

- 1 Guidance for action
- 2 Country experiences
- 3 Financing opportunities

# The finance action box

Understanding sustainable land management policy and financing in Africa



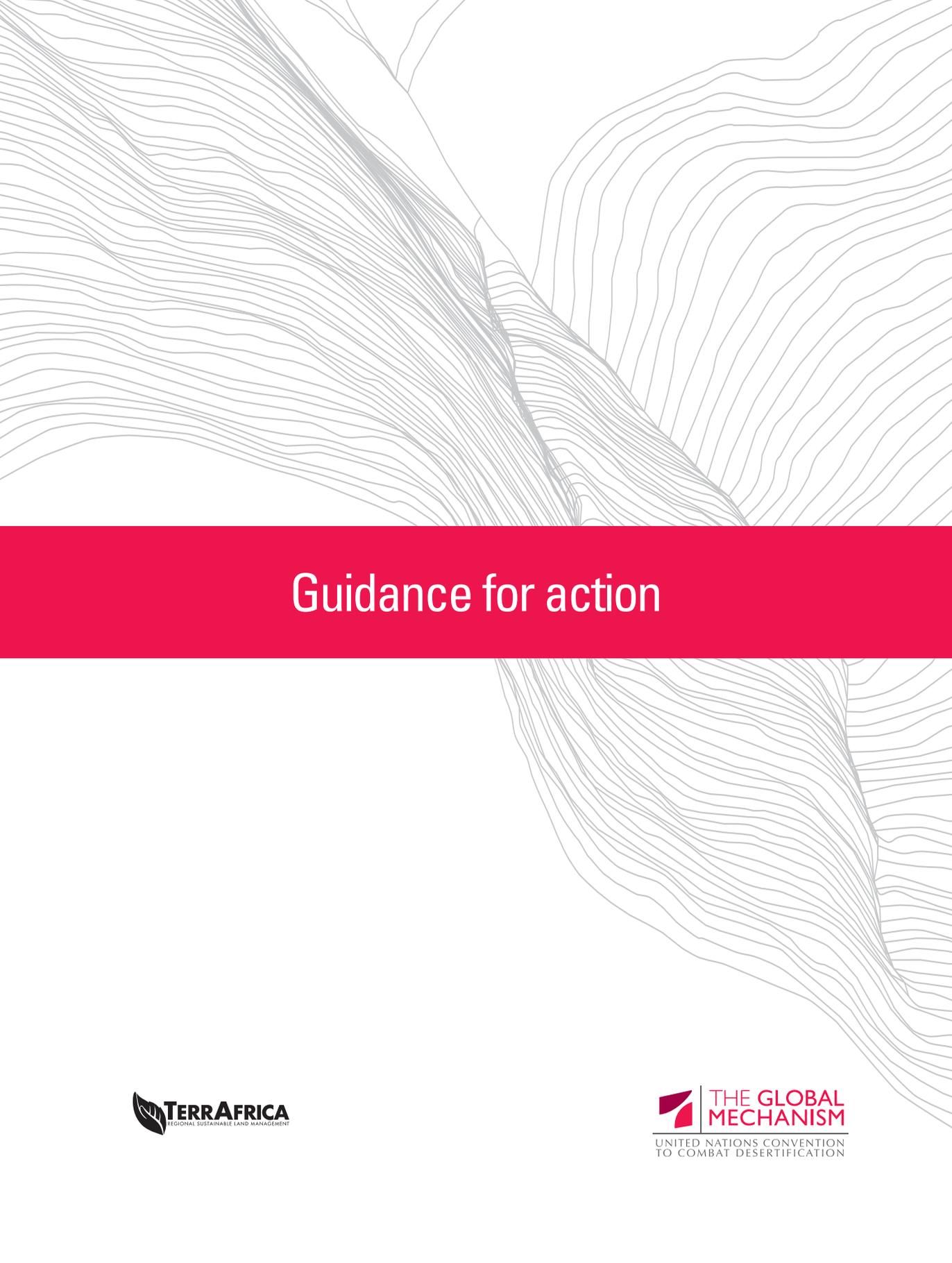
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The background of the entire page is a topographic map with contour lines, rendered in a light gray color. The lines are more densely packed in some areas, indicating steeper slopes, and more widely spaced in others, indicating flatter terrain. The map is centered around a vertical valley or ridge.

# Guidance for action





Understanding sustainable land management policy and financing in Africa

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## Guidance for action



# Preface

Terrafrica was launched in 2005 with the aim of increasing the scale, efficiency and effectiveness of investments in sustainable land management (SLM) in Sub-Saharan Africa. Terrafrica is a regional initiative and a multi-partner platform that seeks to provide an enabling framework for action in support of the mission to scale up the mainstreaming and financing of effective and efficient country-driven SLM approaches.

The provision of advisory services to partner countries needs to be supported by robust financial and policy analyses of thematic and strategic issues and linkages of relevance for SLM and UNCCD implementation, in order to facilitate multi-stakeholder engagement and the identification of opportunities for accessing and/or mobilizing available sources of financing.

The purpose of this paper is to present guidance for action on policy and finance for SLM in Africa for African governments and their development partners, to support the Country Strategic Investment Framework (CSIF) and related initiatives. The paper is based on two background studies: an overview of selected financing mechanisms and instruments for SLM, and a comparative study of experience with policy and financing in selected Sub-Saharan African countries. Since policy and financing issues are closely linked, particularly as governments and donors increasingly move towards more programmatic approaches, this paper combines guidance in both areas.

This study complements the following studies that have also been prepared for Terrafrica by FAO:

- Policies for Scaling Up Sustainable Land Management: A Resource Guide for Policymakers, produced in the Terrafrica Guidelines Series.
- Financing Issues for Scaling up SLM: A Resource Guide for In Country Teams.

This study seeks to complement the two FAO studies (which present a detailed overview of the main areas of action required to support SLM) by focusing on the policy process, and by presenting a comprehensive framework for assessing the possible impact of a wider range of policies on SLM.

A separate Synthesis Paper combines the findings of this study with the FAO papers to provide comprehensive summary and guidance, including an overall agenda for action.

## Acknowledgements

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The findings, conclusions and views presented are the consultant's alone, and should not be attributed to Terrafrica, the Global Mechanism of the UNCCD, or to any other agency.

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## Abbreviations

CDM	Clean Development Mechanism
CSIF	Country Strategic Investment Framework
CSO	Civil Society Organisation
FAO	United Nations Food and Agriculture Organization
GDP	Gross Domestic Product
GEF	Global Environment Fund
IDA	International Development Association
MOFA	Ministry of Food and Agriculture (Ghana)
NGO	Non Government Organisation
NRM	Natural Resource Management
OPM	Oxford Policy Management
PBA	Programme Based Approach
PES	Payment for Ecosystem Services
PFM	Public Finance Management
SSA	Sub Saharan Africa
SWAp	Sector Wide Approach
SWC	Soil and Water Conservation
UNCCD	United Nations Convention on Combating Desertification
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States Dollars

## 1.1 Dimensions of the SLM challenge

TerrAfrica has defined sustainable land management (SLM) as the adoption of land use systems that, through appropriate management practices, enable land users to maximize the economic and social benefits from land while maintaining or enhancing the ecological support functions of the land resources. Land degradation resulting from the failure to implement SLM impedes agricultural growth and impacts especially severely on the livelihoods of the poor. In addition to the direct economic impact, land degradation can contribute to social tensions as populations rise and impose greater burdens on limited natural resources, as well as having wider environmental implications, for instance on water management and biodiversity. Unsustainable land management can also lead to deforestation and hence potentially to the net release of carbon into the atmosphere.

TerrAfrica's Vision Paper for SLM highlights the key economic, ecological and social consequences of land degradation in Africa and attempts to set out the main features of the SLM problem. These may be summarised as follows:

- Land degradation affecting about 20% of the land area in Sub-Saharan Africa (SSA) though with very high variation between countries and regions.
- Soil moisture stress affecting 86% of African soils with a negative nutrient balance on SSA's croplands.
- Direct economic losses of around 3% of agricultural GDP attributable to soil and nutrient loss.
- SSA has some of the highest rates of deforestation in the world, combined with a heavy dependence on forest resources to provide fuel.
- Increasing vulnerability to droughts, flood, famine and conflict over land and water resources in a context where 73% of the rural poor live on marginal land.

The Vision Paper also emphasises that the specific challenges of Sustainable Land Management faced across Africa are very diverse and are not amenable to blueprint solutions.

The common pattern across many African countries is of a long track record of concerns about environmental sustainability associated with, in particular, small scale farming practices which have typically been extensive and based on systems of bush fallow and livestock on open ranges. Both colonial and post-

colonial regimes tried to influence these practices, often through coercive regulation, with little success. Subsequently there have been a wide range of project initiatives and programmes to address aspects of SLM which have been supported by donors. Increasing international concern with environmental issues has been reflected in donor support for initiatives to establish strategies to address particular environmental and resource management problems.

The importance of SLM has also increasingly been recognised in national development plans and poverty reduction strategies prepared by African governments, but this recognition has not yet in general been translated into effective national policies or programmes, or into the prioritisation of SLM for either for national public expenditure or for donor support. Given the dominance of land as a source of wealth in African economies (including through control of forest and mineral resources), land policy is especially politically sensitive. National and local elites (often working with or using alliances with international investors) have a strong incentive to manipulate the land system to secure control of land resources, which can be at the expense of the poor and politically marginal. The recent boom in world prices for agricultural products (including strong interest in securing large tracts of land for bio fuels such as through *jatropha* and sugarcane production), as well as Africa's relatively strong overall recent economic growth performance, have intensified conflicts over land resources that were already severe as a result of population pressure, migration, and in some cases (such as Northern Uganda) ongoing insecurity and violent conflict. It is therefore important to understand the political economy of the policy process affecting SLM which is likely strongly to influence the priority accorded to action in this area by governments, and how in practice programmes are implemented.

There is a strong body of evidence about how farming practices and land management in different contexts can be improved so as to halt and reverse land degradation. The challenge is how to scale up from successful but often fragmented and localised initiatives to national level programmes that are integrated within national and sectoral development plans and budgets and hence are both institutionally and financially sustainable. Addressing this challenge requires effective coordination across sectors and levels of government, engagement of a wide range of stakeholders, and effective political leadership. It also confronts substantial problems of capacity and organizational weakness particularly at sub-national and local level. However, most fundamentally it requires political commitment and the willingness of governments to commit resources and undertake policy and institutional reforms.

The challenge is not essentially a technical one, since the technical solutions for SLM are generally well understood across a range of farming systems and agro-ecological conditions. It is fundamentally a political challenge that requires political solutions.

## 1.2 The aid context: the move towards programmatic approaches

Recent initiatives supported by Terrafrica, the Global Mechanism, FAO, GEF and other international bodies have sought to encourage a more integrated approach to SLM both at the policy level and through the promotion of the Country Strategic Investment Framework (CSIF).

These approaches are consistent with the broad international thrust of reforms aimed at improving both the effectiveness of national government policies and the effectiveness of aid in supporting them. These approaches are encapsulated in the Paris Declaration of 2005 and the recent Accra Agenda for Action. The Paris Declaration Principles (Ownership, Harmonisation, Alignment, Management for Results and Mutual Accountability) are envisaged as helping to improve aid effectiveness through ensuring that aid is provided in a way that supports agreed government priorities, and that uses and strengthens government systems rather than undermining them through developing parallel institutions and channels for aid delivery. This new aid architecture demands new approaches and strategies to support countries affected by land degradation in mobilising resources for SLM, including the adoption of instruments such as programme approaches and direct budget support.

The core model for improving aid effectiveness envisaged in the Paris Declaration is the Programme Based Approach (PBA).<sup>1</sup> A PBA is defined in the Paris Declaration as involving: (a) leadership by the aid-receiving country or organization; (b) a single comprehensive programme and budget framework; (c) a formalised process of donor coordination and harmonisation of procedures for reporting, budgeting, financial management and procurement; and (d) efforts to increase the use of local systems for programme design and implementation, monitoring and evaluation. The SLM policy framework should therefore provide an agreed basis for a PBA in terms of the identification of priorities, targets, and types of activities to be undertaken.

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<sup>1</sup> A Sector Wide Approach (SWAp) can be seen as one form of PBA where the area of focus corresponds to a well-defined "sector", and also typically where there are substantive efforts by donors and government to establish common funding arrangements. Since it is not generally possible to consider SLM as comprising a sector (but instead cutting across more traditional sectors such as agriculture, natural resources, forestry, and water), programmatic approaches to SLM have not generally taken the form of SWAps.

The fact that many SLM initiatives in the past have tended to be heavily based on donor funded projects, and that SLM poses particular problems of cross-institutional coordination, means that the agenda of improving aid and development effectiveness may be particularly relevant to SLM. A programmatic approach to SLM therefore potentially provides a framework for improving cross-sectoral and cross-ministerial dialogue (so as to improve coordination in planning, prioritisation and budgeting), for more effective and coordinated implementation, and for monitoring and evaluation at a level above that of individual projects that may enhance monitoring and evaluation.

However, weak coordination and integration of policies and financing may not be the cause of failures of effective implementation. Rather these problems may be symptoms of limited political commitment and of the effective voice for the interests of those most affected by land degradation in the political process. If this is the case, moving towards a programmatic approach (especially when this process is donor led) is unlikely to confront the underlying issue of political commitment. If the move towards a PBA is driven by a political commitment from government and is responsive to the needs of those most affected, then it may improve aid effectiveness.

The application of a programmatic approach poses some specific challenges for SLM:<sup>2</sup>

- First, SLM depends on the activities of multiple public agencies (in both central and local government) which need to develop and share a common vision as well as to establish effective mechanisms of coordination. Developing and applying PBAs is generally most straightforward where the bulk of relevant expenditure is focused in a small number of core agencies, for instance in education or roads.
- Second, achievement of SLM objectives depends critically on influencing private (especially farmer) behaviour including private investment behaviour, while involving the interests of a potentially extremely wide range of stakeholders because of the important externalities involved. This can include the international community as a whole in relation to concerns about the contribution of poor land management practices to climate change and the loss of biodiversity.

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<sup>2</sup> See Bialluch, G., (2007), Implications for sustainable land management and UNCCD financing arrangements - Case studies from Kenya and Uganda, Global Mechanism of the UNCCD

Important dimensions of the process of moving towards a more programmatic approach to SLM include the following:

- The progress that has been made in understanding the causes and dimensions of the SLM challenge in each national context, in learning what practically can be done to address the challenge, and in turning this into an effective national programme or strategy.
- The involvement of wider groups of stakeholders in the development of the strategy for SLM, and how broad and deep is ownership of this strategy.
- The extent of integration of SLM priorities into national policy statements and goals, and how well mainstreamed it is into other (sectoral and cross-cutting) policies and strategies.
- The extent to which a results framework against which to assess SLM policy has been developed, including the establishment of appropriate monitoring and evaluation mechanisms.
- The respective roles of different organizations (including different levels of government and non-government organizations) in implementing the SLM strategy, and how constraints on the capacity of these organizations to fulfil their roles are being addressed.

The starting point for examining experience with financing SLM in the context of moves towards PBAs should ideally be a comprehensive assessment of public expenditure and other financing sources for SLM. This would encompass the levels of expenditure, the modalities by which financing is being provided, and how these have changed over time. The level of expenditure could in principle be compared with estimates of the rate of return on SLM investments to determine the extent to which SLM may be regarded as having been “underfunded” relative both to direct economic returns, and to estimates of the value of external effects, as well as evidence about the relative effectiveness of different forms of expenditure.

A more programmatic approach to SLM requires government leadership. Financing decisions should depend on the priority accorded to SLM in comparison to other potential calls on public expenditure and aid. Resource allocation choices should be taking place more explicitly through the budget process and decisions should therefore depend on negotiations within the government as well as between the government and the international community and the balancing of priorities. The challenge is therefore to mainstream SLM objectives into the overarching policy processes rather than relying on ad hoc initiatives outside core

government processes which even if they succeed in attracting donor resources are likely to prove to be unsustainable. This paper reviews experience from the case studies to assess the extent to which progress has been made.

### **1.3 Structure of the paper**

This paper is structured as follows. Section 2 sets out a conceptual framework for understanding the different dimensions of the SLM challenge, including the channels by which different policies may impact on incentives and capacity to undertake SLM. Section 3 summarises the main features of the country experience reviewed (Burkina Faso, Ghana, Ethiopia, Mozambique and Uganda). Section 4 presents the findings from the studies on comparative policy experience and on financing within the context of the overall move towards more programmatic approaches. Section 5 proposes guidance for action based on these findings.

### 2.1 Distinguishing structural features, institutions and agents<sup>3</sup>

A framework for understanding and analysing the links between land management arrangements and development and environmental outcomes has to explain the factors shaping the arrangements, the interplay of interests in determining how arrangements function, and their evaluation in terms both of accountability to the key stakeholders and performance against various desirable objectives (including but not limited to environmental sustainability). The basis for a framework is set out in Figure 2.1. The main features of this framework are the following:

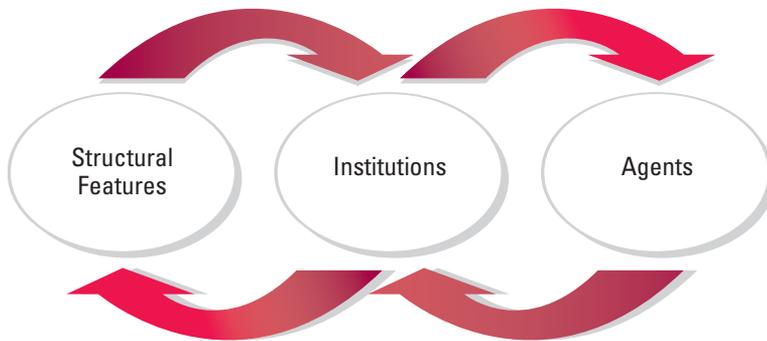
- A distinction is made between structural features (natural and human resources, economic and social structure, and other non-institutional facts), institutions (the frameworks of rules structuring the behaviour of agents), and agents (individuals and organisations pursuing particular interests).
- In principle causal links run in both directions, between structural features and institutions, as well as between institutions and agents. Structural and institutional features influence the behaviour of agents, but do not determine them.
- Actions by specific agents can affect the institutional framework. Agents can also affect structural features and processes, but in a way that is mediated by the institutional framework. In the same way, structural features impact on agents in a way that is in principle mediated through institutions. Institutional performance is therefore central to understanding change processes and how they will impact on the poor.
- The framework is dynamic and interactive since it can be changes in structural features or institutions (or in the behaviour or interests of agents) that function as drivers of change of the system as a whole.

Agents who are stakeholders (individual and organisational) in a particular resource management system can be analysed in terms of both their (differing) interests and the distribution of power among them to exert influence over both institutional design and operation, and the allocation of resources. The relevant stakeholders in a particular system can range from the potential interest of the entire world in the maintenance of biodiversity and the carbon sink function of

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<sup>3</sup> This framework is adapted from OPM (2006), Shared Growth from Renewable Resources, Study for DFID.

**Figure 2.1 A general framework for understanding institutions**



forests, a national interest in securing tax revenues from agricultural production and exports or in sustainable levels of food production, all those in a particular watershed who are affected by upstream land management practices, and landowners deriving rents, to those of a small community whose livelihoods derive from a particular area of land.

Table 2.1 provides a (selective) characterisation of structural features, institutions and agents that are likely to be relevant to determining the sustainability of land management practices within in any given context, distinguishing between international, national, subnational and local levels. Key structural drivers on land systems (noting that these always exist “locally”) are likely to include population increase and international market price developments, while capacity to respond to these pressures will be influenced by the stock of knowledge, financial resources and infrastructure available at each level. At the institutional level, local market and land management arrangements operate within a national legal and administrative context. Agents are stakeholders in the land management system to the extent that they have either an interest in its operation, or have influence over the way in which institutional arrangements work.

The main point of this table is to show the complexity of the range and levels of stakeholders and institutional arrangements that are potential influences on the ultimate behaviour of farmers and hence the impact on the land resources that they use. The relevance of higher levels of structural drivers, institutions and agents to local land systems will depend on the transmission mechanisms between them (notably transport and communications infrastructure). For instance, improved infrastructure may facilitate access to wider national and

**Table 2.1 Structural Features, Institutions and Agents in Land Management**

	<b>Structural Features</b>	<b>Institutions</b>	<b>Agents</b>
<b>International</b>	World demand for agricultural production Stock of international knowledge on land management	International markets and trading arrangements International property rights regimes (applying to agricultural technologies)	Multinational companies Donor agencies International research organisations
<b>National</b>	Population National human capital National infrastructure National stock of wealth (financial)	National legal and administrative system (including specifically for land) National market systems National public finance system	National ministries and government agencies Appointed officials Elected officials Judicial officials Absentee landowners Political parties National private sector National agricultural research organisations
<b>Subnational</b>	Population Subnational human capital Subnational infrastructure Subnational stock of wealth (financial)	Subnational land arrangements Subnational public finance system	Provincial/district administration, judicial and elected officials Provincial/district agricultural service providers
<b>Local</b>	Population and human capital (including knowledge of locally relevant land management practices) Local infrastructure Local stock of wealth (financial) Land resources (including forestry, water, minerals)	Local (customary) land arrangements and practices, including land markets Local public finance system Local market arrangements (including for credit)	Traditional leaders with authority over land and dispute settlement Landowners Farmers (tenant or landholder) Agricultural labourers Purchasers of outputs Suppliers of inputs Extension officers Organisations of or representing each of the above at local level

international markets or to technical information and inputs, but may also increase incentives for predatory behaviour by the politically powerful to attempt to assert control over increasingly valuable land resources.

## 2.2 Private and social incentives for SLM

Whether the interplay of the various structural factors, institutional arrangements, influence and interests leads to sustainable land management practices or to the mining and depletion of these resources depends on how the incentives of those using land are affected, as well as the other complementary resources (knowledge, labour power, finance) to which land users have access. A critical element in assessing incentives for sustainable use relates to the time profile of incentives – whether the land user whose current practices affects the future productivity of the land (or of related resources such as water) expects both that there will be profitable uses of the land in future, and that he or she will be able to obtain the value of increased or maintained future productivity where maintaining future productivity involves a current cost to the user.

A first point is that there can in principle be circumstances where the depletion of land resources may be both individually and socially profitable – for instance through the extraction of mineral resources whose value exceeds that of the land that is damaged in obtaining them. Natural capital in the form of land (or forest) resources may be converted into other forms of capital that yield higher social returns.<sup>4</sup>

However, there are significant reasons for expecting there to be substantial divergence between individual (private) incentives facing land users and the social returns to sustainable land management practices. The causes of this divergence can be classified as follows:

- A failure of the land management system to internalise benefits and costs of land practices that are external to land users, such as the effects of land management practice in watershed areas on downstream water users, or of deforestation on climate change and biodiversity.
- A failure of the land management system to provide security of tenure so as to make SLM practices privately profitable to land users, leading to a shortened time horizon and underinvestment in land improvements for fear that benefits may be appropriated by others.
- A failure to find ways of achieving effective collective action between land users to undertake investments and to maintain resource management arrangements that have collective benefits across groups of land users.
- Failures of related markets (such as for credit for agricultural producers) and lack of information on market or technological opportunities, for instance on markets for organic produce or for sustainable forest products, or institutional weaknesses that militate against establishing such markets.

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<sup>4</sup> World Bank (2006), *Where is the Wealth of Nations? Measuring Capital for the 21st Century*, The World Bank, Washington DC.

The inability of farmers to finance potentially profitable investments in land management can be seen as reflecting a failure of the credit market.

It is important to note the distinctions between these situations and their differing policy implications, specifically the way in which market failures and large external effects may create perverse incentives. For example, improving profitability of agricultural production that is expected to be sustained will generally increase incentives (and the resources available to land users) for sustainable land management practices at the individual level by raising the present discounted value of investments in land management. But if there are significant external effects (such as of fertiliser use on downstream water users) for which there are no market or other institutional mechanisms to bring the incentives facing land users in line with social benefits and costs, the overall social and environmental impact of improved profitability may be reduced or even negative. Similarly, high profitability of some forms of agricultural production (such as industrial soya production or palm oil plantations) encourages deforestation in a context where market and institutional mechanisms to take account of the costs of destruction of carbon sinks or of biodiversity are weak or non-existent. High short-term profitability of production in the context of weak and insecure property rights over land (and specifically of investments made in land improvement) may create especially strong incentives for mining land resources, while extreme poverty will also encourage a shortening of time horizons for land users.

### 2.3 Policy instruments for SLM

Table 2.2 sets out a typology of policy instruments that may be used to promote SLM. Four main types of policy objective are defined for which these instruments may be used:

- Profitability of sustainable production – this is necessary for land users to have an incentive to undertake investments and to use management practices that will sustain land productivity rather than mining resources (for short-term profit) or neglecting management if returns to land maintenance are low.
- Capital and technologies for SLM – physical investments may be required either at the individual farm level (e.g. terracing) or on a much larger scale (e.g. irrigation systems) to promote sustainability. Knowledge of effective technologies for land management and reclamation are also required, as well as systems for disseminating this knowledge, as for learning from farmer practice.

**Table 2.2 Typology of policy instruments for promoting SLM**

	<b>Profitability of sustainable production</b>	<b>Capital and technologies for SLM</b>	<b>Divergence between private and social costs</b>	<b>Land tenure: security and efficient transfer</b>
Taxes and subsidies		Taxes and subsidies to encourage investment and technology adoption	Taxes and subsidies on (agricultural) inputs and outputs to make prices reflect social opportunity costs	Land taxation system (e.g. to discourage land speculation, non-sustainable practices, or to provide finance for land administration systems)
Public investment	Infrastructure	Infrastructure Technology systems (research and extension)		
Legal, regulatory and administrative reforms	Enabling environment for private sector	Enabling environment for technology transfer and physical investment	Enabling environment for carbon trading and PES Legal reforms to clarify rights in relation to external effects (e.g. downstream water users)	Promoting fair, secure and efficient land management system that minimises rent-seeking opportunities
Organisational capacity development	Strengthening of farmer organisations	Strengthening of organisations managing collective infrastructure and technology systems	Strengthening of watershed user groups and other organisations to encourage internalisation of external effects	Strengthening of public and organisations in land management system

- Divergence between private and social cost of SLM practices and investments – as is argued in the previous section, this problem is central to establishing appropriate incentives for SLM, with external effects of different kinds being pervasive in land management practice. These may be particularly significant in relation to the lack of mechanisms for permitting payment for environmental services (PES) including biodiversity, maintaining carbon sinks and landscape protection, and for overall watershed management.
- Security of land tenure and provision for transfer of land – the operation of land tenure and administration systems in a way that protects the property rights of those undertaking investments in land improvements or SLM practices, while also facilitating the transfer of land to those who are able and willing to undertake such investments, is of core importance to

providing individual incentives for SLM. Land administration systems that are open to manipulation by the politically powerful, or that fail to resolve land disputes fairly and efficiently, are unlikely to promote sustainable practices. Establishing formal systems for registering land ownership and documenting land rights may play an important part in strengthening such a system, but this in itself is not sufficient to ensure its effective operation. There may be a tension between the objective of tenure security (which might be promoted by restricting land transfers to prevent land grabbing) and that of promoting transfer to the most efficient user, or to enabling land holders to raise capital using land as security as a way of financing investments necessary for SLM.

Four main categories of policy instrument are also identified:

- Taxes and subsidies – in principle taxation and subsidy policies may be used to try to align private and social costs through influencing market prices and hence land user incentives. In practice this approach is problematic in relation to SLM mainly because such approaches (focusing on input or output markets) are unlikely to be well targeted on achieving SLM objectives. Whether the use of particular inputs (such as non-organic fertilisers) or the production of particular products (such as timber) promotes or harms SLM will depend on the context and may vary substantially across land use systems or even land users in the same area (if they have differential degrees of tenure security, for example). Input subsidy policies will tend to disproportionately benefit the large users of purchased inputs who will not typically be those most at risk through unsustainable land practices. There may be more scope for subsidising the provision of infrastructure and access to information (which have public goods characteristics), though again it may be difficult to target such subsidies effectively to promote SLM. Well-designed land taxation, however, may play an important part both in financing land administration systems, and might be used to discourage excessive land speculation and encourage sustainable land use (for instance through providing tax incentives for investments in improved land management), though a strong tax administration system will be required to implement and manage such systems.
- Public investments – the key public investments affecting SLM are in infrastructure, both as this affects the profitability of land use (especially through transport, communications, water management and access to power). Public investment focused directly on SLM may also play a key

role where large scale investment (in irrigation systems or land reclamation) are required that are beyond the capacity of individual land users or and user groups to finance. Public investment in technology systems (research and extension) may also be significant in generating and disseminating knowledge on improved land use practice.

- Legal, regulatory and administrative reforms – these are likely to be relevant in relation to each of the four types of policy objective defined in Table 2.2. The profitability of sustainable land use will depend on the general environment for private sector operation so as to reduce transactions costs in reaching markets. More specifically, legal and regulatory reforms may be an instrument for facilitating the internalisation of external effects, for example by defining the rights and responsibilities of common resource users (like those in a particular watershed) and setting up mechanisms for dispute resolution and compensation. The establishment of new markets as a way of internalising external effects (in relation to PES, including carbon trading) is likely to require a legal and regulatory basis. Land tenure systems require both an appropriate legal and regulatory framework and an effective administrative system to underpin this.
- Organisational capacity development – the functioning of the institutional arrangements affecting SLM depends on the capacity of the key stakeholders, particularly acting collectively through organisations promoting a common purpose. Organisations of land users (for instance farmers groups or watershed management associations) can play a key role in improving the management of common resources as well as in promoting joint management and service provision which may reduce transactions costs and increase profitability.

The FAO Policy Guidelines provide substantial detail on specific policy options in each of these areas. Section 4 of this report identifies lessons about the use of these instruments that emerge from the review of country experience, which is now summarised in Section 3.

## Summary of country experiences reviewed<sup>5</sup>

### 3.1 Burkina Faso

Concern about soil depletion and erosion is given significant attention in Burkina Faso's poverty reduction strategy, with a distinction drawn between the land degradation challenges in arid areas with open access grazing and extension of arable agriculture into land ill-suited for that purpose, and in higher rainfall areas facing increasing population pressure and still largely dependent on slash and burn agricultural practices.

There has been a long experience of efforts to address these problems through a large number of project initiatives. While the experience of these initiatives has been mixed and overall achievements in reducing land degradation limited, there does appear to be a body of positive experience encapsulated in the "Gestion des Terroirs" approach which involved community-based land management that creates awareness of environmental degradation and land conservation issues, supports local government in developing new natural resource management regulations, and supports adoption of SLM activities including support to soil fertility management practices.

All land in Burkina Faso is owned by the state but farmers are given use rights through customary or statutory institutions, as well as the power to rent or sell these rights. The formal role of customary authorities in land allocation and dispute resolution is limited but in practice these authorities continue to enjoy a high level of local legitimacy and influence in relation to land issues, particularly in the absence of any comprehensive system to document land rights and claims. While the land policy framework in principle provides both flexibility in tenure transfer and a basis for tenure security, the system is vulnerable to elite capture both through abuse by traditional leaders of their authority over land issues, and manipulation of the formal land tenure system by those with access to greater information and influence. There are therefore concerns that the resulting land tenure insecurity may be having an adverse impact on incentives to engage in land improvement.

The main focus of SLM policy has been a move towards a more programmatic approach as part of a wider move towards a programmatic approach for rural

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<sup>5</sup> This section is drawn from OPM (2009), Sustainable Land Management in Africa: Comparative Experience with Policy and Financing, Background Paper for the Global Mechanism.

development where responsibility for aspects of SLM programmes and policies is divided between four ministries dealing with agriculture, livestock, environment and water resources. This is taking the form of the development of the Productive Rural Sector Development Programme (PROSEDERP). Within this context, SLM is being addressed through establishing a Country Partnership Programme led by the Ministry of the Environment. The intention is to establish a comprehensive funding arrangement for SLM activities through PROSEDERP by developing a CSIF.

In Burkina Faso, SLM issues have received significant government and donor attention and there is a record of success and well-established techniques for improving land management through local level interventions and initiatives.

There are three main challenges for effective implementation:

- There have been many policy and organisational initiatives and restructurings of organisational responsibilities relating to agriculture and the environment but little substantive progress to date in moving away from project-based approaches. It is not clear either that there is a strong commitment from within the key government ministries in favour of a more programmatic approach or that in practice important donors will be willing or able to move towards more harmonised and aligned approaches.
- The lack of progress in establishing a coherent budgeting process around a Medium Term Expenditure Framework. An effective process of setting and enforcing ministerial expenditure ceilings that encompass donor aid could play an important (and possibly necessary) role in providing incentives for line ministries to move towards a programmatic approach. There are unresolved issues about the relationship between sectoral policies and processes and the increasing emphasis being given to decentralisation of decision-making and resource allocation decisions, and major problems of capacity throughout the public administration and finance system.
- The need effectively to strengthen land rights and security of tenure, in a context where land tenure insecurity appears to be reducing incentives to engage in sustainable land management practices, and where there appear to be strong interests among both rural and urban elite groups in manipulating both the formal and informal elements of the land system to their advantage. The concern is how the rights can be effectively asserted and protected, and whether there is the political will to overcome the significant administrative, capacity and financial obstacles to establishing a more just, effective, and transparent system of establishing and resolving claims to land.

## 3.2 Ethiopia

Concerns about land degradation and deforestation, particularly focused on the highland areas where the bulk of the population is located, have led to considerable efforts over many years to improve land management practices. However, the record of achievement is judged disappointing by the Ethiopian government and its development partners. This lack of success has been attributed to three main reasons: an excessive concentration on low potential and food insecure areas, the limitations of a project-based approach that cannot address the root causes of land degradation, and a lack of coordination among development partners and across levels of government. However, a consensus led by government has developed around a model of Participatory Watershed Management that has emerged from a review of a wide range of project experiences. There is a significant effort with high level government support to find programmatic ways of implementing this model and attracting funding for it and this is accorded a high priority in Ethiopia's national development strategy.

Ownership of land in Ethiopia is vested in the state and the Constitution guarantees the right of all Ethiopian peasants to be allocated land without payment, while land administration is vested at the Regional State level of government. Major land redistribution took place in Amhara in 1997, and there is some evidence that expectations of further redistribution may be negatively affecting incentives to engage in sustainable land practices. Legal provision has though been made for the certification and registration of land holdings, and substantial progress has been made in certification using a very cost effective participatory model. However, registration alone does not provide guarantees against future land redistribution, particularly in a context of widespread landlessness. There has also been some legal recognition for leasing or exchange of land, though within strict limits.

The Ethiopian government has developed and is implementing a National Programmatic Framework for SLM. This sets key priorities for SLM investments, sets out a strategy for scaling up SLM based on best practice lessons, and defines the approach and mechanisms for coordination, consultation, participation and M&E. The Government has also established a National SLM Platform (which comprises a multi-sectoral and multi-stakeholder National Steering Committee and Technical Committee, supported by a Secretariat). It is intended to establish similar SLM Platforms at Regional level. The Program is envisaged as covering 177 watersheds in high potential areas in eight regions over five years of implementation, based on the model of Participatory Watershed Management.

The SLM Program has been developed through a process lasting about three years involving the main government, donor and NGO stakeholders, focusing on those donors and NGOs with direct field experience of SLM programs. This process has helped to build a consensus on the key elements of the approach although it was somewhat delayed by institutional and personnel changes at the Ministry of Agriculture and Rural Development. A key feature is to try to ensure community responsibility for the investments undertaken. This envisages the establishment of “Watershed Associations” to take responsibility for investments and SLM practices, though neither the legal framework nor the institutional capacity for this arrangement is currently in place.

The Country Strategic Investment Framework (CSIF) Platform is envisaged as providing a framework for donor support of the SLM Program (and the further development of the land certification system). This will provide an umbrella for funding although it is not envisaged that there will necessarily be common funding arrangements. Rather the SLM Program provides a structure within which individual projects may be incorporated to align on overall government policy. The development of the CSIF will be followed by a Donor Conference to seek to secure funding commitments beyond those already provided by IDA and GEF. There does not appear however to be a comprehensive costing of SLM seen as a sector (i.e. encompassing all relevant aspects of government expenditure including ongoing administrative expenditures) rather than as a specific programme (which has been costed on the basis of investment costs per watershed). There has also been little systematic investigation of the possibilities of securing innovative forms of financing, particularly in relation to carbon sequestration related to reforestation.

An important feature of the Ethiopian system is fiscal decentralisation through the provision of substantial block grants to regions and districts (woredas). The longer term sustainability of SLM programmes depends on strengthening of capacity at these levels of government as well as at the local community level.

Ethiopia has made significant progress towards the development of an overall programmatic framework for SLM. This has involved strong government leadership based on a demonstrated commitment to the Agriculture and Rural Sector, and a process that has sought to build consensus among key stakeholders. However, a number of important issues remain to be resolved in taking forward the implementation and financing of the SLM Program within the CSIF:

- The underlying rationale for public investment (in terms of the constraints and incentives affecting SLM) and for the division of costs between the public sector and communities and farmers is not very clear. The economic rationale for the program is set out mainly in relation to the direct

economic returns to the community and farmers, rather than in terms of wider externalities. As the process of scaling up is essentially one of broadening focus from relatively poor and low potential areas to higher potential areas, there are reasons to expect that a relatively higher level of local and farmer contribution to the investments that are envisaged may be available.

- The SLM Program does not in its current form address the issue of the financial or institutional sustainability of the investments and improvements in management practices that it seeks to bring about. There are potentially important linkages between the extent to which farmers and communities will be motivated to undertake investments and the wider policy and institutional framework for land management.
- Capacity development at local, district and regional level has so far received relatively little attention.
- Few major donors have expressed a strong interest in supporting the SLM Program which is heavily reliant on IDA and GEF for its funding in its current form. There is a continued strong interest from important donors in additional support to the land certification programme, but less so for the SLM component. There appears to be a difference in priorities between donors and government in this respect.
- There is a significant danger that donor support will not be forthcoming to finance the SLM Program to the level that has been envisaged. This may require a rethinking of the approach so as to leverage donor funds more effectively and use a higher proportion of farmer and community contribution and Ethiopian government resources so as to ensure the scaling up of SLM initiatives.
- Although there has been a substantial effort to build consensus around the SLM Program through the SLM Platform, this has mainly involved the key government institutions and donors and NGO and CSO involvement has been relatively limited. This raises some concerns about the breadth of support and the strength of the evidence base underlying the preferred SLM model, particularly if donor funding for the Program is going to be less than was envisaged.
- The SLM Program is heavily focused on highland areas and the problems of arable agriculture. This is understandable in terms of the location of population and the stress facing the agro-ecological system on which the bulk of the Ethiopian population depends. However, the issues of land management facing lowland pastoral populations have received very little attention and are not addressed at all within the SLM Program.

### 3.3 Ghana

Problems of land degradation in Ghana are rooted in the dominance of the rotational bush fallow system associated with clearing and burning that destroys the vegetative cover and makes soil susceptible to erosion and leaching. Estimates suggest that the average economic loss caused by soil degradation could be up to 5% of agricultural GDP, with the severest impact in the northern regions where poverty is highest. The Ghanaian government has attempted to enforce regulations on environmental management for agricultural land use over many decades but has not used participatory methods and these attempts have been largely unsuccessful. There has been some positive experience from project initiatives but there have been significant institutional, sectoral and financial barriers to scaling up from this experience.

Land policy in Ghana has been characterised by tensions between customary land tenure systems and attempts by the state (starting in the colonial period) to assert state control through assuming ownership of mineral and timber resource, and powers of expropriation and management of land (often with little or no consultation with stakeholders). This is in a context where customary land systems are complex and diverse.

The main challenge for land policy in Ghana is therefore to find a way of establishing effective legal and administrative structures that protect land rights and respect the legitimacy of traditional institutions while providing a basis for improved productivity and sustainable management in the context of increasing population and pressures on land, including through migration. The 1999 land policy has the objective of stimulating economic development, reducing poverty and promoting social stability by improving security of the land tenure, simplifying the process for accessing land and making it fair, transparent and efficient, developing the land market and fostering prudent land management. However, the land system remains complex and open to abuses by the politically well-connected while creating a non-transparent environment for private investors. There is evidence that land tenure security is greater for those who hold more powerful positions in a local political hierarchy, and consequently they invest more in land fertility and have higher and more sustainable agricultural output.

A long-term Land Administration Programme (LAP) has been developed in support of this, in recognition of the weakness and tendency to corruption of land sector institutions and their inability to play an effective role that has contributed to a lack of transparency and uncertainty, ineffective regulation of land use, and widespread bad practices such as land encroachments, multiple sales of residential parcels, unapproved schemes and haphazard development.

Land degradation is acknowledged as a key challenge to economic growth potential in Ghana's Growth and Poverty Reduction Strategy, although the existing National Action Plan to address desertification has not been effectively mainstreamed. A number of interrelated policy initiatives address aspects of the SLM challenge, including the Food and Agriculture Sector Development Policy, the Northern Rural Growth Programme, and the Agricultural Sustainable Land Management Strategy which is to form the basis for the CSIF. However, the fragmentation of responsibilities across public agencies and weak coordination mechanisms militate against an effective policy approach for SLM.

Ghana has made some significant progress in strengthening its public financial management system, and donors have provided general budget support. However, constraints on the release of funds at field level make it difficult to implement intended work programmes and tend to favour short-term rather than longer-term priorities such as SLM. Attempts to estimate the level of expenditure on SLM are fraught with difficulty because of the lack of available data in relevant forms. No information is available to allow estimates to be made of private investment in SLM. A likely upper bound of public expenditure on SLM is around 0.4% of total public expenditure and is heavily concentrated in the forestry sector with very little focus on agricultural practice. This level of expenditure is far lower than the estimates of the cost of land degradation quoted above suggest would be desirable.

In terms of potential financing mechanisms for SLM, the NAP emphasises Government budgetary allocations; a percentage of royalties from the exploitation of natural resources (timber, mining etc); and penalties from environmental offences and the public sector while FASDEP II also identifies beneficiary contributions; Internally generated funds/ non-tax revenue; and incentive and compulsion measures to encourage users of the environment to adopt less exploitative and non-degrading practices in agriculture. The draft CSIF proposes the establishment of a National Sustainable Land Management Fund (NSLMF) which would be used to fund SLM-related activities.

Ghana presents a situation where land degradation has been identified as a major problem and policy concern over many years, and where there is evidence that there are large economic costs associated with the failure to overcome problems of land degradation. The CSIF is the latest (and possibly the most comprehensive) attempt to address the problem. However, there is limited evidence of success to date and the level of resources allocated to addressing the problem appears to be low relative to the potential economic returns on investment in improved land management practice. The level of government commitment to, and leadership of, the process by which a more effective programmatic approach to SLM will be developed remains uncertain.

The roots of the problem appear to lie in the land tenure system, and the fact that tenure security appears often to be limited with the poorest and marginal farming households having the least incentive and capacity to undertake sustainable land management practices. There has been some progress in trying to develop a system that integrates the various forms of customary tenure with the formalised legal system, but the land management process (in both its formal and traditional aspects) remains open to manipulation by the powerful and does not yet provide effective and straightforward ways of resolving land disputes in a way that provides tenure security and predictability.

### **3.4 Mozambique**

Compared to the other case study countries reviewed, the Mozambican agricultural economy is generally characterised as land abundant and labour scarce. In large parts of the country there have been limited incentives for farmers to practice sustainable land management, with extensive shifting cultivation the main form of farming system. Agricultural growth (which has led to a significant reduction in rural poverty) has been based on increasing the area under cultivation at an average rate of about 3.3% per annum and an increase in the rural labour force rather than through intensification (World Bank, 2006). Land scarcity has been a relatively localised phenomenon, although lack of infrastructure has reduced the economic value of land. However, a number of factors (notably the increasing world price of food and demand for land for biodiesel) have increased demand for land, potentially changing both the incentives for land use practice, and creating threats to the rights of landholders. There is also concern that there is no clear framework for either environmental or broader economic analysis in the assessment of large scale agricultural developments, for instance for sugar or jatropha for biodiesel.

In general, therefore, SLM has received relatively little attention or priority in resource allocation and policy making in Mozambique, including in the recently completed Rural Development Strategy. The GM indicative country programme notes that "there is a general absence of evidence-based advocacy on the extent, scope, degree and impact of land degradation on sustainable development and poverty reduction." There is also an absence of empirical evidence to support the development of models of good practice or effective innovation either for agricultural practice or the institutional approaches that would favour SLM. What has been an important focus of government, donor and civil society concern is land policy. A central issue has been balancing the rights of landholders against the needs of investors within an institutional framework where the capacity of communities effectively to protect and exercise their rights has been coming under threat.

The Mozambican constitution vests land ownership in the state but provides a clear mechanism by which land use rights can be established and transferred. A major concern relates to the implementation of land policy and the scope for manipulation and erosion of the land rights of those lacking effective political influence or resources to defend their rights.

The Mozambican government has articulated a range of policies focused on aspects of environmental protection and agricultural development, but these have not generally been adequately resourced and face institutional constraints in implementation. PROAGRI is an attempt to develop a Sector Wide Approach for agriculture and incorporates a land management component. PROAGRI has provided a clear policy framework but has not succeeded in integrating donor support within a common management framework and the general strategy of creating an enabling environment for private sector service provision has had limited success.

Although General Budget Support has been an important aid modality (and there is a strong focus on public financial management reform) in practice the mechanisms for integrating the overall planning and prioritisation of aid and budget resources remain weak and to a significant extent supply-led, in the sense that government attempted to accommodate donor offers of resources rather than working within an overall system of expenditure ceilings. In this context, the financing of SLM related activities has remained fragmented, in the context of Mozambique's continuing very heavy dependence on aid. A number of separate related initiatives have been costed. The Ministry of Environment (MICOA) has developed an Action Plan to address erosion, but funding for this has not been secured. A national strategy for biodiversity has also been developed but lacks funding.

The main issue for SLM policy in Mozambique is the lack of progress in achieving consensus that SLM is a priority in a context of general land abundance where the incentives for the adoption of sustainable agricultural practices in large parts of the country are low. It is difficult to make an assessment (in the absence of comprehensive information on the dimensions of the problems of land degradation or of analysis of the links between this and other development issues) of the extent to which the limited priority accorded to SLM reflects an appropriate judgement in terms of the development priorities facing Mozambique, or is a reflection of the weak organisation of stakeholder interests (particularly from civil society) that would favour more sustainable practices. A lack of information and analysis constrains effective evidence-based advocacy or policy making. There is in particular a lack of empirically grounded models for how to introduce more sustainable land management practices in the

Mozambican context, as well as limited evidence on the dimensions and implications of the SLM challenge. This constrains the design of any substantive programme to promote SLM.

### 3.5 Uganda

Estimates of the economic costs of land degradation in Uganda are among the highest in Africa with key problems being declining soil productivity, vegetation cover loss, reduced water quality, and conflict over land and related resources particularly involving pastoralists. There is evidence that poorer households use labour more intensively and are less likely to use improved management practices, and that incentives for SLM depend on market opportunities and input prices.

The Ugandan constitution and land legislation recognises four forms of land tenure including customary, freehold (the only country among the case studies to do this), leasehold and mailo (a limited freehold for land granted by the colonial government). The legal framework is based on the presumption that freehold tenancy is the most secure, efficient and conducive to SLM (although there is a lack of evidence to support this). Significant problems in the implementation of the 1998 Land Act (particularly in relation to conflict resolution) have led to progress in the development of a National Land Policy. However, there is evidence of abuse (and of acquiescence in the abuse) of land rights by Government and the effectiveness of political will to resolve these issues remains unclear.

Uganda has a strong policy making and relatively disciplined budgeting process around the framework provided by the Poverty Eradication Action Plan (PEAP). The UNCCD National Action Plan has been mainstreamed into PEAP processes and environmental management is a major component of the second pillar of the 2004 PEAP. The Plan for the Modernisation of Agriculture (PMA) which provides a framework within the PEAP for agricultural policy also has a focus on natural resources though an evaluation of the PMA concluded that in this area most of the achievement had been at policy and strategy level, rather than in relation to implementation.

Since 2006 there has been a process aimed at intensifying dialogue with stakeholders to develop a harmonised country programme for SLM. This is envisaged as developing an operational SLM country platform, producing a stocktaking and gap analysis report, and developing and launching a harmonised SLM country programme.

Uganda therefore is an example of a country with a relatively strong budget and policy making process which has exercised a high level of ownership (through the Ministry of Finance, Planning and Economic Development) of the

development agenda. There has been some progress in mainstreaming SLM issues into sectoral and national policies but this appears to have had little direct impact as yet on either the incentive framework within which farmers are operating, or on the resources available to assist in undertaking investments.

Neither SLM nor agriculture and natural resources in general have been accorded a high priority for public expenditure in Uganda. It is unclear whether this reflects an explicit technical judgement about the costs of soil degradation, a lack of confidence in the effectiveness of public expenditure to address these problems, or a decision-making process that systematically neglects issues of central concern to the rural poor particularly where these may confront elite interests.

In the case of Uganda, good SLM practices appear to be based mainly on the use of inputs (such as organic fertiliser) and so do not necessarily involve a substantial capital investment cost. The issue is more whether there are effective economic incentives for farmers (especially poor farmers) to engage in such practices where input and marketing costs are high and farmers lack access to borrowing for crop finance, and where there appear to be significant problems related to security of tenure.

This section highlights findings from the review of comparative experience summarised in the previous section and the background paper on financing instruments in relation to the issues raised in Sections 1 and 2, including progress towards establishing programmatic approaches to SLM, and evidence on the use of specific policy instruments.

