited EIA should also be trained to get an overall understanding.

Another important aspect is environmental monitoring and environmental reporting. The ETTs will eventually need to be capable of preparing cost estimates for mitigation measures and sometimes invite tender proposals for EIAs and EMPs.

How can training capacity been organized?

Since CDD is an instrument focussing on community empowerment the capacity building should be decentralized. On the national and possibly still local level it could be imparted as a post-graduate course complementing certain relevant university degrees. Additionally, existing training institutes on the regional/local level could host/organize as well regional or local workshops. Courses can also be held in local schools and consultants/NGOs can be subcontracted to undertake the training of trainers. Important in this context is a

continuous check of an observance of agreed upon training quality standards. This monitoring can be done in conjunction with the general monitoring of CDD activities.

Regional cooperation between communities and regions will help to achieve best practice under the given circumstances (refer to ch. 5.1 "**Networking**" on the issue of cooperation). Training for lower levels such as ETTs of district or provincial governments, however, might be better organized through the MoE or at the occasion of (international) workshops/training exchange programs.

For reasons of efficiency and institutional sustainability, the environmental training should be linked with the general CDD capacity building (project design, administering and managing of local development etc..).

The MoE together with the Environmental Unit (EU) within the CDD Central Fund should coordinate the capacity building initiative still at stage A of the CDD implementation and possibly during parts of stage B as well. Additionally the training of the own staff needs to be organized. The EU of the Central Fund should act as an environmental focal point keeping track and sharing knowledge of the most important environmental consultants in the country, of studies done on the subject, of internet sites and of relevant training courses offered in the region.

Within what period of time should environmental capacity be trained and how could a general training schedule look like?

The training requirements depend upon previous know how and the tasks every actor will need to fulfill.

The above mentioned post-graduate training for key personnel (for instance the ETT at CDD level) may reasonably last a minimum of two months en bloc with periodical refresher courses. As with all training utmost care should be taken to select the right participants.

The schedule of environmental training should be coordinated and if possible linked with the general CDD capacity building.

At the beginning of CDD implementation knowledge and skills about basic environmental management and planning will need to be treated. At a later stage, after some years of CDD implementation, it will become more important to train in new procedures and techniques of the EA process.

Generally training should be conducted in an interactive and participatory way including the transmission of theoretical knowledge through planning games as well as through practical case studies and exercises. Depending on the prevailing culture, often participants are very much used from their own school experience to learning by heart through listening, copying and memorizing. Especially when the people now trained are expected to replicate parts of the training received to other people, be it to their colleagues at the local government level, be it to the communities, the practical application of tools such as group work, PRA methods and the like will need to be part of the curriculum. The difficulties involved in changing from memorizing facts to reflecting upon their implications especially when it comes to people who have obtained a certain training level already should not be underestimated. Experience has shown that in communities backward and forward linkages attributed to their immediate sourroundings are often easier grasped by them than by the better trained local government representatives.

How to finance training capacity?

Environmental training is of utmost importance for mainstreaming of safeguard policy compliance. Therefore it seems pertinent to assign funds from the overall CDD budget for the financing of environmental training. Budget allocated might seem proportionally high at first, but with time the benefits will show ever more clearly. It goes without saying that the training provided to multiplicators, its replication by those trained to others and the impacts achieved need to be monitored in order to adjust the training to the (possibly changing) needs encountered.

5.3.3 Using Guidelines

Many guidelines exist for environmental assessments for small-scale projects. In the following paragraphs some examples in this context are portrayed.

Environmental Guidelines for Small-Scale Activities in Africa (U.S. Agency for International Development 1996)

These guidelines are intended primarily for *use by experienced resource planners* who engage in development and humanitarian activities in Africa. They are well designed and provide constructive answers to questions on how to promote environmentally sound development activities. They furthermore include strategies for alternative activity design and mitigation measures. Based on USAID's policies, additional comments on monitoring and evaluation and on EA principles and procedures are made as well.