### 4.1 Understanding of the SLM problem

The discussion in Sections 2.1 and 2.2 highlighted the need for the design and implementation of effective policies to be based on a good understanding of the underlying SLM problem, including the costs associated with land degradation, the causes of failure to use land sustainably, the interests and influence of different stakeholders, and how their actions affect the operation of the institutional arrangements of most significance for land management.

- Estimates of the economic costs of land degradation where these are available are of significance both in relation to macroeconomic growth performance but also in relation to poverty impact, since there is evidence that land degradation disproportionately affects the poorest and least empowered farmers on the most marginal land. These estimates are generally of the direct cost in terms of foregone production. There are potentially further costs in terms of external effects that have not generally been quantified. However, the information base for drawing firm conclusions about the precise scale and nature of the scale and costs of land degradation is quite weak even in countries like Ethiopia where considerable prominence has been given to the issue.
- SLM policy initiatives in the countries reviewed have not generally been based on a specific identification of the relative significance of the different factors identified above as potential causes of divergence between individual incentives facing landholders and social returns, though each of the factors appears to be significant in some contexts. General conclusions that appear to have some empirical validity are that land tenure insecurity is greatest for the poorest as they lack effective capacity to defend their land rights. This group is also likely to face the greatest problems of failures in related markets, and may also have the weakest institutions for managing common resources, particularly in the aftermath of conflict. This suggests that this group may be caught in a

vicious cycle of land degradation and poverty. For the bulk of less marginal agricultural and livestock producers, the causes of land degradation are likely to be more focused on a failure to internalise external effects such as those related to the loss of forest cover.

- In all the countries reviewed there is (to varying degrees) an evidence-based technical understanding of how to address problems of land degradation and what improved and sustainable land management practices involve for the main farming systems in each country. In Burkina Faso and Ethiopia, for example, there is a strong body of positive experience using small-scale investments and improved practices at individual farm and community level, built up through many years of project-based initiatives, that is envisaged as forming the basis for scaled-up national programmes to address SLM. There has been a general recognition that regulation, coercion and external enforcement have had little success as instruments for SLM, and there are general moves towards more participatory approaches.
- The countries reviewed show a common pattern of a large number of initiatives over many years both at the policy and project level that have sought to address land management practices and concerns about degradation in the context both of wider environmental policies and of agricultural and other sectoral development strategies. These responses have generally been fragmented and despite some successes, have been judged in all cases to have been of limited impact. All the countries have articulated National Actions Plans to implement the United Nations Convention to Combat Desertification (UNCCD), but these have tended to add to the number of strategies and initiatives rather than serving to unify and rationalise them. One of the problems has been that SLM cuts across the normal sectoral divides of government, as well as requiring cooperation at different levels of government (local, sub-national, national, and in many cases intergovernmental).
- All the countries reviewed (with the partial exception of Mozambique, which still retains many characteristics of land abundance at least at the aggregate level) have increasingly highlighted concerns about land management practice in national development and poverty reduction strategies. There are processes underway (around and using the Country Strategic Investment Framework – CSIF - in particular) to try to rationalise and integrate SLM policies and develop financing frameworks. However substantial progress on the ground remains limited. Ethiopia has moved

considerably further than any of the other countries in articulating and formulating a programmatic approach to SLM and is in the process of implementing and seeking to secure funding for the programme. Burkina Faso has a strong body of positive project level experience in how to address SLM, but there is less evidence of a high level political focus on this issue to focus resources in this area or to confront and overcome institutional obstacles to a more integrated SLM approach. In neither Ghana nor Uganda (despite estimates of substantial economic and poverty costs from land degradation) has there yet been substantive progress in moving towards a more effective programmatic approach to SLM or in devoting additional resources to the problem. Since both Ghana and Uganda have relatively coherent processes of overall development planning and budget management, this has to be interpreted as reflecting a political decision that devoting substantial public or aid resources to this area is not a high priority. This also appears to be the case in Mozambique where the economic incentives for improved SLM may be significantly less.

## **4.2 Progress towards programmatic approaches to SLM**

All the countries reviewed have made some progress and have ongoing initiatives to develop a more programmatic approach to SLM, both as part of wider processes of aid and public sector reform (influenced by the Paris Declaration) and as a result of specific initiatives related to SLM like the CSIF. However, this has encountered significant obstacles (particularly relating to problems in coordination across ministries and between different levels of government, and the limited engagement/interest of many donors and governments in actually moving towards a more effective and coherent approach).

The CSIF initiative is the latest attempt to provide a coherent and unified approach to SLM policy. It is too early to judge its success, but this will depend on the extent to which it can integrate and supplant the multiplicity of strategies and programmes (many of which appear to have been donor driven) addressing aspects of the SLM challenge that exist in all the countries reviewed. This will in turn depend on the extent to which there is strong political leadership and effective pressure from national stakeholders to achieve more success in moving towards programmatic approaches and addressing the weaknesses both in national land policy and its implementation framework. The major challenge for a programmatic approach is to develop the institutional capacity needed for an expansion of models of support to SLM that have been shown to be successful.

#### **Box 4.1 Developing a Programmatic Approach to SLM in Ethiopia**

The Ethiopian government has developed and is implementing a National Programmatic Framework for SLM. This sets key priorities for SLM investments, sets out a strategy for scaling up SLM based on best practice lessons, and defines the approach and mechanisms for coordination, consultation, participation and monitoring and evaluation. The Government has also established a National SLM Platform (which comprises a multi-sectoral and multi-stakeholder National Steering Committee and Technical Committee, supported by a Secretariat). It is intended to establish similar SLM Platforms at Regional level. The Program is envisaged as covering 177 watersheds in high potential areas in eight regions over five years of implementation, based on the model of Participatory Watershed Management.

The SLM Program has been developed through a process lasting about three years involving the main government, donor and NGO stakeholders, focusing on those donors and NGOs with direct field experience of SLM programs. This process has helped to build a consensus on the key elements of the approach although it was somewhat delayed by institutional and personnel changes at the Ministry of Agriculture and Rural Development. A key feature is to try to ensure community responsibility for the investments undertaken. This envisages the establishment of "Watershed Associations" to take responsibility for investments and SLM practices, though neither the legal framework nor the institutional capacity for this arrangement is currently in place.

The Country Strategic Investment Framework (CSIF) Platform is envisaged as providing a framework for donor support of the SLM Program (and the further development of the land certification system). This will provide an umbrella for funding although it is not envisaged that there will necessarily be common funding arrangements. Rather the SLM Program provides a structure within which individual projects may be incorporated to align on overall government policy. The development of the CSIF will be followed by a Donor Conference to seek to secure funding commitments beyond those already provided by IDA and GEF. There has also been little systematic investigation of the possibilities of securing innovative forms of financing, particularly in relation to carbon sequestration related to reforestation. An important feature of the Ethiopian system is fiscal decentralisation through the provision of substantial block grants to regions and districts (woredas). The longer term sustainability of SLM programmes depends on strengthening of capacity at these levels of government as well as at the local community level.

Some important issues remain to be resolved:

- The underlying rationale for public investment and for the division of costs between the public sector and communities and farmers is not very clear.
- The SLM Program does not in its current form address the issue of the financial or institutional sustainability of the investments and improvements in management practices that it seeks to bring about.
- Capacity development at local, district and regional level has so far received little attention.
- Few major donors have expressed a strong interest in supporting the SLM Program which is heavily reliant on IDA and GEF for its funding in its current form. If donor support is not forthcoming a rethinking of the approach may be required so as to leverage donor funds more effectively and use a higher proportion of farmer and community contribution and Ethiopian government resources so as to ensure the scaling up of SLM initiatives.
- NGO and CSO involvement in the consensus building process has been relatively limited.
- The SLM Program is heavily focused on highland areas. This is understandable in terms of the location of population and the stress facing the agro-ecological system on which the bulk of the Ethiopian population depends. However, the issues of land management facing lowland pastoral populations have received very little attention and are not addressed within the SLM Program.

Ethiopia has made the most substantial progress in developing a coherent SLM programme (see Box 3.1). The first and most important reason for progress has been high level political support to the process and to SLM as a priority, and that the development of a more programmatic approach is necessary to overcome what have been diagnosed as the fragmentation of past efforts. This political support has helped maintain momentum and strategic direction over a process that has lasted several years, despite obstacles such as staffing changes and the need for effective coordination across multiple agencies and levels of government. In none of the other countries reviewed is there evidence of such strong and high level government commitment to SLM. The process of moving towards a more programmatic approach in Burkina Faso, for example, appears to be more heavily dependent on donor leadership and support, and has made to date less progress in overcoming institutional obstacles to greater cross agency coordination.

The second feature of the Ethiopian experience has been a relatively inclusive attempt to develop consensus with stakeholders around the main features of the SLM Program (although NGOs and CSOs have been much less fully involved), and to systematically collate and review evidence on the performance of SLM initiatives. Despite this overall progress, there remain major challenges in developing local level capacity and in securing donor funding for the SLM Program (which is conceived as heavily dependent on donor support) although donors have been closely involved in its development, and some criticisms that the SLM Program was exclusively focused on highland areas.

### **4.3 Lessons on the use of specific policy instruments**

The terms of reference for this study asked for a review of the impact of a range of economic policy instruments on incentives and disincentives for SLM investments. These included subsidies and taxation policies, decentralised revenue collection and retention schemes, and the aspects of fiscal reform that are most significant for SLM investments. However, the country experiences reviewed provided little relevant experience. While there has been consideration of the use of financing mechanisms such as royalties (most notably from mining as in Ghana) and the use of covenants that require mining companies to restore degraded agricultural resources after the completion of operations, SLM initiatives have remained overwhelmingly dependent on donor funding and on transfers from central government. In principle, measures that strengthen fiscal decentralisation (provided that this does in fact make expenditure decisions more accountable to local interests, including those of resource-poor farmers) could be expected to improve responsiveness to local concerns and hence to boost SLM expenditure in cases where this is a local priority. Ethiopia may

provide an interesting test case, since the financing framework for the SLM Program specifies that there should be contributions from each level of government, although these have not yet been specified.

#### **4.4 How much is spent on SLM? Is there a “funding gap”?**

Estimation of the size of the “financing gap” for SLM (defined in terms of the level of expenditure that would be justified in terms of the development impact of improved land management practice) is complicated by several factors. First, there is little comprehensive information available about the current levels of SLM-related expenditure. A background study for the FAO study made an attempt to estimate SLM expenditure levels in Ghana (Box 4.2). Second, while estimates exist of the economic costs of land degradation, these are far from a complete assessment of the overall development cost. Third, there are major gaps in data about the scale and nature of the land degradation problem.

Despite these many sources of uncertainty, the evidence from the case studies suggests there is a large gap between the current levels of expenditure (especially outside the forestry sector) and likely economic returns. Estimates of the economic rate of return on investments in SLM (for example in Burkina Faso and Ethiopia) are strongly positive provided that these take place through the participatory approaches that have been shown to be successful.

A central issue is the appropriate role of the state in funding improvements in farming practices and associated investments. Many of these improvements should be privately profitable for farmers (or collectively profitable for the local area) provided that farmers have sufficient security of tenure to feel that they will reap the benefits of investments, as well as having sufficient access to markets. To this extent, they should not require full government or donor funding provided that there are means available to raise or deploy capital resources locally. However, it was noted in Burkina Faso that while there are well-developed models for how to reverse land degradation there was a problem of limited demand from farmers to undertake these improvements and investments. Understanding the nature of the apparent unwillingness or lack of ability of farmers to undertake such investments is critically important, since the appropriate policy response depends on whether the causes are tenure insecurity, lack of access to viable economic opportunities, or other constraints such as lack of access to investment funds.

Although the most marginal and poorest households may face an absolute resource constraint, this is unlikely to be the case for agricultural and livestock producers in general. Given the many calls on government and donor funding, developing models for SLM that strengthen incentives for farmers to invest, and

#### **Box 4.2 Estimating SLM expenditures – Experience from Ghana**

Recent estimates of the direct reduction of annual agricultural income resulting from land degradation in Ghana are of the order of 5% of agricultural GDP or 1.8% of total GDP. This estimate excludes impacts on other sectors or costs linked to loss of biodiversity, health or quality of life. Expenditures on SLM in Ghana were identified as largely taking place in three sectors:

- In agriculture, large commercial estates undertake some SLM investments but these are probably very rare in the smallholder sector. Knowledge about smallholder SLM initiatives is scant. SLM is equally absent from the portfolio of agricultural public investment projects and programmes, whether government or donor funded. The last SLM focused project spanned 1992-2003; although it left its marks on agricultural extension, SLM slipped back in agricultural priorities when funding ceased. Only one Ministry of Food and Agriculture (MOFA) project out of nineteen (representing about 1% of MOFA's 2006 investment expenditures) was judged directly relevant to SLM.
- Sustainability of the productive capacity of the forestry resources is a policy priority for the Forestry Commission; many of its activities are thus SLM focused. The sector benefits both from government and from donor supported projects but the manner in which these contribute to the implementation of the Forestry Master Plan is not clear.
- In relation to mining, technical and financial provisions for ensuring land sustainability are included in the mining contracts of large operators but the Environmental Protection Agency which is responsible for monitoring and enforcing their legal compliance with environmental regulations has little capacity to do so. Public investment in the sector's SLM is limited to one large donor funded project which funds an Environmental Impact Assessment in the mining and exploration areas and a Strategic Environmental Assessment which will inter alia cover the future consequences of mine closures and the rehabilitation needs.

The estimation of expenditure on SLM in Ghana was fraught with difficulties as: (i) expenditure on SLM is unavailable for the private sector, (ii) budgetary data and donor project data are insufficiently detailed to enable identification of realised expenditures on SLM, and (iii) consistent data in time-series are unavailable both because consolidation of budgetary data is recent thus changing the scope of financial reporting and because ministries and agencies have been moved.

Despite these difficulties, public expenditures on SLM were estimated for 2006 at roughly ₵ 158 billion which is equivalent to about 0.4% of total budget expenditure or 0.13% of GDP. The estimate only gives an indication of the importance of SLM public expenditure: in reality it probably much overstates public expenditure on SLM since budgeted expenditure (and not realised expenditure even though there is strong evidence that actual expenditure is well below budget because of capacity constraints and late release of funds) is included for agriculture and all the Forestry's Commission's budget is included even though not all its activities are SLM focused.

Private sector expenditure is very difficult to capture; it is probably minimal for smallholders and communities and whilst SLM investments may be more sizeable for larger commercial operators, their financial information is not disclosed to the public.

Source: Background Paper on Ghana for FAO Financing Guidelines

address other constraints (such as the weakness of financial markets) on investment, is likely to be important in effectively leveraging public expenditure to increase impact.

A strong conclusion of the study is that the main constraint on closing the financing gap is an unwillingness of African governments to prioritise expenditure on SLM (and on agriculture and rural development more generally). Increasing the flow of donor resources specifically earmarked or targeted on SLM will not in itself address this problem, and is likely to lead at best to a further proliferation of project-based activities that may be relatively successful but that will lack sustainability or government commitment.

The comparative study encountered a dearth of evidence about the scale of private financing for SLM, or of lessons about what can practically be done to increase this. There appear to date not to have been any significant experiments with innovative sources of funding outside countries like South Africa that have a relatively strongly developed institutional infrastructure.

#### **4.5 SLM and public finance reform**

In all the countries reviewed there are substantial ongoing reform efforts, and at least some progress has been made, in strengthening the public financial management system and attempting to link the allocation of public resources more coherently to development priorities. This approach also seeks to integrate the planning and management of government expenditure and donor resources which is central to the establishment of programmatic approaches. The evidence reviewed suggests the following conclusions:

- Where progress has been made in first linking expenditure planning to development priorities and second establishing and enforcing medium term sectoral or ministerial resource envelopes (as in Uganda and Ghana) this has not led so far to any clear increase in the allocation of budget resources to SLM (or indeed to the agriculture and rural development sectors in general). This process has made more transparent the low levels of government commitment to SLM here compared to countries that have made less progress in public financial management (PFM) reform where resource allocation decisions are made in a less explicit way.
- Even where there has been progress at the macroeconomic level in PFM reform, there are substantial problems relating to lack of capacity at lower levels of government, and bottlenecks in the release and effective use of resources appear plausibly to impact especially negatively on the types of activity (like extension services and local land administration) that are of central importance for SLM.

- Even in the Ethiopian case where there has been significant progress in formulating and costing the SLM Program, this is not so far integrated within the regular budget process, and the full cost implications in terms of long-term public expenditure commitments to ensure sustainability have not been developed. Likewise, costings of NAPs have tended to provide listings of proposed standalone investments, rather than building from an understanding of current levels of expenditure and the financing requirements of ongoing core functions of government to support SLM.

The overall lesson is that increasing the provision of public resources for SLM in the context of PFM reform requires effective advocacy and engagement with the processes by which resource allocation decisions are made. In part this may involve presenting clear and compelling evidence about the returns to public expenditure in relation of development objectives and evidence that there are plausible ways to achieve these returns through tried and tested approaches. In part it may involve building effective political coalitions to improve the responsiveness of the decision-making process to the needs and interests of the rural population, in particular the rural poor. It is also important that strong attention in the design of PFM and wider institutional reforms including decentralisation is placed on the building of planning and management capacity at the local level.

#### **4.6 Constraints on using carbon trading for SLM in Africa**

The review of financing sources provides information about relevant initiatives for using carbon finance that has potential relevance to SLM in Africa. However, to date there has been extremely limited use of these mechanisms in Africa despite the substantial opportunities for Greenhouse Gas mitigation, as well as the potentially urgent problems of adaptation that are faced.

For example, a review<sup>6</sup> notes that there are no CDM projects in the Horn of Africa and that outside South Africa and Morocco (with thirteen and four projects respectively) “CDM projects remain thin on the ground in comparison to countries such as India, China or Brazil.” Similarly only two adaptation projects could be identified in the Horn of Africa. This study identifies two main types of barrier to accessing these opportunities in the Horn of Africa. The first relate to general governance, capacity and institutional constraints (which potentially impact on all

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<sup>6</sup> EcoSecurities (2008a), Carbon Market Analysis – Fighting Climate Change and Desertification in the Horn of Africa, A Study for the Global Mechanism, Den Haag.

forms of investment activity). These include a lack of political stability and urgent calls on resources that militate against longer-term investments such as action on climate change, weak financial markets, and a wide range of constraints on private sector initiative resulting from lack of information, and poor communications infrastructure. Specific barriers include those related to the Kyoto Framework (limitations on the type of projects in forestry and land-use sectors that are eligible), and uncertainty about the regulatory framework after 2012 which increases risks and shortens time horizons over which projects can benefit from carbon revenues. The costs of developing and managing projects under the framework of the UNFCCC are also frequently prohibitive.<sup>7</sup>

The paper also highlights that the scope for greenhouse gas mitigation in poorer African countries is limited compared to more developed economies (like South Africa) because of the lack of use of fossil fuels for their energy infrastructure (e.g. large scale use of coal for power stations). This means that opportunities to access carbon finance related to moves to less emissions-intensive forms of energy production are very limited. While this analysis is specific to the Horn of Africa, similar considerations exist across most of the rest of the continent, suggesting that the scope for using carbon finance is likely to be greater in countries with relatively more developed institutional and economic infrastructure. The study proposes facilitation measures including technical assistance for project development, seed capital to kick start project development, and additional research to investigate detailed requirements both technically and institutionally. However, the scope for using such approaches within the existing CDM framework will remain severely constrained because of the wider institutional and governance requirements that few African countries appear able to meet.

Under current circumstances, the international architecture of carbon finance appears to be very poorly adapted to the needs of the poorest and institutionally weakest contexts (where arguably natural resource capital is under the greatest threat). Accessing carbon finance requires a high degree of institutional sophistication and a strong information base about the carbon consequences of investments as well as credible means of verifying and certifying actions undertaken. These conditions are almost by definition absent in situations of poverty and insecurity that typify the resource systems in Africa that are under

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<sup>7</sup> Costs of completing project and methodology documentation for small scale projects are estimated at USD 30,000 to 75,000 and large scale projects at up to USD 200,000, while regular validation and verification costs can be USD 6,500 to USD 30,000. See Ecosystems (2008b), Carbon Finance Opportunities that Assist Implementation of the UNCCD, A Policy Briefing for the Global Mechanism, 29th February.

the greatest threat. The challenge in these circumstances is to build the basic institutional capacity to provide security, enforcement of law to protect resource rights, fair dispute resolution, and access to market opportunities.

For the (minority of) countries in Africa that have reached a sufficient level of institutional development to make it worthwhile to seek to access the existing funding resources, there is a case for nationally-led initiatives to examine how specifically to exploit existing opportunities for carbon financing through both the compliance and voluntary markets. The most plausible large scale opportunities at the moment for most African countries within the existing international architecture would relate to reforestation and afforestation (rather than biomass, methane capture or improved energy efficiency), though the greatest international need is to establish mechanisms that provide additional incentives and institutional support for reducing deforestation and land degradation.

There are in principle opportunities to generate carbon credits through changes to agricultural systems that involve reduced fertiliser use, anaerobic digestion, the use of bioenergy and renewable and more efficient energy sources. One of the areas where there have been initiatives to access carbon finance in Africa relates to the reduction in emissions from burning wood that is unsustainable harvested through the distribution of fuel-efficient stoves. The Ugastove project in Uganda is one example. This is anticipated to generate around USD 0.75 million per annum in carbon credits over a seven year period from 2008.<sup>8</sup>

The general conclusion is that the opportunities for accessing carbon financing for most African countries are limited under the current international arrangements. There is a strong international agenda of action required to develop more relevant and accessible sources of funding for both greenhouse gas mitigation and climate change adaptation.<sup>9</sup>

## 4.7 The use of donor assistance for SLM

The comparative study identifies some lessons about the use of donor assistance for SLM:

- There has to date been little experience with forms of donor support to SLM that are not fundamentally project-based. This reflects the limited progress that has been made in moving towards programmatic approaches

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<sup>8</sup> CTippman, R., (2008), Climate Change Financing for the UNCCD – Funding Opportunities to Support SLM and Project Examples from Asia and Africa.

<sup>9</sup> EcoSecurities (2008b). This note provides proposals on the role that the Global Mechanism could fulfil in promoting changes to the international regulatory framework in order to make carbon finance more accessible.

to SLM in comparison with some other sectors. There is evidence (for instance from Burkina Faso and Ethiopia) that while project approaches have often been successful, the failure to embed projects within a wider programme context has militated against the scaling up of successful initiatives as well as to problems about the sustainability of approaches that depend on flows of public expenditure and effective implementation capacity at the local level.

- This suggests that it is not the mode of donor support (i.e. whether or not it involves pooled funding arrangements of various kinds) that is the main determinant of sustained success, but whether particular initiatives are integrated within a coherent overall planning and financing framework for SLM which enjoys high level political support. How donor support should best be provided within a PBA may take various forms in different contexts (depending on the extent of progress with public finance reform and capacity development). The overall determinant of success is likely therefore to be the effectiveness of national leadership to ensure coherence among related initiatives.
- Donors have however played an important role in supporting the processes by which more programmatic approaches to SLM are being developed, for instance in Burkina Faso and Ethiopia. This has involved support to the review of experience and to engagement with stakeholders in the development of SLM programmes.
- One problem for achieving an integrated and programmatic approach is the preference of some significant donors for focusing resources on particular aspects of the SLM issue (for instance support to formal land titling) rather than adopting a comprehensive approach to supporting a national SLM programme as a whole. It remains to be seen whether donors in practice have, or are prepared to provide, sufficient flexibility to move away from project based approaches towards more integrated forms of support. There is also an issue about the priority that donors are prepared to accord to SLM interventions. For example, it appeared that there is a significant financing gap for the well-articulated Ethiopian SLM programme. There is some evidence that in some cases (for instance Uganda) donors have been unwilling to engage on land issues because of their political sensitivity, but the comparative study suggests that strengthening the land system should be a central element of efforts to support growth, poverty reduction and broad-based sustainable development.

The background papers for this study (and the complementary studies by FAO) have shown evidence that there are likely to be substantial development returns to investment in SLM and to improved land management practice, and that there exists a body of international and local knowledge and practice that can provide a basis for SLM. There has also been some progress in developing programmatic approaches to SLM that have built on successful experience and initiatives and hold out the promise of more sustained achievements in the future if sufficient priority is accorded to action to promote SLM. Effective national government leadership that is responsive to the concerns and interests of primary stakeholders will be the main determinant of whether this promise is realised, while well-designed and flexible donor support will also be necessary.

The key areas for action by **African governments** that emerge from this study can be identified as follows.

**First**, the information and evidence base on the scale and determinants of soil degradation and their economic and other costs needs to be strengthened substantially. This includes most critically a need for an improved understanding of the incentives and constraints on action by farmers, communities, and the private sector to adopt SLM practices, including the relationship between these incentives, the operation of output and input markets, and the working of key national, sub-national and local level institutions.

**Second**, African governments need to develop policies and institutions that ensure security of land tenure for the poorest and most marginalised farmers who are most vulnerable to land degradation, while providing flexibility to enable land to be used productively by those with the resources to do so. This requires effective legal and administrative protection for land rights, and the development of capacity, accountability, and resources for the local level institutions that play a central role in resolving conflicts over land rights.

**Third**, governments need to take the lead in encouraging a more programmatic approach to SLM and to ensure that the resources provided to address the problems are proportional to what the evidence suggests about the scale of the impact of land degradation on poverty and economic performance. The Ethiopian model shows one approach as to how this might be achieved and highlights the need for high level political commitment to take this forward, for agreeing on overall objectives and targets to provide a results framework for the programme,

and for building in as participatory way as possible on the perspectives and experience of communities and practitioners to identify successful models for support to SLM. So far as feasible, these models should seek to mobilise local resources (labour and capital) where they are available so as most effectively to leverage the use of public resources.

**Fourth**, public finance reforms that seek to improve the effectiveness of the planning and management of public resources and their allocation in line with agreed priorities are necessary as part of the wider context for SLM, but effective action to build local level capacity and ensure resources reach this level will be necessary, in addition to the high level allocation of resources to sectors and programmes.

**Fifth**, at the moment it is unrealistic to expect either private finance or innovative sources of funding such as the trading of carbon credits or PES to make any significant contribution to the funding of SLM priorities, though over the longer term they may have potential (especially in relation to deforestation). At the moment the available instruments are not well-suited to the African context since they require a considerable degree of institutional sophistication and have high transactions costs. African governments should lobby for the development of more suitable funding instruments. Financing strategies for SLM should be based primarily on the use of public funding and donor support, while so far as possible seeking to facilitate investment by farmers and landowners in sustainable land management practices, especially through increasing tenure security.

The key areas of action for **donor agencies** may be identified as follows:

**First**, the challenge for donor agencies is also to ensure that resources are provided in support of SLM programmes in line with agreed priorities, and that a proliferation of overlapping and parallel processes is avoided, while programme based support should be designed to reduce transactions costs and to build capacity within government. The CSIF provides a potential framework within which this may occur. However, what is important is to provide effective support to national initiatives that are responsive to the ultimate needs of land users and other primary stakeholders. International frameworks and processes should be seen as tools to support this rather than as drivers.

**Second**, at the same time, donors need to be clear that their actions are based on a clear understanding of the political context and the political economy of the process by which policies relating to land are formulated and (most importantly) implemented. This may require advocacy and support to try to strengthen the voice and interests of those most affected by problems of land degradation within the policy process, including through support to civil society and community based

organisations, as well as selective capacity building support to strengthen the effectiveness, accountability and responsiveness of institutional arrangements.

**Third**, donors also need to support and reinforce processes that strengthen national budget and planning and to be prepared to align their support on agreed strategies and through the use of government systems as these are developed.

**Fourth**, the existing mechanisms for accessing carbon financing have not proved effective for most African countries under the current international arrangements. International action is required to develop more relevant and accessible sources of funding for both greenhouse gas mitigation and climate change adaptation.



the 1990s, the number of people in the world who are illiterate has increased from 400 million to 600 million.

It is not surprising that the United Nations has set a goal of halving the number of illiterate people in the world by the year 2015.

But how can we help? The United Nations has set up a program called the United Nations Literacy Decade, which is designed to help countries around the world to reduce the number of illiterate people.

One of the ways that the United Nations Literacy Decade is helping is by providing technical assistance to countries that are having trouble with their literacy programs.

Another way is by providing financial assistance to countries that are having trouble with their literacy programs.

And a third way is by providing training to teachers and other people who are working in literacy programs.

So, if you are interested in helping to reduce the number of illiterate people in the world, you should consider supporting the United Nations Literacy Decade.

There are many ways that you can help, and the United Nations Literacy Decade is always looking for new people to help.

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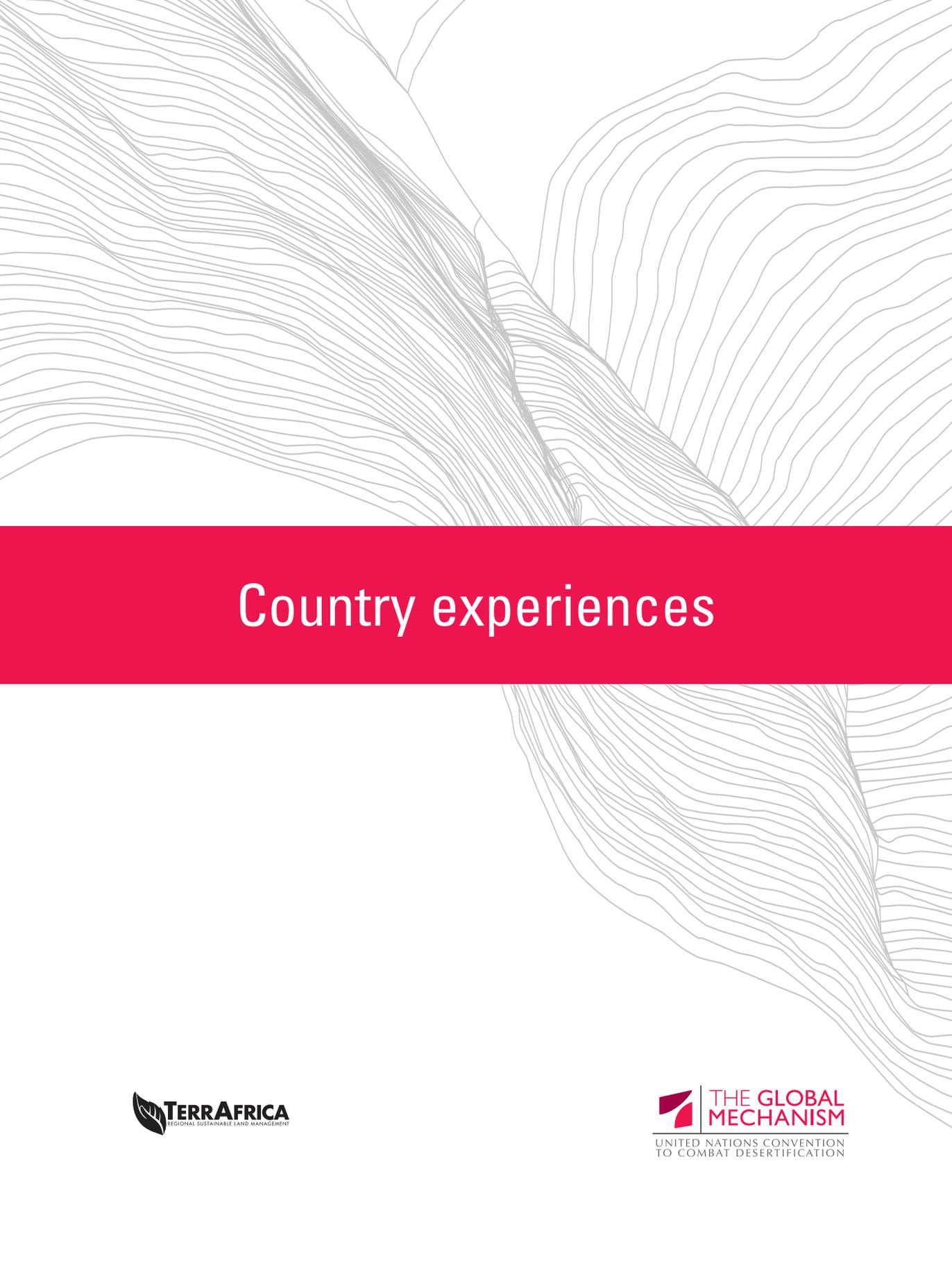
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The background of the page is a topographic map with contour lines, rendered in a light gray color. The lines are more densely packed in some areas, indicating steeper slopes, and more widely spaced in others, indicating flatter terrain. The map covers the entire page, with a solid red horizontal band across the middle.

# Country experiences



the 1990s, the number of people in the world who are illiterate has increased from 1.2 billion to 1.5 billion.

There are many reasons for this. One is that the population of the world is growing. Another is that the number of people who are illiterate is increasing in many countries, particularly in the developing world. This is because of a number of factors, including a lack of access to education, a lack of resources, and a lack of political will.

One of the main reasons for the increase in illiteracy is the lack of access to education. In many developing countries, there are not enough schools, and the quality of education is poor. This means that many children do not go to school, and those who do often do not learn to read and write.

Another reason for the increase in illiteracy is the lack of resources. In many developing countries, there is a lack of money to invest in education. This means that there are not enough teachers, and the schools are often overcrowded. This makes it difficult for children to learn.

A third reason for the increase in illiteracy is the lack of political will. In many developing countries, the government does not prioritize education. This means that there is not enough money invested in education, and the quality of education is poor. This makes it difficult for children to learn.

There are many ways to reduce the number of illiterate people in the world. One way is to increase access to education. This can be done by building more schools, and by improving the quality of education. Another way is to increase resources for education. This can be done by increasing the amount of money invested in education.

Finally, it is important to have political will to prioritize education. This means that the government must invest in education, and must ensure that the quality of education is high. Only then can we hope to reduce the number of illiterate people in the world.

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Another way to do this is to increase resources for education. This can be done by increasing the amount of money invested in education. Finally, it is important to have political will to prioritize education. This means that the government must invest in education, and must ensure that the quality of education is high.

Only then can we hope to reduce the number of illiterate people in the world. There are many ways to do this, and it is important to find the best way for each country. This means that we need to work together, and to share our ideas and experiences.

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Understanding sustainable land management policy and financing in Africa

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## Country experiences

## Acknowledgements

This report was prepared by Stephen Jones of Oxford Policy Management (OPM) for the Global Mechanism as part of an Terrafrica initiative, and was made possible with the financial support of the World Bank's Development Grant Facility.

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The findings, conclusions and views presented are the consultant's alone, and should not be attributed to Terrafrica, the Global Mechanism of the UNCCD, or to any other agency.

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# Executive summary

## Overview of the study

This study reviews and compares the experience of selected African countries (Burkina Faso, Ethiopia, Ghana, Mozambique and Uganda) in formulating and implementing policies for Sustainable Land Management (SLM), and in securing means of financing these policies. The study aims to present an integrated analysis of policy and financing issues using a comparative framework across the country studies. This is to allow the distinctive and common features of each national experience to be identified as a basis for drawing lessons and policy conclusions.

The general SLM problem can be characterised as one of a failure of the Natural Resource Management system in relation to land-based resources that is leading to unsustainable land management practices. A critical issue is to understand the factors that are leading to a divergence between the individual incentives facing landholders and the social returns to improved land management practice. These may include the following conceptually distinct situations:

- A failure of the land management system to internalise benefits and costs of land practices that are external to land users.
- A failure of the land management system to provide security of tenure so as to make SLM practices privately profitable to landholders.
- A failure to find ways of achieving effective collective action between landholders to undertake investments and maintain resource management arrangements that have collective benefits across landholders.
- Failures of related markets (such as for credit for agricultural producers) and lack of information on market opportunities, for instance on markets for organic produce or for sustainable forest products.

Given the dominance of land as a source of wealth in African economies (including through control of forest and mineral resources), land policy is highly politically sensitive. It is therefore important to understand the political economy of the policy process affecting SLM which is likely strongly to influence the priority accorded to action in this area by governments, and how in practice programmes are implemented.

## Findings: common themes

Several common themes emerge from this comparative review of experience:

- Estimates of the economic costs of land degradation where these are available are of significance both in relation to macroeconomic growth performance but also in relation to poverty impact, since there is evidence that land degradation disproportionately affects the poorest and least empowered farmers on the most marginal land. These estimates are generally of the direct cost in terms of foregone production. There are potentially further costs in terms of external effects that have not generally been quantified.
- SLM policy initiatives in the countries reviewed have not generally been based a specific identification of the relative significance of the different factors identified as potential causes of divergence between individual incentives facing landholders and social returns, though each of the factors appears to be significant in some contexts. Land tenure insecurity appears to be greatest for the poorest as they lack effective capacity to defend their land rights, and that this group is also likely to face the greatest problems of failures in related markets, and may also have the weakest institutions for managing common resources, particularly in the aftermath of conflict.
- In all the countries there is (to varying degrees) an evidence-based technical understanding of how to address problems of land degradation and what improved and sustainable land management practices involve for the main farming systems in each country. There has been a general recognition of the failure of approaches based on regulation, coercion and external enforcement that have had little success, towards more participatory approaches.
- The countries reviewed show a common pattern of a large number of initiatives over many years both at the policy and project level that have sought to address land management practices and concerns about degradation in the context both of wider environmental policies and of agricultural and other sectoral development strategies. These responses have generally been fragmented and despite some successes, have been judged in all cases to have been of limited impact.
- The countries reviewed have increasingly highlighted concerns about land management practice in national development and poverty reduction strategies. There are processes underway to try to rationalise and integrate SLM policies and develop financing frameworks. However

substantial progress on the ground remains limited. Ethiopia has moved considerably further than any of the other countries in articulating and formulating a programmatic approach to SLM and is in the process of implementing and seeking to secure funding for the programme.

- The low priority accorded to SLM by governments is reflected in the fragmentary information available about current levels of SLM related expenditure, and what appear to be very low levels of expenditure in so far as information is available. There is essentially no information available for any of the countries on private investment in improved land practices.
- The countries reviewed have generally made progress towards strengthening the national budgetary process and using this (along with the poverty reduction strategy) as a basis for planning the totality of public resource allocation (including the use of donor funds). However, this progress is very variable.
- Weaknesses in the public financial management system are constraining to varying degrees moves towards more effectively programmatic approaches for SLM, but the fundamental factor leading to apparent underfunding of SLM appears to be the continuing low priority accorded to investment in SLM by most African governments, rather than technical features of the budget system, or the policies of donors and potential availability of funds.

## Findings: evidence on key policy questions

### **Is land policy and institutional reform an effective strategy for SLM?**

#### **How can such reforms be successfully implemented?**

The comparative study highlights the central importance of land policies and the way in which the land system operates (in terms of legal and regulatory structures, formal and informal institutions for conflict resolution, and other management functions) for successfully addressing SLM.

The land policies and institutions of the countries reviewed are quite diverse. Despite this diversity, the same challenges and issues arise in each of the countries reviewed. In each of the systems, there appear in principle to be mechanisms that should provide tenure security and means of dispute recognition and the protection of land rights. But achieving tenure security depends critically on the effective operation of both local and national institutions within the land administration and wider legal and judicial system.

The comparative study suggests that strengthening land policy and land administration arrangements should be central to SLM policies. However, it is not sufficient to focus on the formal structure of land rights. Effective ways of

making land management systems accountable and protective of land rights – particularly for the poor – need to be found. There is no strong evidence that particular forms of land tenure arrangement (e.g. freehold) are especially favourable to SLM, or that others (such as state ownership of land or forms of communal) are not in principle compatible with the protection and development of secure and potentially transferable use rights.

**How can progress best be made towards more programme based approaches for SLM? Is there evidence that a more programmatic approach leads in practice to more effective SLM policies?**

All the countries reviewed have made some progress and have ongoing initiatives to develop a more programmatic approach to SLM, both as part of wider processes of aid and public sector reform (influenced by the Paris Declaration) and as a result of specific initiatives related to SLM like the Country Strategic Investment Framework (CSIF).

Ethiopia has made the most substantial progress in developing a coherent SLM programme. Several factors appear to underlie this progress. The first and most important has been high level political support to the process and to SLM as a priority, and that the development of a more programmatic approach is necessary to overcome what have been diagnosed as the fragmentation of past efforts. The second feature of the Ethiopian experience has been a relatively inclusive attempt to develop consensus with stakeholders around the main features of the SLM Program (although NGOs and CSOs have been much less fully involved), and to systematically collate and review evidence on the performance of SLM initiatives.

The CSIF initiative is the latest attempt to provide a coherent and unified approach to SLM policy. It is too early to judge its success, and it likewise remains too early to say that a more programmatic approach is leading to substantive improvements in SLM performance but a consistent finding is that SLM initiatives have had limited impact in the past in part because of their fragmentary and uncoordinated nature and a failure to address institutional, political and capacity constraints on effective coordination. The major challenge for a programmatic approach is to develop the institutional capacity needed for an expansion of models of support to SLM that have been shown to be successful.

### **Is there a financing gap for SLM? How can it be defined and measured?**

Estimation of the size of the “financing gap” for SLM is complicated by several factors. First, in none of the countries is there information available about the current levels of SLM-related expenditure. Second, while estimates exist of the economic costs of land degradation, these are far from a complete assessment of the overall development cost. Third, there are major gaps in data about the scale and nature of the land degradation problem.

Despite these many sources of uncertainty, the evidence from the case studies suggests there is a large gap between the current levels of expenditure (especially outside the forestry sector) and likely economic returns. A strong conclusion of the study is that the main constraint on closing the financing gap is an unwillingness of African governments to prioritise expenditure on SLM (and on agriculture and rural development more generally). Increasing the flow of donor resources specifically earmarked or targeted on SLM will not in itself address this problem.

### **What is the relationship between the performance of the public financial management system and SLM?**

In all the countries reviewed there are substantial ongoing efforts, and progress has been made, in strengthening the public financial management system and attempting to link the allocation of public resources more coherently to development priorities:

- Where progress has been made in first linking expenditure planning to development priorities and second establishing and enforcing medium term sectoral or ministerial resource envelopes (as in Uganda and Ghana) this has not led so far to any clear increase in the allocation of budget resources to SLM.
- Even where there has been progress at the macroeconomic level in PFM reform, there are substantial problems relating to lack of capacity at lower levels of government, and bottlenecks in the release and effective use of resources appear plausibly to impact especially negatively on the types of activity that are of central importance for SLM.
- Even in the Ethiopian case where there has been significant progress in formulating and costing the SLM Program, this is not so far integrated within the regular budget process.

The overall lesson is that increasing the provision of public resources for SLM in the context of PFM reform requires effective advocacy and engagement with the processes by which resource allocation decisions are made.

### **What are the lessons for the use of donor assistance for SLM?**

- There has to date been little experience with forms of donor support to SLM that are not fundamentally project-based. There is evidence (for instance from Burkina Faso and Ethiopia) that while project approaches have often been successful, the failure to embed projects within a wider programme context has militated against the scaling up of successful initiatives as well as to problems about the sustainability of approaches that depend on flows of public expenditure and effective implementation capacity at the local level.
- This suggests that it is not the mode of donor support (i.e. whether or not it involves pooled funding arrangements of various kinds) that is the main determinant of sustained success, but whether particular initiatives are integrated within a coherent overall planning and financing framework for SLM.
- Donors have however played an important role in supporting the processes by which more programmatic approaches to SLM are being developed, for instance in Burkina Faso and Ethiopia.
- One problem for achieving an integrated and programmatic approach is the preference of some significant donors for focusing resources on particular aspects of the SLM issue (for instance support to formal land titling) rather than adopting a comprehensive approach to supporting a national SLM programme as a whole.

### **What lessons emerge about private financing for SLM?**

This study encountered a dearth of evidence about the scale of private financing for SLM, or of lessons about what can practically be done to increase this. There appear to date in the case study countries not to have been any significant experiments with innovative sources of funding. The conclusion in this area is therefore that the process of developing programmatic approaches needs to pay more systematic attention to understanding the scope and constraints on private investment in SLM (including investment by farmers) than appears to have been the case to date.

### **Recommendations for action**

The following main recommendations for action emerge from the study:

1. The information and evidence base on the scale and determinants of soil degradation and their economic and other costs needs to be strengthened. There also needs to be more information and analysis to understand the

incentives and constraints on action by farmers, communities, and the private sector to adopt SLM practices, including the relationship between incentives and the operation of output and input markets.

2. African governments need to develop policies and institutions that ensure security of land tenure for the poorest and most marginalised farmers who are most vulnerable to land degradation, while providing flexibility to enable land to be used productively by those with the resources to do so. This requires effective legal and administrative protection for land rights, and the development of capacity, accountability, and resources for the local level institutions that play a central role in resolving conflicts over land rights.
3. Governments need to take the lead in encouraging a more programmatic approach to SLM and to ensure that the resources provided to address the problems are proportional to what the evidence suggests about the scale of the impact of land degradation on poverty and economic performance. The Ethiopian model shows one approach as to how this might be achieved and highlights the need for high level political commitment to take this forward, for agreeing on overall objectives and targets to provide a results framework for the programme, and for building in as participatory way as possible on the perspectives and experience of communities and practitioners to identify successful models for support to SLM. So far as feasible, these models should seek to mobilise local resources (labour and capital) where they are available so as most effectively to leverage the use of public resources.
4. Public finance reforms that seek to improve the effectiveness of the planning and management of public resources and their allocation in line with agreed priorities are necessary as part of the wider context for SLM. However, effective action to build local level capacity and ensure that resources reach this level will be necessary, in addition to the high level allocation of resources to sectors and programmes.
5. The challenge for donor agencies is also to ensure that resources are provided in support of SLM programmes in line with agreed priorities, and that a proliferation of overlapping and parallel processes is avoided, while programme based support should be designed to reduce transactions costs and to build capacity within government. The CSIF provides a potential framework within which this may occur. However, what is important is to provide effective support to national initiatives. International frameworks and processes should be seen as tools to support this rather than as drivers.

6. At the same time, donors need to be clear that their actions are based on a clear understanding of the political context and the political economy of the process by which policies relating to land are formulated and (most importantly) implemented. This may require advocacy and support to try to strengthen the voice and interests of those most affected by problems of land degradation within the policy process, including through support to CSOs and community based organisations.
7. Donors also need to support and reinforce processes that strengthen national budget and planning and to be prepared to align their support on agreed strategies and through the use of government systems as these are developed.
8. There may be a case for more systematic pilot initiatives to examine the scope for using innovative financing sources for SLM since the extent of experience in Africa appears to date to be very limited.

# Abbreviations

ANGDT	National Sustainable Land Management Agency (Burkina Faso)
ARD	Agriculture and Rural Development
BoARD	Bureau of Agriculture and Rural Development (Ethiopia)
BoWR	Bureau of Water Resources (Ethiopia)
CAADP	Comprehensive Africa Agricultural Development Programme
CASEM	Ministerial Sector Administration Council (Burkina Faso)
CCDPR	Cooperation Framework for Rural Development Partners (Burkina Faso)
CGAB	General Budget Support (Burkina Faso)
CNP	National Steering Committee (Burkina Faso)
CONAGESE	National Council for Environmental Management (Burkina Faso)
CONEDD	National Council for the Environment and Sustainable Development (Burkina Faso)
CPP	Country Partnership Programme
CSIF	Country Strategic Investment Framework
CSLP	Strategic Framework for Struggle Against Poverty (Burkina Faso)
CSO	Civil Society Organisation
CSPG	Cross-Sectoral Planning Groups (Ghana)
CVGT	Village Land Management Commission (Burkina Faso)
DDC	Drylands Development Centre
DEAP	District Environmental Action Plan (Uganda)
DNA	National Directorate of Water (Mozambique)
DUAT	Right of Use and Benefit over Land (Mozambique)
EARO	Ethiopian Agricultural Research Organisation
ECOWAP	ECOWAS Agricultural Policy
ECOWAS	Economic Community of West African States
EIA	Environmental Impact Assessment
ENR-SIP	Environment and Natural Resources Sector Investment Plan (Uganda)
EPA	Environmental Protection Agency (Ethiopia, Ghana)
EthioCAT	Ethiopian Overview of Conservation Approaches and Technologies
FAO	UN Food and Agriculture Organisation
GDP	Gross Domestic Product
GEF	Global Environment Facility
GM	Global Mechanism of the UNCCD
GPRS	Growth and Poverty Reduction Strategy (Ghana)
GTZ	German Technical Cooperation Agency

HIPC	Highly Indebted Poor Countries
IDA	International Development Association
IDDP	Integrated Dryland Development Programme (Uganda)
IDP	Internally Displaced Person
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
IIAM	Mozambican Agricultural Research Institute
LPDRD	Letter on Decentralised Rural Development Policy (Burkina Faso)
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries (Uganda)
M&E	Monitoring and Evaluation
MDG	Millennium Development Goal
MDSIP	MAAIF Development Strategy and Investment Plan (Uganda)
MECV	Ministry of Environment (Burkina Faso)
MFPED	Ministry of Finance, Planning and Economic Development (Uganda)
MIC	Ministry of Industry and Trade (Mozambique)
MICOA	Ministry for Coordination of Environmental Affairs (Mozambique)
MINAG	Ministry of Agriculture (Mozambique)
MIREME	Ministry of Mineral Resources and Energy (Mozambique)
MoARD	Ministry of Agriculture and Rural Development (Ethiopia)
MoWR	Ministry of Water Resources (Ethiopia)
NAADS	National Agricultural Advisory Services (Uganda)
NAP	National Action Plan
NDF	National Desertification Fund (Ghana)
NDPC	National Development Planning Commission (Ghana)
NEAP	National Environmental Action Plan (Ghana, Uganda)
NEMA	National Environmental Management Agency (Uganda)
NGO	Non Government Organisation
NRM	Natural Resources Management
NRMP	Natural Resources Management Programme (Ghana)
NSLMC	National Sustainable Land Management Committee (Ghana)
NSLMF	National Sustainable Land Management Fund (Ghana)
NSMLS	National Sustainable Land Management Secretariat (Ghana)
OPM	Oxford Policy Management
PAF	Poverty Action Fund (Uganda)
PANE	National Action Plan for the Environment (Burkina Faso)
PAPISE	Livestock Sector Action Plans and Investment Programmes (Burkina Faso)

PARPA	Action Plan for the Reduction of Absolute Poverty (Mozambique)
PASDEP	Plan for Accelerated and Sustained Development to End Poverty (Ethiopia)
PBA	Programme Based Approach
PEAP	Poverty Eradication Action Plan (Uganda)
PER	Public Expenditure Review
PISA	Agriculture Sector Investment Programme (Burkina Faso)
PMA	Plan for the Modernisation of Agriculture (Uganda)
PNGT	National Land Management Programme (Burkina Faso)
PROAGRI	National Agriculture Development Programme (Mozambique)
PROSEDERP	Productive Rural Sector Development Programme (Burkina Faso)
PRSP	Poverty Reduction Strategy Paper
SBFP	Sector Budget Framework Paper (Uganda)
SDR	Rural Development Strategy (Burkina Faso)
SEA	Strategic Environmental Assessment (Ghana)
SIP	Sector Investment Plan (Uganda)
SISTAFE	State Financial Administration System (Mozambique)
SLM	Sustainable Land Management
SNNP	Southern Nations, Nationalities, and Peoples
SP/CPSA	Permanent Secretariat for the Coordination of Agricultural Sector Policies (Burkina Faso)
SRMP	Savannah Resources Management Programme (Ghana)
SSA	Sub Saharan Africa
SWAp	Sector Wide Approach
SWC	Soil and Water Conservation
SWG	Sector Working Group
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
USD	United States Dollar
WFP	World Food Programme

The study has been prepared for Terrafrica on behalf of the Global Mechanism (GM) of the UN Convention to Combat Desertification. It is one of a set of four complementary studies prepared by FAO and the GM to contribute towards providing guidance on effective and evidence-based approaches to SLM policy and financing in Africa. This guidance is summarised in a Synthesis Paper that combines the key insights from the four separate studies. This study is aimed at informing African policy makers, donor partners and other interested stakeholders of lessons from experience so as to guide future policy choices and the design of donor support to SLM. The specific focus of this study is on understanding the practical problems of implementing more effective and adequately resourced policies towards SLM.

This study reviews and compares the experience of selected African countries in formulating and implementing policies for Sustainable Land Management, and in securing means of financing these policies. The study aims to present an integrated analysis of policy and financing issues using a comparative framework across the country studies. This is to allow the distinctive and common features of each national experience to be identified as a basis for drawing lessons and policy conclusions.

The study has focused principally on SLM in relation to agricultural practices. It was not possible within the constraints of the study comprehensively to review forestry, water sector and wider environmental policies though examples are drawn from them in a number of cases.

Visits were undertaken to three of the case study countries (Burkina Faso, Ethiopia and Mozambique) for discussions with policy makers, donor agencies and other stakeholders. The other case studies (Ghana and Uganda) were based on desk studies as well as consultations with Global Mechanism staff.

The report is structured as follows. Section 2 presents an overall framework for the comparative analysis taking account of the main dimensions of the SLM challenge in Africa, and important trends in approaches to improving the effectiveness of aid in supporting national policies. The framework identifies key elements of the process of developing and implementing effective SLM policies, and in securing means of financing them. Section 3 provides a summary of the experience of each of the case study countries, based on the framework set out in Section 2, with the more detailed case studies included as annexes. Section 4 provides a comparative analysis, summarising the main common themes, and then what the evidence suggests about lessons for improved practice. Section 5 summarises the overall conclusions and recommendations for action.

### 2.1 The Sustainable Land Management Challenge in Africa

TerrAfrica has defined sustainable land management (SLM) as “the adoption of land use systems that, through appropriate management practices, enable land users to maximize the economic and social benefits from land while maintaining or enhancing the ecological support functions of the land resources.”

TerrAfrica’s Vision Paper for SLM highlights the key economic, ecological and social consequences of land degradation in Africa and attempts to set out the main features of the SLM problem. These may be summarised as follows:

- Land degradation affecting about 20% of the land area in Sub-Saharan Africa (SSA) though with very high variation between countries and regions.
- Soil moisture stress affecting 86% of African soils with a negative nutrient balance on SSA’s croplands.
- Direct economic losses of around 3% of agricultural GDP attributable to soil and nutrient loss.
- SSA has some of the highest rates of deforestation in the world, combined with a heavy dependence on forest resources to provide fuel.
- Increasing vulnerability to droughts, flood, famine and conflict over land and water resources in a context where 73% of the rural poor live on marginal land.

The Vision Paper also emphasises that the specific challenges of Sustainable Land Management faced across Africa are very diverse and are not amenable to blueprint solutions.

However, the general problem can be characterised as one of a failure of the Natural Resource Management system in relation to land-based resources that is leading to unsustainable land management practices. The issue may not principally be one of a lack of appropriate technologies or knowledge of land management practices that would lead to greater sustainability, but rather of the lack of incentives for those who actually manage the land on a daily basis to use more sustainable practices, as well as the existence of a range of constraints on the adoption of improved practice particularly by the rural poor including lack of information on market opportunities and failures in related markets.

An understanding of the dimensions and specific characteristics of this natural resource management problem in each national and local context is therefore of central importance for the design of effective strategies to improve land

management practices. Specifically, the critical issue is to understand the factors that are leading to a divergence between the individual incentives facing landholders and the social returns to improved land management practice. These may include the following conceptually distinct situations:

- A failure of the land management system to internalise benefits and costs of land practices that are external to land users. Examples are the effects of land management practice in watershed areas on downstream water users, and other impacts of deforestation for agricultural use that may be profitable to the farmer but impose wider costs through contributing to climate change and reducing biodiversity. Internalising wider benefits and costs requires mechanisms such as payments for environmental services that can change incentives, and negotiation between stakeholders in NR systems to achieve mutually satisfactory solutions, and the capacity to enforce such agreements.
- A failure of the land management system to provide security of tenure so as to make SLM practices privately profitable to landholders. A lack of tenure security is likely to lead to a shortened time horizon and underinvestment in land improvements by those who fear that the benefits resulting may be appropriated by others. Tenure arrangements that do not allow the transfer of land rights may lead to inefficiencies in land use, but improving the ability to transfer land rights may reduce tenure security where landholders are subject to manipulation of the land management system by national or local elites (including in alliance with foreign investment). These problems may reflect weaknesses in the legal, regulatory and institutional framework for land tenure at the national or local level. They may also reflect wider problems of violence, insecurity and weak governance.
- A failure to find ways of achieving effective collective action between landholders to undertake investments and maintain resource management arrangements that have collective benefits across landholders. These may include the effective regulation of access to common resources (such as forests and grazing land), as well as investments such as in irrigation systems that require collective management. In general this problem has two dimensions: the capacity to enforce regulations that control access to common resources, and the financing of ongoing maintenance of arrangements and investments. The failure of such arrangements (leading to unsustainable overexploitation) is generally termed the “Tragedy of the Commons.”

- Failures of related markets (such as for credit for agricultural producers) and lack of information on market opportunities, for instance on markets for organic produce or for sustainable forest products. In addition, even where information on such opportunities may exist, there may be institutional weaknesses that militate against establishing such markets (for instance if there are problems in establishing and validating certification systems). If the economic value of land to its users is low because of a lack of transport or market opportunities or high input costs this may also reduce incentives to adopt SLM practices. The inability of farmers to finance potentially privately profitable investments in improved land management practice (particularly where this involves capital expenditure such as terracing or building walls, or where seasonal inputs need to be financed) can be seen as reflecting a failure of the credit market. While the poorest and most marginal farmers (particularly in times of crisis) may suffer from an absolute lack of resources that shortens time horizons and focuses on securing immediate subsistence, empirical evidence suggests that the propensity of smallholder farmers in Africa in aggregate to save and to invest is high. The question therefore becomes to understand why certain forms of investment (most notably in livestock even to the level of overstocking contributing to land degradation) are favoured in comparison to investments in improved land management. A likely reason is that the value of the latter investments cannot be realised (in the way that animals can be sold), so that they become very illiquid and consequently risky for households vulnerable to severe fluctuations in agricultural income<sup>1</sup> and other shocks. This illiquidity of investments is reinforced if there are no straightforward mechanisms for selling or renting out improved land while retaining ownership, as is typically the case for African smallholders.

It is important to note the distinctions between these situations and their differing policy implications. A strengthening of land tenure arrangements (or an improvement in the profitability of agricultural production) in a situation where there are major unresolved gaps between the private and social profitability of particular land uses (like deforestation for agricultural use) may intensify the SLM problem. This study therefore seeks to characterise the main dimensions of the land management problem in each of the case study examples used.

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<sup>1</sup> Although in many circumstances these investments may help stabilise as well as increase agricultural production.

Given the dominance of land as a source of wealth in African economies (including through control of forest and mineral resources), land policy is highly politically sensitive. National and local elites (often working with or using alliances with international investors) have a strong incentive to manipulate the land system to secure control of land resources, which can be at the expense of the poor and politically marginal. The recent boom in world prices for agricultural products (including strong interest in securing large tracts of land for bio fuels such as through jatropha and sugarcane production) as well as Africa's relatively strong overall recent economic growth performance have intensified conflicts over land resources that were already severe as a result of population pressure, migration, and in some cases (such as Northern Uganda) ongoing insecurity and violent conflict. The core of the challenge for African governments is to develop land tenure systems that protect the rights and assets of the poor while also providing incentives for increased productivity, investment and sustainable management.

It is therefore important to understand the political economy of the policy process affecting SLM which is likely to strongly influence the priority accorded to action in this area by governments, and how in practice programmes are implemented. There are several aspects of this that are potentially relevant:

- First, whether the political process in a country ensures the effective representation of the interests of those whose livelihoods are most dependent on environmental sustainability (including marginal farmers and pastoralists).
- Second, whether the political process favours the consideration of long-term factors or is heavily biased towards the short-term.
- Third, and more generally, how the conflict of interests between different groups is reflected in policy. The robustness of the institutional framework will be an important factor in determining whether there are incentives to manipulate the legal and institutional framework, or to work within it.

Applying a political economy perspective requires an emphasis on understanding power relations within the policy and resource allocation processes affecting SLM. It is not sufficient to identify appropriate solutions to be carried out by African governments supported by donors. The feasibility of proposed technical approaches will depend on there being an effective coalition of political support for them. This has implications for the role that donors seeking to promote SLM will need to play. Specifically, it may require them seeking to use their influence to try and empower stakeholders whose interests may be relatively marginalised in the policy process.

## 2.2 Policies and programmes for sustainable land management

The common pattern across the case study countries is of a long track record of concerns about environmental sustainability associated with, in particular, small scale farming practices which have typically been extensive and based on systems of bush fallow and livestock on open ranges. Typically both colonial and post-colonial regimes tried to influence these practices through coercive regulation with little success. Subsequently there have been a wide range of project initiatives and programmes to address aspects of SLM which have been supported by donors. Increasing international concern with environmental issues has been reflected in donor support for initiatives to establish strategies to address particular environmental and resource management problems but these also have had only a limited impact on resource allocation decisions and have often not been well-integrated with national development priorities and budget decisions.

Each of the case study countries has produced a National Action Plan (NAP) for combating desertification, which presents the strategy for implementing the UNCCD for each country. The NAP could in principle provide an overarching framework for SLM policy. However, the NAPs cannot generally be seen as “live documents” as they were generally prepared some years ago and lack clear linkages to other strategy and policy processes.

More recent initiatives supported by Terrafrica, the Global Mechanism, FAO, GEF and other international bodies have sought to encourage a more integrated approach to SLM both at the policy level and through the promotion of the Country Strategic Investment Framework (CSIF). These approaches are consistent with the broad international thrust of reforms aimed at improving both the effectiveness of national government policies and the effectiveness of aid in supporting them. These approaches are encapsulated in the Paris Declaration of 2005 and the recent Accra Agenda for Action. The Paris Declaration Principles (Ownership, Harmonisation, Alignment, Management for Results and Mutual Accountability) are envisaged as helping to improve aid effectiveness through ensuring that aid is provided in a way that supports agreed government priorities, and that uses and strengthens government systems rather than undermining them through developing parallel institutions and channels for aid delivery. This new aid architecture demands new approaches and strategies to support countries affected by land degradation in mobilising resources for SLM, including the adoption of instruments such as programme approaches and direct budget support. The fact that many SLM

initiatives in the past have tended to be heavily based on donor funded projects means that the agenda of improving aid and development effectiveness is particularly relevant to this area.

The core model for improving aid effectiveness envisaged in the Paris Declaration is the Programme Based Approach (PBA).<sup>2</sup> A PBA is defined in the Paris Declaration as involving: (a) leadership by the aid-receiving country or organization; (b) a single comprehensive programme and budget framework; (c) a formalised process of donor coordination and harmonisation of procedures for reporting, budgeting, financial management and procurement; and (d) efforts to increase the use of local systems for programme design and implementation, monitoring and evaluation. The SLM policy framework should therefore provide an agreed basis for a PBA in terms of the identification of priorities, targets, and types of activities to be undertaken. The application of a programmatic approach confronts some specific challenges for SLM:<sup>3</sup>

- First, SLM depends on the activities of multiple public agencies (in both central and local government) which need to develop and share a common vision as well as to establish effective mechanisms of coordination. Developing and applying PBAs is generally most straightforward where the bulk of relevant expenditure is focused in a small number of core agencies, for instance in education or roads.
- Second, achievement of SLM objectives depends critically on influencing private (especially farmer) behaviour including private investment behaviour, while involving the interests of a potentially extremely wide range of stakeholders because of the important externalities involved. This can include the international community as a whole in relation to concerns about the contribution of poor land management practices to climate change and the loss of biodiversity.<sup>4</sup>

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2 A Sector Wide Approach (SWAp) can be seen as one form of PBA where the area of focus corresponds to a well-defined "sector", and also typically where there are substantive efforts by donors and government to establish common funding arrangements. Since it is not generally possible to consider SLM as comprising a sector (but instead cutting across more traditional sectors such as agriculture, natural resources, forestry, and water), programmatic approaches to SLM have not generally taken the form of SWAps.

3 See also Bialluch (2007).

4 The findings of Evans et al. (2007) in reviewing international experience with the application of sector wide approaches in the agriculture and rural development sectors are relevant here. They conclude that although there has been some progress, important problems remain including: weak relationships between national strategies (for instance as set out in a Poverty Reduction strategy) and sector strategies; weak integration of sector priorities and national budget processes; uneven integration of donor funds into national planning and budgeting systems; and weak attention to M&E. They emphasise that progress in moving towards a SWAp requires strong political leadership and commitment to sector objectives (within and beyond the main sector institutions), as well as a working consensus on the key policy and management issues for the sector. A common problem identified was a lack of incentives for sector ministries to take a policy lead, their limited influence over national planning and budgeting processes, and capacity constraints.

In each of the case study countries, there are recent and ongoing initiatives to develop a more programmatic and integrated approach. Important dimensions of this process include the following:

- The progress that has been made in understanding the causes and dimensions of the SLM challenge in each national context (including in relation to the relevance of each type of market failure as set out in Section 2.1 above), in learning what practically can be done to address the challenge, and in turning this into an effective national programme or strategy.
- The involvement of wider groups of stakeholders in the development of the strategy for SLM, and how broad and deep is ownership of this strategy.
- The extent of integration of SLM priorities into national policy statements and goals, and how well mainstreamed it is into other (sectoral and cross-cutting) policies and strategies.
- The extent to which a results framework against which to assess SLM policy has been developed, including the establishment of appropriate monitoring and evaluation mechanisms.
- The respective roles of different organizations (including different levels of government and non-government organizations) in implementing the SLM strategy, and how constraints on the capacity of these organizations to fulfil their roles are being addressed.

Each case study reviews national land policies as they affect the agricultural sector, since these are of central importance for determining the incentives for adopting SLM practices that farmers face. Both formal land policies and the way that institutional arrangements in practice operate need to be considered. While there are significant differences in the formal structure of land rights between the case study countries, the issue of the extent to which land rights are in practice secure, especially for the poor and politically marginalised in the face of potential manipulation by the more powerful, is a common theme.

The case studies also review the main national policies and strategies that are relevant to SLM objectives, including the priority accorded to SLM issues in national development policies and poverty reduction strategies, and in sectoral and cross-cutting initiatives. The general trend across the case study countries is of increasing prominence being accorded to SLM in national policies, but with highly variable progress in establishing a framework for SLM policies that integrates what have generally been poorly coordinated project initiatives, and high level strategy statements that have lacked effective mechanisms for implementation, into a coherently managed and conceived programme.

## 2.3 Financing Sustainable Land Management

The starting point for examining experience with financing SLM in the context of moves towards PBAs should ideally be a comprehensive assessment of past trends in public expenditure and other financing sources for SLM. This would encompass the levels of expenditure, the modalities by which financing is being provided, and how these have changed over time. The level of expenditure could in principle be compared with estimates of the rate of return on SLM investments to determine the extent to which SLM may be regarded as having been “underfunded” relative both to direct economic returns, and to estimates of the value of external effects of the kind listed in section 2.1 above, as well as evidence about the relative effectiveness of different forms of expenditure.

However, such an analysis in the form of a comprehensive public expenditure review for SLM is not available in any of the case study countries and there are substantial difficulties in making estimates of levels of expenditure from the often fragmentary information available. There are two main problems with undertaking this analysis. First, SLM expenditures are not straightforwardly identifiable within government budget classifications since they typically cut across the budgets of different sectoral ministries and levels of government. Second, a high proportion of the relevant expenditure has occurred off the government budget through donor managed project initiatives.

A more programmatic approach to SLM requires government leadership and hence financing decisions should depend on the priority accorded to SLM in comparison to other potential calls on public expenditure and aid. Resource allocation choices should be taking place more explicitly through the budget process and decisions should therefore depend on negotiations within the government as well as between the government and the international community and the balancing of priorities. The challenge is therefore to mainstream SLM objectives into the overarching policy processes rather than relying on ad hoc initiatives outside core government processes which even if they succeed in attracting donor resources are likely to prove to be unsustainable (see Global Mechanism, 2008).

### **Performance of public finance management systems**

The development of a PBA as outlined in Section 2.2 above involves the development of an overall policy and programme framework which should enjoy both strong government leadership and the commitment of key stakeholders. The extent to which governments have been prepared and able to allocate and spend resources in support of SLM strategies are important measures of, respectively,

ownership and the effectiveness of the organizational capacity necessary effectively to implement the strategy. The critical steps linking this policy and programme development process to financing are:

- Whether the programme has been adequately costed (in terms of both investments and ongoing expenses), the envisaged role for public expenditure in this strategy (as opposed to legal and regulatory reform and other measures to encourage private investment), and how the costing relates to the underlying diagnosis of the SLM problem.
- Whether expenditure priorities have been identified and agreed and the extent to which these have been taken into account in the overall planning of both government expenditure and aid to support it.
- Whether the costed programme is integrated into the national budget and consistent with overall public expenditure and aid priorities. The existence of an effective process for medium-term expenditure planning that provides a predictable and disciplined framework for public expenditure decisions is likely to play a central role in matching expenditure to priorities.

The effectiveness of the budget process and of public expenditure management is of central importance for implementing a successful programmatic approach. Potentially relevant features of the public financial management system for SLM include the following:

In relation to decentralisation:

- The division of responsibilities between national and sub national levels of government, in particular, the extent to which national government is able to tie sub national government spending to nationally determined priorities.
- The legal basis on which funds are provided to sub national government, particularly whether if there are grants from central to sub national government, they are linked to the delivery of particular services.

In relation to the budget preparation process:

- The effectiveness of the system for linking the budget to policy priorities (including the political economy of the process by which decisions are taken) and whether the level of detail and forms of classification are available that could allow SLM expenditures to be managed and tracked.
- The capacity of the budget system to focus on outputs and to move beyond incremental budgeting based on inputs towards the costing of specific objectives.

- The existence of special funds for specific uses (for example, funds set up as a result of debt relief being granted) and the conditions for gaining access to these funds in relation to SLM.

In relation to budget execution:

- The overall effectiveness of budget execution will be related to whether there are, for instance, problems regarding the predictability of cash releases from the Ministry of Finance to line ministries and agencies/lower levels of government. If so, this may affect ability to implement services effectively, and so may mean that the budget process is not the most appropriate conduit for increasing SLM activities.

### **Development partner funding mechanisms**

A PBA requires a process of donor coordination and harmonisation of procedures for reporting, budgeting, financial management and procurement, and attempts to strengthen government capacity and to manage resources through government systems. A PBA is in principle compatible with alternative aid modalities (including budget support so that all donor resources are managed through normal budget processes, pooled and basket funding arrangements between donors for which specific management arrangements are put in place, or project modalities provided these take place within an overall programmatic framework including in the matching of resource allocation to agreed priorities) though long-term sustainability requires a process of using and strengthening government systems.

Key issues for the comparative study potentially include the following:

- The current extent of donor financing for SLM and related activities in the country. In the absence of comprehensive reviews of public expenditure for SLM, it is difficult to provide quantitative assessments of the scale of donor expenditures on SLM other than in relation to some specific programmes.
- The relative balance between different types of aid modality for SLM (project based aid, SWAPs, trust funds) and what evidence there may be about their effectiveness both in relation to SLM and potentially from relevant experience in other sectors.
- The effectiveness of the systems and processes by which donors work with government and by which decisions about the use of aid are made.

An effective PBA requires the integrated planning of resources provided by national governments and donors. Excessive reliance on donor resources may lead to problems of sustainability or inability to provide counterpart funds. On the

other hand, the availability of aid may be constrained as a result either of donor policies or of difficulties by governments in identifying and accessing potentially relevant funding sources. It is important to identify whether and for what reason available funding mechanisms are not being used in the country.

### **Private funding of SLM**

There are two main sets of issues in relation to the incentives for private investment or service provision related to SLM:

- Whether the policy and regulatory environment provide barriers or incentives for investment in SLM and how changes to the policy and institutional framework might affect these incentives.
- The extent to which innovative mechanisms and funding sources for SLM that harness private sector initiative (for instance the clean development mechanism) are being used and whether there is scope for policy and institutional changes to be made that would favour greater use of these mechanisms.

In practice it was difficult within the constraints of this study to find much firm evidence in relation to these questions. For the first set of questions, the issues are fundamentally linked to the extent to which land tenure is perceived as secure. There is evidence across the countries that tenure security (and hence incentives to undertake long term investments in land improvement) is weakest for the poorest and most vulnerable, but the scale of this impact is difficult to assess. For the second set of questions, there appears to have been almost no use of, and only limited exploration of the feasibility of using, innovative funding sources for SLM.

In addition to private commercially driven SLM investments, NGOs have played an important role in financing and piloting initiatives and approaches to SLM, especially in advocating more participatory approaches. In both Burkina Faso and Ethiopia, the two countries among the case study sample that appear to have made the greatest progress in developing viable models for improved SLM practice at farm level, both international NGOs and local community and civil society organisations have played a significant role in the development of approaches and the learning process, although there are concerns that NGOs and CSOs have been relatively marginal in the development of the SLM Program in Ethiopia.

### 3.1 Burkina Faso

Concern about soil depletion and erosion is given significant attention in Burkina Faso's poverty reduction strategy, with a distinction drawn between the land degradation challenges in arid areas with open access grazing and extension of arable agriculture into land ill-suited for that purpose, and in higher rainfall areas facing increasing population pressure and still largely dependent on slash and burn agricultural practices.

There has been a long experience of efforts to address these problems through a large number of project initiatives. While the experience of these initiatives has been mixed and overall achievements in reducing land degradation limited, there does appear to be a body of positive experience encapsulated in the "Gestion des Terroirs" approach which involved community-based land management that creates awareness of environmental degradation and land conservation issues, supports local government in developing new natural resource management regulations, and supports adoption of SLM activities including support to soil fertility management practices.

All land in Burkina Faso is owned by the state but farmers are given use rights through customary or statutory institutions, as well as the power to rent or sell these rights. The formal role of customary authorities in land allocation and dispute resolution is limited but in practice these authorities continue to enjoy a high level of local legitimacy and influence in relation to land issues, particularly in the absence of any comprehensive system to document land rights and claims. While the land policy framework in principle provides both flexibility in tenure transfer and a basis for tenure security, the system is vulnerable to elite capture both through abuse by traditional leaders of their authority over land issues, and manipulation of the formal land tenure system by those with access to greater information and influence. There are therefore concerns that the resulting land tenure insecurity may be having an adverse impact on incentives to engage in land improvement.

The main focus of SLM policy has been a move towards a more programmatic approach as part of a wider move towards a programmatic approach for rural development where responsibility for aspects of SLM programmes and policies is divided between four ministries dealing with agriculture, livestock, environment and water resources. This is taking the form of the development of the Productive Rural Sector Development Programme (PROSEDERP). Within this context, SLM is

being addressed through establishing a Country Partnership Programme led by the Ministry of the Environment. The intention is to establish a comprehensive funding arrangement for SLM activities through PROSEDERP by developing a CSIF.

In Burkina Faso, SLM issues have received significant government and donor attention and there is a record of success and well-established techniques for improving land management through local level interventions and initiatives.

There are three main challenges for effective implementation:

- There have been many policy and organisational initiatives and restructurings of organisational responsibilities relating to agriculture and the environment but little substantive progress to date in moving away from project-based approaches. It is not clear either that there is a strong commitment from within the key government ministries in favour of a more programmatic approach or that in practice important donors will be willing or able to move towards more harmonised and aligned approaches.
- The lack of progress in establishing a coherent budgeting process around a Medium Term Expenditure Framework. An effective process of setting and enforcing ministerial expenditure ceilings that encompass donor aid could play an important (and possibly necessary) role in providing incentives for line ministries to move towards a programmatic approach. There are unresolved issues about the relationship between sectoral policies and processes and the increasing emphasis being given to decentralisation of decision-making and resource allocation decisions, and major problems of capacity throughout the public administration and finance system.
- The need effectively to strengthen land rights and security of tenure, in a context where land tenure insecurity appears to be reducing incentives to engage in sustainable land management practices, and where there appear to be strong interests among both rural and urban elite groups in manipulating both the formal and informal elements of the land system to their advantage. The concern is how the rights can be effectively asserted and protected, and whether there is the political will to overcome the significant administrative, capacity and financial obstacles to establishing a more just, effective, and transparent system of establishing and resolving claims to land.

## 3.2 Ethiopia

Concerns about land degradation and deforestation, particularly focused on the highland areas where the bulk of the population is located, have led to

considerable efforts over many years to improve land management practices. However, the record of achievement is judged disappointing by the Ethiopian government and its development partners. This lack of success has been attributed to three main reasons: an excessive concentration on low potential and food insecure areas, the limitations of a project-based approach that cannot address the root causes of land degradation, and a lack of coordination among development partners and across levels of government. However, a consensus led by government has developed around a model of Participatory Watershed Management that has emerged from a review of a wide range of project experiences. There is a significant effort with high level government support to find programmatic ways of implementing this model and attracting funding for it and this is accorded a high priority in Ethiopia's national development strategy.

Ownership of land in Ethiopia is vested in the state and the Constitution guarantees the right of all Ethiopian peasants to be allocated land without payment, while land administration is vested at the Regional State level of government. Major land redistribution took place in Amhara in 1997, and there is some evidence that expectations of further redistribution may be negatively affecting incentives to engage in sustainable land practices. Legal provision has though been made for the certification and registration of land holdings, and substantial progress has been made in certification using a very cost effective participatory model. However, registration alone does not provide guarantees against future land redistribution, particularly in a context of widespread landlessness. There has also been some legal recognition for leasing or exchange of land, though within strict limits.

The Ethiopian government has developed and is implementing a National Programmatic Framework for SLM. This sets key priorities for SLM investments, sets out a strategy for scaling up SLM based on best practice lessons, and defines the approach and mechanisms for coordination, consultation, participation and M&E. The Government has also established a National SLM Platform (which comprises a multi-sectoral and multi-stakeholder National Steering Committee and Technical Committee, supported by a Secretariat). It is intended to establish similar SLM Platforms at Regional level. The Program is envisaged as covering 177 watersheds in high potential areas in eight regions over five years of implementation, based on the model of Participatory Watershed Management.

The SLM Program has been developed through a process lasting about three years involving the main government, donor and NGO stakeholders, focusing on those donors and NGOs with direct field experience of SLM programs. This

process has helped to build a consensus on the key elements of the approach although it was somewhat delayed by institutional and personnel changes at the Ministry of Agriculture and Rural Development. A key feature is to try to ensure community responsibility for the investments undertaken. This envisages the establishment of “Watershed Associations” to take responsibility for investments and SLM practices, though neither the legal framework nor the institutional capacity for this arrangement is currently in place.

The Country Strategic Investment Framework (CSIF) Platform is envisaged as providing a framework for donor support of the SLM Program (and the further development of the land certification system). This will provide an umbrella for funding although it is not envisaged that there will necessarily be common funding arrangements. Rather the SLM Program provides a structure within which individual projects may be incorporated to align on overall government policy. The development of the CSIF will be followed by a Donor Conference to seek to secure funding commitments beyond those already provided by IDA and GEF. There does not appear however to be a comprehensive costing of SLM seen as a sector (i.e. encompassing all relevant aspects of government expenditure including ongoing administrative expenditures) rather than as a specific programme (which has been costed on the basis of investment costs per watershed). There has also been little systematic investigation of the possibilities of securing innovative forms of financing, particularly in relation to carbon sequestration related to reforestation. The 15 year ESIF identifies a total funding requirement of USD 6.7 billion.

An important feature of the Ethiopian system is fiscal decentralisation through the provision of substantial block grants to regions and districts (woredas). The longer term sustainability of SLM programmes depends on strengthening of capacity at these levels of government as well as at the local community level.

Ethiopia has made significant progress towards the development of an overall programmatic framework for SLM. This has involved strong government leadership based on a demonstrated commitment to the Agriculture and Rural Sector, and a process that has sought to build consensus among key stakeholders. However, a number of important issues remain to be resolved in taking forward the implementation and financing of the SLM Program within the CSIF:

- The underlying rationale for public investment (in terms of the constraints and incentives affecting SLM) and for the division of costs between the public sector and communities and farmers is not very clear. The economic rationale for the program is set out mainly in relation to the direct economic returns to the community and farmers, rather than in terms of

wider externalities. As the process of scaling up is essentially one of broadening focus from relatively poor and low potential areas to higher potential areas, there are reasons to expect that a relatively higher level of local and farmer contribution to the investments that are envisaged may be available.

- The SLM Program does not in its current form address the issue of the financial or institutional sustainability of the investments and improvements in management practices that it seeks to bring about. There are potentially important linkages between the extent to which farmers and communities will be motivated to undertake investments and the wider policy and institutional framework for land management.
- Capacity development at local, district and regional level has so far received relatively little attention.
- Few major donors have expressed a strong interest in supporting the SLM Program which is heavily reliant on IDA and GEF for its funding in its current form. There is a continued strong interest from important donors in additional support to the land certification programme, but less so for the SLM component. There appears to be a difference in priorities between donors and government in this respect.
- There is a significant danger that donor support will not be forthcoming to finance the SLM Program to the level that has been envisaged. This may require a rethinking of the approach so as to leverage donor funds more effectively and use a higher proportion of farmer and community contribution and Ethiopian government resources so as to ensure the scaling up of SLM initiatives.
- Although there has been a substantial effort to build consensus around the SLM Program through the SLM Platform, this has mainly involved the key government institutions and donors and NGO and CSO involvement has been relatively limited. This raises some concerns about the breadth of support and the strength of the evidence base underlying the preferred SLM model, particularly if donor funding for the Program is going to be less than was envisaged.
- The SLM Program is heavily focused on highland areas and the problems of arable agriculture. This is understandable in terms of the location of population and the stress facing the agro-ecological system on which the bulk of the Ethiopian population depends. However, the issues of land management facing lowland pastoral populations have received very little attention and are not addressed at all within the SLM Program.

### 3.3 Ghana

Problems of land degradation in Ghana are rooted in the dominance of the rotational bush fallow system associated with clearing and burning that destroys the vegetative cover and makes soil susceptible to erosion and leaching.

Estimates suggest that the average economic loss caused by soil degradation could be up to 5% of agricultural GDP, with the severest impact in the northern regions where poverty is highest. The Ghanaian government has attempted to enforce regulations on environmental management for agricultural land use over many decades but has not used participatory methods and these attempts have been largely unsuccessful. There has been some positive experience from project initiatives but there have been significant institutional, sectoral and financial barriers to scaling up from this experience.

Land policy in Ghana has been characterised by tensions between customary land tenure systems and attempts by the state (starting in the colonial period) to assert state control through assuming ownership of mineral and timber resource, and powers of expropriation and management of land (often with little or no consultation with stakeholders). This is in a context where customary land systems are complex and diverse.

The main challenge for land policy in Ghana is therefore to find a way of establishing effective legal and administrative structures that protect land rights and respect the legitimacy of traditional institutions while providing a basis for improved productivity and sustainable management in the context of increasing population and pressures on land, including through migration. The 1999 land policy has the objective of stimulating economic development, reducing poverty and promoting social stability by improving security of the land tenure, simplifying the process for accessing land and making it fair, transparent and efficient, developing the land market and fostering prudent land management. However, the land system remains complex and open to abuses by the politically well-connected while creating a non-transparent environment for private investors. There is evidence that land tenure security is greater for those who hold more powerful positions in a local political hierarchy, and consequently they invest more in land fertility and have higher and more sustainable agricultural output.

A long-term Land Administration Programme (LAP) has been developed in support of this, in recognition of the weakness and tendency to corruption of land sector institutions and their inability to play an effective role that has contributed to a lack of transparency and uncertainty, ineffective regulation of land use, and widespread bad practices such as land encroachments, multiple sales of residential parcels, unapproved schemes and haphazard development.

Land degradation is acknowledged as a key challenge to economic growth potential in Ghana's Growth and Poverty Reduction Strategy, although the existing National Action Plan to address desertification has not been effectively mainstreamed. A number of interrelated policy initiatives address aspects of the SLM challenge, including the Food and Agriculture Sector Development Policy, the Northern Rural Growth Programme, and the Agricultural Sustainable Land Management Strategy which is to form the basis for the CSIF. However, the fragmentation of responsibilities across public agencies and weak coordination mechanisms militate against an effective policy approach for SLM.

Ghana has made some significant progress in strengthening its public financial management system, and donors have provided general budget support. However, constraints on the release of funds at field level make it difficult to implement intended work programmes and tend to favour short-term rather than longer-term priorities such as SLM. Attempts to estimate the level of expenditure on SLM are fraught with difficulty because of the lack of available data in relevant forms. No information is available to allow estimates to be made of private investment in SLM. A likely upper bound of public expenditure on SLM is around 0.4% of total public expenditure and is heavily concentrated in the forestry sector with very little focus on agricultural practice. This level of expenditure is far lower than the estimates of the cost of land degradation quoted above suggest would be desirable.

In terms of potential financing mechanisms for SLM, the NAP emphasises Government budgetary allocations; a percentage of royalties from the exploitation of natural resources (timber, mining etc); and penalties from environmental offences and the public sector while FASDEP II also identifies beneficiary contributions; Internally generated funds/ non-tax revenue; and incentive and compulsion measures to encourage users of the environment to adopt less exploitative and non-degrading practices in agriculture. The draft CSIF proposes the establishment of a National Sustainable Land Management Fund (NSLMF) which would be used to fund SLM-related activities.

Ghana presents a situation where land degradation has been identified as a major problem and policy concern over many years, and where there is evidence that there are large economic costs associated with the failure to overcome problems of land degradation. The CSIF is the latest (and possibly the most comprehensive) attempt to address the problem. However, there is limited evidence of success to date and the level of resources allocated to addressing the problem appears to be low relative to the potential economic returns on investment in improved land management practice. The level of government

commitment to, and leadership of, the process by which a more effective programmatic approach to SLM will be developed remains uncertain.

The roots of the problem appear to lie in the land tenure system, and the fact that tenure security appears often to be limited with the poorest and marginal farming households having the least incentive and capacity to undertake sustainable land management practices. There has been some progress in trying to develop a system that integrates the various forms of customary tenure with the formalised legal system, but the land management process (in both its formal and traditional aspects) remains open to manipulation by the powerful and does not yet provide effective and straightforward ways of resolving land disputes in a way that provides tenure security and predictability.

### **3.4 Mozambique**

Compared to the other case study countries reviewed, the Mozambican agricultural economy is generally characterised as land abundant and labour scarce. In large parts of the country there have been limited incentives for farmers to practice sustainable land management, with extensive shifting cultivation the main form of farming system. Agricultural growth (which has led to a significant reduction in rural poverty) has been based on increasing the area under cultivation at an average rate of about 3.3% per annum and an increase in the rural labour force rather than through intensification (World Bank, 2006). Land scarcity has been a relatively localised phenomenon, although lack of infrastructure has reduced the economic value of land. However, a number of factors (notably the increasing world price of food and demand for land for biodiesel) have increased demand for land, potentially changing both the incentives for land use practice, and creating threats to the rights of landholders. There is also concern that there is no clear framework for either environmental or broader economic analysis in the assessment of large scale agricultural developments, for instance for sugar or jatropha for biodiesel.

In general, therefore, SLM has received relatively little attention or priority in resource allocation and policy making in Mozambique, including in the recently completed Rural Development Strategy. The GM indicative country programme notes that "there is a general absence of evidence-based advocacy on the extent, scope, degree and impact of land degradation on sustainable development and poverty reductive." There is also an absence of empirical evidence to support the development of models of good practice or effective innovation either for agricultural practice or the institutional approaches that would favour SLM. What has been an important focus of government, donor and civil society concern is

land policy. A central issue has been balancing the rights of landholders against the needs of investors within an institutional framework where the capacity of communities effectively to protect and exercise their rights has been coming under threat.

The Mozambican constitution vests land ownership in the state but provides a clear mechanism by which land use rights can be established and transferred. A major concern relates to the implementation of land policy and the scope for manipulation and erosion of the land rights of those lacking effective political influence or resources to defend their rights.

The Mozambican government has articulated a range of policies focused on aspects of environmental protection and agricultural development, but these have not generally been adequately resourced and face institutional constraints in implementation. PROAGRI is an attempt to develop a Sector Wide Approach for agriculture and incorporates a land management component. PROAGRI has provided a clear policy framework but has not succeeded in integrating donor support within a common management framework and the general strategy of creating an enabling environment for private sector service provision has had limited success.

Although General Budget Support has been an important aid modality (and there is a strong focus on public financial management reform) in practice the mechanisms for integrating the overall planning and prioritisation of aid and budget resources remain weak and to a significant extent supply-led, in the sense that government attempted to accommodate donor offers of resources rather than working within an overall system of expenditure ceilings. In this context, the financing of SLM related activities has remained fragmented, in the context of Mozambique's continuing very heavy dependence on aid. A number of separate related initiatives have been costed. The Ministry of Environment (MICOA) has developed an Action Plan to address erosion, but funding for this has not been secured. A national strategy for biodiversity has also been developed but lacks funding.

The main issue for SLM policy in Mozambique is the lack of progress in achieving consensus that SLM is a priority in a context of general land abundance where the incentives for the adoption of sustainable agricultural practices in large parts of the country are low. It is difficult to make an assessment (in the absence of comprehensive information on the dimensions of the problems of land degradation or of analysis of the links between this and other development issues) of the extent to which the limited priority accorded to SLM reflects an appropriate judgement in terms of the development priorities

facing Mozambique, or is a reflection of the weak organisation of stakeholder interests (particularly from civil society) that would favour more sustainable practices. A lack of information and analysis constrains effective evidence-based advocacy or policy making. There is in particular a lack of empirically grounded models for how to introduce more sustainable land management practices in the Mozambican context, as well as limited evidence on the dimensions and implications of the SLM challenge. This constrains the design of any substantive programme to promote SLM.

### 3.5 Uganda

Estimates of the economic costs of land degradation in Uganda are among the highest in Africa with key problems being declining soil productivity, vegetation cover loss, reduced water quality, and conflict over land and related resources particularly involving pastoralists. There is evidence that poorer households use labour more intensively and are less likely to use improved management practices, and that incentives for SLM depend on market opportunities and input prices.

The Ugandan constitution and land legislation recognises four forms of land tenure including customary, freehold (the only country among the case studies to do this), leasehold and *mailo* (a limited freehold for land granted by the colonial government). The legal framework is based on the presumption that freehold tenancy is the most secure, efficient and conducive to SLM (although there is a lack of evidence to support this). Significant problems in the implementation of the 1998 Land Act (particularly in relation to conflict resolution) have led to progress in the development of a National Land Policy. However, there is evidence of abuse (and of acquiescence in the abuse) of land rights by Government and the effectiveness of political will to resolve these issues remains unclear.

Uganda has a strong policy making and relatively disciplined budgeting process around the framework provided by the Poverty Eradication Action Plan (PEAP). The UNCCD National Action Plan has been mainstreamed into PEAP processes and environmental management is a major component of the second pillar of the 2004 PEAP. The Plan for the Modernisation of Agriculture (PMA) which provides a framework within the PEAP for agricultural policy also has a focus on natural resources though an evaluation of the PMA concluded that in this area most of the achievement had been at policy and strategy level, rather than in relation to implementation.

Since 2006 there has been a process aimed at intensifying dialogue with stakeholders to develop a harmonised country programme for SLM. This is

envisaged as developing an operational SLM country platform, producing a stocktaking and gap analysis report, and developing and launching a harmonised SLM country programme.

Uganda therefore is an example of a country with a relatively strong budget and policy making process which has exercised a high level of ownership (through the Ministry of Finance, Planning and Economic Development) of the development agenda. There has been some progress in mainstreaming SLM issues into sectoral and national policies but this appears to have had little direct impact as yet on either the incentive framework within which farmers are operating, or on the resources available to assist in undertaking investments.

Uganda is one of the few countries to have undertaken a comprehensive public expenditure review (PER) focused on SLM (World Bank, 2008). Major challenges for undertaking the PER were the lack of information on the severity of land degradation, and the absence of any established methodology for conducting SLM PERs. Key findings of the PER were the following:

- Five major land degradation hotspots were identified (with only a limited overlap with areas of high poverty), with annual soil erosion of more than 5 tonnes per hectare;
- The proximate and underlying causes of land degradation in Uganda are multifaceted, complex and context-specific;
- SLM sector strategies and investment plans do provide an economic rationale for public investments and clearly define the roles of the public and private sectors;
- In spite of the significant economic value of land resources and severity of land degradation, SLM expenditure amounted to only 0.28% of budget expenditures and 0.13% of GDP between 2001 and 2005, although these expenditures were relatively well-targeted on land degradation hotspots and financed public goods;
- Actual disbursements of SLM expenditures were only 42% of planned expenditures;
- There is a mismatch between planned and actual expenditures on SLM, particularly in regard to scaling up SLM activities;
- Planned and actual expenditure on monitoring and evaluation was very low, making it difficult to learn lessons and support a process of scaling up.

Neither SLM nor agriculture and natural resources in general have been accorded a high priority for public expenditure in Uganda. It is unclear whether this reflects an explicit technical judgement about the costs of soil degradation, a lack of

confidence in the effectiveness of public expenditure to address these problems, or a decision-making process that systematically neglects issues of central concern to the rural poor particularly where these may confront elite interests.

In the case of Uganda, good SLM practices appear to be based mainly on the use of inputs (such as organic fertiliser) and so do not necessarily involve a substantial capital investment cost. The issue is more whether there are effective economic incentives for farmers (especially poor farmers) to engage in such practices where input and marketing costs are high and farmers lack access to borrowing for crop finance, and where there appear to be significant problems related to security of tenure.

### 4.1 Main themes emerging from experience

Several common themes emerge from this comparative review of experience:

- Estimates of the economic costs of land degradation where these are available are of significance both in relation to macroeconomic growth performance but also in relation to poverty impact, since there is evidence that land degradation disproportionately affects the poorest and least empowered farmers on the most marginal land. These estimates are generally of the direct cost in terms of foregone production. There are potentially further costs in terms of external effects that have not generally been quantified. However, the information base for drawing firm conclusions about the precise scale and nature of the scale and costs of land degradation is quite weak even in countries like Ethiopia where considerable prominence has been given to the issue.
- SLM policy initiatives in the countries reviewed have not generally been based on a specific identification of the relative significance of the different factors identified in Section 2.1 as potential causes of divergence between individual incentives facing landholders and social returns, though each of the factors appears to be significant in some contexts. General conclusions that appear to have some empirical validity are that land tenure insecurity is greatest for the poorest as they lack effective capacity to defend their land rights, and that this group is also likely to face the greatest problems of failures in related markets, and may also have the weakest institutions for managing common resources, particularly in the aftermath of conflict. This suggests that this group may be caught in a particular vicious cycle of land degradation and poverty. For the bulk of less marginal agricultural and livestock producers, the causes of land degradation are likely to be more focused on a failure to internalise external effects such as those related to the loss of forest cover.
- In all the countries there is (to varying degrees) an evidence-based technical understanding of how to address problems of land degradation and what improved and sustainable land management practices involve for the main farming systems in each country. In Burkina Faso and Ethiopia, for example, there is a strong body of positive experience using small-scale investments and improved practices at individual farm and community level, built up through many years of project-based initiatives,

that is envisaged as forming the basis for scaled-up national programmes to address SLM. There has been a general recognition of the failure of approaches based on regulation, coercion and external enforcement that have had little success, towards more participatory approaches.

- The countries reviewed show a common pattern of a large number of initiatives over many years both at the policy and project level that have sought to address land management practices and concerns about degradation in the context both of wider environmental policies and of agricultural and other sectoral development strategies. These responses have generally been fragmented and despite some successes, have been judged in all cases to have been of limited impact. All the countries have articulated National Actions Plans to implement the UNCCD, but these have tended to add to the multiplicity of strategies and initiatives rather than serving to unify and rationalise them. One of the problems has been that SLM cuts across the normal sectoral divides of government, as well as inherently requiring cooperation at different levels of government (local, sub-national, national, and in many cases intergovernmental).
- All the countries reviewed (with the partial exception of Mozambique, which still retains many characteristics of land abundance at least at the aggregate level) have increasingly highlighted concerns about land management practice in national development and poverty reduction strategies. There are processes underway (around and using the CSIF in particular) to try to rationalise and integrate SLM policies and develop financing frameworks. However substantial progress on the ground remains limited. Ethiopia has moved considerably further than any of the other countries in articulating and formulating a programmatic approach to SLM and is in the process of implementing and seeking to secure funding for the programme. Burkina Faso has a strong body of positive project level experience in how to address SLM, but there is less evidence of a high level political focus on this issue to focus resources in this area or to confront and overcome institutional obstacles to a more integrated SLM approach. In neither Ghana nor Uganda (despite estimates of substantial economic and poverty costs from land degradation) has there yet been substantive progress in moving towards a more effective programmatic approach to SLM or in devoting additional resources to the problem. Since both Ghana and Uganda have relatively coherent processes of overall development planning and budget management, this has to be interpreted as reflecting a political decision that devoting substantial public or aid

resources to this area is not a high priority. This also appears to be the case in Mozambique where the economic incentives for improved SLM may be significantly less.

- The low priority accorded to SLM by governments is reflected in the fragmentary information available about current levels of SLM related expenditure, and what appear to be very low levels of expenditure in so far as information is available. The only comprehensive attempt at an estimate is the one for Ghana (of an upper bound of 0.4% of public expenditure). There has been progress in developing a more realistic costing of SLM programmes (for instance in Ethiopia) than is the case in the NAPs but there is as yet no evidence that public resources are beginning to be allocated to address SLM to the extent that would be implied by the increasing prominence accorded to it in national development strategies and PRSPs. There is essentially no information available for any of the countries on private investment in improved land practices.
- The countries reviewed have generally made progress towards strengthening the national budgetary process and using this (along with the poverty reduction strategy) as a basis for planning the totality of public resource allocation (including the use of donor funds). However, this progress is very variable. The greatest progress in some respects has been made in Uganda where there is strong leadership by the Ministry of Finance (MFPED) and a Medium Term Expenditure Framework (MTEF) that provides a degree of discipline and coherence over the allocation of resources (highlighting the relatively low priority that has been accorded to SLM), but capacity at district level which is critical for effective implementation of agricultural and SLM programmes is very weak. Ghana presents a somewhat similar picture. In Burkina Faso, there has been less progress in implementing the model of establishing sectoral budget ceilings as part of a medium term expenditure framework and hence there is no coherent process by which overall allocation of resources between priorities occurs. In Mozambique, implementation difficulties with PROAGRI have militated against effective planning and management of donor resources through government systems.
- Weaknesses in the public financial management system are constraining to varying degrees moves towards more effectively programmatic approaches for SLM (and for agriculture and rural development in general), but the fundamental factor leading to apparent underfunding of SLM appears to be the continuing low priority accorded to investment in SLM by most African

governments, rather than technical features of the budget system, or the policies of donors and potential availability of funds. A further key problem is weakness in capacity at sub national and local levels.