The guidelines are to be applied in uni-sectoral (agriculture, timber harvesting and production, livestock and range management, fisheries management, small-scale rural enterprise, small industry, rural roads and energy) as well as in multi-sectoral engagements (agroforestry, integrated conservation and development projects, agricultural pest management, water supply and sanitation, construction, waste management, environmental mitigation during refugee relief, resettlement activities and food aid, humanitarian relief and the environment).

Impact mitigation matrices for activities related to tourism development and to rural road development show very clearly cause and effect relations and necessary mitigation measures. Whereas the rural road example can easily be adapted to the CDD context, the ecotourism example focuses rather on planning on a higher level without community participation through subprojects at this stage. A good example for the "do more good" approach is the one on municipal waste management that corresponds to an EA management plan. The extensive annex to the document focus especially on pest management.

In general terms, the USAID guidelines are meant for projects where decisions are taken on a higher level than it would usually be the case in a CDD. The environmental concerns encountered in a CDD community based setting are rather similar though. Therefore once a certain capacity has been built, the technical advice given in the USAID guidelines are a valuable resource to work with.

Environmental Guidelines for Social Funds (The World Bank Latin America and Caribbean Region, 1998)

These guidelines are intended to serve as a "starting point" for staff in the set up and implementation stage of environmental assessment procedures. The guidelines are addressed to *management* and *technical staff* of social funds as well as *World Bank task managers* of rural development projects in LAC and other regions.

Technical advice is given on the procedures to be applied for EA management within Social Funds. Its analytical part is divided into different subproject types with positive impacts ("do more good approach") and subproject types with expected negative impacts including their mitigation measures. Subprojects with positive impacts are forestry and reforestation, improved pasture and grazing, protected areas and ecotourism. Subprojects with rather negative

impacts are rural roads, bridges and river fords, drinking water supply, wastewater treatment, solid waste water collection, small-scale irrigation and minor construction subprojects.

The guidelines show how EA procedures should be integrated in the regular social fund subproject cycle. Within the EA procedure, the impact assessment is divided into three different levels: a simplified EA Environmental Review, (ER), the limited EA (LEA) and the full EA (Environmental Impact Assessment, EIA).

Several mitigation management options for a number of typical impacts are provided in tables. Rather little information is provided on how the measures can be implemented with and by communities. The same is true for information on when and which external expertise will need to be sought after.

Since most of the CDD subprojects will more than likely be category C or B projects (cf. chapter 4.1.1 for categories) the guidelines discussed here are especially useful for a simple screening and for the preparation of Environmental Reviews (ER, LEA) for CDD subprojects. Constructive checklists are also provided.

ZAMSIF; Submission of Draft Report of an Environmental Impact Study and Guidelines of the Planned Zambia Social Investment Fund (Ministry of Finance and Economic Development Zambia, Chalo Environment & Sustainable Development Consultants, Lusaka, Zambia 2000)

The ZAMSIF draft report is basically an EIA for the entire program suggesting a management structure and detailed procedures for the EA management of the expected subprojects. A sample of seventeen subprojects was evaluated. Helpful guidelines were prepared to allow effective assessment of any potential environmental impact that may result from ZAMSIF subprojects.

The ZAMSIF draft report guidelines addresses three groups of actors:

- Social Fund Management Unit and Environmental Council of Zambia
- Local Government and relevant line departments and, finally,
- Communities

The EA procedure described here has been implemented in the regular social fund subproject cycle.

The Community Action Program. Natural Resources Management Handbook (MINISTRY OF PUBLIC SERVICE, LABOUR AND SOCIAL WELFARE, ZIMBABWE 1999)

This handbook leads through the EA process by addressing practical questions and listing different options as answers, mostly being "do more good" examples.

The handbook is written primarily for *grassroot target groups on the community level*. It uses therefore an easily understandable language refraining from complicated technical terms. The sectoral and multisectoral guidelines are another purposeful part of the handbook.

The sectors considered are catchment management of natural resources, soil and moisture conservation infrastructure for arable land, water conservation, grazing schemes, appropriate cropping systems and practices, agroforestry, wildlife management, renewable energy, as well as rehabilitating alluvial gold mining areas.

Divided by sectors, the handbook provides many technical guidelines on mitigating existing environmental loads and potential impacts that could be associated with community subprojects. Therefore the authors do not only list procedures and necessary activities, but give also further details about what material and what skills are needed for the implementation of mitigation measures. Physical planning, set up and construction are also provided.

5.4 Awareness Raising

Environmental awareness is a basic requirement to reach an environmentally sound development. The wider the range of environmental responsibility is spread, the more effective environmentally sound projects can be implemented.

Therefore awareness raising is one of the central tasks within CDD/CAP processes. Environmental awareness should and can be raised in the long-run in different ways especially targeting children and teenagers by involving schools. Short term success can be reached only with participation of key actors with a multiplication function.

6 Perspectives

The previous chapter described complementary activities at the national level in a country that will start a CDD. This chapter outlines the activities at World Bank recommended to improve EA management of FI type programs.

6.1 Case Studies

It was agreed to furthermore conduct a small case study on a CDD-type project to evaluate the EA management performance and to test to what extent the general procedures and approaches proposed in this study are applicable in practice. It serves to fine-tuning the general guidelines proposed in this study. For this purpose the Zambia Social Investment Fund ZAMSIF was chosen. The report is attached to this document.

6.2 Future Actions

Experience of EA management for FI type programs and projects is rather mixed. An evaluation on EA performance in several types of projects in Latin America has been undertaken. To our knowledge evaluations of social funds have not included an evaluation of their EA performance. The experience gained here should be built upon, especially in regard to tools like checklists, guidelines and handbooks.

In this respect, we recommend three areas for further World Bank activities:

- A Monitoring and Evaluation and Networking with respect to EA management of Social Funds and CDDs
- conduct a comparative ex-post evaluation of EA performance of selected social funds
- monitor and evaluate the safeguard compliance of CDDs and social funds including possibly a benchmarking for the EA management (bonus for best practice CDD)
- actively encourage networking between different national CDDs

B Capacity Building for EA management

- do active knowledge sharing by making information available on training courses developed and on their corresponding training material
- prepare promotional material for the "Do more Good" approach

C Launching a pilot SEA for a specific CDD

- which would also include the further development of necessary tools like
 - screening and scoping checklists
 - standard ToR for EIA for typical subprojects
 - standard mitigation measures for typical subprojects
 - checklists with indicators for monitoring
 - design of an environmental information system for a CDD

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Annex I A1 a: Project examples for EA categories

Examples for potential CAP subprojects seriously to be considered as category A and likely not to be financed or having high standard requirements on EIA⁴⁰:

- Commercial logging operations or acquisition of equipment for use in primary moist tropical forests⁴¹
- Projects involving the significant conversion of natural habitats unless there are no feasible alternatives for the project and its siting and comprehensive analysis demonstrate that overall benefits from the project substantially outweigh the environmental costs⁴²
- Subproject activities conflicting with archaeological and/or historical sites or existing cultural and social institutions⁴³
- Subproject activities in densely populated areas, where resettlement may be required or potential pollution impacts and other disturbances may significantly affect communities²²
- Subproject activities endangering safe drinking water supply along watercourses, in aquifer recharge areas or in reservoir catchments used for potable water supply²²
- Subproject activities on lands or waters containing valuable resources jeopardizing other uses such as fisheries, minerals, medicinal plants, prime agricultural soils etc.²²

Examples for category B1 projects require EIA

- Construction of new bridges and rural roads
- Major rehabilitation of bridges and rural roads
- Construction of medical waste disposal facilities⁴⁴
- Building of new constructions in natural habitats if not significantly converting them (otherwise see example mentioned under the violet square)
- Construction of new storm drainage systems
- Upgrading of human settlements

Examples for category B2 projects require ER

- Construction of ventilated pit latrines
- Construction of rubbish pits
- Construction of small waste water treatments
- Start up of new wood lots
- Rehabilitation of old structures in natural habitats
- Construction of small scale irrigation canals
- Rehabilitation of existing canals and dams
- Construction of new small dams
- Soil conservation and Agroforestry
- Community agro-products processing plants
- Construction of small fish ponds
- Rehabilitation of flood control barriers

⁴⁰ Depending on the sensitivity of the proposed site, however, some may be financed, if the impact can be prevented to a satisfactory extent.