## **4.2 Lessons for Sustainable Land Management Policy**

### **Is land policy and institutional reform an effective strategy for SLM?**

#### **How can such reforms be successfully implemented?**

The comparative study highlights the central importance of land policies and the way in which the land system operates (in terms of legal and regulatory structures, formal and informal institutions for conflict resolution, and other management functions) for successfully addressing SLM. While there are important gaps in understanding of the scale and precise nature of the SLM problem, it does appear that it is the incentives faced by, and the resources available to, the poorest and most marginal farmers, operating on the poorest and most marginal land, that are of the greatest importance to preventing and reversing land degradation. This problem is a multi-dimensional one, and one that can confront extremely powerful economic and political interests, since land represents the key source of wealth across most of Africa.

The land policies and institutions of the countries reviewed are quite diverse. In Burkina Faso, Ethiopia, and Mozambique, the state has asserted ownership of land but has subsequently moved in varying degrees to decentralise decision-making about land. In Burkina Faso and Mozambique this has involved the recognition of local systems and authorities within what is in principle a uniform national system. In Ghana and Uganda, there is a complex mixture of “traditional” systems that were recognised and whose status was changed through colonial policies with “modern” systems based in the Ugandan case on freehold, and in Ghana on state ownership of some land and mineral rights. In both of these cases there are recognised to be significant problems with both the formal framework and of land rights and the operation of the institutional arrangements for land management. There are processes of reform taking place in both countries, though in both cases implementation has been slow and politically sensitive.

Despite this diversity, the same challenges and issues arise in each of the countries reviewed. In each of the systems, there appear in principle to be mechanisms that should provide tenure security and means of dispute recognition and the protection of land rights. However, customary tenure systems in some cases incorporate significant biases against particularly groups, including women, migrants and pastoralists, and mechanisms for land transfer are also incomplete

in some cases, while in practice the ability to capitalise and securitise land rights as a means to secure investment resources are very limited for almost all landholders. But achieving tenure security depends critically on the effective operation of both local and national institutions within the land administration and wider legal and judicial system. Key challenges are finding cost effective ways of delineating and documenting land rights, and ensuring that dispute resolution procedures are not subject to manipulation.

The comparative study suggests that strengthening land policy and land administration arrangements should be central to SLM policies, although more empirical analysis of the determinants of farmer behaviour is desirable to improve understanding of the likely effectiveness of incentives. However, it is not sufficient to focus on the formal structure of land rights. Effective ways of making land management systems accountable and protective of land rights – particularly for the poor – need to be found. There is no strong evidence that particular forms of land tenure arrangement (e.g. freehold) are especially favourable to SLM, or that others (such as state ownership of land or forms of communal) are not in principle compatible with the protection and development of secure and potentially transferable use rights.

In terms of guidance for policy making in this area, Ethiopia has successfully developed a very low cost and participatory system for recording land rights. What is not yet clear is the extent to which this, or more expensive and ambitious approaches to the registration of land rights involving cadastral surveys to which some aid donors are heavily committed, is in fact leading to improved tenure security (and hence to improved incentives to engage in SLM). In the absence of effective, fair, and cost effective arrangements for dispute resolution and to allow land holders to protect their rights and record transfers, certification will not in itself substantially change incentives. Progress in establishing effective, cost efficient and fair institutional arrangements remains limited, although Mozambique provides useful examples of donor and NGO-supported initiatives to help landholders (especially landholding communities) to protect their legal rights.

### **How can progress best be made towards more programme based approaches for SLM? Is there evidence that a more programmatic approach leads in practice to more effective SLM policies?**

All the countries reviewed have made some progress and have ongoing initiatives to develop a more programmatic approach to SLM, both as part of wider processes of aid and public sector reform (influenced by the Paris

Declaration) and as a result of specific initiatives related to SLM like the CSIF.

Ethiopia has made the most substantial progress in developing a coherent SLM programme. Several factors appear to underlie this progress. The first and most important has been high level political support to the process and to SLM as a priority, and that the development of a more programmatic approach is necessary to overcome what have been diagnosed as the fragmentation of past efforts. This political support has helped maintain momentum and strategic direction over a process that has lasted several years, despite obstacles such as staffing changes and the need for effective coordination across multiple agencies and levels of government. In none of the other countries reviewed is there evidence of such strong and high level government commitment to SLM. The process of moving towards a more programmatic approach in Burkina Faso, for example, appears to be more heavily dependent on donor leadership and support, and has made to date less progress in overcoming institutional obstacles to greater cross agency coordination.

The second feature of the Ethiopian experience has been a relatively inclusive attempt to develop consensus with stakeholders around the main features of the SLM Program (although NGOs and CSOs have been much less fully involved), and to systematically collate and review evidence on the performance of SLM initiatives. Despite this overall progress, there remain major challenges in developing local level capacity and in securing donor funding for the SLM Program (which is conceived as heavily dependent on donor support) although donors have been closely involved in its development, and some criticisms that the SLM Program was exclusively focused on highland areas.

The CSIF initiative is the latest attempt to provide a coherent and unified approach to SLM policy. It is too early to judge its success, but this will depend on the extent to which it can integrate and supplant the multiplicity of strategies and programmes (many of which appear to have been donor driven) addressing aspects of the SLM challenge that exist in all the countries reviewed. This will in turn depend on the extent to which there is strong political leadership and effective pressure from national stakeholders to achieve more success in moving towards programmatic approaches and addressing the weaknesses both in national land policy and its implementation framework. It likewise remains too early to say that a more programmatic approach is leading to substantive improvements in SLM performance but a consistent finding is that SLM initiatives have had limited impact in the past in part because of their fragmentary and uncoordinated nature and a failure to address institutional, political and capacity constraints on effective coordination. The major challenge for a programmatic

approach is to develop the institutional capacity needed for an expansion of models of support to SLM that have been shown to be successful.

### **4.3 Lessons for Sustainable Land Management Financing** **Is there a financing gap for SLM? How can it be defined and measured?**

Estimation of the size of the “financing gap” for SLM (defined in terms of the level of expenditure that would be justified in terms of the development impact of improved land management practice) is complicated by several factors. First, in none of the countries is there information available about the current levels of SLM-related expenditure. Second, while estimates exist of the economic costs of land degradation, these are far from a complete assessment of the overall development cost. Third, there are major gaps in data about the scale and nature of the land degradation problem.

Despite these many sources of uncertainty, the evidence from the case studies suggests there is a large gap between the current levels of expenditure (especially outside the forestry sector) and likely economic returns. Estimates of the economic rate of return on investments in SLM (for example in Burkina Faso and Ethiopia) are strongly positive provided that these take place through the participatory approaches that have been shown to be successful.

A central issue, as discussed in Section 2 above, is what should be the role of the state in funding improvements in farming practices and associated investments. As noted above, many of these improvements should be privately profitable for farmers (or collectively profitable for the local area) provided that farmers have sufficient security of tenure to feel that they will reap the benefits of investments, as well as having sufficient access to markets. To this extent, they should not require full government or donor funding provided that there are means available to raise or deploy capital resources locally. However, it was noted in Burkina Faso that while there are well-developed models for how to reverse land degradation there was a problem of limited demand from farmers to undertake these improvements and investments. Understanding the nature of the apparent unwillingness or lack of ability of farmers to undertake such investments is critically important, since the appropriate policy response depends on whether the causes are tenure insecurity, lack of access to viable economic opportunities, or other constraints such as lack of access to investment funds.

Although the most marginal and poorest households may face an absolute resource constraint, this is unlikely to be the case for agricultural and livestock producers in general. Given the many calls on government and donor funding, developing models for SLM that strengthen incentives for farmers to invest, and

address other constraints (such as the weakness of financial markets) on investment, is likely to be important in effectively leveraging public expenditure to increase impact.

A strong conclusion of the study is that the main constraint on closing the financing gap is an unwillingness of African governments to prioritise expenditure on SLM (and on agriculture and rural development more generally). Increasing the flow of donor resources specifically earmarked or targeted on SLM will not in itself address this problem, and is likely to lead at best to a further proliferation of project-based activities that may be relatively successful but that will lack sustainability or government commitment.

### **What is the relationship between the performance of the public financial management system and SLM?**

In all the countries reviewed there are substantial ongoing efforts, and progress has been made, in strengthening the public financial management system and attempting to link the allocation of public resources more coherently to development priorities. This approach also seeks to integrate the planning and management of government expenditure and donor resources which is central to the establishment of programmatic approaches. The evidence reviewed suggests the following conclusions:

- Where progress has been made in first linking expenditure planning to development priorities and second establishing and enforcing medium term sectoral or ministerial resource envelopes (as in Uganda and Ghana) this has not led so far to any clear increase in the allocation of budget resources to SLM (or indeed to the agriculture and rural development sectors in general). This process has made more transparent the low levels of government commitment to SLM here compared to countries that have made less progress in PFM reform where resource allocation decisions are made in a less explicit way.
- Even where there has been progress at the macroeconomic level in PFM reform, there are substantial problems relating to lack of capacity at lower levels of government, and bottlenecks in the release and effective use of resources appear plausibly to impact especially negatively on the types of activity (like extension services and local land administration) that are of central importance for SLM.
- Even in the Ethiopian case where there has been significant progress in formulating and costing the SLM Program, this is not so far integrated within the regular budget process, and the full cost implications in terms

of long-term public expenditure commitments to ensure sustainability have not been developed. Likewise, costings of NAPs have tended to provide listings of proposed standalone investments, rather than building from an understanding of current levels of expenditure and the financing requirements of ongoing core functions of government to support SLM.

The overall lesson is that increasing the provision of public resources for SLM in the context of PFM reform requires effective advocacy and engagement with the processes by which resource allocation decisions are made. In part this may involve presenting clear and compelling evidence about the returns to public expenditure in relation of development objectives and evidence that there are plausible ways to achieve these returns through tried and tested approaches. In part it may involve building effective political coalitions to improve the responsiveness of the decision-making process to the needs and interests of the rural population, in particular the rural poor. It is also important that strong attention in the design of PFM and wider institutional reforms including decentralisation is placed on the building of planning and management capacity at the local level.

### **What are the lessons for the use of donor assistance for SLM?**

This study has not sought to assess comprehensively the performance of donor support to SLM – this would have required a much more detailed investigation than was feasible within the constraints of this study. However, several lessons emerge from the review of experience:

- There has to date been little experience with forms of donor support to SLM that are not fundamentally project-based. This reflects the limited progress that has been made in moving towards programmatic approaches to SLM in comparison with some other sectors. There is evidence (for instance from Burkina Faso and Ethiopia) that while project approaches have often been successful, the failure to embed projects within a wider programme context has militated against the scaling up of successful initiatives as well as to problems about the sustainability of approaches that depend on flows of public expenditure and effective implementation capacity at the local level.
- This suggests that it is not the mode of donor support (i.e. whether or not it involves pooled funding arrangements of various kinds) that is the main determinant of sustained success, but whether particular initiatives are integrated within a coherent overall planning and financing framework for

SLM. How donor support should best be provided within a PBA may take various forms in different contexts (depending on the extent of progress with public finance reform and capacity development). The overall determinant of success is likely therefore to be the effectiveness of national leadership to ensure coherence among related initiatives.

- Donors have however played an important role in supporting the processes by which more programmatic approaches to SLM are being developed, for instance in Burkina Faso and Ethiopia. This has involved support to the review of experience and to engagement with stakeholders in the development of SLM programmes.
- One problem for achieving an integrated and programmatic approach is the preference of some significant donors for focusing resources on particular aspects of the SLM issue (for instance support to formal land titling) rather than adopting a comprehensive approach to supporting a national SLM programme as a whole. It remains to be seen whether donors in practice have, or are prepared to provide, sufficient flexibility to move away from project based approaches towards more integrated forms of support. There is also an issue about the priority that donors are prepared to accord to SLM interventions. For example, it appeared that there is a significant financing gap for the well-articulated Ethiopian SLM programme. There is some evidence that in some cases (for instance Uganda) donors have been unwilling to engage on land issues because of their political sensitivity, but the comparative study suggests that strengthening the land system should be a central element of efforts to support growth, poverty reduction and broad-based sustainable development.

### **What lessons emerge about private financing for SLM?**

This study encountered a dearth of evidence about the scale of private financing for SLM, or of lessons about what can practically be done to increase this. There appear to date in the case study countries not to have been any significant experiments with innovative sources of funding.

A parallel study has reviewed the experience to date with payment for environmental services and carbon financing. In general, these have played and appear likely to play only a limited role in addressing the specific problems of financing improved land management in agricultural systems, with the possible exception in the long-term of payments to improve watershed management where there are significant downstream externalities from farming practice. Such mechanisms are more likely to be of value for the protection of specific

ecosystems and where there are clear opportunities for establishing carbon sinks. These are likely to arise mainly in the forestry sector – for arable and pastoral farming systems the opportunities for using these approaches are likely to be limited (though they may have a central role in the protection of forest resources that will be under threat as a result of pressures for the expansion of the area under agricultural production). The core challenge remains to provide incentives for sustainable practice by farmers and other private sector actors to mobilise resources within the agricultural and other relevant sectors, as well as to find cost-effective ways for the state to play a regulatory and support role.

The conclusion in this area is therefore that the process of developing programmatic approaches needs to pay more systematic attention to understanding the scope and constraints on private investment in SLM (including investment by farmers) than appears to have been the case to date.

This study has shown evidence that there are likely to be substantial development returns to investment in SLM and that there has been some progress in developing programmatic approaches to SLM building that can build on successful experience and initiatives and hold out the promise of more sustained achievements in the future if sufficient priority is accorded to action to promote SLM. Effective national government leadership will be the main determinant of whether this promise is realised while well-designed and flexible donor support will also be necessary.

The following main recommendations for action emerge from the study:

1. The information and evidence base on the scale and determinants of soil degradation and their economic and other costs needs to be strengthened. There also needs to be a more information and analysis to understand the incentives and constraints on action by farmers, communities, and the private sector to adopt SLM practices, including the relationship between incentives and the operation of output and input markets.
2. African governments need to develop policies and institutions that ensure security of land tenure for the poorest and most marginalised farmers who are most vulnerable to land degradation, while providing flexibility to enable land to be used productively by those with the resources to do so. This requires effective legal and administrative protection for land rights, and the development of capacity, accountability, and resources for the local level institutions that play a central role in resolving conflicts over land rights.
3. Governments need to take the lead in encouraging a more programmatic approach to SLM and to ensure that the resources provided to address the problems are proportional to what the evidence suggests about the scale of the impact of land degradation on poverty and economic performance. The Ethiopian model shows one approach as to how this might be achieved and highlights the need for high level political commitment to take this forward, for agreeing on overall objectives and targets to provide a results framework for the programme, and for building in as participatory way as possible on the perspectives and experience of communities and practitioners to identify successful models for support to SLM. So far as feasible, these models should seek to mobilise local resources (labour and capital) where they are available so as most effectively to leverage the use of public resources.

4. Public finance reforms that seek to improve the effectiveness of the planning and management of public resources and their allocation in line with agreed priorities are necessary as part of the wider context for SLM, but effective action to build local level capacity and ensure resources reach this level will be necessary, in addition to the high level allocation of resources to sectors and programmes.
5. The challenge for donor agencies is also to ensure that resources are provided in support of SLM programmes in line with agreed priorities, and that a proliferation of overlapping and parallel processes is avoided, while programme based support should be designed to reduce transactions costs and to build capacity within government. The CSIF provides a potential framework within which this may occur. However, what is important is to provide effective support to national initiative. International frameworks and processes should be seen as tools to support this rather than as drivers.
6. At the same time, donors need to be clear that their actions are based on a clear understanding of the political context and the political economy of the process by which policies relating to land are formulated and (most importantly) implemented. This may require advocacy and support to try to strengthen the voice and interests of those most affected by problems of land degradation within the policy process, including through support to CSOs and community based organisations.
7. Donors also need to support and reinforce processes that strengthen national budget and planning and to be prepared to align their support on agreed strategies and through the use of government systems as these are developed.
8. There may be a case for more systematic pilot initiatives to examine the scope for using innovative financing sources for SLM since the extent of experience in Africa appears to date to be very limited.

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## A.1 The SLM context

The economy of Burkina Faso is dominated by arable agriculture and animal production, which provide employment for more than 85% of the population and account for about 70% of export earnings. Burkina Faso's Poverty Reduction Strategy document, the CSLP, (2004, p. 88) notes that population pressure has led to shortened fallow periods and loss of fertility:

“Signs of soil depletion are very visible in the north and central [Sahelian] regions. There are also pockets of fairly severe land degradation in the west and southwest [Sudanian] regions (including the cotton growing area), where most of the country's agricultural land reserves are located. In severely degraded areas, soil depletion, poverty, and food insecurity have created a vicious cycle. Food insecurity and poverty lead to depletion not only of the soil, but of other natural resources as well, such as forests, wildlife, and fish stocks.”

The CSLP document provided little information on the dimensions of the SLM problem, but set targets for a “30,000 ha/year increase in the rate of restoration of degraded soils and the construction of 150,000 manure pits per year” as well as the expansion of forest cover. UNDP (nd, p.8) estimates that 30% of the country's arable land is severely degraded (81,080 km<sup>2</sup>).

In general, a distinction is drawn between the nature of land degradation challenge in the Sahelian zone “characterized by open access grazing, the reduction of grazing lands from the extensification of agriculture into marginal lands ill-suited for cropping, the reduced access to water points and the reduced mobility of the pastoralists in combination with successive and extended droughts” and that in the higher rainfall Sudanian zone where population is increasing (in part because of large scale migration from the Sahelian zone). The main causes of land degradation here are deforestation, the prevalence of slash and burn agricultural practices with associated uncontrolled bush fires, and over cropping of cash crops.

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5 These include the following : The National Land Management Programme (PNGT); the IFAD Conservation of Water and of Soils/Agroforestry project; the Management and Conservation of Natural Resources Project (PATECORE); The Burkinabe Sahel Project (PSB); and Integrated Rural Development and related natural resource management projects in many areas of the country including Zoundwéogo, North Yatenga, Namentenga, Piéla-Bilanga, Poni, Comoé, Bazèga, Nahouri, Yatenga, Ganzourgou, and Tapoa.

There have been significant efforts over many years to address the problems of erosion and land degradation through a large number of project initiatives.<sup>5</sup> However UNDP (nd) states that:

“The standard project approach, being sometimes sector oriented or other times productivity led, top-down or non-participatory, has not allowed the Government of Burkina Faso and its partners (farmers, policy-makers, donors, etc.) to address these specific challenges. Furthermore, the standard approach has not led to a critical mass of long term (20-30 years) investments that is required to reverse land degradation. Fully aware of these challenges, the Government has demonstrated a strong commitment to reverse this tendency, but despite reported achievements, many obstacles still hamper the promotion of sustainable land management in Burkina Faso.”

The strategy proposed in the CSLP to address SLM focuses on farming practice, stressing the need to promote mixed farming, the use of organic manure, other agricultural inputs and water and soil conservation techniques, citing evidence of the success of soil restoration and fertilization with the Zai<sup>6</sup> technique, stone cordons, and organic manure. There is a strong emphasis on the role of decentralised initiatives and organisations. For instance, Village Land Management Commissions (CVGTs) are seen as playing an important role in encouraging tree planting and forest conservation as part of a strategy to regenerate soil fertility. The agricultural strategy in the CSLP combines intensification to increase agricultural production with greater attention to SLM practices.

One of the main government programmes to address SLM has been the National Land Management Programme (PNGT) which was initiated under the Ministry of Agriculture in 2001 with multidonor support, and is backed up by an agricultural research effort focused on SLM that is relatively substantial by African standards.

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6 The technique is described in World Bank (2005). “Farmers apply the Zai technique to recover crusted land called “Zippelle”. Zai is a planting pit with a diameter of 20-40 cm and a depth of 10-20 cm - the dimensions vary according to the type of soil. Pits are dug during the dry season from November until May and the number of Zai pits per hectare varies from 12,000 to 25,000. After digging the pits, organic matter is added at an average, recommended rate of 0.6 kg/pit and, after the first rainfall, the matter is covered with a thin layer of soil and the seeds placed in the middle of the pit. The excavated earth is ridged around the demi-circle to improve the water retention capacity of the pit. Zai fulfils three functions: soil and water conservation and erosion control for encrusted soils. The advantages of Zai are that it :

- (i) captures rain and surface/ run-off water;
- (ii) protects seeds and organic matter against being washed away;
- (iii) concentrates nutrient and water availability at the beginning of the rainy season;
- (iv) increases yields; and
- (v) reactivates biological activities in the soil and eventually leads to an improvement in soil structure.

The application of the Zai technique can reportedly increase production by about 500% if properly executed.”

The “Gestion des Terroirs” approach used in the PNGT involves community-based land management that:

- Creates awareness of environmental degradation and conservation issues.
- Supports local government in developing new natural resource management regulations.
- Support adoption of SLM and income generating activities, including providing training and support in soil fertility management practices.

By early 2007, over 12,000 subprojects had been financed through the PNGT at a cost of US\$39 million. A recent study (World Bank, 2007) estimated economic rates of return of 116-250% on investments in stone fencing and compost pits taking place through the programme. The experience under Phase 2 of the Programme is seen as having built up a body of knowledge of effective techniques for erosion control.

The major issues for successful further expansion of these techniques relate to limited local management capacity and the ability to work effectively through decentralised local government arrangements. There are also concerns that farmers’ effective demand for undertaking such practices improved practices is limited, partly as a result of concerns about land tenure security discussed below.

## A.2 SLM policies

### Land policy framework

Under the Sankara regime in 1984, responsibility for land allocation and resolution was allocated to elected local authorities, in an attempt to eliminate the power of customary institutions that had fulfilled this role in the past. This framework proved unworkable in the face of opposition from traditional leaders, and was substantially revised by the Campaoré regime in 1991 and 1996.

Under the current legal framework, all land is owned by the state but farmers are given use rights through customary or statutory institutions, as well as the power to rent or sell these rights. The formal role of customary authorities in land allocation and dispute resolution is limited but in practice these authorities continue to enjoy a high level of local legitimacy and influence in relation to land issues, particularly in the absence of any comprehensive system to document land rights and claims.

The Ministry of Agriculture has undertaken some pilot initiatives on strengthening land tenure including through mapping, surveying of plots and

awareness-raising, and the issuing of certificates to land holders. A new Land Law is under preparation that will have provision for issuing ownership and documenting titles based on a cadastral survey, as well as enhanced arrangements for settling land conflicts through local Land Committees. A focus of the Millennium Challenge Corporation programme in Burkina Faso is on strengthening rural land governance.

While the current land policy framework in principle provides a high degree both of flexibility in tenure transfer and of tenure security for farmers, there are a number of concerns about how in practice the system operates, which are reinforced by the limited progress that has been made in documenting land ownership. The system appears to be prone to elite capture, both through the abuse by traditional leaders of their legitimacy and authority over land issues, and the manipulation of the formal land tenure system by those with access to greater information and influence. Specifically there is evidence that land claims have been prepared for large areas of both urban and agricultural land in anticipation of a move to a more formalised legal recognition of land rights in the future. There is a lack of human resources to manage a more sophisticated and better documented land management system and the customary tenure system also tends to be biased against women. The overall result is that there are concerns that the resulting land tenure insecurity may be having an adverse impact on incentives to engage in land improvement.

A further issue relates to conflicts over land access. These are classified as of three main types: between arable farmers and pastoralists, between local inhabitants and new migrants, and between agricultural producers and artisanal miners (particularly in areas in the North, Central Plateau and the Sahelian region that have gold deposits). The Ministry of Agriculture has also been undertaking pilot initiatives to develop approaches to resolving conflicts over land access.

## **Approaches to SLM policy**

The National Action Plan (NAP) on implementing the UNCCD was formulated in 1999 and adopted in 2000. It aims to combat desertification through initiatives undertaken by local, regional and national bodies, under the coordination of a National Steering Committee (CNP). Its main objective is to contribute to the sustainable development of Burkina Faso through building the capacity of local authorities and ensuring the active participation of the whole population in the fight against desertification and to:

- Ensure integrated and sustainable natural resource management in order to enhance food security;
- Improve the economic context in order to eliminate poverty;

- Improve the institutional and legal framework concerned with combating desertification; and
- Raise awareness of desertification and monitor and evaluate its effects

Burkina Faso's third progress report on UNCCD implementation,<sup>7</sup> written in 2004, claims that successful harmonisation of national policies, strategies and actions to combat desertification took place from 2000 to 2004.<sup>8</sup> However, the funding which had been envisaged in the NAP as required for its successful implementation was not secured. In order to better mobilise funds, from 2002, various initiatives aimed to encourage relevant actors to take the NAP into account when developing or revising national development policies. The report claims that, as a result of these initiatives, the NAP implementation strategy was successfully integrated into both the Decentralized Rural Development Policy Letter and the CSLP. This policy integration is also in line with the government's Rural Development Strategy (to 2015). The integration of the NAP into the CSLP resulted in a certain amount of coherence between the NAP activities and those of other national development plans. However, the report admits that whilst this coherence is in place at regional and local level, it is less established at central policy level.<sup>9</sup>

In order to address this concern, the following actions were taken by Government through the National Council for Environmental Management<sup>10</sup> (CONAGESE):

- Inclusion of the environment sector in the national accounts;
- Review and revision of the National Plan of Action for the Environment<sup>11</sup>;
- Creation of units in charge of environmental issues within the ministries and regions: these units have a mandate to advise heads of ministry departments and regional administrative leaders on integrating environmental issues into their activities;
- Operationalisation of the regulations contained in the Environment Code (particularly regulations related to Environmental Impact Assessments); and
- Development of regular reports on the state of the Environment.

7 Troisième rapport national du Burkina Faso sur la mise en ?uvre de la Convention des Nations Unies sur la lutte contre la désertification

8 Troisième rapport national du Burkina Faso sur la mise en ?uvre de la Convention des Nations Unies sur la lutte contre la désertification, page 1

9 Troisième rapport national du Burkina Faso sur la mise en ?uvre de la Convention des Nations Unies sur la lutte contre la désertification, page 2

10 This was transformed in 2002 into the National Council for the Environment and Sustainable Development (CONEDD).

11 Plan d'Action National pour l'Environnement (PANE).

The main focus of SLM policy has therefore been a continuing attempt to move towards the use of more programmatic approaches as part of a wider move towards a programmatic approach for rural development, and where responsibility for SLM programmes and policies is divided between four ministries (those dealing with agriculture, livestock, environment and water resources).

The overall approach to rural development within the broad framework provided by the CSLP is based on the Rural Development Strategy (SDR) prepared in 2000, and the principles of decentralised rural development (set out in the LPDRD). In 2006 the government, several Development Partners and NGOs established the Coordination Framework for Rural Development Partners (CCPDR). This is chaired by the Permanent Secretary of the Ministry of Agriculture and includes sectoral Government ministries and the Ministry of Finance, Development Partners as well as producers associations and other stakeholders. The SP/CPSA, the body responsible for the coordination of agricultural policies, which is attached to the Ministry of Agriculture but liaises with all Ministries responsible for SDR implementation, has a support role to the CCPDR.

A CCPDR working group (led by the SP/CPSA) produced a road map for the development of a Productive Rural Sector Development Programme (PROSEDERP). This defined a number of preparatory steps from 2007 until the end of 2009 and the start of sector programme implementation in early 2010 based around a programme comprising the harmonised work plans of the Ministries of Agriculture, Livestock and Environment. During late 2007 and early 2008 there were some delays in this process as a result of ministerial changes. However in the 2008 General Budget Support/Poverty Reduction Strategy performance evaluation process (CGAB/CSLP) the relevant ministers reaffirmed their commitment to work towards a sector programme in the Agriculture and Rural Development sector.

Within this context, there has been an attempt to address SLM through the establishment of a Country Partnership Programme (CPP) within the context of the Global Environment Facility (GEF) and led by the Ministry of the Environment (MECV). The CPP is seen as an operational programme of the Rural Development Strategy and comprises five sub-programmes, four of them centred on pilot regions (Mouhoun Belt, Eastern, Centre West and Northern), and the fifth focused on institutional development for SLM including establishing a National Sustainable Land Management Agency (ANGDT) and related activities to support the overall programme including the establishment of a National Platform for SLM Partnership. GEF support for the first phase of the CPP is budgeted at over USD 15 million and was discussed at a donor round table in January 2006 which sought to identify and

coordinate the CPP with activities undertaken by bilateral and multilateral donors. However buy in from other development partners to the CPP has been weak and the relationship between PROSEDERP and the CPP has been unclear.

### A.3 SLM financing

The intention is to establish a comprehensive funding arrangement for SLM activities through PROSEDERP by developing a Country Strategic Investment Framework (CSIF) and preliminary work has been undertaken as part of this process.

The overall context for public finance policy in Burkina Faso involves the development of a Medium Term Expenditure Framework (CDMT) to provide an overall budget envelope for the expenditures of each Ministry. However, this process is not well advanced and there remain significant problems with the public finance management system. These include:

- The lack of a coherent budget preparation process which leads to a tendency to budget for more resources than are available.
- Difficulties in measuring and integrating extra-budget expenditures (including those provided by donors) into the budget ceilings.
- A problem in combining defined sectoral ceilings with a process of increasing decentralisation of budget decisions.

The public finance management system therefore has not proved effective in ensuring an overall matching of resources to priorities, illustrated by an inability to access loans because budget resources have not been available to provide counterpart funds.

The NAP outlines current financing systems related to SLM. It states that, historically, most activities aimed at combating desertification are financed through projects or programmes related to land management, natural resource management or local development. This situation has meant that multisectoral projects or programmes have been more likely to obtain funding. Most of the financing has come from external sources, through bilateral or multilateral cooperation, but there has been increasing pressure on beneficiaries to make some financial contribution.<sup>12</sup> The NAP acknowledges that the government has had mixed experiences of creating and implementing funds specifically for local development.

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<sup>12</sup> Generally, beneficiaries are required to contribute at least 10% of the total investment required

Financing through informal local credit facilities has also been attempted but these have had a fragmented response and have not resulted in stable financing systems which are able to meet local development financing needs.

In order to be able to implement the NAP, the decentralised institutions and rural communities need to have access to sufficient and consistent financing structures. At the local level, there are currently two main types of funding: community investment mechanisms (responding directly to communal user needs, such as water supplies, cereal banks irrigation and drainage systems) and public investments, for collective needs financed through contributions from beneficiaries. External financing helps to increase the impact of such local action: this generally comes through local or sectoral projects but sometimes comes through financing allocated to public administration programmes. This fragmented approach to financing often leads to difficulty in effectively disbursing the funds at the local level.

In order to overcome this problem, the NAP suggests that all external funding is put into a resource pool which local programmes could tap into. This would also help to increase transparency and ensure funds were allocated in accordance with the priorities of action programmes. However, this idea has been met with some resistance as donors generally lack confidence in the decentralised systems which would be used to manage these pools and are therefore reluctant to allow their funds to be managed in this way. The NAP therefore recommends that a national fund to combat desertification is established, which would in turn lead to a solid funding base which could gradually be integrated into local development financing.

A further barrier to financing SLM at the local level is the lack of mechanisms for distributing resources to the various organisations implementing local development plans. Local funds have successfully been set up to serve those communities and individuals who do not have access to finance via banks, but it remains difficult to ensure that national and external funding reaches the right people at the local level. A possible solution is to encourage the use of local development funds at village level: this would have the advantage of ensuring a direct relationship with the main actors but would be very difficult to control and manage. An alternative solution would be to develop a regional or provincial funding mechanism, linked into existing financial structures. This mechanism could consist of two sources of finance: a local development fund (resourced by national funds, development projects and local taxes) and a credit fund (resourced through external aid funding, banking mechanisms and savings institutions). The two funding sources would be managed by a banking institution

with branches at the local level. In parallel, some investments would be funded through national budget allocation processes to local administrative services.

There has been an initiative by UNIDO to examine options for the use of the Clean Development Mechanism (CDM) and CONEDD has been designated as the National Authority, but progress in exploring options is reported to have been affected by financial and capacity constraints.

## A.4 Conclusions

In Burkina Faso SLM has received significant government and donor attention and there is a record of success and well-established techniques for improving land management through local level interventions and initiatives. A process is underway to move towards a programmatic approach but this confronts three main challenges:

- The first are the institutional difficulties of moving towards a programmatic approach for the agricultural sector (encompassing SLM as an important element of this approach). There have been many policy and organisational initiatives and restructurings of organisational responsibilities relating to agriculture and the environment but little substantive progress to date in moving away from project-based approaches which are regarded as lacking sustainability. The strength of commitment to a more programmatic approach may be questionable, both from within the main ministries that need to cooperate, and at a higher political level to create greater pressures on these ministries to change. This is evidenced by the limited meetings of the main Interministerial coordination body (CASEM). While the process is led by some committed donors, it is not clear that in practice key donors will be willing or able to move towards more harmonised and aligned approaches.
- The second is the weakness of the budget management, most specifically the limited progress to date in establishing a coherent budgeting process around a Medium Term Expenditure Framework. An effective process of setting and enforcing ministerial expenditure ceilings that encompass donor aid could play an important (and possibly necessary) role in providing incentives for line ministries to move towards a programmatic approach. At the same time, there are unresolved issues about the relationship between sectoral policies and processes and the increasing emphasis being given to decentralisation of decision-making and resource allocation decisions, and major problems of capacity throughout the public administration and finance system.

- The third is the challenge of effectively strengthening land rights and security of tenure, in a context where land tenure insecurity appears to be reducing incentives to engage in sustainable land management practices, and where there appear to be strong interests among both rural and urban elite groups in manipulating both the formal and informal elements of the land system to their advantage. This raises issues about how the rights of smallholders, women, and others whose rights of land access may be most threatened can be effectively asserted, and whether there will in fact be the political will to address the significant administrative, capacity and financial obstacles to establishing a more just, effective, and transparent system of establishing and resolving claims to land.

### B.1 The SLM context

Available statistics suggest that about 85% of the Ethiopian land surface is prone to land degradation. 28% of land is characterised as severely or very severely degraded. It is estimated that about 30,000 ha of cropland and one billion tonnes of topsoil is lost each year from soil erosion, while 62,000 ha of forest and woodland are cleared annually.<sup>13</sup> The direct annual cost of land degradation (leaving aside other aspects of the cost) is estimated at 2-3% of agricultural GDP, in a context where 85% of the population lives in rural areas and is dependent on crop production and animal husbandry. Extremely high population density in highland areas has led to the reduction in the practice of leaving land fallow and even in some cases the removal of terracing to increase the amount of land under cultivation.

Despite considerable efforts to address these problems over many years, the record of achievement is judged by the Ethiopian government and its development partners to be disappointing. Main reasons for the lack of success are judged to include the following:

- An artificial demarcation of the country into “high potential/food secure” as opposed to “low potential/food insecure” areas which has excessively influenced policies with a concentration of SLM efforts on the latter areas.<sup>14</sup>
- A “narrow, project-specific or ad-hoc approach to the problem that does not capture the cross-sectoral nature of land degradation and cannot systematically address its root causes.”
- Lack of coordination among development partners and across different sectoral branches of government, especially in “high potential” areas.

However, experience from the evaluation through the Ethiopian Overview of Conservation Approaches and Technologies (EthioCAT) system of a range of programmes supported by different donors (notably GTZ and WFP) is regarded as

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<sup>13</sup> However, Woldeyes and Dejene (2007) argue that environmental statistics are extremely weak and that, for example, total forest area, total forest cover, and the annual deforestation rate are all unknown and that of the very few indicators available many are “inconsistent or even obsolete.”

<sup>14</sup> However Pender, Place and Ehui (2006) report evidence that returns to investments focused on improving water retention have significantly higher returns in lower potential more water-constrained parts of Ethiopia compared to higher potential areas.

providing a strong basis for developing a replicable model of best practice in soil and water conservation, mainly around a model of Participatory Watershed Management. The main challenge is to find a programmatic way to implement this model. A more coordinated and harmonized approach among both development partners and government institutions, evenly targeting food secure and insecure areas is seen as:

“improv[ing] the coherence of interventions, avoiding antagonistic approaches or duplication of efforts. It would in addition allow leveraging the scope and impact of interventions, having a longer timeframe in the planning, and using more strategically the financial resources.”

A study by Holden et al (2005) illustrates some of the challenges for designing appropriate policies that balance incentives for higher production with sustainable land use in the Ethiopian Highlands. They found that:

“Provision and adoption of credit for fertilizer, although risky, would lead to increased grain production and improved household welfare and food security. However, provision of credit for fertilizer has a negative effect on incentives to conserve land, resulting in higher erosion rates when such unlinked credit is provided. Linking a conservation requirement to the provision of fertilizer credit can mitigate this negative outcome. Overall, however, even the combination of conservation structures and high levels of fertilizer use cannot sustain crop yields, because erosion cannot be eliminated fully and soils in the area are shallow.”

## B.2 SLM policies

### Land policy framework

Under the 1994 Constitution, ownership of rural and urban land (and all natural resources) is vested in the state. There is no constitutional mechanism for sale or private exchange of land although there is a provision for ensuring the rights of private investors to the use of land. The Constitution guarantees all adult Ethiopian peasants the right to be allocated land by the State without payment, and substantial relocation of land to accommodate the landless took place in Amhara in 1997 following a Proclamation that allowed the sale of improvements in land but did not allow its sale, exchange, or use as collateral. Pender, Place and Ehui (2007) report evidence that this redistribution led to production increases in the short-term, while Deininger et al (2007) report that there was a

continuing expectation of further land redistribution in Amhara which may have negatively affected incentives to engage in sustainable land practices.

Under Proclamation 456/2005, the right to inter-generational transfer of tenure was confirmed and some provision allowed for leasing and exchanging land though within strict limits. This Proclamation also made provision for the certification and registration of land holdings, while requiring land holders to use land sustainably and to protect it from erosion.

Regional States have the power to administer land and other natural resources within the framework of Federal law and some (Tigray, Amhara, Oromia and SNNP) provide a limited framework for renting of land and restrictions on inheritance of land rights. Commercial farmers (but not small farmers) were allowed to take out mortgages.

There has been substantial recent progress in rural land certification with 20 million land certificates (i.e. covering 20 million plots) issued using a very cost effective participatory model with costs of substantially less than USD 1 per plot certified (Deininger et al, nd), much lower than has been achieved in similar exercises in other parts of the world. A key issue is whether to deepen this programme through moving to a (more expensive) second phase that would involve the mapping of land plots. This would require higher levels of donor support.

Adams and Palmer (2007) identify the following key issues for land policy in Ethiopia:

- The political and economic history of Ethiopia (specifically the role of ethnically based landlordism) makes moves towards the widespread privatization of land rights politically implausible.
- Complementary reforms are needed as a prelude to any fundamental change in land tenure (including public investments and literacy).
- Land registration alone will not provide guarantees against future land redistribution. This requires public commitments from regional states not to undertake large scale land redistribution. On the other hand, landlessness remains a major problem and calls to address this through further redistribution are likely to continue.
- Compensation to landholders for publicly acquired land is generally inadequate.
- Reducing restrictions on land rental could yield economic benefits without undermining the state's title to land. Deininger et al. (2007) present evidence on the economic costs of the weakness of rental arrangements in the Ethiopian Highlands (including the inability to hire oxen) and the inefficiencies involved in sharecropping arrangements.

- Inheritance rights are restricted to locally resident relatives (which is not consistent with succession laws in general).
- The legal position of women in relation to land rights is protected, but unequal gender relations (particularly under patrilocal systems, where women do not receive access to land in their husband's area of residence) mean that in practice women remain disadvantaged.
- Arrangements for land dispute resolution are weak.
- Land legislation is shaped by concerns of most relevance for arable agriculture in the Highlands. There is no legislation to protect the land and water rights of pastoral communities (mainly in the Afar and Somali Regions), and customary land and water rights in these areas are generally ignored.
- Local level land administration is undertaken by ad hoc committees, while at a higher level there is a lack of clear jurisdiction and coordination, and government has not taken the lead on clarifying institutional responsibilities.

The implications of the land tenure system for SLM are unclear in the absence of more widespread evidence about the extent to which registration is in practice strengthening perceived tenure security and providing some protection against future land redistribution.

## Approaches to SLM policy

The Ethiopian government has formalised the decision to develop and implement a National Programmatic Framework for SLM. This sets key priorities for SLM investments, sets out a strategy for scaling up SLM based on best practice lessons, and defines the approach and mechanisms for coordination, consultation, participation and M&E. The Government has also established a National SLM Platform (which comprises a multi-sectoral and multi-stakeholder National Steering Committee and Technical Committee, supported by a Secretariat). It is intended to establish similar SLM Platforms at Regional level. The Program is envisaged as covering 177 watersheds in high potential areas in eight regions over five years of implementation.

The SLM Program has as its objective:

“To (1) address (i.e. reduce, halt and reverse) land degradation, (2) increase and sustain agriculture productivity and income growth and (3) protect and restore ecosystem integrity and functions in degraded landscapes, by catalyzing the adoption of sustainable land management practices.”

The Program has four pillars:

1. On-the-ground activities to scale-up SLM Best Practices
2. Strengthening the Enabling Environment for SLM
3. Improving Knowledge Management for SLM
4. Program coordination, intervention, alignment and harmonization, and Monitoring & Evaluation.

The model of SLM practices that is being promoted through the SLM Program is based on the participatory watershed management model. This focuses on investments in water management and improved agricultural practice, though lack of controls over grazing has been identified as an important cause of land degradation. A key positive lesson has been that effective investments and improvements in agricultural practices have led to the successful rehabilitation of even severely degraded land.

The SLM Program has been developed through a process lasting about three years involving the main government, donor and NGO stakeholders, focusing on those donors and NGOs with direct field experience of SLM programs. This process has helped to build a consensus on the key elements of the approach although it was somewhat delayed by institutional and personnel changes at the Ministry of Agriculture and Rural Development.

A key feature is to try to ensure community responsibility for the investments undertaken. This envisages the establishment of “Watershed Associations” to take responsibility for investments and SLM practices, though the legal framework for this arrangement is not currently in place. A major challenge will be the building of regional and local level capacity to implement the SLM Program. The establishment of Regional SLM Platforms has been delayed but was due to take place in May 2008 with a high level of political commitment (for instance from the Prime Minister and Deputy Prime Minister) to progress in this area.

Ethiopia’s national development strategy and poverty reduction strategy is set out in the Plan for Accelerated and Sustained Development to End Poverty (PASDEP, Government of Ethiopia 2006). Annex A sets out the main natural resource management issues of relevance for SLM that are highlighted in the PASDEP, which focuses principally on the scaling up of watershed management approaches and land registration. The explicit focus on SLM was absent in Ethiopia’s earlier Poverty Reduction Strategies.

The main public institutions with direct responsibility for SLM activities are the following (as set out in the terms of reference for the preparation of the CSIF):

- The Ministry of Agriculture and Rural Development (MoARD) has overall responsibility for rural development, agriculture (both crops and livestock), agricultural marketing, and rural development. It focuses on the formulation of agricultural and related policies, preparation of technology packages, and provision of technical backstopping to the regions. It has lead responsibility for watershed management. The Ministry also has responsibility for small-scale irrigation developments up to 500 ha. The MoARD is the lead agency for the SLM program.
- The Ministry of Water Resources (MoWR) has responsibility for water resources in the country, both their monitoring, management and development. As such, it has primary responsibility for irrigation developments over 500 ha, although implementation responsibility may be transferred to the regional Water Bureaus. Associated with water development the MoWR has a section focused on watershed management, with protection of the water engineering investments a primary concern. The MoWR is also the responsible agency for the different river master plan studies undertaken over the past 15 years. Following from these master plan studies, the Government is also debating the creation of River Basin Authorities; how these would relate to the MoWR, and the responsibilities of these authorities, has yet to be decided.
- The Environmental Protection Agency (EPA) has overall responsibility for securing the national environment. It is also the GEF focal point for GEF-funded projects. Its mandate is for policy and regulation; environmental awareness; EIA on developments; research into combating desertification; international environmental agreements to which the GoE is a signatory; and backstopping of the regional environmental agencies. It has recently undertaken a visioning process for the environment in Ethiopia, based on the Government's overall development vision. Proposed strategic goals include the rehabilitation of degraded ecosystems; enhancement of the delivery of ecosystem goods and services; mainstreaming of the environment; addressing the urban environment; pollution control and waste management; and industrial pollution. The objectives of the proposed SLM program are consistent with the first three strategic goals. The EPA is also preparing guidelines for preparation of Woreda Environmental Management Plans, under its implementation of Agenda 21. The EPA's effectiveness is constrained by its limited staffing, all of whom are operating at the Federal level.

- Research Institutions: The Ethiopian Agricultural Research Organization (EARO) is a federal institution responsible for conducting and coordinating agricultural research activities across the country. The regional research centres, controlled by their respective regional governments, have the responsibility to address specific local and regional problems.
- The Regional government institutional set-up mirrors that of the national level. Thus, at regional level, there are the full range of sector Bureaus – the Bureau of Agriculture and Rural Development, Bureau of Water Resources, Bureau of Capacity building, other sector bureaus, and an environmental agency. The BoARDs are responsible for the planning, implementation and evaluation of the extension activities, which are delivered through the Woredas and Kebeles. While responsibilities for watershed management rest with the BoARDs, irrigation and associated watershed management fall under the BoWRs.
- The Woreda is at the centre of the local administration. The Woreda administration has ‘desks’ organized along sectoral lines, and which nearly parallel the national and regional structure. Each desk is headed by an ‘expert’, who will normally be a degree or diploma holder. The Woreda desks ‘back stop’ the Development Agents in the Kebeles (villages). In principal, the Woreda is where the sectors come together; in practice, there may be limited inter-sectoral interaction. In principal, there is an environmental team at Woreda level; however, even where this exists, it is set up as a specialist unit rather than ‘mainstreaming’ the environment.

### B.3 SLM Financing

A key feature of the Ethiopian system is fiscal decentralisation. Thirty-five to forty percent of expenditure is carried out at regional level (with further decentralisation to the woredas level), although only 15-20% of revenue is collected regionally. Funds are provided to regions and woredas in the form of block grants. The use of block grants is untied, and the system of central reporting on the use of block grants is weak, which limits the extent to which expenditures can be seen as driven by central policy objectives (as set out in the PASDEP). Although the link between the PASDEP and the government budget as a whole is not clear, the PASDEP does contain some costings at the programme level based on ministerial estimates. However, the budget classification (which has recently been changed) does not allow detailed analysis of expenditures by

cross-cutting function. This (together with the substantial decentralisation of decision-making) militates against analysis of the aggregate level of expenditure on particular functions at any level of detail.

It is therefore difficult to estimate the total expenditure on SLM related activities. A recent Public Expenditure Review for Agriculture and Rural Development (World Bank, 2008) concluded that:

- Ethiopia's budgetary support to Agriculture and Rural Development (ARD) has been significant and is rising, reflecting the high priority placed on the sector by government.
- Strengthening of regional and woreda governments are critical to making ARD programmes more responsive to local needs.
- There is a strong focus of programmes and expenditure on vulnerability and food security, particularly on low potential areas. A better understanding of the relative returns in terms of reducing poverty and improving food security of a selective re-targeting on higher potential areas is required.
- Stronger programme design capacity and streamlined budget procedures (particularly at regional and woreda level) are necessary to strengthen the effectiveness of ARD programmes.
- Monitoring and evaluation of ARD spending and programmes needs to be improved, and improvement in the data on externally-financed expenditure is particularly needed in order to provide an overall picture of ARD spending.

An illustrative costing of the SLM Program has been carried out which is included in the SLM Program design document. This involves an estimated cost of around USD 266 per hectare of land treated (equivalent to USD 97 to USD 133 for the whole watershed) depending on the variety of the model used, with around 60% of this cost met by government through the Program and about 40% by farmers mainly through the provision of labour to undertake construction of investments. This implied a typical investment cost of around USD 1 – 1.3 million to improve a watershed of 8,000 to 10,000 hectares. The SLM Program model is designed to be expandable to accommodate the level of resources that are attracted. The initial funding estimate is based on USD 20 million from IDA and USD 9 million from GEF. This would be sufficient to fund about a fifth of the whole programme (based on the 177 watersheds identified). The total funding required for a 15 year programme was identified as USD 6.7 billion, of which USD 5.4 billion would be incremental to the current baseline level of expenditure.

The Country SLM Investment Framework (CSIF) Platform is envisaged as providing a framework for donor support of the SLM Program (and the further development of the land certification system) (SLM Secretariat, 2008). This will provide an umbrella for funding although it is not envisaged that there will necessarily be common funding arrangements. Rather the SLM Program provides a structure within which individual projects may be incorporated to align on overall government policy and the government's preferred approaches. The development of the CSIF will be followed by a Donor Conference to seek to secure funding commitments beyond those already provided by IDA and GEF.

There does not appear however to be a comprehensive costing of SLM seen as a sector (i.e. encompassing all relevant aspects of government expenditure including ongoing administrative expenditures) rather than as a specific programme. There has also been little systematic investigation of the possibilities of securing innovative forms of financing, particularly in relation to carbon sequestration related to reforestation. A preliminary assessment of this issue concluded that there would be difficulties in getting investment expenditure in this area classified as "additional" as would be required to make existing programmes eligible under the Kyoto Protocol.

## B.4 Conclusions

Ethiopia has made significant progress towards the development of an overall programmatic framework for SLM. This has involved strong government leadership based on a demonstrated commitment to the Agriculture and Rural Sector, and a process that has sought to build consensus among key stakeholders. This consensus has involved both a recognition that a more consistent and sustained approach to SLM is required (moving beyond fragmented initiatives) and agreement on a particular preferred model of SLM intervention. This process has proved time consuming but is regarded as having had value in building consensus. The process is being taken forward in a coherent way, based around the development of the CSIF and the establishment of the National and Regional SLM Platforms as the key forums for sharing experience and consensus building.