⁴¹ OP 4.36 World Bank safeguard policy on forestry
42 OP 4.04 World Bank safeguard policy on natural habitats

⁴³ EA Sourcebook Update No. 2 "Environmental Screening" (THE WORLD BANK, ENVIRONMENTAL DEPARTMENT, 1993)

⁴⁴ The disposal of medical wastes is an issue of the health sector as well as the sanitation sector. Although the health sector typically represents a category C project, waste disposal subprojects within CDDs will be handled like category B projects.

- Construction of Community structures (markets)
- Major rehabilitation of community infrastructure

Examples for category C1 projects require ER

- Construction of new buildings related to the education sector
- Major rehabilitation of structures related to the education sector
- Construction of new health centers
- Major rehabilitation of structures related to the health sector
- Supply of medical equipment and utilities

Examples for category C2 projects require no further EA

- Minor rehabilitation of structures related to the education sector
- Supply of equipment and furniture to the school
- Minor rehabilitation of structures related to the health sector
- Minor rehabilitation of bridges
- Supply of water supply equipment
- Minor rehabilitation of community infrastructure

Annex I A1 b: Example for a Generic Project Screening List (from EIA ZAMSIF 2000)

	Detail of Environmental Assessment/Catego		
Project Type/Sector	None	Environmental Review	Environmenta Assessment
Education		Review	ASSESSMEN
Construction of new buildings		•	
Major rehabilitation of structures		•	
Minor rehabilitation structures	•		
Supply of equipment and furniture to the school	•		
Health			
Construction of new Health Centres			•
Major rehabilitation		•	
Minor rehabilitation	•		
Supply of medical equipment & utilities		•	
Transport			
Construction of new bridges & rural roads			•
Major Rehabilitation of bridges and roads			•
Minor Rehabilitation of bridges	•		
Supply of Rural and Urban Drinking Water			
Sinking of new boreholes, water wells		•	
Rehabilitation of old boreholes		•	
Supply of equipment	•	•	
Sanitation			
Construction of ventilated Pit Latrines (VIP) Construction of modified wests disposed facilities.		•	
Construction of medical waste disposal facilities		_	•
Construction of rubbish pits		•	
Construction of small waste water treatments		•	
Forestry			
Establishment of new woodlots		•	
Reforestation of degraded and deforested areas		•	
Tree planting for wind breaks			
Wildlife Areas/Protected Parks/Wetlands			
Construction of new structures in these areas			•
Major rehabilitation of old structures		•	
Minor rehabilitation of old structures	•		
Agriculture			
Construction of small scale irrigation canals		•	
Rehabilitation of existing canals and dams		•	
Construction of new small dams		•	
Soil conservation and Agroforestry		•	
 Community Agro-products processing plants 		•	
Construction of small fish ponds		•	
Flood Protection Barriers			
 Construction of new storm drains 			•
 Rehabilitation of flood control barriers 		•	
Vegetation planting for flood control		•	
Community Infrastructure			
Construction of Community structures (markets)		•	
 Major rehabilitation of structures, 		•	
Minor rehabilitation of infrastructure	•		
Rural and Urban Settlement			
Resettlement of sizeable number of households			•
Upgrading of human settlement			•

Annex I A2: Checklist for Screening and Scoping Exercises

Checklist Questions			Additional Data needs
PROJECT SITING			Data Heeus
Who identified the project			
2. Who selected the site of the project			
3. Has the land use plan been prepared for the area in which the project is sited?	Yes	No	
4 Is the project sited near conservation worthy ecosystems, flora or fauna (e.g protected			
areas, wetlands, forests, sites of historical or cultural importance which may be impacted negatively as a result of project activities?			
5 Is the project sited near major water bodies (rivers, lake, lagoons, wetland, etc)?			
6 Is the project sited near main domestic/commercial use such as borehole, water well, spring etc?			
7. Is the project sited in an area prone to soil erosion (see guideline No. 12)			
8. Is the project site easily accessible to the majority of the potential beneficiaries?			
9. Are there people who will be displaced/removed from the project site? (see G14			
10. Will the project lead to migration into the area?			
11. Who owns the land where the project is sited?			
12. Does the siting require any legal permits/clearances from relevant institutions			
PROJECT INPUTS			
13. Will the project require large volumes of construction materials to be taken from local			
sources (eg gravel, stones, water, timber, fire wood) See G20 14 Will project require use of heavy machinery and equipment?			
15 Require significant levels of service amenities to support the workforce?			
16 Will any chemicals/oils be used in the project? G13			
To This any distinsuits are deed in the project.			
PROJECT ACTIVITIES			
17. Will the construction/implementation activities lead to degradation or loss of quality of any environmental component such as forests, air, soils, water, wildlife, fish, plain, swamp/wetland, etc?			
18. Will the project construction activities present dust/ chemical/ smoke pollution risks or lead to a significant increase in noise pollution in neighbourhood?			
19. Will project Implementation activities lead to significant employment opportunities?			
ANTICIPATED PROJECT OUTCOMES			
20. Will the project result in significant quantities of wastes or eroded material? G21			
21 Will the project lead to significant changes in land use patterns G22			
22 Lead to unplanned/squatter settlements or access to conservation-worthy ecosystems or over exploitation of natural resources (eg land, forests?			
23 Be likely to require mitigation measures that result in the project being socially or financially unacceptable			

Source: EIA ZAMSIF, 2000

Annex I A3: Example of a Generic Environmental Review (ER) Checklist

Type of Expected Impact	Description of Impact	Proposed Mitigation Measure
PHYSICAL ENVIRONMENT		
Increased soil erosion?		
Increased sediment load into receiving waters?		
Likely contamination of surface or sub-surface waters?		
Excessive dust or noise during construction?		
BIOLOGICAL ENVIRONMENT		
Removal or disturbance of natural vegetation?		
Subproject in core or buffer area of a protected area?		
Disruption or disturbance of animals or any locally important animal habitat?		
SOCIAL ENVIRONMENT		
Aesthetic degradation of a landscape?		
Degradation or disturbance of an historical or cultural site?		
Transport or use of toxic substances that poses a risk to human health?		
Involuntarily displacement of individuals or families		
Economic losses to individuals or families because of the subproject?		

Source: Environmental Guidelines for Social Fund, World Bank 1998

Annex I A 4: Technical Guidelines for Mitigation Management for different subproject types

Summary of Technical Guidelines, Source EIA ZAMSIF 2000

Schools and Community Buildings

Siting / Preparation Stage:

- Choose an appropriate site for your project.
- Avoid dumpy or water logged sites
- Look at other alternatives and weigh the advantages against disadvantages of different sites
- Avoid termite infested areas. Where there are no alternatives take measures against termites in the
 designs and during construction.
- Consider other existing structures on site in relation to your new project
- Remember to clear only the affected site and not to cut trees when not necessary
- Ensure a holistic design approach, taking into account the operations of the existing building, buildings to be added and support facilities like water supply, sanitation and the environment
- Base design criteria and selection of materials according to local conditions and availability of resources
- Design for maximum efficiency in materials and energy use
- Incorporate indigenous customs and building techniques in project designs
- Consider adapting layouts to fit natural patterns on project sites

Construction Stage:

- Ensure you have the MPU Project Implementation Manual volume 2
- Always take measures to attend to off site effects like quarries, debris, tree cutting
- Rank your projects according to the most pressing needs
- Ensure all your building waste is attended to do not bury paint tins and plastics as they do not decompose
- Incorporate permanent erosion control plans on the site provide a drainage system in the areas close to the school and always include dish drains around your buildings
- Ensure that the sand digging is done a good distance away from the school buildings and make sure you bury the quarries regardless of distance and area affected
- Make sure you clear all the debris or broken bricks from the kilning site and use them in the construction for back-filling (when crushed), brick drains construction of paved walkways etc.
- Avoid massive disruption of top soils during construction
- Cover haulage trucks carrying cement or lime and avoid vegetation destruction to create temporary access roads to the construction site
- Provide enclosed storage for cement, lime and oils
- Outline safety techniques and accident emergency measures during construction activities
- Collect only adequate wood for brick making (kilning) consider alternative brick making technologies e.g. Compressed earth blocks
- Use water to minimise the dust generation
- Remove excess materials of laterite, stone aggregate, concrete blocks, bricks, timber pieces

Operation Stage:

- Dig a pit for ordinary waste, do not through tins, glass and plastics in pits
- Plant trees and flowers around the school
- Do not cut and trees unnecessarily around the premises
- Do not allow animals to use the school premises for grazing

Hospitals / Health Centres

Siting / Preparation Stage:

- Choose an appropriate site for your project.
- Avoid dumpy or water logged sites
- Look at other alternatives and weigh the advantages against disadvantages of different sites
- Avoid termite infested areas. Where there are no alternatives take measures against termites in the designs and during construction.
- Ensure the Incinerator is included among the targets and consider an appropriate site for It
- Ensure the relatives shelter is given due consideration and cater for the sleeping area, cooking and laundry areas
- Make sure you consult experts on the equipment required for the full operations of the hospital / health centre and if not among the project components, find out the cost and who will provide it upon completion of the project

Construction Stage:

- Avoid chopping down trees if you can
- Remember that the activity of digging soils from any part of the land will result in quarries.
- Dispose the paint tins and plastic containers properly
- Ensure you dispose of the paint tins, plastic containers for oil based paints and kerosene properly. Do not
 bury them nor throw them around, as they do not decompose, as they are an environmental and fire
 hazards.
- Ensure you have the MPU Project Implementation Manual volume 2
- Always take measures to attend to off site effects like quarries, debris, tree cutting
- Rank your projects according to the most pressing needs
- Ensure all your building waste is attended to do not bury paint tins and plastics as they do not decompose; consider recycling e.g flower pots etc.
- Consider the drainage system in the areas close to the school and always include dish drains around your buildings and ensure rain water is taken away from the buildings as much as possible.
- Ensure that the sand digging is done a good distance away from the school buildings and make sure you bury the quarries regardless of distance and area affected
- Make sure you clear all the debris or broken bricks from the kilning site and use them in the construction for back-filling (when crushed), brick drains construction of paved walkways etc.
- Clean construction sites daily and provide adequate building waste disposal methods
- Use water to minimise the dust generation

Operational Stage:

- Make sure the incinerator for medical waste is available and functional
- Consider and manage the relatives shelter as part and parcel of the overall facilities of the hospital / health centre
- Planting another tree in the community for every tree cut is a good environmental practice.
- · Separate disposal systems for medical or hazardous wastes; put in place safety procedures
- the trees should only be cut if other solutions to save the building are not viable. Trees should be planted away from buildings

VIP Latrines and Water Borne Toilets

Siting / Preparation stage

- Ensure the V.I.P is built downhill from the well and bore-hole to reduce the chances of ground water pollution
- Incorporate into larger waste disposal systems where possible
- Select appropriate technology for waste water disposal
- Weigh siting alternatives with environmental considerations in mind
- Check the type of soils at the site construction on of a VIP latrine in sandy soils shall require extra care and expertise
- Design centralised systems to avoid leakage do not scatter pit latrines around the site unnecessarily, this spreads ground contamination on site