However, a number of important challenges remain to be resolved in taking forward the implementation and financing of the SLM Program within the CSIF:

- In terms of the framework set out in Section 2, the underlying rationale for public investment (in terms of the constraints and incentives affecting

SLM) and for the division of costs between the public sector and communities and farmers is not very clear. The economic rationale for the program is set out mainly in relation to the direct economic returns to the community and farmers, rather than in terms of wider externalities. As the process of scaling up is essentially one of broadening focus from relatively poor and low potential areas to higher potential areas, there are reasons to expect a relatively higher level of local and farmer contribution to the investments that are envisaged.

- The SLM Program does not in its current form address the issue of the financial or institutional sustainability of the investments and improvements in management practices that it seeks to bring about. An important issue in terms of the coverage and sustainability of the Program is the extent to which is strong community commitment to it, such as to allow initiatives to proceed without a heavy dependence on donor support. There are potentially important linkages between the extent to which farmers and communities will be motivated to undertake investments and the wider policy and institutional framework for land management.
- Successful implementation of the Program is also going to be very dependent on the existence of sufficient capacity and commitment to it at regional and woreda level. However capacity development at this level has so far received relatively little attention and the formation of the Regional SLM Platforms has come late in the process of development of the Program.
- There was concern that few major donors had expressed a strong interest in supporting the SLM Program which is heavily reliant on IDA and GEF for its funding in its current form. While Germany had expressed interested in a continued involvement in the SLM sector, it was not clear that the Ethiopian government was going to conclude that this represented their preferred use of German aid. There is a continued strong interest from important donors in additional support to the land certification programme, but less so for the SLM component. There appears to be a difference in priorities between donors and government in this respect.
- These issues suggest that there is a significant danger that donor support will not be forthcoming to finance the SLM Program to the level that has been envisaged. This may require a rethinking of the approach so as to leverage donor funds more effectively and use a higher proportion of farmer and community contribution and Ethiopian government resources so as to ensure the scaling up of SLM initiatives. There may also be scope for further

investigation of the opportunities for using innovative funding sources which have not so far been a focus of attention in the CSIF process.

- Although there has been a substantial effort to build consensus around the SLM Program through the SLM Platform, this has mainly involved the key government institutions and donors and NGO and CSO involvement has been relatively limited. This raises some concerns about the breadth of support and the strength of the evidence base underlying the preferred SLM model, particularly if donor funding for the Program is going to be less than was envisaged.
- The SLM Program is heavily focused on highland areas and the problems of arable agriculture. This is understandable in terms of the location of population and the stress facing the agro-ecological system on which the bulk of the Ethiopian population depends. However, the issues of land management facing lowland pastoral populations have received very little attention and are not addressed at all within the SLM Program.

## C.1 The SLM context

Diao and Sarpong (2007, p.3) review the main causes of land degradation in Ghana. They note that:

“The human-associated factors driving long-term soil and vegetation degradation in Ghana are reflected in unsustainable farming practices, removal of vegetation cover (including deforestation and overgrazing), mining activities, and urbanization and industrial activities caused by increased population growth pressures. The agricultural farming systems used in Ghana can be categorized as rotational bush fallow, permanent tree crop, compound farming, mixed farming, and special horticultural farming systems. These farming systems have peculiar characteristics that have different effects on the soil. The rotational bush fallow system, which is characterized by clearing and burning of the vegetative cover, is the dominant farming system throughout Ghana. The clearing and burning normally destroys the vegetative cover and makes the soil susceptible to erosion and leaching to soil infertility.”

They calculate that the expected reduction in agricultural income resulting from land degradation over the period 2006-2015 is approximately 5% of total agricultural GDP, and that soil loss will lead poverty to be 5.4 percentage points higher than without soil loss by 2015, with a particularly severe impact on the northern regions that have the highest levels of poverty. They estimate that adoption of SLM practices would generate an aggregate economic benefit of US\$6.4 billion over the period 2006-2015 with this benefit concentrated in the poorest parts of the country.

Ghana has attempted to enforce regulations on environmental management for agricultural land use activities over many decades but these regulations were developed without stakeholder participation, and land users remain generally unaware of the regulations and enforcement is weak. Past efforts by the government and its development partners have yielded some positive results but there have been significant institutional, sectoral and financial barriers to scaling up SLM practices. Some of the major gaps and barriers to scaling-up sustainable land management in Ghana (identified in the 2002 National Action Plan) include:

- Lack of information and incompatibility of information systems;
- Marginalisation of SLM: tends to be pigeon-holed as an agricultural or environmental problem;
- Lack of cross-border implementation mechanisms;
- Local communities are not sufficiently empowered to be equal partners in complex negotiations;
- Lack of multi-disciplinary approach by international institutions, governments and authorities;
- Lack of capacity building programmes in SLM for transfrontier communities;
- Stakeholders/development partners have unequal capabilities, resources and power: foreign and domestic investments need to be scaled-up to reflect the scale of the problem, but also be harmonized and aligned to ensure efficiency;
- Lack of instruments to enforce and monitor the implementation of agreements; and
- Land tenure systems which do not favour investments in land improvement.

Udry and Goldstein (2005) present evidence that land tenure security is greater for those who hold powerful positions in a local political hierarchy, and that consequently they invest more in land fertility and have higher and more sustainable agricultural output.

The 2007 World Bank Country Environmental Analysis noted that there was limited information available on the extent, impacts, or costs of land degradation, or of the economic benefits of SLM.

## C.2 SLM policies

### Land policy framework

Land policy in Ghana has been characterised by tensions between customary land tenure systems and attempts by the state (starting in the colonial period) to assert state control through assuming ownership of mineral and timber resource, and powers of expropriation and management of land (often with little or no consultation with stakeholders). This is in a context where customary land systems are complex and diverse. There are three types of land ownership defined in the Ghanaian constitution of 1992:

- Public lands
- Stool/skin lands (community lands vested in traditional or other community leaders on behalf of communities)
- Private and family/clan lands (owned by families, individuals and clans)

There are elements of both patrilineal (in the north) and matrilineal land tenure systems. In the patrilineal system, land is divided among the male heirs of the family, which often leads to fragmentation through gifts. There are also some cases of rental (cash or share cropping) arrangements. Other systems are the 'Abunu' (50% share) and 'Abusa' (34%/ 66% share). All these systems provide disincentives to maintain tree planting or economic trees. Under the matrilineal system, there are also disincentives for men to undertake long-term improvements to land as on their deaths, their widows or children will not inherit their land. However, the attempts by the state to assert influence and control have not solved these problems and may indeed have worsened them.

The main challenge for land policy in Ghana is therefore to find a way of establishing effective legal and administrative structures that protect land rights and respect the legitimacy of traditional institutions while providing a basis for improved productivity and sustainable management in the context of increasing population and pressures on land, including through migration. The 1999 land policy has the objective of stimulating economic development, reducing poverty and promoting social stability by improving security of the land tenure, simplifying the process for accessing land and making it fair, transparent and efficient, developing the land market and fostering prudent land management. However, the land system remains complex and open to abuses by the politically well-connected while creating a non-transparent environment for private investors (see for example Nyari, 2008).

A long-term Land Administration Programme (LAP) has been developed in support of this, in recognition of the weakness and tendency to corruption of land sector institutions and their inability to play an effective role that has contributed to a lack of transparency and uncertainty, ineffective regulation of land use, and widespread bad practices such as land encroachments, multiple sales of residential parcels, unapproved schemes and haphazard development.

The objective of the LAP is therefore "to lay the foundation for a sustainable and well functioning land administration system that is fair, efficient, cost effective, decentralised and that enhances land tenure security" through:

- Harmonising land policies and the legislative framework with customary law for sustainable land administration.

- Undertaking institutional reform and capacity building for comprehensive improvement in the land administration system.
- Establishing an efficient, fair and transparent system of land titling, registration and valuation.
- Issuing and registering land titles in selected urban and rural areas on a pilot basis
- Adopting innovative methodologies, including community level land dispute resolution mechanisms.

A review by Crook (2008) examined the functioning of the systems for resolving land disputes in Ghana and concluded that half of land disputes are brought before formal state courts. State courts are favoured because they can provide more definitive judgements than are available through traditional processes. State-related mediation is not much used as a conflict resolution mechanism. Informal mediation by state officers is effective but open to abuse although there are examples of effective use of alternative dispute resolution systems.

## Approaches to SLM policy

### **National Action Plan for the UNCCD**

Ghana's NAP was finalised in 2002. It was published by the Environmental Protection Agency (EPA) and its aim is to 'find practical steps in halting desertification in the affected areas of Ghana.' It builds on earlier initiatives including the National Environmental Action Plan (NEAP) which was adopted by the government in 1991. The NEAP was the first attempt to coordinate environmental management and encourage a sustained monitoring and reporting approach to environmental issues involving the development of policies, action programmes and projects at local, regional and national levels. The NAP is being implemented in two phases covering a total period of 25 years. Phase 1 is due to last for ten years (of which the first five would be for entry point activities and piloting and the second five for up-scaling and implementation) and phase 2 for fifteen years (for continued implementation and withdrawal).

In 2005, the Global Mechanism of the UNCCD and the UNDP Ghana Country Office, in collaboration with the EPA, organised a consultative meeting which brought together the government, development partners and other stakeholders to discuss NAP implementation. The meeting resulted in a series of activities which aimed to facilitate multi-stakeholder stock-taking of information and investment levels in Ghana with regards to efforts to combat desertification.

The meeting also explored synergies among the three environmental conventions on Biological Diversity, Climate Change and Desertification.

### **Poverty reduction strategy**

Ghana's first PRSP (Growth and Poverty Reduction Strategy (GPRS I)) was adopted in 2003. This was updated and revised in 2005 (GPRS II) and GPRS II runs from 2006 to 2009. GPRS I reflected a policy framework that was directed primarily towards the attainment of the anti-poverty objectives of the UN's Millennium Development Goals (MDGs). GPRS II is intended to introduce a shift of strategic focus, even though many of the actual programmes are in the same areas as GPRS I. The central goal of GPRS II is to accelerate the growth of the economy so that Ghana can achieve middle-income status within a measurable planning period.

GPRS II acknowledges land degradation as a key challenge to the economic growth potential of the agricultural sector, and consequently, to the growth potential of the country. One of the suggested interventions in the NAP is to increase per capita agricultural yields and this has been adopted in GPRS II. The objective of this intervention is to enhance food production and security, and rural incomes and livelihoods, by increasing crop and livestock production and yield through improved soil and water management practices, crop and livestock husbandry and access to production inputs. Agricultural modernisation is accorded second highest priority in GPRS II, in recognition of the fact that:

“no significant progress can be made in raising the average real incomes of Ghanaians as a whole without significant improvements in the productivity of the small-scale farmer and farm labourer.”

This final priority area, restoration of degraded land and environment, is of particular relevance to SLM. GPRS II claims that a major impediment to increased productivity and sustainability in agriculture is the environmental degradation associated with traditional farming practices. In order to minimise the impact of environmental degradation the proposed interventions aim to restore degraded natural resources (especially water and land), ensuring their sustainable use for economic growth, and protecting and conserving unique habitats and biodiversity.

GPRS II also gives more emphasis to natural resource management than GPRS I, and identifies a number of interventions that could directly or indirectly favour the wider adoption of sustainable land management practices. GPRS II also includes specific references to mining. In addition to the exploitation of traditional minerals (such as gold and diamonds), it states that a policy will be developed to promote mining of other mineral resources. It also claims that

efforts will be made to: sustain the mining sector through continuous exploration, exploitation and management of mineral resources; improve environmental and natural resources management; and promote collaborative management of mineral resources. There is also a reference to the depletion of forest resources, but only in relation to the lack of success of Ghana's timber industry.

In its macro-economic analysis, GPRS II highlights the challenges posed to the growth potential of the agricultural sector. These are: the stagnation of technologies and (in some areas) the wide gender inequalities in access to and control over land and agricultural inputs, including extension services, as well as adverse environmental factors such as climate variability and land/soil degradation. It also claims that a study to determine the costs of degradation of Ghana's renewable natural resources in relation to GDP indicates that Ghana may be losing about US\$475 million annually (approximately 5.5% of GDP). It therefore states the need to recognise this problem and initiate steps to reverse this trend in order to sustain the agriculture-led accelerated growth strategy envisaged in GPRS II.

However, in general, it appears that the NAP has not had much influence on, let alone been mainstreamed into, the PRSP. There is no specific mention of the NAP in GPRS II – for instance the UNCCD is not mentioned in the list of relevant international conventions that Ghana has ratified. Having said this, the Strategic Environmental Assessment (SEA) team of the Environmental Protection Agency (EPA)/ National Development Planning Commission (NDPC) was represented in the PRSP development process, through the Cross Sectoral Planning Groups (CSPGs) which were established to develop GPRS II. This is in line with the MDG requirement to ensure integration of environmental issues in national policies and programmes (goal 7 – Target 9). The CSPGs were also specifically required to take into consideration the findings of the SEA and mainstream cross-cutting issues, including the environment. The effectiveness of this involvement in terms of mainstreaming SLM-related policies into GPRS II is, however, questionable.

GPRS II includes an analysis of progress towards the MDGs. It claims that it is 'potentially' able to reach the sub-component of goal 7 (Ensuring Environmental Sustainability) which is relevant to SLM ('to integrate the principles of sustainable development into country policies and programmes and reverse loss of environmental resources'). It claims that the supporting environment to attain this goal is 'weak but improving'.

GPRS II acknowledges that there are inconsistencies in the consideration of environmental issues in the public policy process. It claims that the solution is to ensure that sustainable development principles are institutionalized and

mainstreamed by subjecting all public policy formulation processes to Strategic Environmental Assessment (SEA).

Terrafrica (2007, p. vi) reviewed the allocation of SLM responsibilities across government and concluded that:

“The fragmentation of SLM responsibilities across public agencies and weak intersectoral coordination mechanisms hinder the adoption of an overall policy direction, the integration of SLM in the agencies activities and the coherence and coordination of SLM actions. Besides, the agencies that play a potential role in SLM suffer from insufficient human and financial resources to carry out their SLM related tasks, in particular at field level.”

### **Sectoral and cross-cutting policies**

Within the framework of the GPRS, relevant sectoral and cross-cutting policy initiatives include the following:

#### **Savannah Resources Management Programme (SRMP)/ Natural Resources Management Programme (NRMP)**

The implementation of the NAP falls under the Savannah Resources Management Programme (SRMP), which is a component of the Natural Resources Management Programme (NRMP). The NRMP aims to restore, protect and conserve natural resources by involving stakeholder groups.

#### **Food and Agriculture Sector Development Policy (FASDEP)**

The first FASDEP was developed in 2002 and FASDEP II was developed in 2007. Both FASDEP I and FASDEP II have clear links with GPRS II: their aim is to provide a framework for the implementation of strategies to modernise the agricultural sector, which is a stated key priority in GPRS II. GPRS II also makes explicit reference to FASDEP as a key policy document influencing its development. FASDEP is also linked to NEPAD's Comprehensive Africa Agricultural Development Programme (CAADP) and the Economic Community of West African States' (ECOWAS) Agricultural Policy (ECOWAP). FASDEP II was developed in consultation with inter-ministerial teams, the Ministry of Food and Agriculture (MOFA), its development partners, banks, the Parliamentary Select Committee on Agriculture and a cross-section of other stakeholders, through regional workshops. FASDEP II emphasises 'the sustainable utilisation of all resources and commercialisation of activities in the sector with market-driven growth in mind.'

Under its 'Sustainable management of land and environment' objective, FASDEP II states that the government will aim to mainstream and support the

scaling up of SLM practices in Ghana's overall development agenda. In addition to addressing issues around agricultural productivity and environmental services, this objective is intended to serve as an entry point to address the interactions between agriculture, climate change and loss of biodiversity. Strategic Environmental Assessment (SEA) of FASDEP II will be carried out to ensure that the policy is in line with all regional and sub-regional conventions on natural resource management (NRM), inclusiveness and cross-sector interactions.

### **Agricultural sustainable land management strategy**

This sector strategy is currently being developed and should be finalised by July 2008. A two day workshop was held in March to discuss this document and feed into its finalisation.

### **Country Strategic Investment Framework (CSIF) for Sustainable Land Management (SLM), Ghana, 2008 - 2020**

This framework was due to be finalised in July 2008. A two day workshop was held in March to discuss the zero draft CSIF and feed into its finalisation. The goal of Ghana's CSIF is to support the country's priorities in improving natural resource-based livelihoods by reducing land degradation, in line with MDGs 1 and 7. The objective of the CSIF is to mainstream and scale-up sustainable land management in the development framework of Ghana at all levels in order to improve the governance of land management decisions and secure ecosystem services, and improve rural livelihoods in the country.

The preparation of the CSIF is being led by the National Sustainable Land Management Committee (NSLMC). The main objective of the NSLMC is to support, coordinate and oversee the CSIF/ SLM preparation process, ensuring participatory policy dialogue. The National Sustainable Land Management Secretariat (NSLMS) (based in the EPA) is responsible for coordinating and facilitating the activities of the NSLMC (Task Force), and provides secretariat support for, and on behalf of, the NSLMC.

### **Northern rural growth programme**

The Northern Rural Growth Programme is an integrated rural development programme which aims to increase rural incomes through the development and enhancement of agricultural productivity. The programme, which is jointly supported by IFAD and the African Development Bank, targets three of Ghana's poorest northern regions. The programme particularly emphasises environmental sustainability (specifically soil fertility, soil and water conservation and

biodiversity conservation). It uses conversional extension approaches (farmers groups and individuals) in technology dissemination and is also piloting the watershed management approach for promoting SLM in selected catchments. Lessons learned from the use of the watershed management approach are intended to be used to extend the concept to other parts of the country as part of up-scaling SLM activities.

### C.3 SLM financing

The Terrafrica case study on SLM financing in Ghana (Terrafrica, 2007) attempted to undertake a comprehensive assessment of SLM expenditures in agriculture, forestry, mining and other sectors. This study concluded (p. vi) that:

“The estimation of expenditure on SLM in Ghana has been fraught with difficulties as: (i) expenditure on SLM is unavailable for the private sector, (ii) budgetary data and donor project data are insufficiently detailed to enable identification of realised expenditures on SLM, and (iii) consistent data in time-series are unavailable both because consolidation of budgetary data is recent thus changing the scope of financial reporting and because ministries and agencies have been moved.

Despite these difficulties, public expenditures on SLM have been estimated for 2006 at roughly 158 billion cedis which is equivalent to about 0.4% of total budget expenditure or 0.13% of GDP. The estimate only gives an indication of the importance of SLM public expenditure: in reality it probably much overstates public expenditure on SLM.”

The 2006 External Review of Public Financial Management claims that overall, GPRS priorities have been broadly aligned with annual budgets, though with some variation on an expenditure outturn basis. The review states: ‘GPRS II now guides the 2006 budget.’ However, it highlights the weak relationship between intended budget allocations and current budget levels. This may be as a result of weak coordination in the budget preparation process or the segmented funding framework for some ministries. It therefore recommends improved alignment between GPRS II and the annual budget, by strengthening the MTEF, making it a more effective tool which aligns policies, plans and annual budgets, and increasing its capacity to reflect the costs of existing and new policies and programmes. This would make the national budget more credible and improve clarity of links with GPRS II costing.

The 2006 External Review of Public Financial Management claims that, since the launch of the first Ghana Poverty Reduction Strategy (GPRS I), pro-poor spending has been on an ascending trend, rising from 4.8 percent of GDP in 2002 to 8.5 percent in 2005. In turn, poverty has been declining in Ghana, though much of this has come as a result of urban migration in response to the greater opportunities offered by accelerating economic growth. However, agricultural incomes have dropped, with a higher incidence of poverty in Northern parts of the country. Terrafrica (2007, p.vii) suggests that in practice, especially in the agriculture sector, weaknesses in the public finance management system militate against SLM:

“The budget planning process in Ghana tries to combine a bottom-up approach to planning with the overall constraint of sector budget ceilings set on the basis of macro-economic projections and MTEF priorities. In reality, the system produces work plans at field level that are unrelated to actual budgetary constraints. Since credits are rarely released on time and almost always fall short of budgets approved, there is a great gap between activities announced in the budget estimates and those actually undertaken. In agriculture, this means that field staff tends to prioritise activities according to farmers’ immediate demands at the expense of introducing longer term productivity enhancement through SLM.”

According to FASDEP II, the government has used a number of financing instruments to address constraints in the agricultural sector. Their main approach to date has been public-led service delivery, complemented with donor-funded stand-alone projects. In general, project activities and impact are rarely sustained due to inadequate plans for phasing out and mainstreaming project activities with budgetary support from the government. A multi-donor budget support programme within a SWAP is currently being developed to improve harmonisation of interventions, coordination among donor support and consistency of such support with sector policies. The government and its development partners have committed to a new partnership framework and some development partners have made good progress in adopting new instruments for providing support to the agricultural sector, such as budget support.

FASDEP II calls for greater engagement of the private sector to facilitate policy implementation. It also suggests co-financing with the private sector as a means to generate funds for its implementation. FASDEP II also states that the most effective instrument for encouraging private sector investment in the agricultural sector is tax exemptions. However, these tax incentives have been

ineffective as a result of certain constraints such as the high cost of energy and poor infrastructure

In terms of financing mechanisms for SLM, the NAP emphasises Government budgetary allocations; a percentage of royalties from the exploitation of natural resources (timber, mining etc); and penalties from environmental offences and the public sector while FASDEP II also identifies beneficiary contributions; Internally generated funds/ non-tax revenue; and incentive and compulsion measures to encourage users of the environment to adopt less exploitative and non-degrading practices in agriculture. The NAP includes an estimation of costs for each action programme (broken down into phases and specific sub-projects), but states that the actual cost will, of course, vary during implementation. The estimated total cost of implementing the NAP is estimated at just over USD 100 million.<sup>15</sup>

The draft CSIF proposes the establishment of a National Sustainable Land Management Fund (NSLMF) which would be used to fund SLM-related activities:

- Material resources, such as meteorological and communication equipment, vehicles needed to implement the programme;
- Technical resources, such as training, information, education and communication, inter-regional/international co-operation and research; and
- Human Resources Development, such as expertise, skills and experience sharing, seminars/ workshops and community field days.

The NSLMF Fund is an extremely important aspect of the CSIF, in order to ensure its sustainability and establish strong linkages with both external and internal donors. The CSIF proposes that the Fund committee be chaired by the Chief Director of the Ministry of Local Government Rural Development and Environment. The NSLMF would be run and managed by the National Sustainable Land Management Committee (NSLMC). Funds would be disbursed directly to participating communities (working on anti-land degradation projects) through operational modalities to ensure transparency and accountability.

The challenge of combating land degradation requires long term programmes and dependable and sustainable funding sources. The CSIF argues that high levels of funding are required, much of which the government is unable to provide. It therefore proposes that some level of internally generated funds

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<sup>15</sup> This comprised USD 1.4 million for land use and soil management, USD 11.4 million for management of vegetative cover, USD 5.5 million for wildlife and biodiversity management, USD 13 million for Water Resources Management, USD 35 million for rural infrastructure development and USD 34.3 million for improvement of socio-economic environment for poverty reduction

would be made available in addition to government budgetary support. A high degree of support would also be solicited from the donor community, international sources and grants from the Global Mechanism of UNCCD. The description of this fund is very similar to that of the National Desertification Fund (NDF) that was proposed in the NAP. It is unclear whether this fund is being proposed in addition to, or instead of the NDF.

## C.4 Conclusions

Ghana presents a situation where land degradation has been identified as a major problem and policy concern over many years, and where there is evidence that there are large economic costs associated with the failure to overcome problems of land degradation. The issue receives prominence in the Growth and Poverty Reduction Strategy and is seen as central to improving agricultural productivity and reducing poverty. A number of initiatives have been taken (mainly through project interventions) to direct resources to address the problem. The CSIF is the latest (and possibly the most comprehensive) attempt to address the problem. However, there is limited evidence of success to date and the level of resources allocated to addressing the problem appears to be low relative to the potential economic returns on investment in improved land management practice.

The roots of the problem lie in the land tenure system, and the fact that tenure security appears often to be limited with the poorest and marginal farming households having the least incentive and capacity to undertake sustainable land management practices. There has been some progress in trying to develop a system that integrates the various forms of customary tenure with the formalised legal system, but the land management process (in both its formal and traditional aspects) remains open to manipulation by the powerful and does not yet provide effective and straightforward ways of resolving land disputes in a way that provides tenure security and predictability.

### D.1 The SLM context

A World Bank study (World Bank, 2006) characterises the Mozambican agricultural economy as land abundant and labour scarce:

“With a rural population density of 16 per square kilometre, farm households could be a theoretical 12 or 13 hectares. Shifting rain-fed agriculture of some 3.2 million farm households now occupies about 4.5 million hectares out of an arable area of 36-40 million hectares... These ratios make Mozambique one of the most land abundant countries in Africa. The combination of abundant land and poorly functioning input markets means that cultivation is likely to continue to be extensive and of low productivity.”

There is a lack of comprehensive information on the scale and nature of the land management challenge in Mozambique. Estimates suggest that between 75-80% of the population depend directly for their livelihoods on land and natural resources in Mozambique, and there has been particular concern about vulnerability to flooding particularly in the South. The 2000 floods killed 700 people, and directly affected around 2 million people. The damage was estimated as causing a decline in economic growth from 10% to 4% (Bambaige, 2007:1). Flooding has resulted in: (a) soil degradation, (b) decline in vegetation cover in sloped lands, (c) increased water runoff, (d) destruction of infrastructure; and (e) loss of economic growth. Flooding has also increased rural to urban and coastal migration of the population, causing further stress to environmental conditions and resources (GM, 2006:5). There are also significant concerns about land degradation in semi-arid areas (for instance in Tete Province) related in particular to uncontrolled grazing, and in coastal and periurban areas of relatively high population density. The government has promulgated strategies to address the effects of uncontrolled burning of vegetation to clear land for farming or other purposes, and about the effects of erosion, and of deforestation.

A further issue relates to vulnerability to climate change. Bambaige (2007) identifies four key sectors – agriculture, water, energy, and health – which are considered particularly vulnerable to climate change. Of these, three are particularly closely linked to SLM:

- Agriculture supports 80% of the population in Mozambique and contributes to 45% of Gross Domestic Product (GDP). MINAG's strategies

to mitigate desertification and the negative effects of Climate Change include: increasing in seeds varieties; developing and researching new and alternative technologies and low cost technologies; adopting community based knowledge; opening new research centres at local level; promoting conservation practices; and investing in technologies to deal with droughts (Bambaige, 2007:11). MINAG is also working on improving soil fertility and rehabilitating irrigation schemes in rural areas.

- Poor dam management has led to extensive floods in Mozambique. On the other hands, some remote areas of the country face continual risk of droughts. To combat both these issues, the National Directorate of Water (DNA) is focussing on improving existing infrastructure, and increasing the range and reach of new irrigation and well-drilling activities (Bambaige, 2007:12).
- The most used source of energy is biomass and charcoal, accounting for 80% of annual energy consumption in Mozambique. Forestry management is therefore a particular area of concern in energy sector programming. The need to explore the use of natural gas to ensure the sustainable and renewable use of forest-resources is therefore very important. In addition, The National Energy Fund is already in the process of providing technical and financial support to implement alternative and renewable sources of energy in rural areas. There is a need to integrate these actions into an overall sectoral policy that is sensitive to the needs of climate change adaptation, and wider environmental sustainability (Bambaige, 2007:13)

In large parts of the country there have been limited incentives for farmers to practice sustainable land management, with extensive shifting cultivation the main form of farming system. Agricultural growth (which has led to a significant reduction in rural poverty) has been based on increasing the area under cultivation at an average rate of about 3.3% per annum and an increase in the rural labour force rather than through intensification (World Bank, 2006). Land scarcity has been a relatively localised phenomenon, although lack of infrastructure has reduced the economic value of land. However, a number of factors (notably the increasing world price of food and demand for land for biodiesel) have been leading to a strong increase in demand for land in Mozambique and hence its economic value, potentially changing both the incentives for land use practice, and creating threats to the rights of landholders. There is also concern that there is no clear framework for either environmental or broader economic analysis in the assessment of large scale agricultural

developments, for instance for sugar or jatropha for biodiesel, including in relation to the impact on food production as well as environmental sustainability.

In general, therefore, SLM has received relatively little attention or priority in resource allocation and policy making in Mozambique, including in the recently completed Rural Development Strategy. The GM indicative country programme notes that “there is a general absence of evidence-based advocacy on the extent, scope, degree and impact of land degradation on sustainable development and poverty reductive.” There is also an absence of empirical evidence to support the development of models of good practice or effective innovation either for agricultural practice or the institutional approaches that would favour SLM. What has been an important focus of government, donor and civil society concern is land policy. A central issue has been balancing the rights of landholders against the needs of investors within an institutional framework where the capacity of communities effectively to protect and exercise their rights has been coming under threat.

## D.2 SLM policies

While Mozambique developed and technically validated through stakeholder consultation a National Action Programme (NAP) for the UNCCD in 2002 this has not been approved by the Cabinet and does not appear to play a substantial role in policy making and resource allocation decisions. It is however seen as providing potential leverage for mainstreaming SLM into national planning and development frameworks.

### Land policy issues

The 1975 Constitution and 1979 Land Law involved the appropriation by the State of all land, and a system of access to land through the “Right of Use and Benefit Over Land” (known by its Portuguese acronym as DUAT). Significant changes to this system took place in the context of Mozambique’s move to democracy and a market economy during the 1990s, culminating in the 1997 Land Law that was developed by a Land Commission with extensive consultation. This set out three procedures by which a DUAT could be acquired, and provided a high level of legal protection to DUAT holders. A DUAT could only be revoked by the state on the grounds of public interest, and with the payment of appropriate compensation.

The three ways of acquiring a DUAT are set out in Article 12 of the Land Law:

- Occupation following customary norms and practices, if these do not contradict the Constitution (for Local Communities and national individuals)

- By 'good faith' occupation, for national individuals (gives a definitive right if, in a ten year period, there is no third party manifestation of a declared and legally recognized interest over the land in question);
- By formal application to the Government land administration, which allocates a new DUAT on behalf of the State (the only route open to foreigners and to national companies).

The 1997 Law provides an important role for the local community both as a holder of a collective land title and as a land administration body. Calengo, Monteiro and Tanner (2007, p.1) argue that this law was based on a high level of participation and consensus and that:

“The 1997 Land Law was a turning point for land reform in Mozambique, and brought great expectations for progress and social development, above all in rural areas where more than 80% of Mozambicans live. This progressive law was reinforced by other new legislation for Forestry and Wildlife, and the Environment, which also contained safeguards for local rights, and created new types of diffuse or societal rights (for example, to be able to live in an environment free from pollution).”

The 1997 Law recognised that following conflict and widespread economic and social disruption, rights to land across most of the country lacked documentation but were recognised and well known at the local level. The legal framework therefore gave:

“a central role to local forms of land and resource management, and incorporated innovative instruments that allowed customary rights to be formally recognised and protected. Attention was also to be paid to implementation strategy and institutions, so that these new ideas could be fully implemented in practice.”

Subsequent debates and policy initiatives in relation to land have focused on the balance (and possible tensions) between the effective protection of the rights of users, and concerns about whether land under this system is being both efficiently and sustainably:

“Both the Government and the donors are concerned that large areas of arable land and other resources are not being productively used and that levels of private investment in land and natural resources are still too low. They are also concerned about unsustainable practices and weak regulation that are undermining the long term development of land and other natural

resource-based production. Furthermore, local people have not been able to fully exercise or defend their rights and participate fully in the development process.” (Calengo et al, p. 2).

Calengo et al. conclude that the challenge for land policy is to ensure its effective implementation and that:

“Weak implementation has created the impression of a law that does not work. Policy makers should resist the temptation to change it... There is also no clear Government implementing plan that puts the land and natural resources framework at the heart of a rural and national development strategy – land law implementation alone will not produce the desired social and economic returns.

A major cause of this weakness has been the lack of any sectorial and stakeholder coordination and dialogue once the Land Commission was wound up. The assessment finds that a national “land vision” must be developed as a matter of urgency. This can only be achieved through a participatory process like the one that produced the 1997 Land Law, and which still gives this law widespread legitimacy and popular support.”

In relation to sustainable land use and environmental protection, Calengo et al. note that:

“The Environment Law (Law No. 20/97, of 1 October 1997) was approved at the same time as the Land Law, and includes strong guarantees of new ‘diffuse’ or collective rights (for example the right to not have local resources polluted by external interests) including an explicit provision guaranteeing the right of recourse to justice. The Environmental Impact Assessment (EIA) Regulation (Decree No 45/2004, of 24 September) is also an integral part of DUAT processes that require environmental licenses before obtaining full approval.

The over-riding impression is that this important legislation and its links to the wider framework of land and resource management has been poorly implemented and enforced. EIAs have been carried out where required, but rarely result in actions that either block or change project proposals. For example, building is allowed in protected areas on coastal dunes, little is done about pollution by major industries, and the level of public consultation in all cases is said by many to be almost non-existent in real terms.”

In assessing the relationship between land policy and growth, the World Bank (2006) identified five key problems with the Land Law:

- The law has not resolved recurring conflicts between smallholders who practice extensive, shifting cultivation and commercial farmers who practice capital intensive cultivation.
- It has not encouraged partnerships between smallholders and large commercial farmers. Few partnerships have materialized. NGOs argue that the mechanisms for consultation are a charade because smallholders have been displaced without consultation and due compensation.
- Commercial farmers (farms over 50 hectares) wishing to invest complain that the procedure for securing leases is cumbersome and costly because of administrative decisions on the viability of the development plan.
- The process by which leases are granted is not transparent and is thus prone to corruption. It is a system that encourages the well-connected to obtain access to large holdings at virtually no cost. There is anecdotal evidence that local elites, sometimes in partnership with foreign investors, acquire large tracts of land that remain barely developed or are used only for extensive cattle ranching.
- Finally, for smallholders and large commercial farmers alike, land still does not serve as collateral for loans despite the 1997 Land Law. Although there are other factors, smallholders are not credit worthy to commercial banks. Even for commercial farmers, land does not serve as collateral because it is socially very unpopular to actually seize the land.

The World Bank study concluded that:

“In sum, the Land Law has not promoted long-term investments in agricultural land and there is no evidence that it has improved equitable distribution. Land access for smallholders is reasonably secure but not for large-scale endeavours. In implementation of the Land Law, the right of access that it confers is not secure, enforceable, and transferable without excessive bureaucratic interference and discretion.”

## **Other natural resource management issues**

The World Bank study also noted significant issues in relation to the management of water and forestry resources:

“Despite overall water abundance, distribution and investments are problematic. Mozambique should emphasize the management and use of its water resources. The overall institutional and legal framework for the water

sector in Mozambique is coherent and largely consistent with good practices in many middle- and high-income countries, but there are no clear policies for rural water management that encompass drought mitigation, irrigation development, and rural water supplies.”

In relation to forestry, Mozambique has a relatively well developed framework within the context of the Land Law, based on a system of concessions, but lacks resources and institutional capacity to manage the system effectively. There is though a general lack of effective policy guidance on approaches to afforestation, for instance in relation for example to the expansion of the area under eucalyptus which generally provides the highest returns but which has problematic environmental consequences.

### **SLM and poverty reduction strategies**

‘The Environment’ is one of eight cross-cutting issues that have been identified in Mozambique’s Poverty Reduction Strategy (PARPA II). According to the PARPA II, these issues cut across the different sectors and the country’s social and economic reality. They are also interrelated, inasmuch as the issues of one of the topics are important and affect the way in which the other cross-cutting topics are addressed, and vice versa (PARPA II, 2006:57).

The PARPA II notes that qualitative studies on poverty (2001 and 2003) have shown that environmental issues, such as droughts and floods were specifically mentioned as causes of poverty (PARPA II, 2006:19). The Plan also notes that most of Mozambique’s population depends on natural resources for subsistence and income.

The PARPA II links sustainable urban land use and a functioning land title registration and land use zoning systems with effective strategies to combat endemic diseases such as malaria and cholera (which are a direct consequence of faulty drainage, sanitation, solid waste management and water supply systems). The PARPA II calls for better protection of natural resources and their sustainable use by banning water pollution and its harmful effects on soil fertility (PARPA II, 2006:61).

The PARPA II also identifies specific Public Sector Reform initiatives that strengthen the institutional capabilities of local government. It also calls for approval and implementation of the national decentralized planning and finance strategy, including its geographical and environmental dimension (PARPA II, 2006:74).

Agricultural benchmarks set by the PARPA II are predicated upon effective natural resource management (land, forests, wildlife) (PARPA II, 2006:130).

Industrial sector improvements also include key environmental sustainability goals – with a specific focus on creating an institutional framework for promotion of environmentally healthy technologies. The Plan also calls for the joint participation by the MIC and MICOA (Ministry for Coordination of Environmental Affairs) in environmental audits of industrial establishments, provided this does not hamper the expansion of industry (PARPA II, 2006:133).

## **SLM and the National Agriculture Development Programme - PROAGRI**

PROAGRI has been an attempt (with uneven success) to develop a Sector Wide Approach for agriculture. While it is regarded as having set out a clear policy framework, the goal of integrating donor support within a common management framework has not been achieved. At least 50% of donor funding remains off budget, and there have been difficulties in mobilising and effectively using funds through PROAGRI's management arrangements. The overall focus of PROAGRI has been on creating an enabling environment for private service provision. However, the implementation record of PROAGRI has been generally regarded as disappointing, and as noted by Evans et al. (2007), recently a number of donors have returned to project-type investments as a result of concerns about continuing service delivery gaps. Agricultural extension is one area (of particular potential significance for the dissemination of sustainable land management practices) where the model of publicly enabled private provision has appeared to be unsuccessful in reaching the bulk of small farmers.

The Land Management component in PROAGRI was focused on simplifying land allocation procedures in provinces, developing enforceable national and provincial regulations, as well as encouraging community participation and ownership of land use issues and regulation of local resources. The NRM strategy of PROAGRI is focused on policy reform to create an environment conducive to private sector development. This includes building the capacity of local communities to understand their economic and social rights, routes of recourse and protection within the legal system, exploring technology transfers to the farm level, and developing financial systems that provide basic guarantees to farmers and input suppliers.

PROAGRI was also used to strengthen new and reform existing legislation on environmental issues. For instance, PROAGRI developed detailed guidelines for technical offers as part of the environmental assessment requirements. In addition, a new handbook on Environment Impact Assessment and Mitigation initiatives was developed, and staff training provided. However, the evaluation of the programme noted that PROAGRI failed to address a number of community environmental issues.

A problem encountered in dealing with natural resource issues was that major environmental issues are addressed by several different ministries: MINAG, Environment (MICOA) and Mineral Resources and Energy (MIREME). Interministerial committees were formed, such as that for the strategy to address bush fires, these have had variable success rates. Sustainable Development Centres of the Ministry of Environment and the Mozambican Agricultural Research Institute (IIAM) of MINAG provide policy, strategic and technical support for NRM matters. The development of integrated district plans provides an opportunity for mainstreaming NRM priorities into the provision of agricultural extension services (PWC, 2007:74).

### D.3 SLM financing

As has been discussed above, there has been only limited progress towards establishing an effective programme-based approach either for agriculture or for land and natural resource management. PROAGRI did however include an attempt to provide overall direction for the allocation of resources. The financing of PROAGRI was based on donors covering 88% (US\$162 million) and the Government of Mozambique 12% (US\$22 million) of the total cost of the programme. A total of US\$18.9 million was provided for direct project funding by IFAD (US\$5.5 million); The World Bank (US\$8.5 million); UNDP (US\$1.7 million); and FAO (US\$3.2 million) (PWC, 2007:37). Approximately 15% of the overall target expenditure was earmarked for Land Management issues, and a further 16% was earmarked to address Forestry and Wildlife issues. PROAGRI in its first phase was heavily focused on Institutional Development, which meant that of the total expenditure, less than 5% was actually spent on Land Management initiatives, and less than 4% was actually spent on Forestry and Wildlife initiatives (PWC, 2007:vii). However, PROAGRI has not succeeded in raising spending above 4% of the national budget, or in integrating donor funding into the budget.

In practice, financing of SLM related activities has remained fragmented, in the context of Mozambique's continuing very heavy dependence on aid. A number of separate related initiatives have been costed (such as the National Adaptation Plan of Action, to address climate change, with a budget of USD 8 million), as well as the joint programme of donor support (from the UK, the Netherlands, Sweden, Denmark and Finland) for improving the protection of smallholder land rights providing USD 12 million over five to six years, a large project funded by the Millennium Challenge Corporation to upgrade cadastral services (\$38 million)

and institutional support from the UN within the One UN framework (with a budget of \$7.5 million). MICOA has developed an Action Plan to address erosion, but funding for this has not been secured. A national strategy for biodiversity has also been developed but lacks funding.

Consultations in Mozambique suggested that although General Budget Support has been an important aid modality (and there is a strong focus on public financial management reform, notably through the SISTAFE programme), in practice the mechanisms for integrating the overall planning and prioritisation of aid and budget resources remain weak and to a significant extent supply-led, in the sense that government attempted to accommodate donor offers of resources rather than working within an overall system of expenditure ceilings. In this context, there are incentives for government agencies to seek additional project funding outside the budget framework, raising issues about potential sustainability and programme focus. Availability of potential donor funding did not appear to be a constraint on taking forward SLM initiatives. This was notably a problem for accessing funding through GEF where it is understood resources have been allocated for Mozambique that have not been used. The key financing issues relate to the low priority placed on SLM by the government and consequent lack of budget resources allocated to this area, and the limited attention paid to the implementation of strategies.

## D.4 Conclusions

The main issue for SLM policy in Mozambique is the lack of progress in achieving consensus that SLM is a priority in a context of general land abundance where the incentives for the adoption of sustainable agricultural practices in large parts of the country are low. This is reflected in the lack of progress in implementing the large number of relevant strategies that have been articulated or in focusing government budget resources on SLM issues. It is difficult to make an assessment (in the absence of comprehensive information on the dimensions of the problems of land degradation or of analysis of the links between this and other development issues) of the extent to which the limited priority accorded to SLM reflects an appropriate judgement in terms of the development priorities facing Mozambique, or is a reflection of the weak organisation of stakeholder interests (particularly from civil society) that would favour more sustainable practices. This would include the relatively marginal role of MICOA, the ministry with responsibility for coordinating and implementing cross-cutting environmental policies.

Mozambique has made some progress towards establishing the structures and processes for a sectorwide approach in agriculture and in developing an improved overall public finance framework. However, the implementation of these initiatives remains very incomplete with PROAGRI in particular having failed to meet the expectations of development partners. As a result, there has been only limited progress in moving towards a more programmatic approach and in ensuring that resources are allocated to government priorities and that there is effective capacity to implement government priorities. Donor funding for the natural resource sectors remains fragmented. The key point however is that SLM does not appear to be a major government priority in terms of how resources have been allocated.

The main issue for land policy in Mozambique is how to make effective the commitments in the 1997 Land Law to protect the land rights of communities, while also ensuring that land can be used productively and sustainably by investors. Government has recently made legal changes to give more power to the Cabinet in decision-making on land allocation for large scale investments (as well as in the granting of community land certificates), which creates concern about the extent to which a combination of political power and foreign and domestic investor resources may override the rights of communities. Some major donors (notably the US and the World Bank) are seen as advocating more fundamental changes to the land tenure system in the direction of privatisation of land rights that have generally proved to be politically unacceptable.

The current situation appears to leave community land rights vulnerable to predation or manipulation by the politically well-connected, while not in practice providing an effective means for transferring land use rights to investors in a way that provides adequate protection for investments, and limiting the extent to which land can be used as collateral. This appears to be acting as a break on investment (including in the commercialisation of agriculture). However it is not clear whether issues about security of land tenure are contributing to unsustainable land management practices in aggregate, although concerns about land degradation in the more densely populated and economically attractive coastal and periurban areas suggest that this may be a contributing factor. In general, this challenge will become more relevant nationally as rural infrastructure is improved leading to greater incentives for agricultural intensification. Strengthening the capacity of key institutions (particularly at local level) involved in natural resource management will be a critical part of an effective strategy.

The lack of information and analysis constrains effective evidence-based advocacy or policy making. There is in particular a lack of empirically grounded models for how to introduce more sustainable land management practices in the Mozambican context, as well as limited evidence on the dimensions and implications of the SLM challenge. This constrains the design of any substantive programme to promote SLM. Similarly, there have been few initiatives to examine the scope for innovative financing associated with SLM, for instance in relation to carbon trading, particularly in forms that would be of potential value to smallholders and rural communities.

## E.1 The SLM context

Some 90% of Uganda's population lives in rural areas, and rely on land and forestry resources for cultivation and grazing. Land degradation has been estimated as causing losses of 4-12% of GDP (among the highest cost estimated in Africa) with soil erosion and nutrient loss accounting for the bulk of this (see NEMA, 2004/5 p. 69 for more information on estimates). Key land management problems have been identified as declining soil productivity, vegetation cover loss (about 75% of forest cover lost over the 20th century), reduced water quality, lack of access to services for nomads and those engaged in transhumance, and conflict over land and related resources (Muwaya, nd; NEMA, 2004/5).

Uganda's dry lands occupy what is referred to as the "cattle corridor", an area stretching from the North-East through Central to the South-West of the country. In these areas semi arid and dry sub humid conditions prevail. In Uganda drought conditions are mainly experienced in the North- Eastern districts, where serious crop failure has been noted to occur in every five years.

There is evidence from studies by IFPRI (Nkonya et al., 2004, quoted in NEMA, 2004/5, p.66) that poorer households (in terms of access to land, ownership of physical assets, and education levels) use labour more intensively and are less likely to use improved land management practices. The study also notes that:

"Households in communities with lower wage rates use labour more intensively in agriculture, but use several non-labour inputs less intensively, and obtain lower value of crop production and incomes. Thus lack of off-farm opportunities may contribute to keeping poor households in a poverty and land degradation trap.

Nonetheless, the study concludes that without access to extension services, and market information or credit, households are less prepared to use several modern non-labour inputs thus resulting in lower crop production. It is also important to note that households with poor access to roads use less organic or inorganic fertilisers, a practice which directly contributes to land degradation. Poorer road access is also associated with lower value of crop production per acre in the eastern and western regions and lower income in the central region. Thus lack of access to infrastructure and services also may prevent households from exiting the poverty-land degradation trap, although the impacts may be location-specific."

NEMA (2004/5 p.71) draws the general conclusion that the:

“measures that need to be taken to increase adoption of soil conservation technologies call for a multi-sectoral approach since land degradation is a complex phenomenon. Both markets for inputs and outputs need to be improved to lower the transaction costs and hence the input prices. This would allow farmers to earn remunerative returns to their labour invested in soil conservation and other technologies. This means transportation and information infrastructure need further improvement... Further research is needed to understand the impact, costs and benefits of soil conservation technologies in the South Western Highlands region.”

## E.2 SLM Policies

### Land policy issues

The 1995 Constitution for the first time formally recognised the role of customary tenure and vested title to land in the people (rather than the state). The Constitutional provisions (enacted in the 1998 Land Act) recognised four forms of land tenure: customary, freehold (limited to Ugandan citizens), leasehold, and *mailo* (a limited form of freehold for grants of land by the British colonial government to the Buganda royal family and others that involves the payment of limited ground rent) with authority over land administration in the hands of district Land Boards, and dispute resolution handled by local land tribunals. The Land Act provides mechanisms for the conversion of land from customary or *mailo* to freehold tenure and in general is based on the presumption that freehold tenure is the most secure, efficient and the most conducive to SLM. The prominent role and legal favouring of freehold tenancy, as well as the supplanting of customary authorities in land decisions, makes Ugandan legal context for land management very different from that of the other countries reviewed.

The following significant issues for land policy in Uganda are identified in the literature:

- A lack of evidence to support the view that freehold tenure in fact encourages more sustainable land management practices.
- Many poor farmers do not understand their legal rights and rights to land, deterring them from investing in infrastructure, perennial crops and trees, or soil conservation technologies (OPM, 2005:21).
- Significant levels of conflict over land rights with evidence of substantial economic losses and other social problems associated with these conflicts.

- A reliance on new administrative bodies to implement the Land Act and a model for the land titling process that was unrealistically costly, with the result that envisaged management systems are not functioning effectively, and there is a lack of confidence in local administrative and juridical systems to enforce these rights.
- Pervasive biases against women under the patrilineal system governing customary land rights which leaves women with very insecure land rights.
- The Land Act provides for communal customary tenure rights in rangelands and pastures, but there are tensions between this and the provisions for individual customary or freehold titling. Increasing individualisation of rights appears to be associated with more sustainable rangeland management, but also with increasing conflicts over resources as sections of the population lose access to grazing.

Attempts to address these issues were judged in 2005 as having not received sufficient political support in order to be adopted into law. Action on land policy is moving slowly, and four major barriers still remain: the issue of raising revenues based on land taxation; the privatisation of land services (in particular cadastral surveys and land valuation); how to deal with the resettlement and protection of the land rights of internally displaced persons (IDPs) in the context of the peace process in the North; and HIV/AIDS<sup>16</sup> and land (OPM, 2005:22).

There has been subsequently been progress in the development of a Draft National Land Policy (issued in third draft in January 2007). This process has been relatively consultative, though consultation has been largely limited to formal sector organisations. The draft policy recognises the importance of customary systems, and notes the need to resolve issues around *mailo* land (where the rights of tenants have been under threat), and the problems related to urbanization. However, the 2007 Independent Review of Land Issues while welcoming the initiative is cautious about the prospects for effective implementation, and highlights corruption throughout the justice system (including the large scale forging of titles on the National Land Register), and the dependence of the land administration sector on severely underfunded District government. The Review notes (pp 58-9) that:

“Abuse of land rights by Government and its institutions, and their acquiescence in the abuse of land rights, are rampant. Their behaviour shows

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<sup>16</sup> See Kamusiime and Rugadya (2007) who examine the relationship between land policy and HIV/AIDS, including its effect on land sales and hence overall land distribution.

little respect for either the Constitution or Land Law, so there is no reason to believe that the Policy will have any more positive influence on practice.

Land prices have rocketed in recent years, particularly in the central area around the capital and the hunger for land has grown enormously. Landowners of *mailo* land are evicting lawful occupants, publicly owned land is being grabbed by those with powerful connections and there are allegations that the State is using its rights to compulsorily acquire land 'in the public interest' to give land to private companies, without the due process of compensation."

## SLM and national policies

Policy making and the budget process in Uganda have been strongly based around the framework provided by the Poverty Eradication Action Plan (PEAP). The overall planning of public expenditure is geared towards supporting implementation of the PEAP. Efforts to incorporate environmental protection and natural resource management into PEAP objectives have been made. This has included mainstreaming the UNCCD National Action Plan (NAP)<sup>17</sup> into PEAP processes, thereby "enabling a more strategic use of major financing instruments for sustained mobilisation of financial resources towards the implementation of NAP activities" (Ingvarson, 2008:S1).

Environmental management is a major component of the second pillar of the 2004 PEAP. In particular, elements such as the modernisation of agriculture and preservation of the natural resource base such as soil and forests have direct impacts on the implementation of the SLM agenda in Uganda.

As part of the PEAP process,

"Analytical work has been done on the economic importance of environment and natural resources in Uganda. Problems of soil degradation, deforestation, depletion of wildlife resources and encroachment on wetlands give examples where public action is needed" (PEAP, 2004:6).

The PEAP also notes that problems of soil degradation and forestry have been underestimated in the past. In addition, the lack of a sectoral approach to environment and natural resources has been a constraint to effective management, and the PEAP aims to address this deficit.

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17 Muwaya (nd) notes the following efforts to operationalise the NAP: Development of Road Map for NAP implementation and Resource Management; The Integrated Dryland Development Programme (IDDP); Mainstreaming of the NAP into national development frameworks; Integrating drylands management issues into District Development Plans; National Capacity Self Assessment of Multilateral Environment Agreements; Formulation of a Rangelands policy.

The PEAP discusses farming practices that have contributed to soil degradation, and identifies a number of ways to address these issues. Through the National Agricultural Advisory Services (NAADS), the Government aims to integrate environmental concerns such as soil degradation into advice, policy and action.

Specific strategies identified by the PEAP on SLM initiatives include:

- Developing a sector-wide approach for the Environment and Natural Resources sector;
- Undertaking meaningful land reform by clarifying land rights and strengthening the rights of the poor, especially for women;
- Improving the land registry in the short run and strengthening the land rights of the poor through systematic demarcation in the long run, including specific initiatives for urban land reform;
- Regulating provision of housing to ensure minimum standards and avoid overcrowding;
- Reducing deforestation caused by increasing demand for fuel wood;
- Encouraging private sector participation in forestry sector while protecting central forest reserves;
- Providing more support to District and community forests;
- Establishing beach management units to ensure sustainable management at the community level;
- Implementing programmes to protect wetlands and wildlife, and aim to strengthen the meteorological service to provide farmers with accurate information.

**National Environment Action Plan (NEAP):** Uganda's NEAP was developed with the intention of preparing a comprehensive approach to improve and create an enabling environment for biodiversity conservation. As such, the NEAP includes policy, institutional and financial measures to ensure the realisation of its mandate (Tukahirwa, 2002:11).

The NEAP is designed to respond to the numerous threats facing Uganda's environment today, which include:

- Lack of data on monitoring of biodiversity available for policy makers;
- Poor definitions and uneven allocation of resources (which leads to over-exploitation of natural resources in other regions);
- Lack of alternatives to unsustainable practices (such as unsustainable use of land and habitat loss as a result of population expansion);

- The need for industrialisation, trade, tourism, and agricultural production – which have serious side-effects on the environment such as pollution, waste, and increased pressure on natural resources.

A number of measures have already been enacted under the auspices of the NEAP to address these issues. They include the establishment of laws and policies such as the Environmental Statute, the Wildlife Act, the Wetland Policy, and decentralisation and local/district-level management of environmental resources. Specific measures such as local campaigns on tree-planting and afforestation, and Soil and Water Conservation (SWC) are regarded as successes generated by the NEAP.

There are still a number of barriers preventing overall successful implementation of the NEAP and its strategies. They include:

- Local level capacity for environmental management remains low, only a handful of districts have been active in environmental management;
- Lack of support from national-level government institutions and agencies to ensure the realisation of NEAP goals;
- Most districts have no previous experience of planning;
- Systems of information management and communication continue to be weak;
- Sustainable funding mechanisms are not yet available to ensure the participation of NGOs and other civil society groups.

**Plan for Modernisation of Agriculture (PMA):** The PMA envisions “Poverty eradication through a profitable, competitive, sustainable and dynamic agricultural and agro-industrial sector” (OPM, 2005:2). The main objectives of the PMA are to:

- Increase income and improve the quality of life of poor subsistence farmers;
- Improve household food security through the market;
- Generate gainful employment; and
- Promote sustainable use and management of natural resources.

The sixth priority pillar of the PMA (Sustainable natural resource utilisation and management) has direct relevance to SLM initiatives. One of the key areas of focus in this priority area is land tenure. The PMA also deals with other key environmental issues that affect Agriculture. In particular, this includes investments and strategies for the water and forestry sectors. In addition, the PMA has also engaged with the development of District Environmental Action

Plans (DEAP) which are integrated into District Development Plans. This approach is intended to align local level implementation with national-level policy.

As noted by the OPM evaluation of the PMA, “much of the achievement under the natural resource pillar so far has been at policy and strategy level, rather than at the level of implementation” (OPM, 2005:22). District structures are slowly being implemented, but there is still limited evidence of impact.

Given its characteristics and unique placement in the institutional setting in Uganda, the PMA possesses a number of interesting features that provide excellent opportunities for financing NAP implementation. These include:

- The high degree of consistency between PMA and NAP priority areas;
- The inclusive composition of the PMA institutions, involving among others seven sectors and twelve ministries;
- High level commitment from key institutions;
- A national level mini-forum meeting nine times a year, performing a coordination role and reviewing position and strategy papers;
- The existence of a sub-committee dedicated for cross cutting issues related to Environment and Natural Resources (Ingvarson, 2008:33).

Bialluch (2007) concluded that in Uganda (and in Kenya):

“Increased donor-government coordination along the principles of the Paris Declaration, including SWAp, is helping to overcome constraints that had been identified by the NAPs as obstacles to sustainable land management and UNCCD implementation, such as unpredictable and uncoordinated funding, inadequate policies and regulatory frameworks, individual project approaches with no interrelation and limited opportunities to promote cross-cutting issues.”

Despite these relatively positive aspects of the policy environment for mainstreaming SLM, Bialluch (2007, p.8) noted that in both Kenya and Uganda:

“UNCCD focal points are not directly and actively involved in the relevant SWAp. Their knowledge about the harmonisation and alignment processes is limited. Relevant SWAp documents make little reference to the UNCCD focal points and NAPs. However NAP priority areas and components have been partly taken up by difference sector strategies and SWAp.”

## Development of the SLM country programme

Since 2006 there has been a joint country process aimed at intensifying dialogue with stakeholders to develop a harmonised country programme for SLM. The harmonised country programme has been envisaged as minimising duplication of efforts and conflicting approaches, improving inter-sectoral coordination, and strengthening partnerships, increasing resource mobilisation and the transfer of appropriate technology and practices for SLM.

The Country SLM process has the following envisaged outputs:

- Operational SLM Country Platform (including an intersectoral core working committee on SLM)
- Stocktaking and gap analysis report
- Development, adoption and launching of a harmonized SLM country programme.

The approach is intended to emphasise the role of NGOs, CBOs and the private sector, to focus on actions tied to socio-economic benefits, and to provide the motivation to “reverse the overall decline in donor support to SLM.”

## E.3 SLM financing

### The budget process

The Medium Term Expenditure Framework (MTEF) provides a 3-year rolling expenditure framework which links sector and district plans to existing and potential funding opportunities and aims to ensure consistency between several levels of expenditure with the overall national resource envelope. It also sets sector and district spending ceilings and maintains them in concert with the macroeconomic environment and prospects for revenue mobilisation.

Sectors and districts prepare budget framework papers (SBFP), which are used as the basis for the MTEF. Furthermore, alternations in the PEAP are also reflected in the MTEF. MTEF priority areas include security, primary education, primary health, HIV/AIDS, roads, agricultural research and extension, and water and sanitation. Others include promotion of good governance, increased access to justice especially by the poor, accountability and environmental sustainability. The Ministry of Finance, Planning and Economic Development (MFPED) has exercised strong leadership over the policy process and the enforcement of sectoral expenditure ceilings.

The increased levels of budget support provided to Uganda over the last six years have influenced allocation of expenditures in several ways. Increased budget support has resulted in a shift in public expenditure towards priority PEAP programmes via the Poverty Action Fund (PAF)<sup>18</sup> and has as a consequence influenced the levels of pro-poor expenditure positively (Ingvarson, 2004:38).

In terms of policy alignment, budget support has had a strong effect in aligning assistance from development partners with the Government's objectives and targets through the PEAP. The nature of the PEAP as a nexus for overall policy making reconfirms the need for efforts to enable the NAP finding expression in the PEAP.

## **NAP financing**

The NAP is financed by the Government of Uganda, with support from bilateral and multilateral partners. Government funding to NAP implementation is channelled through sectoral and district budgets. Direct funding for NAP projects have been provided by partners such as the UNDP, DDC, Global mechanism of UNCCD, GEF, WB, UNEP, Norway, and Belgium. By 2004, a total of US\$291,000 had been provided to facilitate a diverse range of projects (MAAIF, 2004:32).

Funding specifically for NAP activities cannot easily be identified from sectoral budgets. Most of the major sectors implementing the NAP (Agriculture, and Environment and Natural Resources) tend to receive low funding, and therefore cannot adequately fund activities for all priorities. For instance, the Agricultural Sector budget allocation remains about 3% of the overall national budget, and the majority of the NAP priority areas are closely linked with the agricultural sector.

## **Sector-based financing and investment strategies**

The MAAIF Development Strategy and Investment Plan (MDSIP) is a strategic statement on how national goals and priorities of the PEAP are translated into a plan for public sector activities in the agricultural sector. It seeks to clarify the objectives and outputs for the agriculture sector, to highlight priority areas in which work will be carried out by MAAIF between the years 2005/06 and 2007/08 and to link spending to these areas (Ingvarson, 2008:17).

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<sup>18</sup> "The PAF was created in 1997/1998 as a mechanism to channel resources from the Heavy Indebted Poor Countries (HIPC) initiative to poverty reduction activities. It was set up to provide a mechanism for strengthening the pro-poor orientation of the budget" (Ingvarson, 2008:18). PAF resources are part of the general budget resources, and indeed PAF expenditures are an integral part of the government's expenditures. These expenditures are not "off budget". The PAF consists of a subset of the government's budget which contributes directly to poverty reduction: primary education, primary health care, water and sanitation, agriculture and rural roads.

Issues related to land degradation are mainly addressed through the priority programme area on capacity building for irrigation, drainage, water harvesting, soil & water conservation and rangeland management and potentially priority programme area 10, Agricultural Advisory Services. Land degradation related issues are identified as decline in soil fertility and inadequacies in irrigation, and rangeland management capacity.

Interestingly, there is no specific reference to the NAP or to the IDDP in the MDSIP. This indicates that no particular attention will be paid to these programmes in the near future in terms of investments. General environmental considerations are claimed to be made throughout the activities of the Ministry, in line with the 1994 National Environment Management Policy. These considerations are however difficult to track down to specific expenditures.

The Environment and Natural Resources Sector Investment Plan (ENR-SIP) is still in the formulation phase. The process was initiated in 2001, as MFPED set up the ENR Sector Working Group, which was charged with the mandate to present the annual Sector Budget Framework Paper (SBFP) and develop a SIP. The ENR-SIP development process has proved difficult to conclude and as of June 2006, only a draft copy is available, lacking cost estimates and budget as well as conclusive objectives (Ingvarson, 2008:17). The SIP aims to include investments in the following SLM-relevant areas: land, forestry, fisheries, wetlands, climate/meteorology, wildlife, environmental management, and policy, planning and administration.

## **SLM public expenditure review**

Uganda is one of the few countries to have undertaken a comprehensive public expenditure review (PER) focused on SLM (World Bank, 2008). Major challenges for undertaking the PER were the lack of information on the on the severity of land degradation, and the absence of any established methodology for conducting SLM PERs. Key findings of the PER were the following:

- Five major land degradation hotspots were identified (with only a limited overlap with areas of high poverty), with annual soil erosion of more than 5 tonnes per hectare;
- The proximate and underlying causes of land degradation in Uganda are multifaceted, complex and context-specific;
- SLM sector strategies and investment plans do provide an economic rationale for public investments and clearly define the roles of the public and private sectors;
- In spite of the significant economic value of land resources and severity of land degradation, SLM expenditure amounted to only 0.28% of budget

expenditures and 0.13% of GDP between 2001 and 2005, although these expenditures were relatively well-targeted on land degradation hotspots and financed public goods;

- Actual disbursements of SLM expenditures were only 42% of planned expenditures;
- There is a mismatch between planned and actual expenditures on SLM, particularly in regard to scaling up SLM activities;
- Planned and actual expenditure on monitoring and evaluation was very low, making it difficult to learn lessons and support a process of scaling up.

## E.4 Conclusions

Uganda provides an example of a country with a relatively strong budget and policy making process which has exercised a high level of ownership (through the Ministry of Finance, Planning and Economic Development) of the development agenda. There has been some progress in mainstreaming SLM issues into sectoral and national policies but this appears to have had little direct impact on either the incentive framework within which farmers are operating, or on the resources available to assist in undertaking investments.

In a context where a significant proportion of aid is in the form of budget support, the priority placed on SLM by government as it emerges through the budget and political process is of key importance. Neither SLM nor agriculture and natural resources in general have been accorded a high priority for public expenditure in Uganda. It is unclear whether this reflects an explicit technical judgement that the costs of soil degradation and related problems are either not so high as the estimates quoted above suggest, or a lack of confidence in public expenditure to address these problems, or a political economy of decision-making that systematically neglects issues of central concern to the rural poor particularly where these may confront elite interests.

In the case of Uganda, good SLM practices appear to be based mainly on the use of inputs (such as organic fertiliser) and so do not necessarily involve a substantial and long-term investment cost. The issue is more whether there are effective economic incentives for farmers (especially poor farmers) to engage in such practices where input and marketing costs are high and farmers lack access to borrowing for crop finance, and where there appear to be significant problems related to security of tenure.

In relation to land policy, there does not appear to have been a strong political will to address the problems that have been identified with the 1998 Land Law, in particular the reliance for its enforcement and for management of the land system on district level administrations that lack the financial or staffing resources to fulfil this role effectively, and where policy changes are required to find more affordable and effective approaches to resolving land disputes and protecting land rights within resource constraints.





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The background of the page is a topographic map with contour lines, rendered in a light gray color. The lines are more densely packed in some areas, indicating steeper slopes, and more widely spaced in others, indicating flatter terrain. The map is centered on the page, with a prominent red horizontal band across the middle.

# Financing opportunities





Understanding sustainable land management policy and financing in Africa

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## Financing opportunities



## Acknowledgements

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## Abbreviations

AfDB	African Development Bank
AGRA	Alliance for a Green Revolution in Africa
BWI	Biodiversity and Wine Initiative
CDCF	Community Development Carbon Fund
CDM	Clean Development Mechanism
CER	Certified emission reduction
CES	Compensation for Environmental Services
CF-SEA	Carbon Finance for Sustainable Energy in Africa
CFU	Carbon Finance Unit
CPF	Carbon Partnership Facility
DCF	Danish Carbon Fund
DNA	Designated national authorities
DOE	Designated Operational Entity
ERU	Emission reduction unit
FAO	Food and Agriculture Organisation
FCPF	Forest Carbon Partnership Facility
FSC	Forest Stewardship Council
GBS	General budget support
GEF	Global Environment Fund
GHG	Greenhouse gas
GM	Global Mechanism of the UNCCD
IFC	International Finance Corporation
LDC	Least Developed Country
LULUCF	Land use, land-use change and forestry
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries (Uganda)
NAPA	National Adaptation Plan of Action
NFP	National focal point
NGO	Non-governmental organisation
ODA	Official Development Assistance
OPM	Oxford Policy Management
PEFC	Pan-European Forest Certification Framework
PES	Payment for environmental services
PIF	Project Identification Form
PIN	Project Idea Note
PPG	Project Preparation Grant

PRSP	Poverty reduction strategy paper (or process)
REDD	Reduced emissions from deforestation and forest degradation
RFP	Request for Proposal
SCF	Strategic Climate Fund
SGP	Small grant programme
SIDS	Small Island Developing States
SLM	Sustainable Land Management
SWAp	Sector wide approach
UNCCD	United Nations Convention to Combat Desertification
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
WB	World Bank
WTO	World Trade Organisation

This paper provides an overview of and introductory guide to funding sources of finance that complement more traditional forms of government financing and official development assistance (ODA) for Sustainable Land Management (SLM) in Africa. This includes both financing for public sector activities using special funds provided by donors (particularly those focused on environmental objectives), ODA that is potentially available to non-government sources and non-aid (market based) forms of finance involving payments for environmental services or for reducing or offsetting carbon emissions.

The paper is intended to provide guidance to African governments, the private sector and other stakeholders on a range of instruments that are potentially available to fund SLM outside the traditional forms of public sector and donor finance. It is to be read in conjunction with the FAO/GM guidelines<sup>1</sup> on policy and financing. The paper is not intended to provide a comprehensive overview of funding sources but focuses on those areas that emerged from discussions with potential users in the case study countries as of most value in filling information gaps.

The paper covers the following main sources:

Approaches to financing focused on addressing externalities through providing incentives and creating markets:

- Compensation/payment for environmental services (CES/PES) in watershed management, biodiversity and ecotourism;
- Climate change financing, including mitigation and adaptation funding, carbon finance through the regulatory market and the Kyoto Protocol's Clean Development Mechanism (CDM) and the voluntary carbon market, the UN's initiative on reducing emissions from deforestation and forest degradation and the World Bank's carbon finance unit.

Funding (grant and investment funds) from international financial institutions and bilateral donors that is specifically targeted on, or available to address, environmental objectives relevant to SLM:

- Funding for SLM available under the Global Environmental Fund (GEF), incl. the GEF Operational Program on Sustainable Land Management (OP#15), the GEF small grant programme and the GEF adaptation funds;

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<sup>1</sup> TerrAfrica. Policy and Financing for Sustainable Land Management in Sub-Saharan Africa. Lessons and Guidance for Action. Report for TerrAfrica, the GM and FAO, August 2009

- Funding for SLM available under the European Development Fund and the International Development Association;
- Environmental funds set up by bilateral donors that aim to address adaptation to climate change, incl. Cool Earth Loans, Global Climate Change Alliance, the Strategic Climate Fund, International Climate Protection Initiative, International Climate Forest Initiative and Fonds Français pour l'Environnement Mondial.

Grant funding from other sources:

- Funding from private donors and philanthropic foundations, including AGRA, Bill and Melinda Gates, and Rockefeller foundations; and

Other sources of funding (including those focused on improving the viability of appropriate forms of land use):

- Initiatives to address trade in non-traditional products which are appropriate for dryland areas, and debt for nature swaps.

The paper discusses the requirements for projects and programmes to be eligible for these types of funding. This may involve the implementer (government, non-governmental organisation (NGO) or private sector) establishing quality control or monitoring systems to enable projects and programmes to qualify for funding under particular initiatives. This emphasis on funding projects and programmes should not detract from the more general importance of a country establishing a system of policies or regulations which sets up appropriate incentives for private investment in SLM, which facilitates private sector investments into SLM, and ways of funding the public actions required through the government budget.

There is considerable activity in the area of funding for climate change. Insofar as climate change creates an adverse environment for SLM, then in the long run all such funds have some relevance as sources of funding. However, because of the time frame for climate change funding for clean technology, for example, to have impact on SLM, this paper restricts itself to funding sources which cover activities which directly impact on land use, whether in agriculture, forestry or water use. Although GEF funds are well-established and well known to most countries, an overview is included in this paper because of their key position in the financing architecture in this area.

A general conclusion of the review is however that there has to date been relatively little use of the many of these funding sources in the African context, and that this in part reflects (especially for the innovative approaches for

instance for carbon financing) the fact that funding instruments developed to date have not been well-tailored for use in Africa, especially in the poorer and more fragile contexts where the challenges of addressing SLM are likely to be greatest. This limits to some extent the scope for governments and other stakeholders to access funding through these sources, and suggests an important agenda of international action to develop more suitable instruments for use in Africa, while in the short to medium term, a funding strategy for SLM is likely to depend on the use of government resources and donor support while at the same time encouraging the institutional development that is necessary to support market-based approaches such as compensation for environmental services and climate change financing.

Under each section, there is a brief description of the areas funded, and how to go about getting funding, links to more detailed information on funding mechanisms and processes, and where possible examples of projects funded in Africa. Some funding sources are only available to non-state bodies, some to international agencies and others require government sponsorship. This is made clear in the text. Annex A presents examples of carbon and adaptation funds available for African projects.

## 2.1 CES and SLM

In principle, public and private sector payments can be used to provide incentives for the provision and commercialisation of environmental services. Public sector payments, generally seeking wider welfare gains which may not be directly measurable, frequently seek to increase benefits for multiple stakeholders at a local, national or international scale<sup>2</sup>.

Rural dwellers face choices as to the way they manage their land, both in terms of agricultural practices and grazing in wooded lands, and in terms of management of forest resources. In most countries, the incentives facing farmers and forest dwellers relate to the use of their own resources, in particular labour, in relation to the income that can be made through selling products on local, national and international markets. These include food and other agricultural products, as well as wood, including firewood. However, farmers may also produce, through SLM, environmental services that may include protection of watersheds, prevention of soil erosion, scenic landscapes, biodiversity and carbon related services. These environmental services usually do not pass through markets. They are often described as externalities. Because they are not given market values they are often undersupplied (in the case of positive externalities such as biodiversity or oversupplied (for negative externalities such as soil erosion) compared to what would be socially and environmentally desirable.

Compensation for Environmental Services (CES) is one of several mechanisms that can be used to change the market signals facing rural dwellers so that they reflect the real social, environmental and economic benefits that their activities deliver. Compensation can include cash payments (in which case schemes may be referred to as Payment for Environmental Services (PES)), payment in kind, possibly at community level, for example infrastructure development, or access to resources, e.g. land use rights. A service provider is either compensated directly by the service beneficiary or by government, donors or NGOs on behalf of the service beneficiaries.

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<sup>2</sup> Strategic concept of the climate change and the environmental services programmes of the GM of the UNCCD. Report for the GM by EcoSecurities Consult (2006).

Although the concept is fairly simple, its implementation can be complex. Both providers and beneficiaries may not be well organised to act in a collective manner, which, in some cases, will be necessary for effective CES schemes. Where payment is made by an intermediary, rather than directly through a market, there may be difficulties in valuing the services provided. Even where payment is made through a quasi-market process, there is often a very limited range of buyers, so that the market is quite unlike that for a widely traded commodity such as rice, for example.

There are three main sectors where CES schemes have been tried in Africa:

- Watershed services
- Biodiversity Management
- Ecotourism

Although Carbon Finance can be regarded as an example of CES, the funding sources and mechanisms are so sufficiently specific that they have been addressed in a separate section (see below).

CES schemes can involve different sets of stakeholders. The most common are:

- Government to government, whereby ODA can be provided to fund initial costs of projects which are intended to be self-funding, for example a project to access certified trading markets.
- National governments and private sector sellers, where funding is made available for support to the private sector, whether companies or individual farmers, to produce under specified conditions.
- Direct sales of environmental services by communities to local or overseas buyers, such as sales of high quality water from watershed management schemes.
- Sales of licences to enjoy environmental services by government, sometimes on behalf of local communities, such as licences to visit national parks, or to hunt controlled numbers of animals.

CES schemes have been slow to take off in Africa. There is a much longer track record in Latin America and in Asia. Most CES schemes are funded through ODA, international NGOs, and increasingly government agencies. There is little direct private sector involvement in CES. Reasons given for this are limited technical and market information, limited institutional experience, inadequate legal frameworks and suspicion of the market for public goods.<sup>3</sup> It is also important to

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<sup>3</sup> The United States Agency for International Development (USAID) PES brief no.7, Payments for Watershed Services, Synthesis Report, 2007

note that private sector CES schemes will have to find funding for the upfront costs of establishing the scheme, before a sufficiently large market is developed so that the scheme becomes self-sustaining. For community based schemes this will inevitably require either government assistance or ODA.

The following potentially relevant lessons emerged from the experience of the GM during the implementation of two pilot initiatives in Nicaragua and Ecuador/Peru:<sup>4</sup>

- Partnerships between international organisations, the private sector and local partners in the development of carbon sequestration/PES projects can work but need clear implementation modalities and guidelines and parallel capacity development measures for concerned, local stakeholders.
- Incentives (e.g., clear investment/sales opportunities) for stakeholders or project developers are important to make them believe and move into the growing carbon market or the other emerging environmental services markets.
- The selected pilot projects all had in place a basic infrastructure and minimal available basic funding.
- Most environmental services buyers/investors are primarily not interested in poverty reduction components but in the payment for services that helps them to maintain/increase profits or rather minimize costs. However, poverty reduction comes in under (additional) PR/marketing values.
- Clear, sound project implementation structures with respect to coordination and management roles are needed to ensure resource effective implementation (time- and cost-wise), as well as an overall project coordinator should be assigned to coordinate and manage the implementation of activities, including the allocation and management of budgets to avoid implementation delays and cost constraints.
- The still long lead times, which will decrease significantly when more land use, land-use change and forestry (LULUCF) projects have entered the market, for projects with the specific framework conditions or requirements as in this case do not allow for the identification of project (pipelines), project development and buyer negotiations within one project phase; unless longer time periods (i.e. more than a year) and budgets are allocated or collaborations with other initiatives are established to complement activities.

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<sup>4</sup> Strategic concept of the climate change and the environmental services programmes of the GM of the UNCCD. Report for the GM by EcoSecurities Consult (2006).

- The development of several environmental services components of a project or programme is unrealistic within short time periods (e.g., one year) and related budget limitations. Again, longer time periods (i.e. more than a year) and budgets need to be allocated or collaborations with other initiatives established to complement activities.

The main constraints that so far have been identified for the watershed and biodiversity protection markets, mostly through learning-by-doing experiences, are:

- High transaction costs;
- Legal feasibility constraints;
- Lack of clearly perceived benefits by buyers; and
- Lack of clearly perceived benefits by sellers.

The following sections give some examples of CES schemes in Africa in specific sectors.

## 2.2 CES in watershed management

Improved forest or land management, afforestation and reforestation, and forest protection are related activities and are often included in payment agreements between water users and watershed managers. The majority of watershed protection services and related seller-buyer arrangements usually take place at the local level, unless one is dealing with a transboundary scheme. The following services and commodities can be included in payment schemes:

### Services

- Water flow regulation
- Water quality maintenance
- Erosion and sedimentation control
- Reduction of land salinisation/water table control
- Maintenance of aquatic habitats

### Commodities

- Best management practice contracts
- Ecolotree plantings
- Salinity-friendly products
- Salinity credits
- Fish habitat or safe products related payments
- Stream flow reduction licenses
- Transpiration credits
- Water rights

- Water quality credits
- Watershed lease
- Watershed protection contract

Main groups of users include hydroelectric power generators, municipal water supply systems, irrigation systems, industrial users, and populations in flood-prone areas. Each watershed management payment contract is unique and its provisions cannot easily be standardized as, for example, in the case of greenhouse gas emission reductions purchase agreements (ERPAs). Apart from the diversity of stakeholders and their objectives, another important reason for this unsuitability for standardization is that there is no set 'currency' for watershed protection services, nor is it easy to quantify indicators.<sup>5</sup>

As pointed out above, there has been very limited progress in establishing CES in watershed management in Africa, despite the potentially profound effect of land management practices on water supply. Of 61 cases of CES schemes involving watershed protection identified in 2002, only five were in Africa. There was, at one point, interest expressed by the Nairobi City Water and Sewerage Company, who felt that use of naturally purified water would reduce their costs while maintaining sustainable water resources. The investment in watershed management could have been a useful contribution to SLM in the relevant area, providing incentives to maintain properly managed water sources. However the institutional obstacles in negotiating a CES, given the separation of agencies addressing water services from those addressing water resource management, and the absence of a policy framework for CES, made the whole initiative too risky.

In general, African municipal water supply systems suffer from underinvestment, low levels of cost recovery, low payment rates for water bills and poor financial management. CES schemes are therefore not high on their current list of priorities and few would have the resources or management capacity effectively to implement such schemes in the short term.

### 2.3 CES in biodiversity management

There are strong synergies between land degradation and loss of biodiversity. The CBD defines biological diversity as "the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes

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<sup>5</sup> Strategic concept of the climate change and the environmental services programmes of the GM of the UNCCD. Report for the GM by EcoSecurities Consult (2006).

diversity within species, between species and of ecosystems". In comparison to watershed protection biodiversity protection services do cross national borders and can be traded internationally. The following particular services and commodities exist:

#### **Services**

- Providing habitat conditions that support diverse wild plant, animal and microorganism populations of economic or cultural value, including subsistence value
- Maintaining ecosystem functionality
- Conserving genetic and chemical information with potential future utility
- Providing insurance against undesirable future changes
- Providing spiritual, aesthetic and cultural value
- Ensuring the continued existence of wild organisms as legitimate claimants on the Earth's resources

#### **Commodities**

- Purchase of high-value habitat/land explicitly for biodiversity conservation by private (including NGOs) or public (government agencies) entities
- Compensation for access to species or habitat
- Payment for biodiversity-conserving management practices
- Tradable rights under cap-and-trade regulations
- Support for biodiversity-conserving businesses

Buyers of project-based biodiversity protection will usually voluntarily engage in transactions. Private corporations and international NGOs are the largest buyer groups, each being active in some 50% of cases. Communities are the largest group of sellers (50% of cases), followed by private landowners and local NGOs (each around 20%). Trust funds are usually set up as intermediaries and can significantly increase the credibility of a scheme towards either side. Overall, intermediaries are used in more than 50% of the cases. Intermediaries are particularly useful where multiple landowners or other stakeholders are involved.<sup>6</sup>

Wildlife management is one area of biodiversity protection that has been used in Africa. Although ecotourism projects are the most common way in which wildlife management is addressed in Africa, there are other examples of wildlife management which are not directly targeted towards, or funded by ecotourism. In Kitengela, an area close to Nairobi, and the Nairobi National Park, the

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<sup>6</sup> Strategic concept of the climate change and the environmental services programmes of the Global Mechanism of the UNCCD. Report for the GM by EcoSecurities Consult (2006).

subdivision of group ranches into private parcels in 1986, and the subsequent fencing off of private land, has led to land use change from pastoral to cultivation and increased urbanisation. This in turn has posed serious challenges to the movement of livestock to and from the National Park.

In 2000, the Kitengela Wildlife Conservation Lease Programme<sup>7</sup> was launched to help local Maasai retain ownership of their land while leaving land open and uncultivated and allowing movement of wildlife and livestock. Landowners are paid \$4 per acre per annum for the opportunities foregone, and participation is on a voluntary basis. The programme is led by the Wildlife Foundation and Kenya Wildlife Society, and is supported by a number of local organisations, as well as bilateral donors, such as USAID. The programme supports SLM through paying landowners not to adopt unsustainable practices.

## 2.4 CES in ecotourism

Land stewards have for a long time been paid by 'consumers' (i.e., tourists and tour agencies) for providing access to beautiful landscapes. Existing payment schemes involve site-specific negotiations and transactions, such as short and long-term access agreements, entrance permits, forest management contracts, as well as payment systems at the national level which were introduced by governments (e.g., user fee systems in national parks or schemes for sharing revenue from protected areas with local communities).

The following commodities are used to market landscape beauty:

- Access rights and entrance permits
- Packages of tourist tours and services
- Natural resource management agreements/projects
- Ecotourism concessions
- Photographic permits
- Land acquisition
- Land lease

Payment mechanisms, often combined or in hybrid forms, are:

- Over-the-counter transactions (entrance and user fees, land acquisition)
- Direct negotiations and payments between tour operators and local land stewards
- Vertical integration where local land stewards develop their own tourism operations

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<sup>7</sup> <http://www.reto-o-reto.org/downloads/policyinfobriefs/PolicyBrief1KitengelaLeaseProgramme.pdf>

- Trust funds
- Intermediaries (NGOs, government, private)
- Joint ventures between tour operators and land stewards
- Retail based markets
- Clearing-house mechanisms for allocating payments
- Auction-based market.<sup>8</sup>

This is the area where there has been most activity. Box 2.1 gives an account of perhaps the longest standing ecotourism initiative in Africa. However there are now many others. In some cases these started using aid resources. The Torra Conservancy in Namibia, however, is a private sector-community partnership which runs a conservancy for tourism and hunting. Some funding comes from a local environment NGO, but most comes from licences to hunt, and a lodging tax paid to the community by a luxury lodge built in the conservancy area.

## 2.5 Useful guidance material and weblinks

The Food and Agriculture Organisation (FAO) has a useful set of guidance notes on setting up a CES scheme, which can be found at [www.fao.org/es/esa/PESAL/scheme.html](http://www.fao.org/es/esa/PESAL/scheme.html)

The World Bank has also had an interest in promoting CES schemes, and has prepared a number of tools. An introduction which focuses on a number of initiatives, such as a water treatment plant in Kenya, to show both the logic and the potential problems associated with this can be found at <http://siteresources.worldbank.org/INTEEI/Resources/IntroToPES.pdf>.

A more general introduction can be found at <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/ENVIRONMENT/EXTEEI/0,,contentMDK:20487921~isCURL:Y~menuPK:1187844~pagePK:210058~piPK:210062~theSitePK:408050,00.html>. The WB is intending to produce a best practice paper which should be available at this site in the near future.

The Katoomba group is an international working group which addresses key challenges to developing markets and payments for ecosystem services. They have published a step by step approach to how to set up a CES: “An Introductory Primer to Assessing and Developing Payments for Ecosystem Service Deals”: [www.katoombagroup.org/~katoomba/learning\\_tools.php](http://www.katoombagroup.org/~katoomba/learning_tools.php) .

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<sup>8</sup> Strategic concept of the climate change and the environmental services programmes of the GM of the UNCCD. Report for the GM by EcoSecurities Consult (2006).

### **Box 2.1 Communal areas management programme for indigenous resources in Zimbabwe**

Communal areas management programme for indigenous resources (CAMPFIRE)<sup>9</sup> was set up in 1986 to manage wildlife and wildlife habitat in the communal lands in Zimbabwe for the benefit of rural people living in these areas. Prior to this wildlife was treated as state property, only rarely used commercially under a state licence, and as a result wildlife was threatened by farmers, both commercial and communal, who treated it as a pest. Since 1975, the private sector has been able to set up game ranches on their land, engaging in sport-hunting, game viewing, selling animals for meat, etc., it was not until 1982 that similar rights were extended to the communal sector. CAMPFIRE was developed to allow people living next to wildlife habitat to get direct payment from the use of wildlife, with district councils acting as the responsible authority.

Between 1989 and 2001, CAMPFIRE revenues amounted to \$20.3 million, almost 90% from safari hunting licences, the most valuable product. Although the programme predates the current interest in CES, it has clear similarities, in that safari operators are paying to bring hunters or eco-tourists into their concession areas. The Rural District Councils (RDCs) act as sellers on behalf of the local communities, and they are supposed to give at least 50% to the communities, not more than 35% should go into wildlife management and about 15% is retained by the RDC as an administrative levy. Increasingly licences were awarded through competitive tender.

CAMPFIRE works on the assumption that the benefits received by the RDC and the community are sufficient for them to modify their use of land in ways appropriate for maintaining wildlife populations through habitat conservation. In some areas people have resettled, and in others they have restricted land clearance.

CAMPFIRE is regarded as a very successful natural resource management programme in southern Africa. However problems have arisen in three areas: the actual wildlife areas in the communal areas are not clearly demarcated in such a way as to ensure economic viability and ecological sustainability; it can be difficult to achieve consensus within communal areas; and there is a lack of clearly defined property rights at both individual and communal areas. There is also little overall monitoring as to the impact on wildlife populations and habitat. There has been no analysis as to the relationship between concession fees and the quality of wildlife habitat. However, the experience does illustrate some of the benefits and pitfalls of CES in wildlife management.

There are investment funds and NGOs prepared to invest in small companies who meet certain conservation criteria, which could include SLM objectives. One such example is Verde Ventures, an investment fund of Conservation International, which funds projects which promote biodiversity conservation. Further information can be found at <http://web.conservation.org/xp/verdeventures/>

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9 See Frost, P.G. and I. Bond, Campfire and payment for environmental services, IIED, 2006

### 3.1 Introduction and background

Climate change is closely related to SLM. The increase in extreme weather events (droughts, hurricanes, heavy rains) has contributed to further land degradation and desertification. At the same time, land degradation caused by unsustainable agricultural and land management practices (such as deforestation, increased use of bio-fuels) is in a major contributor to increased greenhouse gases (GHG) emissions.

Activities which promote SLM and address climate change can be categorised as mitigation activities and adaptation activities. Mitigation activities aim to reduce the production of carbon and other greenhouse gases, thereby avoiding land degradation. These include carbon sequestration activities, such as afforestation and reforestation, carbon conservation through conservation of biomass, carbon substitution through improved use of biomass, and substitution of renewable materials for energy-intensive materials, and GHG reduction. Many of these activities may be able to generate carbon credits, and thus provide incentives for the rural poor (among others) to participate.

Climate change adaptation activities focus on assisting communities to develop sustainable technologies to address the challenges of ongoing climate change. This could be at the level of infrastructure, such as landslide barriers, or development of more drought resistant seeds and technologies.

The section below sets out the possibilities of financing mitigation activities, including the rapidly developing options for carbon financing. Adaptation funds are addressed in Sections 4 and 5, on the GEF, and other environmental funds. Annex A lists carbon funds and adaptation funds available for African projects.

Carbon financing aims to reward financially sustainable business activities which reduce their overall carbon footprint. Through carbon markets, environmentally sustainable businesses trade/sell their accrued carbon credits globally. This Carbon Finance (CF) model therefore directly provides financial reward for environmentally friendly business models.

Projects implemented under CF funds have the potential to contribute to the overall aims and goals of the SLM/UNCCD and UNFCCC. Themes under which CF projects are organised bear close resemblance to the SLM and climate change adaptation agendas:

- Forestry (afforestation/ reforestation, avoided deforestation, sustainable forest/land management);

- Energy (energy-efficiency at household or community level, biofuels, and bio-energy);
- Agricultural and rural sectors (cropland and grazing land management, methane-focussed interventions in the agricultural sector);
- Biodiversity (watershed and soil management, biodiversity conservation).

For instance, in the Uganda National Action Plan for the UNCCD, rural energy consumption is identified as a key barrier to sustainable forestry and land management initiatives.<sup>10</sup> The Ugandan Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) has developed a 'Rural Electrification Strategy and Action Plan', which promotes the use of renewable energy forms, namely, bio-gas, solar, small hydro, and wind resources – which cumulatively reduce the burden on forestry resources for providing fuel.

The Mozambique National Adaptation Plan of Action (NAPA) identifies four key issues which resonate strongly with SLM objectives as stated by the GM's Country Programme: agriculture, water, energy, and health – which are considered particularly vulnerable to climate change. Of these, the energy and agricultural sectors are particularly relevant to CF projects. In Mozambique, the most used source of energy is biomass and charcoal, accounting for 80% of annual energy consumption in Mozambique. As a result, CF projects which generate energy, which does not have biomass as a source, can help achieve the goals of sustainable forestry management as well.

In Mozambique, agriculture supports 80% of the population. The government's strategies to mitigate desertification and to adapt to the negative effects of Climate Change include: increasing seed varieties; developing and researching new and alternative technologies and low cost technologies; adopting community based knowledge; opening new research centres at local level; promoting conservation practices; and investing in technologies to deal with droughts. There are a number of potential areas for implementing CF projects within this menu of action<sup>11</sup> (Bambaige, 2007:11).

However, not all adaptation-related work falls under the remit of CF projects and funds. The end-product of CF projects is the generation of carbon credits, and that is the specific focus of this section of the paper. Although adaptation and climate change related programming has synergies

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**IFC definition of carbon credits:**

Carbon credits are GHG emission reductions that are created when a project reduces or avoids the emissions of GHGs, such as carbon dioxide or methane, relative to what would have been emitted under a 'business as usual' scenario. For example, a new wind power plant that displaces existing or expected coal-fired power generation would create a significant amount of credits, as would a project at a landfill that captures and utilizes some or all of the methane that previously escaped into the air. In contrast, a wind power project that offsets hydropower would not generate credits as the baseline itself has no GHG emissions."

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<sup>10</sup> Uganda Ministry of Agriculture, Animal Industry and Fisheries. 1999. "Framework for the National Action Programme to Combat Desertification and Drought in Uganda", October 1999, pg. 24.

<sup>11</sup> A. Bambaige (2007), "National Adaptation Strategies to Climate Change Impacts - A Case Study of Mozambique", p. 13.

with the SLM agenda, it does not necessarily generate carbon credits, and as a result, it is not included for analysis in this section of the paper. An overview of the GEF's three adaptation funds can be found in the next chapter of this paper.

There has been relatively little progress in developing carbon finance in Africa. For example, the World Bank carbon finance operations have had modest success in developing the carbon market in the Africa region, accounting for 14 projects with signed emission reductions purchase agreements and 30 in the project pipeline. To put this in perspective, out of a total global carbon market of \$30 billion in 2006, with the share of developing countries totalling \$5 billion of that amount, Africa's share was only \$200 million (World Bank, 2007:12). The Clean Development Mechanism (CDM) of the Kyoto Protocol has also engaged a number of African participants. In particular, these include the wood/bio-fuels industry, forestry management, and waste-management sectors. But the size of this initiative is so far small compared to the World Bank's operations.

Section 3.2 looks specifically at the major mitigation mechanisms, and their related funds and projects, currently working to reduce greenhouse gas emissions. Section 3.3 reviews the main carbon financing programmes and facilities.

## 3.2 Carbon finance through greenhouse gas mitigating mechanisms

There are two principal options for project-based mitigation of GHGs. Both options may offer a financial return for the reduction of emissions: The CDM under the Kyoto Protocol and Voluntary projects that are outside the Kyoto framework.<sup>12</sup>

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### Operational successes of CDM

Since 2006, the CDM has registered more than 1,000 projects and is anticipated to produce CERs amounting to more than 2.7 billion tonnes of CO<sub>2</sub> equivalent in the first commitment period of the Kyoto Protocol, 2008–2012.

Source: CDM Website

### The Kyoto -Protocol's clean development mechanism

The CDM is one of three flexible mechanisms created by the Kyoto Protocol to enable the trading of credits for carbon emissions reductions. The CDM allows emission-reduction (or emission removal) projects in developing countries to earn certified emission reduction (CER) credits, each equivalent to one tonne of carbon dioxide. These CERs can be traded and sold, and used by industrialized countries to meet a part of their emission reduction targets under the Kyoto Protocol.

The mechanism stimulates sustainable development and emission reductions through a range of projects focused on forestry management, agricultural methods, hydroelectric power and landfill management.

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<sup>12</sup> Step-By-Step Guidelines on Developing Greenhouse Gas Mitigation Activities and Accessing Carbon Finance to Support UNCCD Implementation. The GM (2008)

## **The clean development mechanism in Africa**

CDM is currently the only mechanism available to countries such as South Africa which have no formal commitments to reduce emissions under Kyoto. The emissions reductions credits generated through CDM projects cannot currently be traded by organisations in African countries, but they can be sold on to organisations in developed countries. They in turn either trade them or use them to offset their own emissions caps.<sup>13</sup>

Key initiatives of the CDM aimed at improving the capacity of African countries to take part in the mechanism include:

- **The Nairobi Framework** - catalysing the CDM in Africa: The Nairobi Framework was initiated by the United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), World Bank Group, African Development Bank (AfDB), and the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) with the specific target of helping developing countries, especially those in sub-Saharan Africa, to improve their level of participation in the CDM.
- **Africa Carbon Forum** brings together representatives from designated national authorities (DNA), national focal points (NFP), representatives from several UN agencies, governments and the private sector. The Africa Carbon Forum is a platform that will strengthen links between CDM project developers and the region's investment community, provide opportunities for DNA representatives to exchange views and share their experiences relating to the CDM, while facilitating knowledge sharing and transactions between project sponsors and global carbon offset credit buyers.

## **Project process**

There are three types of CDM projects: (i) large scale projects; (ii) small scale projects<sup>14</sup> and (iii) afforestation/reforestation projects.<sup>15</sup> The process for approving projects under the CDM includes first a Project Design (PDD) phase, followed by an Accreditation phase. "The projects must qualify through a rigorous and public registration and issuance process designed to ensure real, measurable and verifiable emission reductions that are additional to what would have occurred without the project". In order to be considered for registration, a project must

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13 <http://www.carbonfinanceafrica.org.za/default.asp?pageid=2216>

14 [http://cdm.unfccc.int/Projects/pac/pac\\_ssc.html](http://cdm.unfccc.int/Projects/pac/pac_ssc.html)

15 [http://cdm.unfccc.int/Projects/pac/pac\\_ar.html](http://cdm.unfccc.int/Projects/pac/pac_ar.html)

first be approved by the DNA. Project methodology is then approved in order to acquire CDM validation. Finally, upon successful completion, credits are issued to the project stakeholders.

Once the CERs have been validated and are ready to be sold/traded, the CDM offers stakeholders a web-based facility known as the CDM Bazaar. This Bazaar facilitates the exchange of information on CDM project opportunities. Sellers, buyers and relevant service providers create profiles of their activities, and are able to directly communicate with each other to facilitate the trading process. <http://www.cdmbazaar.net/>

### **Key stakeholders**

The DNA is the relevant ministry/department tasked with ensuring the implementation of CDM initiatives. The following link includes contact details for a number of African national authorities: <http://cdm.unfccc.int/DNA/index.html>

The Designated Operational Entity (DOE) is either a domestic legal entity or an international organization accredited and designated by the CDM Executive Board. <http://cdm.unfccc.int/DOE/index.html>

### **The voluntary market**

Voluntary projects are outside the Kyoto framework. Such projects do not comply with a universally recognized and policed regulatory framework and the voluntary approach may therefore be applicable for projects which do not meet the different regulatory requirements set out by the CDM. Emission reductions from voluntary projects are typically purchased by actors in the private or public sector that are not regulated but would like to take action on climate change or prepare for future emission targets that they may be subjected to.

The voluntary market is burgeoning in the United States and the European Union (EU), mostly stimulated by demand for Verified Emission Reductions (VERs) from organizations and companies that want to limit their GHG footprint on the environment. For example, the emissions from flying on a holiday can be calculated and offset by purchasing carbon credits. This way a flight can be made carbon neutral. Due to the increasing global awareness and concern about climate change the demand for carbon credits is therefore continuously increasing.<sup>16</sup>

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<sup>16</sup> Step-By-Step Guidelines on Developing Greenhouse Gas Mitigation Activities and Accessing Carbon Finance to Support UNCCD Implementation, The Global Mechanism (2008).

### **Box 3.1 Clean development mechanism projects in Africa**

As of the end of April 2007, there were nine registered CDM projects in South Africa, and another 8 at validation or revision, with many more in the pipeline. There has been a surge of local interest in CDM, and many new developers are seeking guidance on dealing with the CDM procedures and methodologies. Some of the country's "success stories" include a growing industry of CDM developers and consultants, and the lessons learned from projects that have made it through the project cycle.

Several major achievements stand out:

1. South Africa now has an established CDM project approval process. Successful project developers have been working closely with the DNAs to get early assessments of project sustainability.
2. The environmental impact assessment process is now an integral part of the CDM process rather than an obstacle to it.
3. Most of the less-complicated projects - such as those involving reduction of industrial gases such as N<sub>2</sub>O and landfill gas-to-electricity projects - are either completed or actively under development. Opportunities now exist for the development of more ambitious and complex projects, e.g. renewable energy and energy efficiency projects.
4. Increased awareness of CDM as a financing option has led to more intensive involvement by banks and other financing institutions, who increasingly see CDM as an opportunity to improve the client's cash flow and thereby reduce lenders' risks.
5. The pool of CDM expertise is expanding rapidly, with many new project developers and specialist consultants marketing their skills and providing capacity-building opportunities as well.

During this initial period of CDM development, several flagship projects have been approved despite numerous technical uncertainties and significant methodological and procedural barriers. Current and future project developers have gained valuable lessons from these early experiences.