Construction Stage

- Make sure you read the MPU project Implementation technical manual and understand how a VIP latrine works
- Study the VIP technical drawings carefully before starting to build
- Take measures to avoid the collapsing of the foundation walls while building, especially in sandy soils
- Make sure you have the technical drawing all the time on site
- Incorporate permanent erosion control plans on the site

Operation Stage

- Ensure hygiene education on the uses of the facilities
- Do not through toxic or hazardous waste in pit latrines as this could lead to ground water pollution upon which most communities rely for domestic water supply
- Keep the pit latrine clean all the time

Small Scale Water Supply and Irrigation Projects

Wells and Bore holes

Siting:

- Always site your wells or bole holes at a higher ground level compared to the pit latrines or septic tanks and soak-aways.
- Weigh siting alternatives with environmental considerations in mind
- Select workable water extraction or booster systems
- Make efforts to have the water tested periodically

Construction stage

- Provide effective drainage for water spills at water pumping or collection points
- Install adequate pumping systems
- Confirm water yielding levels before implementation
- Dig wells only in the dry season

Operation Stage

• Provide adequate protection from livestock

- Regulate the use of water points through local bye laws e.g. no washing at water points, no water wastage, user fee payments
- Keep adequate tools and learn how to maintain the water systems

Irrigation Water Furrows

Siting

- Site irrigation subprojects properly and seek a carefully designed and appropriate irrigation system
- Proper design of canals; monitor water quality; operation and put maintenance plans in place
- Select appropriate crops and agricultural technology
- Ensure adequate siting and hydrology information studies
- Consider alternative sites
- Ensure there is no or minimal dislocation of habitants

Construction

- Construction during dry season; take measures to minimise erosion of river banks
- Minimise the disruption of natural streamflows

Operation Stage

- Control land uses, wastewater discharges, and agricultural chemical use in watershed to avoid deterioration of water quality
- Limit retention time of water in reservoir to uphold water quality
- Planning and management of dam in context of carchment area
- Control resettlement to avoid surpassing carrying capacity of land
- Ensure the water is not stagnant nor moving too slowly water stagnation can lead to water-borne diseases

Dams and Reservoirs

Siting /Preparation Stage

- Ensure that the layout of the furrows or field is not too steep (gradient)
- Ensure the siting of the project avoids or minimises encroachment on swamps and other ecologically sensitive areas
- Avoid dislocation of populations and communities

Construction Stage

- Use lined canals or pipes to avoid disease vectors
- Provide access to canals for removal of weeds and sediments
- Use lined canals or pipes avoid seepage

Operational Stage

- Maintain furrow by periodic removal of weeds and sediments
- Take measures to avoid waterlogging or water stagnation
- Apply "soft" engineering techniques to achieve soil stabilisation in the canals and avoid erosion

Access and Community Roads

Siting

- Select your road route such that there are no or less disturbances of human communities
- Consider alternative options
- Make adequate consultation and ensure participation of all potentially affected communities
- Pay particular attention to the drainage along the road
- Minimize loss of natural vegetation during construction
- Incorporate adequate and effective drainage works in the designs
- Ensure careful siting and management of construction camps to avoid environmental and social disruption

Construction Stage

- Carry out earth movements during the dry season
- Protect drainage channels with berms
- Consider a good number of drainage outlets
- Avoid the use of heavy equipment and vehicles if you can during construction

Operation Stage

• Provide for anti-littering or anti-dumping local bye-laws on roadsides

Bridges/Culverts

Siting

- Consider alternative bridge sites
- Ensure that special attention is paid to the drainage system along the road leading to the bridge
- Regulate through local bye laws the transportation of materials though the bridge
- Ensure safety is considered in the design e.g. the provision of bridge side barriers

Construction

- Cleanup construction sites, recycle building waste materials
- Construction during dry season; take measures to minimise erosion of river banks
- Minimise the disruption