Source: <http://www.carbonfinanceafrica.org.za/default.asp?pageid=2269>

### **Reducing emissions from deforestation and degradation**

A study for the GM<sup>17</sup> notes that reducing emissions from deforestation and forest degradation (REDD) initiatives are an attempt to address the problem that the UNFCCC and the Kyoto Protocol do not contain sufficient mechanisms to reward efforts aimed at avoiding deforestation and land degradation in developing countries, since the opportunity to gain carbon credits under the CDM is limited to reforestation and afforestation projects. This study reviews a range of options under consideration to link measures to avoid land degradation and destruction of forests to carbon markets. It notes that a critical requirement

17 EcoSecurities (2008a), The Potential of REDD to Combat Land Degradation and Promote Rural Development, draft, April.

for any effective scheme will be to determine the spatial extent and carbon content of UNCCD relevant forests, and that substantial progress would be required to foster good governance and build local capacity, though the study suggests that an optimistic view would be that REDD could provide both incentives and funds to tackle corruption and improve governance structures. Specific requirements to make any scheme operational in the context of low income developing countries (and a fortiori in those with the greatest vulnerability and insecurity where incentives and capacity for effective resource management are likely to be weakest) include: strengthened land use planning and law enforcement capacity, while at the local level smallholders and community organisations would need to acquire the legal standing and understanding of preconditions to tap into REDD mechanisms.

While this may be a feasible strategy for African countries with stronger overall institutions these opportunities currently appear of little relevance to the poorest and most insecure situations. The key challenge for the international community (for the post 2012 carbon regime) is to design instruments of support and financing for REDD that are tailored to the needs of the poorest and most vulnerable contexts. The prerequisites for access to any more sophisticated financial instruments are anyway strengthened legal and regulatory regimes, and more effective and accountable organisations for resource management and service provision. Progress in this form of institutional development remains the critical requirement for more effective resource management.

### **3.3 Carbon financing programmes and facilities**

Two institutions have taken the lead in establishing GHG mitigation mechanisms, and they are the Kyoto Protocol's CDM, and the World Bank's Carbon Finance Unit (CFU). A third set of mechanisms is coordinated by the UNEP. The following analysis is by no means a complete list, as the number of funds under both the CDM and CFU and private-sector voluntary markets has been growing rapidly.<sup>18</sup>

#### **The World Bank and carbon finance**

The World Bank's LULUCF programme is the main link between SLM activities and carbon finance structures. The LULUCF focuses on forestry projects in developing countries and its corresponding forest portfolio has grown from \$149 million in fiscal year 2001 to \$540 million in fiscal year 2007. Of this, Africa accounts for 29% of the portfolio.

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<sup>18</sup> See Porter, Bird et. al. "New Finance for Climate Change and the Environment", [http://www.odi.org.uk/fccc/resources/reports/s0178\\_final\\_report.pdf](http://www.odi.org.uk/fccc/resources/reports/s0178_final_report.pdf)

The BioCarbon Fund (BioCF) has emerged as a leader in developing credible protocols and methodologies for LULUCF projects (World Bank, 2007:74). It is based on a public/private partnership model, and focuses on biodiversity and conservation projects. The Fund was designed to provide the World Bank's Borrowing Member Countries with an opportunity to benefit from carbon finance in the areas of forestry, agriculture and land management. The Fund provides resources for projects that are consistent with the regulatory requirements of the CDM (WB, 2004:1). Although it is closed to new participation, the Fund considers purchasing carbon from a variety of land use and forestry projects. Previous examples of projects include afforestation and reforestation, REDD and exploring innovative approaches to agricultural carbon.

The CFU serves as the World Bank's in-house resource for all carbon finance-related issues, providing services directly to buyers and sellers. The Unit leads in the development of new products, and serves as an advisor on a variety of products and services to support private sector participation in the evolving carbon market. The World Bank manages about one billion dollars to purchase credits of greenhouse gas emission reductions from projects that are expected to be registered with the CDM of the Kyoto Protocol.

### **Project process**

The website for the CFU contains a comprehensive tool-kit for potential applicants, which includes guidelines on how to prepare project proposals. There are also a number of stated minimum requirements necessary to advance the project process. In the first instance, Project sponsors submit a Project Idea Note (PIN) which provides a basic overview of the proposed project. Following initial approvals to include the project into its Portfolio, the CFU then commissions a Baseline Study and Monitoring Plan which in turn informs the design of the project in operational terms. After a series of consultations between the designated local authorities who are responsible for operational control of the project and the CFU, the processes of verification and certification are completed.

### **Carbon funds**

Governments and companies in OECD countries have set up CFs under the management of the CFU to purchase project-based greenhouse gas emission reductions in developing countries and countries with economies in transition. The emission reductions are purchased through one of these carbon funds on behalf of the contributor, and within the framework of the Kyoto Protocol's CDM or Joint Implementation (JI). The focus of these Carbon Funds varies. Some

address carbon sequestration in agroforestry and forest projects, others emphasise elements of governance and partnership, and others are identified with an individual donor. In all cases, they are managed by the CFU, which should be the first port of call for a potential carbon financing project. The CFU provides information on project design, eligibility and requirements on its website, <http://wbcarbonfinance.org/Router.cfm?Page=Funds&ItemID=24670>

A list and details of current carbon finance funds is available at Annex A. Some examples of projects funded through the CFU are presented below.

### **Box 3.2 Examples of projects funded by the carbon finance unit**

#### **Nigeria: Aba Cogeneration Project (Community Development Carbon Fund)**

SLM relevance area: BioFuels

The Nigeria Aba Cogeneration project will introduce more efficient, gas-fired cogeneration to displace more carbon-intensive fuels from off-grid generation, as well as from the national power grid. The new plant will also supply carbon dioxide to a local brewery, which currently produces the gas from generators using diesel and provide its waste steam to other local businesses that will no longer have to burn diesel to generate steam. The Community Development Carbon Fund will purchase emission reductions of 1.1 million tons of carbon dioxide equivalent over a seven year crediting period. The CDCF added a community benefits plan to the project, which will provide health and education facilities. This project was short-listed under "Best Carbon Finance Initiative" by the Africa Investor Awards 2007.

#### **Kenya: Olkaria II Geothermal Expansion Project (Community Development Carbon Fund)**

SLM relevance area: infrastructure, electricity/energy production, forestry/rural fuel consumption

In the past two decades, the quality of delivery of energy and other infrastructure services in Kenya has declined. Only about 15% of the population has access to electricity supply. The use of household commercial fuels to substitute for fuel wood and biomass use, which is causing acute depletion of the country's forest resource, is among the lowest in Sub-Saharan Africa on per capita consumption basis.

The Olkaria II Geothermal Expansion Project consists of expanding a geothermal power plant, from 70 megawatts to 105 megawatts by constructing a new unit (incremental addition of 276 gigawatt hours per year). It will displace the electricity that would be generated by fossil fuel thermal power plants in the Kenyan grid, reducing 171,000 tons of carbon dioxide per year. The Community Development Carbon Fund is purchasing 900,000 tons of carbon dioxide equivalent emission reductions from the project. The community benefits to be delivered under this project include the provision of clean water (through the construction of water lines and storage tanks); the provision of educational benefits (through the construction and equipping of classrooms, administration blocks, and boarding facilities); provision of health benefits (through the construction and equipping of health centers); livestock improvements (through the rehabilitation and construction of cattle dips); and improved access to markets and educational and health facilities (through the upgrading of rural roads).

#### **Niger: Acacia Senegal Plantation Project (World Bank BioCarbon Fund)**

SLM relevance area: forest conservation

This BCF project will reforest over 17,700 hectares of Acacia Senegal, a species endemic to the whole African Sahel, over a five-year period. The project should allow the sequestration of around one million tons of carbon dioxide equivalent emission reductions by 2017. Also, the project should annually produce about 4,000 tons of gum as well as groundnut, cowpea and other crop production resulting from intercropping. About 10,000 farming families are expected to receive social benefits from the project through additional revenues generated by Arabic gum, grains and forage, combined with certified emission reductions.

#### **Mali: OMVS Felou Regional Hydropower Project (Spanish Carbon Fund)**

SLM relevance area: rural electricity/energy production

The purpose of this project is to generate zero emissions hydroelectricity from a run-of-river hydroelectric installation on the Senegal River in Mali. The Félou Regional Hydropower Project will deliver clean energy to the interconnected grid in the sub-region including Mali, Mauritania and Senegal. Currently, the electricity generated in the three countries that is sent into the interconnected grid is relatively carbon intensive. This project is expected to reduce emissions of greenhouse gases by an estimated 160,908 tonnes of CO<sub>2</sub> per year during the first crediting period.

Source: <http://carbonfinance.org/Router.cfm?Page=SCF&FID=9714&ItemID=9714&ft=Projects&ProjID=38205>

### **The United Nations Environment Programme and carbon finance**

The United Nations Environmental Programme (UNEP), works to facilitate the transition to low-carbon societies, support climate proofing efforts, improve understanding of climate change science, and raise public awareness about this global challenge. It is one of the UN partners in REDD (see below).

#### **Risoe centre on energy, climate and sustainable development**

Risoe centre on energy, climate and sustainable development (URC) supports the UNEP in its aim to incorporate environmental aspects into energy planning and policy world-wide, with special emphasis on developing countries. The Centre supports research by local institutions, coordinates projects, and disseminates information. URC pursues its objectives through:

- The initiation of, and participation in, UNEP-sponsored energy-environment projects at national or regional level,
- Research and methodological development on energy-environment issues and climate change mitigation,
- Technical support to programmes on energy and climate change.

The URC's Climate-related activities are all focused on African countries. Projects like the Carbon Finance for Agriculture, Silviculture, Conservation and Action against Deforestation (CASCADE - Africa) aim to enhance expertise to generate carbon

credits in LULUCF as well as bioenergy activities in Sub-Saharan African countries.

Furthermore, energy-related activities of the URC focus on financing, renewables and efficiency, institutional reform, energy access and rural energy, and general planning, modelling and policy. Under this strand, there are a few Africa-specific projects, namely:

- African Rural Energy Enterprise Development
- Development and Energy in Africa
- Energy Planning in Burkina Faso
- Improving the Economic and Social Impact of Rural Electrification (IMPROVES-RE).

### **Carbon finance for sustainable energy in Africa**

The carbon finance for sustainable energy in Africa (CF-SEA) is a joint UNEP-World Bank initiative, including Cameroon, Ghana, Mali, Mozambique and Zambia. According to the main website of the project, teams have been working with host government agencies, banks and project sponsors to develop an initial pipeline of CDM investment opportunities – some of which the World Bank hopes to finance through its Community Development Carbon Fund. At its core, the CF-SEA targets African countries that offer the best prospects for implementing a number of CDM projects within a reasonable timeframe.

### **Project process**

The CF-SEA works on a two-track approach. The first is Track 1 - Capacity Development for CDM. Country teams first identify potential local and regional partners, institutions and experts and assess their capabilities and immediate needs. The second step focuses on hands-on training and capacity-building to institutions/experts through technical training courses, field trips, web-based training and project development workshops.

Track 2 is focused on Targeted Technical Assistance for Project Preparation, whereby experienced international carbon-consultants are providing the technical expertise, and financial engineering needed to successfully bring PINs and CF documents to fruition.

### **Implementing agencies**

Programme implementation and management is being carried out jointly by UNEP Division of Technology, Industry and Economics (DTIE), the UNEP RISOE Centre, and the World Bank's Community Development Carbon Fund (CDCF). Project funding is provided through contributions from the UN Foundation and the CDCF.<sup>19</sup>

## **The United Nations collaborative programme on reducing emissions from deforestation and forest degradation**

The United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (UN-REDD Programme) is a collaboration between FAO, UNDP and UNEP. A multi-donor trust fund was established in July 2008 that allows donors to pool resources and provides funding to activities towards this programme. A framework document was agreed in June 2008.

A quick start programme will lead up to the UNFCCC COP in Copenhagen in December 2009, covering areas such as:

- Building capacity of developing countries to implement REDD actions to maximize emission reductions and activities towards beneficial outcomes at the national and local levels (including co-benefits);
- Testing a range of activities relevant to the REDD negotiations under the auspices of the UNFCCC, leading up to the Conference of the Parties in 2009, including training of negotiators about REDD;
- Testing preliminary concepts and scenarios for REDD building both knowledge base of successes and failures; and
- Paving the way for long-term engagement of REDD into the carbon market through payment for ecosystem services

Activities will be both country-led and international. Country activities will come under a national steering committee, including the UN partners. At present USD 35 million has been committed to the REDD fund.

### **3.4 Constraints and opportunities for using carbon finance in Africa**

The sections above have provided information about sources of finance and relevant initiatives for using carbon finance that has potential relevance to SLM in Africa. However, to date there has been extremely limited use of these resources in Africa despite the substantial opportunities for GHG mitigation, as well as the potentially urgent problems of adaptation that are faced.

For example, EcoSecurities (2008b)<sup>20</sup> notes that there are no CDM projects in the Horn of Africa and that outside South Africa and Morocco (with thirteen and four projects respectively) “CDM projects remain thin on the ground in

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19 For further information see: UNEP-RISOE Centre <http://uneprisoe.org/CFSEA/> ; <http://www.uneptie.org/energy/act/re/CF-SEA/index.htm>.

20 EcoSecurities (2008b), Carbon Market Analysis – Fighting Climate Change and Desertification in the Horn of Africa, A Study for the GM, Den Haag, 28th February.

comparison to countries such as India, China or Brazil.” Similarly only two adaptation projects could be identified in the Horn of Africa. This study identifies two main types of barrier to accessing these opportunities in the Horn of Africa. The first relate to general governance, capacity and institutional constraints (which potentially impact on all forms of investment activity). These include a lack of political stability and urgent calls on resources that militate against longer-term investments such as action on climate change, weak financial markets, and a wide range of constraints on private sector initiative resulting from lack of information, and poor communications infrastructure. Specific barriers include those related to the Kyoto Framework (limitations on the type of projects in forestry and land-use sectors that are eligible), and uncertainty about the regulatory framework after 2012 which increases risks and shortens time horizons over which projects can benefit from carbon revenues. The costs of developing and managing projects under the framework of the UNFCCC are also frequently prohibitive.<sup>21</sup>

The paper also highlights that the scope for GHG mitigation in poorer African countries is limited compared to more developed economies (like South Africa) because of the lack of use of fossil fuels for their energy infrastructure (e.g. large scale use of coal for power stations). This means that opportunities to access carbon finance related to moves to less emissions-intensive forms of energy production are very limited exist. While this analysis is specific to the Horn of Africa, similar considerations exist across most of the rest of the continent, suggesting that the scope for using carbon finance is likely to be greater in countries with relatively more developed institutional and economic infrastructure. The study proposes facilitation measures including technical assistance for project development, seed capital to kick start project development, and additional research to investigate detailed requirements both technically and institutionally. However, the scope for using such approaches within the existing CDM framework will remain severely constrained because of the wider institutional and governance requirements that few African countries appear able to meet.

Under current circumstances, the international architecture of carbon finance appears to be very poorly adapted to the needs of the poorest and institutionally weakest contexts (where arguably natural resource capital is under the greatest

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<sup>21</sup> Costs of completing project and methodology documentation for small scale projects are estimated at USD 30,000 to 75,000 and large scale projects at up to USD 200,000, while regular validation and verification costs can be USD 6,500 to USD 30,000. See Ecosystems (2008c), Carbon Finance Opportunities that Assist Implementation of the UNCCD, A Policy Briefing for the Global Mechanism, 29th February.

threat). Accessing carbon finance requires a high degree of institutional sophistication and a strong information base about the carbon consequences of investments as well as credible means of verifying and certifying actions undertaken. These conditions are almost by definition absent in situations of poverty and insecurity that typify the resource systems in Africa that are under the greatest threat. The challenge in these circumstances is to build the basic institutional capacity to provide security, enforcement of law to protect resource rights, fair dispute resolution, and access to market opportunities.

For the (minority of) countries in Africa that have reached a sufficient level of institutional development to make it worthwhile to seek to access the existing funding resources, there is a case for nationally-led initiatives to examine how specifically to exploit existing opportunities for carbon financing through both the compliance and voluntary markets. The most plausible large scale opportunities at the moment for most African countries within the existing international architecture would relate to reforestation and afforestation (rather than biomass, methane capture or improved energy efficiency), though the greatest international need is to establish mechanisms that provide additional incentives and institutional support for reducing deforestation and land degradation.

There are in principle opportunities to generate carbon credits through changes to agricultural systems that involve reduced fertiliser use, anaerobic digestion, the use of bioenergy and renewable and more efficient energy sources. One of the areas where there have been initiatives to access carbon finance in Africa relates to the reduction in emissions from burning wood that is unsustainable harvested through the distribution of fuel-efficient stoves. The Ugastove project in Uganda is one example. This is anticipated to generate around USD 0.75 million per annum in carbon credits over a seven year period from 2008.<sup>22</sup>

The general conclusion is that the opportunities for accessing carbon financing for most African countries are limited under the current international arrangements. There is a strong international agenda of action required to develop more relevant and accessible sources of funding for both GHG mitigation and climate change adaptation.<sup>23</sup>

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22 Tippman, R., (2008), Climate Change Financing for the UNCCD – Funding Opportunities to Support SLM and Project Examples from Asia and Africa.

23 EcoSecurities (2008c). This note provides proposals on the role that the Global Mechanism could fulfil in promoting changes to the international regulatory framework in order to make carbon finance more accessible.

### 3.5 Useful guidance material and weblinks

#### Carbon finance unit useful links:

Eligibility: <http://carbonfinance.org/Router.cfm?Page=MinReqs&ItemID=24689>

Project Developers:

<http://carbonfinance.org/Router.cfm?Page=ProjDev&ItemID=24671>

Submitting a Project:

<http://carbonfinance.org/Router.cfm?Page=SubmitProj&ItemID=24683>

Minimum requirements:

<http://carbonfinance.org/Router.cfm?Page=MinReqs&ItemID=24689>

World Bank, "Carbon finance for sustainable development 2007", Carbon Finance Unit, World Bank,

[http://carbonfinance.org/docs/AnnualReport2007\\_FullReport.pdf](http://carbonfinance.org/docs/AnnualReport2007_FullReport.pdf)

World Bank, "The BioCarbon Fund: An Overview", 7 October 2004,

<http://carbonfinance.org/docs/AboutBioCF.doc>

The GM:

[www.global-mechanism.org/dynamic/documents/document\\_file/ccesinfokit\\_web-1.pdf](http://www.global-mechanism.org/dynamic/documents/document_file/ccesinfokit_web-1.pdf).

#### CDM useful links:

Preparing the Project Design Document (CDM-PDD):

[http://cdm.unfccc.int/Reference/Guidclarif/pdd/PDD\\_guid04\\_v07.pdf](http://cdm.unfccc.int/Reference/Guidclarif/pdd/PDD_guid04_v07.pdf)

Preparing the Simplified Project Design Document for Small-Scale project activities (CDM-SSC-PDD):

[http://cdm.unfccc.int/Reference/Guidclarif/pdd/PDD\\_guid02\\_v05.pdf](http://cdm.unfccc.int/Reference/Guidclarif/pdd/PDD_guid02_v05.pdf)

UN-REDD:

<http://www.undp.org/mdtf/UN-REDD/overview.shtml>

## 4.1 Introduction and background<sup>24</sup>

### **Focal areas, eligibility and funding**

The GEF, created in 1991, is a designated financial mechanism for a number of international environmental agreements and conventions.<sup>25</sup> It provides funding for projects and activities to address global environmental issues related to six focal areas: biodiversity, climate change, international waters, land degradation (desertification and deforestation), the ozone layer, and persistent organic pollutants (POPs).

Eligible recipients of GEF funding include governments, NGOs and community groups in developing and transition countries. GEF funded projects can be implemented in any country that has ratified the relevant treaty or international agreement (for instance, in the case of land degradation, the UNCCD) and are eligible to borrow funds from the World Bank or receive technical assistance grants from the UNDP. NGOs and community groups can participate in GEF activities and assist in the design, execution and monitoring of projects.

The GEF provides grants only to cover the incremental costs of a project, e.g., the difference in cost between a project with global environmental benefits and another project without such benefits. The principle of co-financing is applied.<sup>26</sup> Usually the implementing agency or executing agency, NGO or community group proposing the project provides co-funding. Other interested partners such as bilateral agencies or research institutions often provide additional co-funding (GEF project guide).

As of December 2007, GEF has provided 165 governments in partnership with NGOs, community groups and private sector with over \$7.6 billion in grants and leveraged \$30.6 billion in co-financing for 2,025 projects. The GEF has also provided more than 7,000 grants that go directly to NGOs, community groups, small entrepreneurs and others to promote locally appropriate solutions to global environmental problems (GEF Fact Sheet, 2007).

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<sup>24</sup> For a detailed overview of the GEF, see <http://thegef.org/interior.aspx?id=50> and <http://www.gefcountrysupport.org/>.

<sup>25</sup> Including the CBD, UNCCD, UNFCCC and the Stockholm Convention on POPs (GEF Fact Sheet, 2007).

<sup>26</sup> Co-financing means that all GEF projects must have a cost-sharing partner, which may contribute in cash or in-kind contributions (e.g., staff time, office space, materials). GEF defines co-financing to include: grants, concessional or market rate loans, credits, equity investments, and committed in-kind support (GEF project guide).

## Organisational structure

The GEF Council, the main governing body, comprises 32 members representing 178 member countries. The Council approves all GEF full-size projects and determines the guidelines for all program activities. The GEF Assembly comprises all GEF member countries. It meets once every four years to review the policies and operations of the GEF.

The GEF Secretariat serves and reports to the GEF Council and Assembly. It coordinates the implementation of GEF projects and programs, as well as the formulation of policies and operational strategies. The Secretariat works closely with the three 'implementing agencies' – UNDP, UNEP and the World Bank – which assist in the development, implementation and management of GEF projects.

In 1999, the GEF began working with other international agencies (so called 'executing agencies') with direct access for funding.<sup>27</sup> The project proponents including NGOs and community groups can contact any of the executing agencies directly to begin the process of applying to GEF for preparatory and project funds.

A GEF Operational Focal Point is designated by each country that receives funding and is responsible for endorse project proposal and affirm they are in line with national priorities and plans.

NGOs involved in GEF funding have established a GEF – NGO Network to facilitate communication among themselves and with the GEF. NGOs are organised into eight regions with a regional NGO focal point. A central NGO Focal Point acts as the main liaison with the GEF. The GEF is in the process of developing new approaches to work with private sector, including a private sector fund and a non-grant instrument.

## 4.2 GEF funding for SLM

From the outset, the GEF funded SLM as a supportive activity to other GEF focal areas (biological diversity, climate change and international waters). Countries applying for GEF funding were, however, facing operational problems in developing SLM projects because of the difficulties in defining the linkages with the other GEF focal areas, as well as applying the incremental cost principle (GEF Operational Programme on SLM (OP#15), 2003: 5).

In September 2002, the World Summit on Sustainable Development (WSSD) reaffirmed land degradation<sup>28</sup> as one of the major global environment and

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27 These include regional development banks, such as the ADB, AfDB, EBRD and IDB, as well as other UN agencies, such as the IFAD, FAO and UNIDO.

28 Land degradation is broadly defined as 'any form of deterioration of the natural potential of land that affects ecosystem integrity either in terms of reducing its sustainable ecological productivity or in terms of its native biological richness and maintenance of resilience' (GEF Operational Programme on SLM (OP#15), 2003: 1).

sustainable development challenges. The summit called for GEF to adopt land degradation as a focal area to support the implementation of the UNCCD – consequently making the GEF a financial mechanism for the convention while at the same time recognising the complementary role of the GEF to the GM.

Subsequently, in October 2002, at the second GEF Assembly in Beijing, a designated focal area for land degradation (primarily desertification and deforestation) was created. This made SLM a primary focus of GEF funding to achieve global environment benefits within the context of sustainable development (GEF Operational Programme on SLM (OP#15), 2003: 1-2).

The GEF Operational Program on Sustainable Land Management (OP#15) was approved in May 2003. It provides the framework for incremental financing for the focal area of land degradation. As of December 2007, the focal area of land degradation has provided over \$350 million (5% of total GEF funding) in grants and leveraged over \$2 billion (7% of total GEF funding) in co-financing for 49 projects (GEF Fact Sheet, 2007). For the fourth replenishment of the GEF (2007 – 2011), \$300 million has been allocated to the focal area of land degradation (GEF – 4, 2007).

During the period 2002 – 2006 financing for projects by implementing agency included UNDP (GEF funding \$66.95 million and co-financing \$159.81 million), UNEP (GEF funding \$18.6 million and co-financing \$21.67 million) and the World Bank (GEF funding \$79.64 million and co-financing \$457.97 million) (GEF/GM, 2006:30).

A review of funding under the GEF for the focal area of land degradation concluded that GEF support has had a catalytic role in promoting investments in SLM activities. And, despite a relatively small funding portfolio, GEF has promoted integrative environmental and social approaches for SLM. There has also been a rapid increase in number of projects, and since the approval of the land degradation focal area, the demand for projects under the operational program on SLM has been overwhelming (GEF/GM, 2006:30).

In June 2007 the GEF Council approved the Strategic Investment Program (SIP) for Sustainable Land Management for Sub-Saharan Africa.<sup>29</sup> This is a \$150 million programme that aims to restore soil fertility in a large part of the African continent, helping boost food security, increase farm incomes, maintain ecosystem services, and engage local communities in better managing their lands. The SIP is intended to support the TerrAfrica initiative and to bring together, under one umbrella, six agencies including the World Bank, for concerted results-oriented actions.

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<sup>29</sup> <http://desertification.wordpress.com/2007/06/26/gef-sip-terrafrica-slm-concerted-actions-for-sub-saharan-africa-linkages-africa/>.

### **Objectives and strategic programs for the focal area of land degradation**

The land degradation focal area strategy and strategic programming for 2007 – 2011 (GEF – 4, 2007)<sup>30</sup> sets out the purpose of the focal area, which is ‘to foster system-wide change to control the increasing severity and extent of land degradation in order to derive global environmental benefits. Its tool is SLM. Investing in SLM to control and prevent land degradation in the wider landscape is an essential and cost effective way to deliver other global environmental benefits, such as maintenance of biodiversity, mitigation of climate change, and protection of international waters’ (GEF – 4, 2007:3).

The two long-term objectives identified are: to develop an enabling environment that will place SLM in the mainstream development policy and practices at the regional, national, and local levels; and to upscale SLM investments that generate mutual benefits for the global environment and local livelihoods.

Investments in three strategic programs will support the achievement of the long-term objectives (see Box 4.1 below): (i) sustainable agriculture and rangeland management; (ii) sustainable forest management in production landscapes; and (iii) investing in innovative approaches in SLM to advance the GEF knowledge base on SLM and future investments (GEF – 4, 2007:1-2).

Priority areas for GEF – 4 are to address direct drivers for terrestrial ecosystem degradation as identified by the Millennium Ecosystem Assessment, including land use change, natural resource consumption, climate change and technology use and adaptation. All project proposals are envisaged to incorporate the effect of climate change as an integral part of measures for SLM (GEF – 4, 2007:6).

### **The GEF project cycle and project funding routes**

The two key documents for GEF project preparation include the Project Identification Form (PIF) and the Project Preparation Grant (PPG). The PIF is a short description of a project concept that is used by the GEF to determine whether the project meets certain basic criteria. The PPG is a small amount of funds that can be utilized to cover partial project preparation costs incurred by the project proponent. The main steps in the GEF project cycle can be summarised as follows:

1. Develop PIF and option to request PPG
2. PIF submitted by the relevant GEF agency to the GEF Secretariat for review (10 business days)
3. PIF circulated for comment to all GEF agencies and relevant conventions Secretariats (5 business days)

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<sup>30</sup> The GEF Secretariat will initiate the development of long-term objectives and strategic programs for GEF – 5 in 2008 for presentation to the GEF Council at its first meeting in 2009.

#### **Box 4.1 GEF strategic land degradation programmes**

##### **1. Supporting sustainable agriculture and rangeland management**

Dryland management in areas of intense competition for land resources – focus on arid to semi-arid eco-zones with critically endangered ecosystems where herders, agriculturists, and other resource users face increasing competition for land resources.

Management of semi-arid to sub-humid mixed land uses in areas prone to severe soil erosion and loss of soil fertility – focus on the protection of biodiverse grasslands, savannah, and cerrado-type ecosystems that support large numbers of resource-poor smallholder farmers.

Sustainable management of mountain ecosystems – focus on the protection of mountain ecosystems and landscapes that are socioeconomically and environmentally significant, including protection of water sources, prevention of soil erosion, integrated land and watershed management, and the stabilization of cropping, pastoral, and forest system.

##### **2. Supporting sustainable forest management in production landscapes**

Support to landscape approaches to the management of woodlands, humid forest margins, and reducing forest fragmentation, including:

- strengthening the national enabling policy and institutional environment for managing forest and woodland resources in the wider production landscape;
- defining strategies to avoid the degradation of woodlands, forest margins, and further forest fragmentation mainly caused by expanding cropland and grazing activities, and unsustainable harvesting of fuel wood; and
- replicating successful practices for sustainable forest management in the wider landscape to restore the integrity of forest ecosystems.

Issues may also arise related to climate change and biodiversity in forest and woodland ecosystems.

##### **3. Investing in new and innovative approaches in SLM**

This program focuses on creating new scientific and technical knowledge on emerging issues in order to facilitate future strategy discussions for GEF-5 and to enhance GEF operations in the land degradation focal area, including the following main themes:

- Evaluation of types of incentive systems or tax regimes to recover and reinvest land resource rents and to promote SLM.
- Assessing and evaluating emerging evidence of the links between security of tenure and sustainable land and natural resource management.
- Management of LULUCF as a means to protect carbon stocks and avoid CO2 emissions (jointly among focal areas for biodiversity/climate change/land degradation).
- Development of sustainability criteria and voluntary certification standards for sustainable biomass production (jointly among focal areas for biodiversity/climate change/land degradation).

Source: Adapted from GEF – 4 (2007)

**Table 4.1 GEF project examples in Sub-Saharan Africa**

Project example	Main components	Type of project/ GEF funding	Beneficiary
Burundi: Agricultural Rehabilitation and Support Project	Environmentally friendly land management Agro-ecological systems that aid in restoring soil systems, Agro-biodiversity and stemming the rapid loss of wetland ecosystems and related biodiversity	Full sized project / US\$5.35 million	Government / Ministry of Agriculture and Livestock
Guinea Community-Based Land Management	Capacity-building at the level of the rural development communities Sustainable land use practices to preserve ecological systems.	Full sized project / US\$7.35 million	Government / Ministry of Mining
Burkina Faso Partnership Programme for Sustainable Land Management	Enabling environment for policy reforms to support SLM Develop human and institutional capacity for SLM Adopt integrated approaches to SLM including synergies between environment and other sectors especially water resources	Full-sized project / US\$10 million	Government, multilateral/ bilateral development agencies, private sector
Ghana Sustainable Land Management for Mitigating Land Degradation, Enhancing Agricultural Biodiversity and Reducing Poverty	Sustainable ecosystem-based integrated land management Ecosystem recovery Capacity for mitigation of land degradation and for sustainable land management through greater awareness, mainstreaming, and policy reform	Medium sized project / US\$945, 000	NGO / University of Ghana and consortium partners
Kenya Development and Implementation of a Sustainable Resource Management Plan for Marsabit Mountain and its associated Watersheds	Sustainable use of mountain ecosystems in Marsabit by developing and implementing a management plan that could be replicated in similar environments in the Horn of Africa	Medium sized project / US\$945, 000	NGO / Agricultural Research Foundation
Ghana Gburumani Community Based Land Restoration Programme	Soil fertility techniques, wildfires prevention, natural regeneration establishment and enrichment planting Support for production for honey, poultry and small ruminants Capacity building of local communities	Small Grant Program / US\$20,000	NGO / Center for African Survival and Livelihood Development
South Africa Combating Land Degradation and Enhancing Livelihoods in the Suid Bokkeveld	Capacity building of small scale farmers Awareness raising of sustainable farming methods	Small Grant Program / US\$41,000	Community Based Organization/ Heiveld Cooperative

Source: GEF project database

4. GEF Secretariat approval of PIP (ensures eligibility, consistency with GEF strategic objectives and programmes, provides estimated cost including expected co-financing, indicates clear project milestones)
5. GEF Council review (at the 2 Council meetings and by inter-sessionally e-mail) and approval of PIP (ensures focal area and geographical balance, innovative elements, identify key assumptions and risks and resource programme implications). It should not take more than 22 months to reach this step in the project cycle.
6. Preparation of project proposal
7. Project proposal submitted by the relevant GEF agency to the GEF Secretariat for review (10 business days)
8. GEF Secretariat endorsement (ensures that project design is consistent with focal area strategies, that GEF funds are used cost effectively, compliance with GEF M&E policy)
9. Implement, monitor and evaluate project.

The GEF's support focuses on funding the incremental cost. In most cases, GEF projects have two interlinked parts: one focusing on the improvement of people's livelihoods (e.g., baseline actions and funding contributed by the country/partner government, NGO, private sector etc.), and the other contributing to the global environmental system (e.g., GEF incremental actions and funding) (GEF/GM, 2006:29). Examples of GEF activities, incremental actions (GEF funding) and baseline actions (country/partner funding) are summarised in Table 4.2 below (Berry and Esikuri, 2005:4).

There are various pathways for different kinds of proposals, projects and organisations seeking funds. For instance, for a community group seeking US\$50,000, the Small Grants Program (SGP) (see Table 4.2 below) may be the most suitable option. If there is a coalition of NGOs seeking US\$1 million or more, the full-sized project funding route may be the preferred approach. There may also be special funding routes for Least Developed Countries (LDCs) and Small Island Developing States (SIDS).

General guidelines for the different project funding routes can be summarised as follows:

- Full sized project will require more than \$1 million. Project concepts may be developed by governments, NGOs, communities, the private sector, or other civil society entities, but must respond to both national priorities and GEF focal area strategies and operational programs. Project proponents work closely with national GEF Focal Points (who formally endorse project

concepts) and GEF agencies to develop concepts and move through the project cycle.

- Medium sized project will require less than \$1 million, but more than \$50,000. The project cycle is expedited so as to allow for more diverse participation by NGOs and other civil society organizations in project development and implementation. Approval has been delegated by the GEF Council to the GEF Secretariat. Time needed is approximately 4-12 months.
- Enabling activities provide financing for the preparation of a plan, strategy, or program to fulfil commitments under a global environmental convention or for a national communication or report to a relevant convention. The project cycle for enabling activities over \$1 million is the same as for full sized projects. The project cycle requesting resources less than \$1 million is the same expedited cycle that is in place for medium sized projects.
- GEF SGP: If a local NGO or community organization and looking for support for a community-oriented land degradation project up to \$50,000. Small grants have fewer rules and requirements, so they are generally easier to access for small, local groups (time needed: 2-12 months).

### 4.3 GEF adaptation funds

The GEF manages three adaptation funds that are linked with climate change related programming.

**The Strategic Priority on Adaptation (SPA)** fund works to ensure that climate change concerns are incorporated in the management of ecosystems through GEF focal area projects. The fund is currently operating as a pilot programme with a budget of \$50 million, and will aim to increase its overall budget following a review of its portfolio of planned and operational projects. The SPA is concerned with the management of ecosystems to and how climate change adaptation planning and assessment can be practically integrated into national policy and sustainable development planning.

One of the ongoing African projects in the SPA portfolio is the Adapting to Climate Change through the Improvement of Traditional Crops and Livestock Farming project in Namibia. With a total budget of \$2 million (of which, \$1 million is co-financed), the project aims to 'enhance the adaptive capacities of farmers, pastoralists, and natural resource managers to climate change in the agricultural and pastoral systems in North-Central Namibia. This will also contribute to the reduction of land degradation in the region.'<sup>31</sup> This includes

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31 <http://sdnhq.undp.org/gef-adaptation/projects/project.php?id=38>

**Table 4.2 GEF project examples in Sub-Saharan Africa**

Eligible GEF activity	Baseline actions/ Country/partner funding	Incremental actions/ GEF funding
Sustainable agriculture	Improving livelihoods by crop diversification; introduction of higher-yield and drought resistant crops; introduction of improved cropping practices, water harvesting and efficiency; better access to credit, extension, and marketing; physical works; chemical/fertilizer use; and pest management	Piloting demonstrations of better management practices or conservation works such as reduced tillage methods and better use of crop residues; establishment of erosion controls such as windbreaks, buffer strips, and filter strips; rehabilitation of wetlands to stabilize river flows and improve water quality; alternatives to slash-and-burn; protection of riparian zones; and introduction of indigenous crops to lower-loss risks
Sustainable pasture management	Reducing livestock stocking density to a sustainable carrying capacity Distributing water points to spread grazing intensity Introducing rotational grazing Improving access to credit, veterinary, and marketing services	Piloting demonstrations of better management practices or mechanisms such as strengthening traditional grazing management systems; mechanisms to resolve wildlife-livestock-agriculture conflicts; rangeland rehabilitation with indigenous plants; fire management; use of indigenous livestock varieties; protection/ rehabilitation of erosion, riparian vegetation, and recharge areas
Forest management	Developing community-based management systems Establishing plantations or tree crops Minimizing forest clearance for cropping by improving crop productivity	Piloting demonstration activities to strengthen indigenous forest management Rehabilitating land with multi-use tree species Protecting ecologically sensitive forest, riparian forest, wetlands, recharge areas Piloting methods to compensate communities that protect ecosystems

piloting and testing risk-reduction and agricultural diversification strategies, improving information flows, and developing effective systems to integrate climate change issues into planning processes.

**The Least Developed Countries Fund (LDCF)** supports the poorest countries most vulnerable to the impacts of climate change. Operational since 2001, the fund currently supports a portfolio of projects amounting to approximately \$90 million. The fund supports LDCs as they prepare National Adaptation Programmes of Action (NAPA) in which they identify their most urgent adaptation needs. There is a second phase associated with this fund, whereby LDCs are able to access additional funds to implement the NAPAs.

One of the ongoing African projects in the LDCF portfolio is the Building Resilience and Adaptive Capacity of the Agriculture Sector to Climate Change project in Niger. With a total budget of \$6 million (of which, \$4 million is co-financed), the project aims to 'implement urgent and priority interventions

#### Box 4.2 GEF small grant program

The GEF small grant program (SGP) was created to support local, community-level and community-inspired action to preserve the environment at the local level. The program is decentralized and managed by UNDP. To be eligible for GEF SGP, you must be an NGO or community group and located in an eligible country (check the GEF SGP website <http://sgp.undp.org/index.cfm>). The following are some guidelines that all project under the SGP have to consider.

- To be eligible for SGP support, your project concept must fit the GEF SGP country program strategy and country-specific criteria (as determined by each national steering committee)
- In addition, project proposals must meet GEF's overall eligibility as well the Operational Program-specific criteria for SLM

Several types of activities are eligible for funding under the GEF SGP:

- Community-based assessment and planning;
- Pilot demonstration activities (these kinds of activities are the bulk of what SGP funds): project would test or demonstrate innovative, community-level approaches to conserving the global environment;
- Capacity development: project would provide technical assistance and training activities to community-based organizations and/or NGO capacity;
- Monitoring and analysis: support for NGOs or Universities to analyse SGP activities and identify successful or unsuccessful activities and draw lessons from these activities;
- Dissemination, networking and policy dialogue: project would be designed to promote a supportive policy environment for community-level action in GEF program areas.

Source: Adapted from SLM Project Guide

identified in Niger's NAPA that will enhance adaptive capacity of the agricultural sector to address the risks posed by climate change.<sup>32</sup> This includes implementing improved water management, water harvesting, and soil conservation measures, disseminating climate change related forecasting information, and institutionalising adaptation and mitigation measures into provincial and local development and risk management plans.

The **Special Climate Change Fund (SCCF)** is the third adaptation-related fund concerned primarily with activities, programmes and measures in the development sectors most affected by climate change. Operational since 2005, the fund's budget currently stands at approximately \$60 million. Areas of support relevant to SLM activities include adaptation in agriculture, water resources management, and coastal zone management.

One of the ongoing African projects in the SCCF portfolio is the "Coping with Drought and Climate Change" project in Mozambique. With a total budget of \$1.96 million (of which, \$1 million is co-financed), the project aims to 'develop and pilot a range of coping mechanisms for reducing the vulnerability of farmers

32 <http://sdnhq.undp.org/gef-adaptation/projects/project.php?id=101>

and pastoralists to future climate shocks.<sup>33</sup> This includes assisting farmers/pastoralists to cope with drought, developing effective early-warning systems, developing drought-preparedness strategies for farmers/pastoralists and their families, and developing frameworks to replicate successes in other parts of the country.

The **Adaptation Fund** established under the Kyoto Protocol is financed by funds from the project activities of the CDM, and is equivalent to 2% of the certified emission reductions. It is still at an early stage, with the Board and management arrangements set up in late 2007 at the Bali conference. GEF will serve as the secretariat to the Adaptation Fund, and the World Bank is trustee.<sup>34</sup> The fund will be accessible to all developing countries that are Party to the Kyoto Protocol.

#### 4.4 Useful guidance material and weblinks

GEF:

<http://www.thegef.org> and the GEF Country Support Program – knowledge facility for GEF focal points: <http://www.gefcountrysupport.org/>

GEF Project Cycle Policy Paper:

[http://gefweb.org/uploadedfiles/GEF\\_Project\\_Cycle\\_Policy\\_Paper\\_Oct29\\_07.pdf](http://gefweb.org/uploadedfiles/GEF_Project_Cycle_Policy_Paper_Oct29_07.pdf)

GEF Small Grants Program (SGP):

<http://sgp.undp.org/index.cfm>

GEF Project Database:

<http://gefonline.org/home.cfm>

UNDP:

<http://www.undp.org/gef/05/>

UNDP develops and implements GEF projects that complement its mission to promote sustainable human development programs. The UNDP-GEF program is composed of a GEF Central Unit located in the Sustainable Energy and Environment Division of UNDP's Bureau for Policy and Program Support at its headquarters in New York. UNDP-GEF Regional Coordinators are posted in each one of UNDP's five Regional Bureau offices in New York. The Regional Coordinators work closely with each UNDP country office and are responsible for developing each GEF project in their region and securing its approval from GEF.

GEF – UNDP targeted portfolio project on capacity building and mainstreaming of SLM for Least Developed Countries (LDCs) and Small Island Developing States (SIDS): <http://www.gsu.co.za/>

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<sup>33</sup> <http://sdnhq.undp.org/gef-adaptation/projects/project.php?id=36>

<sup>34</sup> [http://unfccc.int/cooperation\\_and\\_support/financial\\_mechanism/items/3659.php](http://unfccc.int/cooperation_and_support/financial_mechanism/items/3659.php)

UNEP: <http://www.unep.org/gef/content/index.htm>

The UNEP implements GEF national, regional and global projects specializing at the regional and global levels. These projects complement its mission to increase awareness of and leverage strategic action toward lessening environmental degradation and addressing a variety of other pressing environmental issues around the world. UNEP's GEF office is located in UNEP Headquarters in Nairobi, Kenya. UNEP – GEF has a liaison officer in several of UNEP's six regional offices who serves as the GEF officer for his or her region. UNEP Regional Offices that have UNEP liaisons are located in Mexico (Latin America and the Caribbean), Switzerland (Europe), Kenya (Africa), United States of America (North America), Bahrain (Western Asia) and Thailand (Asia and the Pacific). UNEP has country offices in Brazil, Russia and China.

World Bank: <http://www.worldbank.org/gef>

The World Bank implements GEF projects that usually complement its regular loan making programs in client countries. The World Bank has a central GEF office located in the Global Environment Coordination Division in Washington, D.C., which works closely with their counterparts in other World Bank country offices. Together, they work with client country governments, NGOs and local community groups to develop GEF projects that mainstream global environmental concerns into World Bank loan initiatives in those countries.

## 5.1 The European Development Fund and SLM

The European Development Fund (EDF) is the main financial instrument of the EU for providing external aid to African, Caribbean and Pacific countries (ACP) countries. Development cooperation between the EU and ACP countries is governed by partnership Conventions (successively the Yaoundé, Lome and the Cotonou Convention). The current 10th EDF 2008 – 2013 has been allocated approx. €22 billion.

Funding for SLM is mainly provided to sustainable environmental policies, including forestry management, biodiversity and conservation. Article 32<sup>35</sup> of the Agreement recognises co-operation on environmental protection and sustainable management of natural resources as a fundamental supporting tool for ensuring compliance with international environmental commitments. Desertification, drought and deforestation are specifically cited as the main fields for such collaboration. Similarly, Article 20(3) identifies the protection of natural resources and of the environment, the halting of the deterioration of land, forests and aquatic ecosystems, the restoration of ecological balances, the preservation of natural resources and their sustainable use, as basic objectives that ACP countries shall strive to achieve with EU support.

The EDF allocates funds through three main instruments, namely: (i) long-term development funds, including for instance environmental sustainability; (ii) regional cooperation funds, including for instance trans-boarder SLM related activities; and (iii) an investment facility defined as ‘risk capital’ to support private sector development.

The allocation process of EDF funds is done according to a formulae based on the needs (GDP per capita, population size, vulnerability) and performance (past use of EDF and progress of reforms.<sup>36</sup> Based on the funding allocated, each beneficiary country develops a cooperation strategy (also known as the Country Strategy Paper). A National Indicative Programme (NIP) is then drawn up to

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35 For details see [http://ec.europa.eu/development/icenter/repository/agr01\\_en.pdf](http://ec.europa.eu/development/icenter/repository/agr01_en.pdf)

36 Funds are allocated in two tranches. Countries are allocated 70% of their overall financial envelope in the first tranche. A second tranche is allocated after review, which must take place latest in the third year of implementation after the entry into force of the financial protocol or much earlier at the request of any country which has achieved 80% of its commitments

implement the cooperation strategy, including sectoral and focal areas. Hence, the development of the NIP creates the space for SLM activities to be identified and funded.

The NIPs of a few African countries give some importance to natural resource management and participatory approach to environmental protection. The extent to which countries earmark funds to SLM activities tend to be differentiated. Whilst some reserve a reasonable percentage of funds to these broad categories in which SLM programmes can easily be undertaken, others allocate a negligible amount to SLM related activities. Examples of SLM related activities funded under EDF are presented in the box below.

## **5.2 Other European Union funding sources for SLM**

In addition to the EDF, other thematic budget lines have been introduced in the annual budget of the EU that fund SLM related activities. Funding tends to support small pilot projects, small scale NGO projects or research studies. They generally focus on particular sectors rather than geographic areas (see Box 5.1 and Box 5.2 for examples).

## **5.3 The International Development Association and SLM**

The International Development Association (IDA) is the concessional lending arm of the World Bank. It provides funds to support the poverty reduction and development efforts of low income countries who have limited access to market based financing.

IDA lending supports a range of programmes and projects in health, education, water and sanitation and the environment. Specifically, lending to support the environment and natural resource management has totalled \$4.5 billion in the last 11 years. African countries received the bulk of this funding with more than 39% of total IDA commitment for environment and natural resource management. This support among other things has gone towards making land management more sustainable; building environmental institutions; dealing with climate change and protecting biodiversity.

Eligibility for IDA funds are determined by two main criteria: (i) relative poverty defined according to IDA funding guidelines as GNI per capita below an established threshold that is annually updated (in fiscal year 2009, \$1,095); and (ii) lack of creditworthiness to borrow on market terms and therefore a need for concessional resources to finance the country's development programme.

The allocation process of IDA funds is based on a performance-based allocation system, whereby the amount of resources received by a country is

### **Box 5.1 Examples of European Development Fund activities**

**Ethiopia - rural development and food security:** Though the overall objective of this focal area is sustainable reduction of vulnerability to food insecurity and poverty, the NIP identifies conservation of national resources and the restoration of degrading environmental conditions as one of the main actions to achieving this overall goal. An indicative amount of €10million has been earmarked for this field. Funding will be used to put in place measures that will:

1. Establish participatory natural resource management systems between the local populations with forestry/pastoralist based livelihoods and the highland immigrants with crop agriculture based livelihoods. Three support strategies are envisaged: (i) a Natural Resource Management Fund; (ii) Grant Agreements with relevant forestry / natural resources related institutions; and (iii) participatory natural resource management projects run on a regional basis in partnership with the Forestry Departments of the Ministry of Agriculture Rural Development.
2. Accompany growth in the densely populated areas of the highlands by strengthening water-use related activities (identification of suitable water harvesting schemes and management / maintenance capacity for small scale irrigation schemes which are known to have proliferated in the four main regions in the last decade);
3. Promote conservation, use and national and international valorisation of Ethiopian's (agro)-biodiversity in all parts of the country.

**Kenya - agriculture and rural development:** Support will go towards the developing a Strategy for Rural Agricultural (SRA) development. One of the core objectives of the Strategy is to of the promote conservation of the environment and natural resources by means of sustainable land use.

**Mozambique - agriculture, rural development and regional economic integration:** One specific objectives of this programme is to secure better access and sustainable management of natural resources by the rural population; in particular adapting to the impact of climate change.

**Angola - biodiversity management:** Support will go towards the management of protected areas in order to preserve biodiversity presently under threat. This will be achieved through protected areas management training and scientific activities and better management of non-timber forest building on years of experience with the Commission of Ministers in charge of Forests in Central Africa and the Ecosystems Forestiers Afrique Centrale.

**Ghana - natural resources management:** Support will be provided to the Natural Resources Management Joint Approach to improve the governance of the sector by strengthening the capacity of key regulatory agencies and high-level inter-sectoral coordination to assess the environmental effects of all investment. The specific EDF funding to this programme will be decided jointly with the government and other donors working in the sector. Support for national parks and biodiversity may also be considered. Support is also to be provided to the Forestry Law Enforcement, Governance and Trade initiative, which uses access to the EU market as an incentive to curtail illegal logging.

determined by policy performance and institutional capacity. Following the allocation of IDA resources to each recipient country, a Country Assistance Strategy is drawn based on the Poverty Reduction Strategy Paper (PRSP) of each country. This creates an opportunity for SLM related issues to be funded once it has been identified as a priority area.

## **Box 5.2 Examples of other European Union funding sources**

### **Thematic Programme for Environment and Sustainable Management of Natural Resources including Energy (ENRTP)**

The ENRTP was adopted in 2006 to address the environmental dimension of development and other external policies, as well as to help promote the EU's environmental and energy policies abroad. An amount of €804 million has been earmarked for 2007 - 2013. The ENRTP supports thematic sectors which include areas such as climate change, biodiversity, forest, illegal logging and forest governance, fisheries and marine resources, energy and water, chemical and waste management and SLM.

#### **Co – financing for NGOs**

A special budget line is set aside by the EU for support towards a whole range of projects concerning developing countries carried out by NGOs. Actions are implemented through partnerships between European and local NGOs and mainly concern local rural and urban development, human resource development and institutional support to local partners. Projects aimed at addressing SLM related activities under this budget line have involved improving agricultural techniques in dryland areas, local reforestation actions and support to local community groups in the implementation of agro-ecological activities.

An example of an SLM related activity currently being funded under this budget line is the Ghana Rural Environment Empowerment Project (2003-2010). This project is being undertaken by Concern Universal with EU grant funding of €300,000. The project objective is to reduce poverty by empowering rural communities towards participatory and environmentally sustainable resource development and management. Through enhancing rural communities understanding and awareness of environmental issues, they can work towards framing methods that will prevent ecological damage and improve livelihoods. The programme will benefit marginalised and poor in Brong-Ahafo's forest-savannah transition zone, by building the capacity of the communities, through environmental education and awareness raising and promoting sustainable livelihood options, in order to improve decision making about their lands, food security and income generating activities. The programme design has come from direct consultation with the communities.

#### **Financing for research and scientific cooperation**

The Seventh Framework Programme (FP7) for research, scientific cooperation and technological development is an important financial instrument for research based SLM activities. It combines all research-related EU initiatives under a common scheme aimed at increasing growth, competitiveness and employment. The overall budget of the FP7 for the period 2007-2013 is €53 billion, of which €2.2 billion is allocated to projects focusing on the environment, including climate change. The largest component of the FP7 is the Co-operation Programme, to which €32.4 billion is allocated. The Co-operation Programme covers the following areas: health, transport, environment, climate change, food, agricultural technology and biotechnology, socio-economic sciences, security and space. Areas of relevance to SLM are:

- Food: FP7 introduces support for sustainable production and management of biological resources from land, forests and the aquatic environment.
- Environment: Support to the implementation of international commitments under United Nations conventions and the sixth Environment Action Programme (EAP). Main activities include climate change, sustainable resource management (conservation), environmental technologies (sustainable management, technology assessment) and earth conservation.

IDA loan allocations are made through two main lending instruments: investment loans and development policy loans. Investment loans have a long-term focus (5 to 10 years). SLM related activities whose impact is felt in the long term, are therefore likely to be funded through investment loans. Development policy loans on the other hand, provide quick-disbursing assistance to countries with external financing needs to support structural reforms in an economic sector or in the economy as a whole.

Since 2000, several World Bank sector strategy papers have revolved around SLM. For example the Environment Strategy (2001), the Rural Development Strategy (2003) and the Water Resource and Sector strategy (2004) have all identified land degradation as an important issue and requiring attention. While the World Bank's strategy papers reflect a commitment to achieve SLM, these strategies have for the most part not culminated into comprehensive approaches to dealing with SLM. At the end of 2004 for example, only about 10% of the total investment in environment and natural resource management for Africa went to SLM. Similarly a review of a hand full of PRSPs and Country Assistance Strategy show that very little attention has been paid to SLM.

The general consensus though is that PRSPs, which represent the main funding vehicle through which IDA lends supports to Africa, does present an opportunity for SLM. The principles of national ownership and the country driven identification of development priority on which PRSPs are based allow for IDA to fund SLM activities once it has been identifies as a priority.

### **Examples of sustainable land management projects funded through IDA**

Though the amount of IDA funds to SLM has been relatively low, some of the few ongoing SLM projects that are being funded through IDA are illustrated below.

#### **Ethiopia: Sustainable land management (\$20 million)**

The objective of the Sustainable Land Management Project in Ethiopia is to reduce land degradation in agricultural landscapes and to improve the agricultural productivity of smallholder farmers. There are three components though only the first component relates to SLM. It relates to watershed management is aimed at supporting scaling up of best management practices in sustainable land management practices and technologies for smallholder farmers in the high potential/food secure areas that are increasingly becoming vulnerable to land degradation and food insecurity. The second component is the rural land certification and administration. Its objective is to expand the coverage and enhance the government's land certification project, with the aim

of strengthening land tenure security for smallholder farmers. The third component is the project management. The focus of this component is to provide financial and technical assistance to the federal ministry of agriculture and rural development and local government units responsible for sustainable land management to effectively support coordination and implementation of the SLM project.

#### **Burundi: Agriculture rehabilitation and sustainable land management (\$35 million)**

The development objective of the Agricultural Rehabilitation and Sustainable Land Management project is to restore the productive capacity of rural areas, through investments in production and sustainable land management, and through capacity building for producer organizations, and local communities. Beneficiaries would also include war-distressed returnees and internally displaced persons. The project has three main components: 1) Support for production and sustainable land management investments will finance demand-driven sub-projects and their effective planning, and implementation by producer organizations and local communities. It will also provide emergency support for returnees and internally displaced persons seeking their reintegration in the agricultural sector. 2) Support for capacity building and institutional strengthening will enhance access to information and capacity of producer organizations, local communities and local project's implementing agencies. 3) Support for project coordination and management will finance project management activities, including monitoring and evaluation.

#### **Kenya: Natural resource management (\$68.5 million)**

The objectives of the Natural Resource Management project are to enhance the institutional capacity to manage water and forest resources, reduce the incidence and severity of water shocks in river catchments, and improve the livelihoods of communities participating in the co-management of water and forests. Achievements under the project will be measured by indicators tracking changes in organizations and their performance, in the health of the natural resource base and in welfare of participating communities. The Natural Resource Management Project has four components: water resource management and irrigation, management of forest resources, livelihood investments in the upper Tana Catchment, and management and monitoring and evaluation. The first two components support the legal and institutional reforms contained in recent legislation, as well as investments in catchment areas. The third component

provides assistance to communities participating in management of the resources. The fourth provides managerial oversight and monitoring and evaluation for the project.

## 5.4 Useful guidance material and weblinks

### The European Development Fund

Access to working papers on ENTRP is available on:

[http://ec.europa.eu/europeaid/where/worldwide/environment/working-documents\\_en.htm](http://ec.europa.eu/europeaid/where/worldwide/environment/working-documents_en.htm)

Details about FP7:

[http://cordis.europa.eu/fp7/environment/about-env\\_en.html](http://cordis.europa.eu/fp7/environment/about-env_en.html)

To access Country strategy Papers of all ACP countries see:

<http://www.acp-programming.eu/wcm/content/section/4/27/en/>

### The International Development Association

45 countries contributed to the 15th replenishment of IDA. The largest pledges to IDA15 were made by the United Kingdom, the United States, Japan, Germany, France, Canada, Italy and Spain. For further details see

<http://siteresources.worldbank.org/IDA/Resources/Seminar%20PDFs/73449-1172525976405/FinalreportMarch2008.pdf>

For details on CPIA see

<http://siteresources.worldbank.org/IDA/Resources/CPIA2007Questionnaire.pdf>

For more examples of SLM related projects funded through IDA see

<http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/0,,menuPK:115635~pagePK:64020917~piPK:64021009~theSitePK:40941,00.html>

In addition to the GEF adaptation funds, there are a considerable number of initiatives from individual donors to address adaptation to climate change which may have relevance to SLM. A number of these are discussed briefly below.

Japan has recently (in 2008) established a loan scheme, Cool Earth Loan, as part of the its Cool Earth Partnership, for projects and programmes which contribute to mitigation of climate change and are within the fields of Preferential Terms, which include forestation, forest conservation, and protection of desertification.

The European Union also proposed in late 2007 financing for mitigation, adaptation and poverty reduction under its Global Climate Change Alliance. A budget of €60 million over the period 2008-2010 was initially proposed, largely from the existing Thematic Programme for Environment and Sustainable Management of Natural Resources including Energy. However there has been a recent proposal that a substantial proportion (up to 25%) of the revenue from the EU Emissions Trading Scheme should also be devoted to the Global Climate Change Alliance. Two areas covered by the fund, deforestation and integration of climate change into PRSPs, address SLM concerns.

In July 2008, the World Bank approved the creation of the Climate Investment Funds, one of which, the Strategic Climate Fund (SCF), will provide funding for a broad array of approaches to adaptation at international and national level, including providing incentives for integrating adaptation into sectoral and national plans, and projects to enable climate resilient development taking into account the “needs of countries in Africa affected by drought, desertification and floods”. The initial programme of the SCF will be a Pilot Programme for Climate Resilience which will focus on integrating climate adaptation into national development plans and financing. It is also planned to establish within the SCF a Forest Investment Fund to mobilise resources to address deforestation and promote sustainable forest management. These funds will be managed by the multilateral development banks, primarily the World Bank. Commitments have been made by a number of donors, including the United Kingdom, who are channelling much of the finance promised under its Environmental Transformation Fund through this facility.

A number of initiatives either address forestry and deforestation directly or include them explicitly as part of a broader initiative. The German International

Climate Protection Initiative, managed by the Federal Environment Ministry and funded through the sale of emissions allowances, has one focus on the conservation of large forests, both for protection of biodiversity and also for climate protection. Through their International Climate and Forest Initiative, Norway is earmarking up to NOK3 billion in 2009 for concrete projects to address deforestation, an increase on its 2008 allocation. Moreover, France is supporting the Fonds Français pour l'Environnement Mondial (FFEM) – a bilateral fund that aims to promote global environment through funding projects in the areas such as biodiversity, climate change, land degradation and POPs.

Most of these funds operate on a government or multilateral development bank to government basis. This generally means that projects must have involvement of public sector agents, or at least their sponsorship. As some of these initiatives are very new (Cool Earth Alliance, Global Climate Change Alliance, Strategic Climate Fund) a useful first step would be to approach the local donor office for information as to the procedures which will be adopted.

## 6.1 Useful guidance material and weblinks

Cool Earth Mechanism:

<http://www.mofa.go.jp/policy/economy/wef/2008/mechanism.html>

Global Climate Change Alliance:

<http://www.europarl.europa.eu/sides/getDoc.do?type=REPORT&reference=A6-2008-0366&language=EN&mode=XML>

WB Pilot Programme for Climate Resilience, submission of EOI:

[http://siteresources.worldbank.org/INTCC/Resources/PPCR\\_Expression\\_of\\_interest\\_draft\\_template\\_Nov\\_08\\_TFC\\_Meeting.pdf](http://siteresources.worldbank.org/INTCC/Resources/PPCR_Expression_of_interest_draft_template_Nov_08_TFC_Meeting.pdf)

Pilot Programme for Climate Resilience, description of country eligibility:

<http://siteresources.worldbank.org/INTCC/Resources/PPCRGovernanceStructure.pdf>

German International Climate Protection Initiative:

[http://www.bmu.de/english/climate\\_protection\\_initiative/general\\_information/doc/42000.php](http://www.bmu.de/english/climate_protection_initiative/general_information/doc/42000.php)

International Climate and Forest Initiative:

<http://www.regjeringen.no/en/dep/md/Selected-topics/klima/why-a-climate-and-forest-initiative.html?id=526489>

Fonds Français pour l'Environnement Mondial (FFEM):

<http://www.ffem.fr/jahia/Jahia/lang/en/accueil>

## Private foundations and other funding sources for SLM

Although there are at present no global funds which focus on SLM, there are funds which could encompass specific SLM proposals.

The Gates Foundation has, within its Global Development Programme, an agricultural development initiative, which focuses on four areas:

- Increased farmer productivity
- Links to markets
- New technologies
- Data, research, and policy analysis.

The Gates Foundation places a high importance on choosing the right partners, as recipients of grants. Grants awarded recently have ranged from \$1,000 to \$150 million. Agricultural Development grants can be awarded to established international organizations working to help smallholder farmers improve crop production and gain access to markets. Applications have to be in response to a Project Preparation Grant. The Foundation has recently given the International Maize and Wheat Improvement Centre a grant to develop and disseminate drought tolerant wheat varieties.

Other trusts fund small scale programmes in agriculture in Africa, which can be compatible with certain SLM projects. For example:

The Gatsby Charitable Foundation gives grants for smallscale agriculture development and enterprise development projects.

Alliance for a Green Revolution in Africa (AGRA) gives grants for projects and programmes which develop practical solutions to significantly boost farm productivity and incomes for the poor while safeguarding the environment. Grants are given to charitable institutions. AGRA has a two-step application system composed of a 1-2 page concept application, followed by a full proposal at AGRA's invitation

The Charles A. and Anne Morrow Lindbergh Foundation give 8-10 grants a year, up to \$10,580 for research and/or education projects in areas such as agriculture, conservation of plant resources, conservation of animal resources and conservation of water resources. The projects should further the Lindberghs' vision of a balance between the advance of technology and the preservation of the natural/human environment, and are assessed with balance in mind. They are

not restricted to US researchers, but are focussed on individuals with connections with research institutions. Grants have been awarded to project based in Africa – a project on producing biopesticides in Ethiopia, and another on replanting of the African blackwood tree – but these have had American researchers as key investigators. However, in 2008 a grant was given to a Chinese researcher based at a Chinese research institution. This would be a possible source of funding for an innovative research project in the area of SLM.

The Rockefeller Foundation focuses on enabling smart globalisation. Within this, it includes building resilience to climate change, and supporting sustainable efforts to provide nutrition and water. There is no specific timetable for grants. Organisations can apply when they have a project proposal ready. In 2008, 15 grants were granted for work in Africa on environment. Of these, nine were for African organisations. The Rockefeller Foundation supports AGRA (see above). The Rockefeller Africa regional office is based in Nairobi.

The Ford Foundation makes around 2,000 grants each year, in a number of fields, including environment and development. They have regional offices in Nairobi, Johannesburg and Lagos. Each office develops its own programme, and, at present, only the Nairobi and Johannesburg offices work in this field. The East Africa region (Nairobi) focuses on communities and natural resources, and the Southern Africa office focuses on community-based NRM. Grants can vary in size, but most in this field in Africa tend to be around \$100,000 - \$200,000. There is an on-line application process for grants, but interested organisations can also contact the Office of the Secretary by email with specific queries about the process. The on-line application process can be found at <http://www.fordfound.org/grants/inquiry/1>.

## **7.1 Useful guidance material and weblinks**

Almost all the foundations mentioned above allow internet applications for grants. Some, such as the Lindberg Foundation, have specific annual application dates, usually in June.

Others, such as Gates, send out requests for proposals or invite Letters of Inquiry for specific areas.

Yet others accept applications in their areas of interest as and when proposals are ready. This includes the Ford Foundation and the Rockefeller Foundation.

Most foundations work primarily with not-for-profit organisations and charities. However, some, such as Ford Foundation, may also include public sector organisations as eligible recipients. If there is uncertainty about areas of

interest, websites may clarify this, or potential applicants can contact the foundation directly.

The relevant sites for the organisations discussed above are:

Gates Foundation

[www.gatesfoundation.org/grantseeker/Pages/overview.aspx](http://www.gatesfoundation.org/grantseeker/Pages/overview.aspx)

Gatsby Foundation

[www.gatsby.org.uk/](http://www.gatsby.org.uk/)

AGRA

[www.agra-alliance.org/section/about/guidelines](http://www.agra-alliance.org/section/about/guidelines)

Lindbergh Foundation

[www.lindberghfoundation.org/grants/index.php](http://www.lindberghfoundation.org/grants/index.php)

Rockefeller Foundation

[www.rockfound.org/grants/grants.shtml](http://www.rockfound.org/grants/grants.shtml).

Ford Foundation

[www.fordfound.org1](http://www.fordfound.org1)

Information about other foundations can be found at

[www.fordfound.org/grants/otherresources](http://www.fordfound.org/grants/otherresources)

### 8.1 Debt for nature swaps

Debt for nature swaps have been used by the United States Government in Latin America since the 1990s. They entail redeeming a portion of the government's external debt in return for the developing country government using an equivalent amount of local currency to fund natural resource management projects. In 2006, France and Cameroon signed the first ever debt for nature swap in Central Africa. The agreement will invest at least \$25 million over a five year period to protect part of the Cameroon tropical forest, along with its wildlife and indigenous groups. The Forest and Environment Development Programme, which will be funded by the debt for nature swap, will also work with forest companies to develop a demand for certified environmentally friendly products.

#### **Box 8.1 Debt for nature swap for tropical forest conservation in Cameroon**

France and Cameroon signed the first ever Central African debt for nature swap in 2006. This agreement will invest at least \$25 million over the next five years to protect part of the world's second largest tropical forest.

The agreement comes from France's Debt Development Contract (C2D) a complement to the Heavily Indebted Poor Countries initiative (HIPC). The goal of C2D is to provide complete debt relief of the concessional loans France contracted to other countries. Twenty-two countries are eligible for C2D. The total amount of C2D debt relief is \$4.6 billion. The agreement requires Cameroon to earmark funds among four different sectors: education, health, infrastructure and natural resources. This is the first C2D agreement to allocate funds to natural resources. Previously funding had only been allocated to the education and health sectors.

Through the funds the Forest and Environment Development Program, a program to reduce poverty while protecting and managing natural forestry resources, will be implemented. The funding will be used to better manage protected areas, wildlife and forest production and increase community forest resources and research capacity. The program is designed to secure some 40 protected areas and increase the present protected area network from 14 to 17 percent of the national land area.

Illegal logging and an underdeveloped infrastructure threaten Cameroon's forests. As a solution, the program calls for working alongside forest companies to develop management plans and a demand for certified, environmentally friendly products. Employing 12,000, the forest sector is Cameroon's largest private employer and the second largest source of export revenue after oil. However, forest sector employment has dropped in recent years, so funds will also be used to re-establish two national forestry schools to train the new recruits.

Source: <http://www.worldwildlife.org/who/media/press/2006/WWFPresitem865.html>

In 2008, the government of France and the Government of Madagascar signed a \$20 million debt for nature swap to increase the area protected through the Foundation for Protected Areas and Biodiversity, a conservation trust Fund established by the World Wildlife Fund. The exact terms of any specific debt for nature swap will vary but for Francophone countries in particular this could provide useful earmarked funding for SLM.

## 8.2 Developing markets for sustainable ecosystem products and services

Sustainably produced and traded dryland products are another potential source of funding for SLM. Multilateral environmental agreements are increasingly identifying market creation and enhancement as an economic instrument to provide incentives for sustainable use of natural resources, focusing on integrating environmental concerns into the multilateral trading system. The World Trade Organisation (WTO) Committee on Trade and Environment has included environmental issues in the Doha Round negotiations, but no changes have yet been made to international trade rules.<sup>37</sup>

Where trading conditions for products such as aloe provide incentives for better management of local resources, then there can be a win-win situation for both household income and SLM. Care has to be taken however that resources are not exploited in an unsustainable manner which could lead to greater land degradation.

The GM has a Market Access and Trade programme which provides technical support to countries in identifying investment opportunities to integrate SLM concerns into trade processes and related financing mechanisms. Another objective of the programme is to develop coherent incentive frameworks to encourage policy-makers and institutions to foster an enabling environment for increased investment in SLM through trade. A focus area is to engage new stakeholders in SLM, leverage innovative sources for SLM financing and establish links with overarching development plans and budgeting processes. At the local level, the GM programme supports small projects to identify the type of incentives and enabling conditions that encourage private actors and local communities to reinvest the profits generated through market activities in sustainable land and natural resource use. Box 7.1 provides an example of one initiative under the programme.

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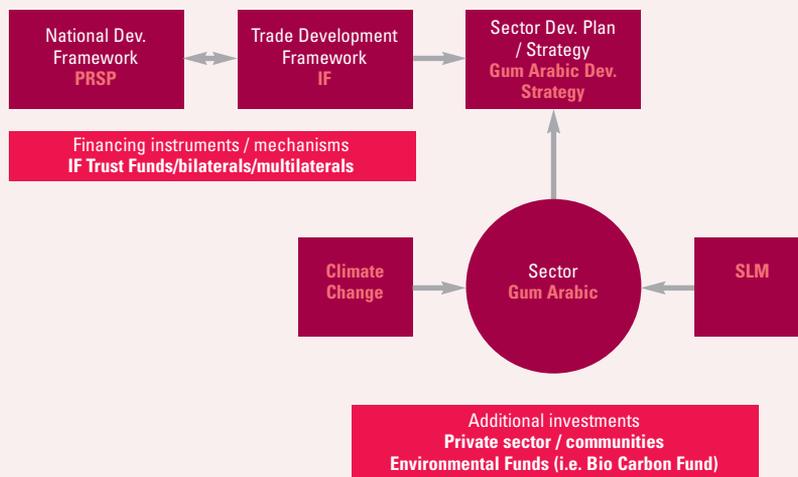
<sup>37</sup> GM (2008), Bridging the gaps between trade and environment financing.

## Box 8.2 The Global Mechanism's gum arabic initiative

Gum arabic is a versatile product of acacia trees (*Acacia senegal* and *A. seyal*) in the arid zones of sub-Saharan Africa. It is widely used in industries such as pharmaceuticals, food, cosmetics, textiles and printing. Fostering national and international trade in gum arabic would improve food security and reduce poverty in communities in the value chain, which are often in marginal areas with limited livelihood options. Exports of gum arabic are estimated to fulfil only 30 to 50 percent of global demand. The major producing countries - Chad, Nigeria and Sudan - supply 95 percent of world production. The gap between demand and supply gives opportunities for countries such as Mali and Burkina Faso that produce small amounts to position themselves in the niche market for high quality gum. Acacia trees also provide environmental services and livelihood options that include:

- Improving soil fertility by fixing nitrogen and recycling nutrients;
- Controlling desertification by acting as wind breaks and shelters against desert encroachment;
- Reducing soil erosion by means of their roots;
- Facilitating the infiltration of water and catchment in their canopies;
- Conserving biodiversity through intercropping, for example with aloe plants and pasture;
- Sequestering carbon;
- Providing fodder, fuelwood and material for construction and fencing; and
- Supporting bees that make honey.

These environmental services provide employment and generate incomes through the sales of derived products. High production potential, the availability of natural stands of acacia and the possibility of establishing plantations are assets for a growing gum sector. But forest degradation requires sound natural resource management to guarantee the resource base.



Source: Bridging the gaps between trade and environment financing (GM, 2008).

Appropriate labelling and certification of ecosystem products is one way of ensuring that trade is consistent with SLM, and can also increase the proceeds for both households and SLM investment. There are a number of different schemes for certification and labelling. Timber is one area where this has been well-established with perhaps the best known being the Forest Stewardship Council (FSC), and the Programme for the Endorsement of Forest Certification (PEFC) an umbrella body which assess and recognises national forest certification schemes. There are also private sector schemes for agricultural products which include Fairtrade and organic labels which have certain minimum environmental standards which promote SLM. These regulate production conditions to create marketing advantage and higher prices, for example certified forest products and the Biodiversity and Wine Initiative in South Africa:

### **Box 8.3: Examples of eco labeling**

#### **Example: The biodiversity and wine initiative in South Africa**

The biodiversity and wine initiative (BWI) is a collaboration between the wine industry in South Africa and the conservation sector, to add value to South African wines by adopting biodiversity best practices, and thereby also gaining market advantage. This was started in 2006, and now has over 100 members. It is funded by private sector organisations (two South African banks) and not-for-profit organisations, and intends to develop a number of marketing initiatives, including a biodiversity wine route for tourists. By adopting good biodiversity practices, the initiative contributes to SLM, and although not directly paying for environmental services, will recoup at least some of the cost of SLM investment through added product value. Also, it provides technical support for BWI members.

#### **Example: Forest certification schemes**

Forest certification timber is, in some sense, a joint product, of timber plus an environmental service. It allows consumers to select products made from sustainably managed forests. Forest certification schemes have proliferated since the early 1990s, and are driven by market forces and economic incentives. The largest are the FSC and the PEFC, based on the Pan-European Forest Process. This latter programme recognises national standards for forest certification, provided that they are compatible with international standards. Certification has been slow to take hold in Africa, though six new countries were added in Asia and Africa in 2006, including Cameroon and Gabon. However, insufficient market demand has reduced the price incentive, and much eligible timber is sold as uncertified. Twelve African countries have FSC national initiatives, and there is a regional office in Ghana. <http://www.fsc.org/africa.html>

### 8.3 Useful guidance material and weblinks

The GM is working with a number of international organisations to promote this agenda:

- The Network for Natural Gums and Resins in Africa, <http://www.global-mechanism.org/products-services/regional-initiatives/gum-arabic>
- UNCTAD's bio-trade initiative, <http://www.global-mechanism.org/products-services/global-initiatives/biotrade>
- The International Centre for Trade and Sustainable Development, <http://www.global-mechanism.org/products-services/global-initiatives/ictsd-partnership>

Information can be found about forestry certification schemes at the websites of the two certification systems covering the largest areas of forest:

- The Forest Stewardship Council, <http://www.fsc.org/>
- The Programme for Endorsement of Forest Certification Schemes, <http://www.pefc.org/internet/html/index.htm>

More information about BWI can be found at <http://www.bwi.co.za/>

On other standards initiatives see for example the sustainably harvested medicinal plants global initiative:

[www.traffic.org/home/2008/10/8/new-foundation-to-promote-sustainable-collection-of-wild-pla.html](http://www.traffic.org/home/2008/10/8/new-foundation-to-promote-sustainable-collection-of-wild-pla.html)

And an example in Uganda:

[www.bgci.org/files/Worldwide/Adverts/2008/profile\\_of\\_npf\\_medicinal\\_plants\\_program.pdf](http://www.bgci.org/files/Worldwide/Adverts/2008/profile_of_npf_medicinal_plants_program.pdf)

Biofuel standards: Roundtable on sustainable biofuels:

<http://cgse.epfl.ch/page65660-en.html>

Multi-stakeholder partnerships- Better Cotton:

[www.bettercotton.org/site.php](http://www.bettercotton.org/site.php)

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# Carbon and adaptation funds available for African projects

This listing is compiled from the Global Mechanism's database of Carbon and Adaptation Funds, excluding those whose geographical focus excludes Africa.

### A.1 Carbon funds

#### **Austrian JI/CDM Programme**

Objective	To purchase emission reduction credits from JI/CDM projects to help Austria meet its emission targets under the KP.
Investors	Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management only
Project eligibility	Geographic coverage: All host countries eligible for JI and CDM projects under the KP. Type: All CDM and JI are eligible for the programme
Size	
Contact	<a href="http://www.ji-cdm-austria.at/en">www.ji-cdm-austria.at/en</a> - <a href="mailto:Kyoto@kommunalkredit.at">Kyoto@kommunalkredit.at</a>

#### **Belgian JI/CDM Tender**

Objective	To purchase emission reduction credits from JI/CDM projects for the Belgian government.
Investors	The Belgian Federal Government only.
Project eligibility	Geographic coverage: JI and CDM projects worldwide. Host countries must have established a DNA/focal point and have ratified the KP Type: All JI/CDM projects, excluding nuclear and LULUCF. Preference is given to energy efficiency and renewable energy projects.
Size	Euro 22 million
Contact	<a href="http://www.climatechange.be/jicdmtender/">www.climatechange.be/jicdmtender/</a> - <a href="mailto:jicdmtender@helath.fgov.be">jicdmtender@helath.fgov.be</a>

## BioCarbon Fund (BioCF)

Objective	To provide carbon finance to demonstrate and test projects that sequester or remove GHG in forest, agricultural and other ecosystems.
Investors	Open to contributors from government, the private sector, and civil society groups. The minimum contribution to the fund is \$2.5 million.
Project eligibility	Geographic coverage: All JI and CDM countries are eligible Type: The fund has 2 windows, the larger of which will buy reductions potentially eligible for credit under the KP. For CDM projects, these are limited to A/R activities in the first commitment period. For JI projects, accepted activities cover the whole range of LULUCF activities. A smaller window will explore options to buy carbon credits not eligible under the KP, but that may be creditable under other programmes (eg. Restoration of degraded land, rehabilitation of dry-land grazing lands, etc.). Plantations are excluded.
Size	\$ 53.8 million
Contact	<a href="http://carbonfinance.org">http://carbonfinance.org</a> <a href="mailto:helpdesk@carbonfinance.org">helpdesk@carbonfinance.org</a> ; <a href="mailto:ebaroudy@worldbank.org">ebaroudy@worldbank.org</a>

## Carbon Assets Fund

Objective	The fund seeks to achieve attractive total rates of return through investment of private equity into CDM and JI projects that generate CERs and ERUs. Its strategy is to produce CERs and ERUs at cost and sell them into the EU spot market by physical delivery once issued. The fund recycles part of the revenue generated from the CERs and ERUs to social programmes to benefit local communities.
Investors	Open to further investors.
Project eligibility	Geographic coverage: All CDM and JI countries. Type: All CDM and JI projects, where the majority of revenues are from CERs and ERUs, particularly methane recovery projects. However coal-mine methane CDM projects in China are excluded, to avoid overlap with the China Methane recovery fund.
Size	Not disclosed
Contact	<a href="http://www.carboncapitalmarkets.com">www.carboncapitalmarkets.com</a> <a href="mailto:Karen.mcclellan@carboncapitalmarkets.com">Karen.mcclellan@carboncapitalmarkets.com</a>

## Carbon Fund for Europe

Objective	The fund will buy reduction from CDM and JI projects from either bank's portfolio, as well as stand-alone projects. It is designed to help developing countries and economies in transition to achieve sustainable development by fostering investment in clean technology projects, complement private sector development in the emerging carbon market and seek ways to support essential private carbon market development.
Investors	European governments and companies.
Project eligibility	Geographic coverage: All CDM and JI countries. Type: All CDM and JI projects
Size	Euro 50 million
Contact	<a href="http://carbonfinance.org">http://carbonfinance.org</a> - <a href="mailto:heldesk@carbonfinance.org">heldesk@carbonfinance.org</a>

## **CERUPT**

<b>Objective</b>	To buy emission reduction from the Dutch government, via CDM projects while, at the same time, helping companies investing in renewable energy and energy efficiency in developing countries by boosting the economic feasibility of project and creating an additional source of income.
<b>Investors</b>	Dutch government only.
<b>Project eligibility</b>	Geographic coverage: All CDM countries Type: All CDM projects excluding LULUCF
<b>Size</b>	Not disclosed.
<b>Contact</b>	<a href="http://www.carboncredits.nl">www.carboncredits.nl</a> - <a href="mailto:carboncredits@SenterNovem.nl">carboncredits@SenterNovem.nl</a>

## **Cheyne Carbon Fund Limited**

<b>Objective</b>	A voluntary carbon offset investment fund focusing on sourcing, purchasing, warehousing and selling voluntary emission reductions. The fund trades mostly in Voluntary Carbon Units, standardised offset instruments verified and certified in accordance with the Voluntary Carbon Standard.
<b>Investors</b>	Open to existing investors in Cheyne Capital Management
<b>Project eligibility</b>	Geographic coverage: open to Kyoto and non-Kyoto countries. Type: The fund invests in all project categories generating verified emission reductions that are: additional and permanent emission reductions and which create meaningful and quantifiable environmental benefits. The fund invests in project types that facilitate capital market investments in innovative new technologies which create expeditious solutions to climate change while also contributing towards aspects of sustainable development in the host countries. The fund will not invest in "business as usual" emission reductions nor credits generated from sectors where long-term performance and permanence may be questionable: eg. Forestry, enhanced oil recovery, soil sequestration, agricultural gases, and industrial gas destruction projects.
<b>Size</b>	Not disclosed
<b>Contact</b>	<a href="mailto:Mitchell.feierstein@cheynecapital.com">Mitchell.feierstein@cheynecapital.com</a>

## **Climate Cent Foundation**

<b>Objective</b>	To purchase 9Mt CO <sub>2</sub> e emission reduction credits from projects in Switzerland and abroad. A maximum of 8Mt CO <sub>2</sub> over the period 2008-12 can come from CERs and ERUs.
<b>Investors</b>	The Swiss government only.
<b>Project eligibility</b>	Geographic coverage: For foreign projects no geographical exclusions but preference will be given to highly-rated countries Type: In principle all project-based Kyoto credits issued in accordance with the rules governing the CDM and JI. However the foundation will favour small-scale renewable energy and methane reduction projects.
<b>Size</b>	+/- SFR 100 million/year anticipated
<b>Contact</b>	<a href="http://www.stiftungsklimarappen.ch">www.stiftungsklimarappen.ch</a> - <a href="mailto:info@stiftungskimarappen.ch">info@stiftungskimarappen.ch</a>

## Climate Change Capital Carbon Fund

Objective	To generate attractive levels of return for investors by acquiring a diversified portfolio of carbon credits, mostly from CDM projects and by investing directly in emission reduction projects and the companies that develop them.
Investors	
Project eligibility	Geographic coverage: All eligible JI and CDM countries. Type: Sectors include biomass, coal mine methane, forestry, industrial gases, energy efficiency, waste and landfill gas as well as wind, hydro and solar energy
Size	\$ 1 billion
Contact	<a href="http://www.climatechangecapital.com">www.climatechangecapital.com</a>

## Climate Change Investment

Objective	To raised investment for CDM and JI projects.
Investors	The fund is open to any institutional or retail investors.
Project eligibility	Geographic coverage: No restrictions, but the fund focuses on South America, India and South-east Asia Type: No restrictions, but the focus is on landfill, renewable energy and energy efficiency projects.
Size	Still in fund raising phase
Contact	<a href="http://www.3c-company.com">www.3c-company.com</a> - <a href="mailto:Clemens.huettner@3c-company.com">Clemens.huettner@3c-company.com</a>

## Community Development Carbon Fund

Objective	The CDCF was created to extend the benefits of carbon finance to the poorest countries and poor communities in all developing countries, which would otherwise find it difficult to attract carbon finance because of country and financial risk. Contributors to the CDCF support projects that measurably benefit poor communities and their local environment and will receive, in return, verified Kyoto-compliant emission reductions from these projects.
Investors	Closed to contributors other than those that have already invested capital in the fund.
Project eligibility	Geographic coverage: Non Annex-I countries which have ratified the KP Type: CDM projects, including afforestation, reforestation and LULUCF, that provide significant and measurable development benefits to communities living in the immediate project vicinity or with a historical, cultural or economic affiliation with the project.
Size	\$ 128,6 million
Contact	<a href="http://carbonfinance.org">http://carbonfinance.org</a> - <a href="mailto:helpdesk@carbonfinance.org">helpdesk@carbonfinance.org</a>

## Danish Carbon Fund (DCF)

Objective	The fund was established to help Danish private and public entities meet emissions reduction targets through the purchase of credits from JI and CDM projects and to build knowledge about understanding of the Kyoto mechanisms and implementation of projects among DCF participants.
Investors	The fund is a public-private partnership involving 4 Danish private sector companies and 2 government ministries. DCF participants are involved in the governance of the fund, as members of the participants committee, and have full voting rights.
Project eligibility	Geographic coverage: All host countries for CDM and JI projects (countries must have ratified the Kyoto Protocol or be about to ratify it in due course) Type: All CDM and JI projects are eligible, except LULUCF projects. However a preference is given to wind power, combined heat and power, hydropower, biomass and landfill projects.
Size	Euro 58 million
Contact	<a href="http://carbonfinance.org">http://carbonfinance.org</a> - <a href="mailto:helpdesk@carbonfinance.com">helpdesk@carbonfinance.com</a>

## Eco-Way

Objective	To buy CERs both from projects and the secondary market; to take equity stakes in CDM projects; and to invest in other private sector carbon funds.
Investors	No restrictions, but particularly geared towards financial institutions.
Project eligibility	Geographic coverage: All CDM countries Type: to be defined
Size	Not disclosed
Contact	<a href="http://www.eco-way.it">www.eco-way.it</a> - <a href="mailto:n.donati@eco-way.it">n.donati@eco-way.it</a>

## EDF Carbon Fund

Objective	To source CERs and ERUs from emission reduction projects under the CDM and JI frameworks for EDF and its European affiliates to offset GHG emissions.
Investors	EDF and its European affiliates: EDF Trading, EDF Energy of the UK, Edison of Italy and EnBW of Germany
Project eligibility	Geographic coverage: Project eligibility assessed on a case-by-case basis. Type: Project eligibility assessed on a case-by-case basis.
Size	Euro 290 million
Contact	<a href="http://www.edftrading.com">www.edftrading.com</a> - <a href="mailto:enquiries@edftrading.com">enquiries@edftrading.com</a>

## EIB-KfW Carbon Programme

Objective	To finance the purchase of carbon credits on behalf of European small and medium-sized enterprises, allowing them to access the JI and CDM markets to help them comply with targets under the EU ETS.
Investors	Open to European companies that have compliance obligations under the EU ETS, especially SMEs and their intermediaries, with a minimum commitment of Euro 500,000.
Project eligibility	Geographic coverage: no restrictions on eligible projects Type: CDM, JI and project-based efficiency projects. No industrial gases. Minimum transaction size of 30,000t/year, although bundling of smaller projects is also possible.
Size	NA
Contact	<a href="http://www.kfw.de/carbonfund">www.kfw.de/carbonfund</a> - <a href="mailto:carbonfund@kfw.de">carbonfund@kfw.de</a>

## ERUPT New Style

Objective	To buy emission reduction for the Dutch government, via JI projects while, at the same time, helping companies investing in renewable energy efficiency in Central and Eastern Europe by boosting the economic feasibility of projects by creating an additional source of income.
Investors	Dutch government only
Project eligibility	Geographic coverage: Annex I countries that have signed the KP (JI projects only) and countries with operational JI procedures Type: All JI projects except those adversely affected by the EU ETS. Examples of projects are: <ul style="list-style-type: none"><li>• Energy supply</li><li>• Transport</li><li>• Waste management</li><li>• LULUCF (A/F)</li></ul>
Size	Euro 116 million
Contact	<a href="http://www.carboncredits.nl">www.carboncredits.nl</a> - <a href="mailto:carboncredits@senternovem.nl">carboncredits@senternovem.nl</a>

## European Carbon Fund (ECF)

Objective	The fund is designed to provide investors a financial return. ECF will invest in the full range of carbon-based assets and their derivatives, barring forestry sinks, which it will risk manage and trade to generate returns.
Investors	Major financial institutions (now closed for further subscriptions)
Project eligibility	Geographic coverage: All eligible JI and CM countries Type: Any CDM and JI project can generate credits accepted under the EU Linking Directive. Thus LULUCF projects are not accepted.
Size	Euro 142,7 million
Contact	<a href="http://www.europeancarbonfund.com">www.europeancarbonfund.com</a> - <a href="mailto:carbon@europeancarbonfund.com">carbon@europeancarbonfund.com</a>

## Finnish Carbon Procurement Programme

Objective	To identify, develop and contract CDM and JI projects on behalf of Finland; to acquire carbon credits from such projects to be used towards Finland's Kyoto target; and to manage the portfolio of CDM and JI projects contracted under the Finnish CDM/JI Pilot Programme between 1999 and 2006.
Investors	
Project eligibility	Geographic coverage: All host countries eligible for CDM and JI projects. Type: All JI and CDM projects, except HFC-23 destruction and carbon capture and storage (CCS); hydro projects above 20MW must respect the criteria and guidelines of the World Commission on Dams.
Size	Euro 70 million
Contact	<a href="http://www.environment.fi/finnder">www.environment.fi/finnder</a> - <a href="mailto:finnder@ymparisto.fi">finnder@ymparisto.fi</a>

### **Flemish Government JI/CDM Tender**

<b>Objective</b>	To acquire high-quality credits from JI and CDM projects and involve Belgian companies in Carbon Finance. To help projects developers with supervision and advice at any stage of project development
<b>Investors</b>	Flemish region
<b>Project eligibility</b>	Geographic coverage: JI track 2 and CDM eligible countries. Type: Preference was given for projects involving energy saving, renewables or energy efficiency
<b>Size</b>	Euro 5 million
<b>Contact</b>	<a href="http://www.energiesparen.be/fxm">www.energiesparen.be/fxm</a> - <a href="mailto:liselotte.devos@ewbl.vlaanderen.be">liselotte.devos@ewbl.vlaanderen.be</a>

### **Fondo de Carbono para la Empresa Espanola**

<b>Objective</b>	To buy emission reductions from JI and CDM projects to deliver to Spanish public and private sector organisations to help them meet their commitments under both the EU ETS, and the Kyoto Protocol. The fund is intended to improve the competitiveness of Spanish industry by providing access to the carbon markets.
<b>Investors</b>	Public and private organisations, including small and medium-sized enterprises.
<b>Project eligibility</b>	Geographic coverage: The funds invests in CDM and JI projects, with a preference for those in Latina America due to the nature of its main investors, but open to all regions. Type: Any that generate credits that are eligible for use in the EU ETS.
<b>Size</b>	Euro 70 million
<b>Contact</b>	<a href="mailto:Miguel.winkels@fc2e.com">Miguel.winkels@fc2e.com</a> ; <a href="mailto:Federico.valles@fc2e.com">Federico.valles@fc2e.com</a>

### **Greenhouse Gas-Credit Aggregation Pool (GG-CAP)**

<b>Objective</b>	To enable participants to manage their GHG emission reduction requirements cost-effectively by providing them with low-cost, high-quality CERs and ERUs
<b>Investors</b>	Private companies
<b>Project eligibility</b>	Geographic coverage: JO and CDM projects globally Type: targeting projects such key sectors as agriculture, cement, chemicals, mining, petroleum, pulp and paper, and waste management. Interested in destruction of industrial gases, EE, full switching, fugitive gases and renewable energy projects.
<b>Size</b>	Euro 510 million
<b>Contact</b>	<a href="mailto:webmaster@natsource.com">webmaster@natsource.com</a> ; <a href="http://www.natsource.com">www.natsource.com</a>

## Grey K Environmental Fund LP

Objective	To achieve consistent absolute returns in all markets conditions, via a diversified portfolio of environmental products, including structured investments.
Investors	Not disclosed
Project eligibility	Geographic coverage: the fund invests and purchases CERs from, CDM projects in non-Annex I countries. It also invests in, and purchases ERus from, qualified Annex I countries included in Annex B to the KP. The fund invests in other baseline-and-credit schemes as determined by management. Type: CDM/JI projects, qualified renewable energy projects, forestry projects, ETS allowance markets.
Size	Not disclosed.
Contact	<a href="http://www.rnkcapital.com">www.rnkcapital.com</a> - <a href="mailto:kedin.kilgore@rnkcapital.com">kedin.kilgore@rnkcapital.com</a>

## ICECAP Carbon Portfolio

Objective	To help a selected group of participants meet and/or hedge their carbon emission reduction commitments under, or deriving from, the KP, the EU ETS or certain national schemes.
Investors	A limited numbers of participants (companies covered by emission reduction targets)
Project eligibility	Geographic coverage: All possible JI and CDM host countries. Type: All types of CM (eligible under the EU ETS) and JI projects.
Size	Not disclosed.
Contact	<a href="http://www.icecapltd.com">www.icecapltd.com</a> - <a href="mailto:alick@icecapltd.com">alick@icecapltd.com</a>

## IFC-Netherlands Carbon Facility (INCaF)

Objective	To acquire CERs for the Netherlands while, at the same time, providing projects with a future stream of income that may otherwise not be available, and to help host countries develop efficient, clean technologies at a lower cost, thus supporting more environmentally sustainable economic growth.
Investors	Dutch government only.
Project eligibility	Geographic coverage: Projects must be located in a CDM-eligible developing country that has either ratified the KP or is in the process of doing so. Type: CDM projects with particular focus on the following types: renewable energy projects (eg. Biomass, wind, geothermal); energy efficiency; capture and utilisation of methane; fuel switching; recovery and utilisation or destruction of industrial gases that are potent GHGs.
Size	Euro 100 million
Contact	<a href="http://www.ifc.org/carbonfinance">www.ifc.org/carbonfinance</a> - <a href="mailto:carbonfinance@ifc.org">carbonfinance@ifc.org</a>

## Japan Carbon Facility

Objective	To acquire 1 million tonnes of CERs generated between 2008 and 2012 from small-scale projects in developing countries. The facility, which will develop projects jointly with project proponents, is tailored to the specific needs of the buyer in terms of price, volume and delivery schedule carbon credits.
Investors	Only open to the Japan GHG Reduction Fund
Project eligibility	Geographic coverage: All CDM countries Type: Only small-scale CDM projects as defined by the CDM Executive Board.
Size	NA
Contact	<a href="http://www.jcarbon.co.jp">www.jcarbon.co.jp</a> - <a href="mailto:h-sawano@jcarbon.co.jp">h-sawano@jcarbon.co.jp</a>

## Japan Carbon Finance

Objective	To purchase CERs and ERUs from CDM/JI projects for the first Kyoto commitment period.
Investors	Japanese companies
Project eligibility	Geographic coverage: Developing countries and Eastern Europe Type: All types of JI and CDM projects
Size	Not disclosed
Contact	<a href="http://www.jcarbon.co.jp">www.jcarbon.co.jp</a> - <a href="mailto:jcf@carbon.co.jp">jcf@carbon.co.jp</a>

## Japan Greenhouse Gas Reduction Fund

Objective	To purchase CERs and ERUs from CDM/JI projects for the first Kyoto commitment period. The fund is also designed to support CDM/JI project development, providing grant money for PDD preparation and validation, and advice to developers to help them obtain host country approval and certification.
Investors	Japanese companies
Project eligibility	Geographic coverage: Developing countries and Eastern Europe Type: All types of JI and CDM projects
Size	\$ 141,5 million
Contact	<a href="http://www.jcarbon.co.jp">www.jcarbon.co.jp</a> - <a href="mailto:jcf@carbon.co.jp">jcf@carbon.co.jp</a>

## KfW Carbon Fund

Objective	To purchase cost-effective carbon credits from projects for the participants, to be use as compliance tools in the ETS; to promote projects contributing to GHG emission reductions and sustainable development.
Investors	Companies and other private and/or public-sector entities or institutions, that want to purchase ETS compliance tools.
Project eligibility	Geographic coverage: no restrictions Type: CDM, JI, project-based EUAs
Size	Euro 83,9 million
Contact	<a href="http://www.kfw.de/carbonfund">www.kfw.de/carbonfund</a> - <a href="mailto:carbonfund@kfw.de">carbonfund@kfw.de</a>

## Luso Carbon Fund

Objective	To achieve substantial commercial returns for investors by investing in CDM projects, predominantly in the Portuguese-speaking world.
Investors	Institutional investors and installation operators facing GHG emission limits.
Project eligibility	Geographic coverage: the main focus is Brazil; In addition the Fund prioritises Portuguese-speaking countries, including Portugal's former colonies in Africa. However, projects in other geographical regions will be considered. Type: Any CDM projects. JI projects will also be considered.
Size	Euro 30,7 million
Contact	<a href="mailto:lsouto@banifib.pt">lsouto@banifib.pt</a> ; <a href="mailto:geral@ecoprogresso.pt">geral@ecoprogresso.pt</a>

## Merzbach Carbon Finance

Objective	Provides long-term mezzanine financing to JI and CDM project developers who have signed ERPAs with buyers of their carbon credits. MCF does not buy CERs/ERUs, but receives CERs/ERUs as a return for providing upfront financing and for taking multiple risks in the projects. It provides advice on financial matters, arranges financing and helps in tailoring ERPAs.
Investors	Financial institutions
Project eligibility	Geographic coverage: All JI and CDM host countries Type: Methane, waste heat recovery and industrial projects are preferred.
Size	\$ 400 million (indicative commitment)
Contact	<a href="http://www.merzbach.tk">www.merzbach.tk</a> - <a href="mailto:cdeville@optonline.net">cdeville@optonline.net</a>

### **Netherlands Clean Development Mechanism Facility**

<b>Objective</b>	To increase the range of options for complying with the Dutch emissions reductions requirement established by the KP, while at the same time promoting sustainable development, capacity building, fostering of knowledge and market creation.
<b>Investors</b>	Dutch government only
<b>Project eligibility</b>	Geographic coverage: Non-Annex I countries which have either ratified the KP, or have begun the ratification process. Type: All CDM projects, excluding LULUCF
<b>Size</b>	Euro 228 million
<b>Contact</b>	<a href="http://carbonfinance.org">http://carbonfinance.org</a> - <a href="mailto:heldesk@carbonfinance.org">heldesk@carbonfinance.org</a>

### **Portuguese Carbon Fund**

<b>Objective</b>	The fund is the Portuguese government's financial arm to meet its Kyoto target.
<b>Investors</b>	Portuguese government bodies
<b>Project eligibility</b>	Geographic coverage: the investment portfolio will be diversified geographically, with priority for Portuguese-speaking countries and others with relevant relations with Portugal. Type: The investment portfolio will have the following priorities: energy efficiency and renewable energies; sustainable transport and mobility systems; waste management; the use of clean technologies; and technical and scientific capacity-building to contribute to the implementation of the global climate regime.
<b>Size</b>	Euro 354 million (target size)
<b>Contact</b>	<a href="mailto:DNA.Portugal@sg.maotdr.gov.pt">DNA.Portugal@sg.maotdr.gov.pt</a>

### **Prototype Carbon Fund**

<b>Objective</b>	The PCF was the world's first carbon fund and, while it is designed to return carbon credits to its participants, it was designed particularly to show how project-based GHG emission reduction transactions can contribute to sustainable development and lower the cost of compliance with the KP.
<b>Investors</b>	Participation in the PCF was open to all World Bank member countries, and to any company or entity located in these countries. The fund is now closed.
<b>Project eligibility</b>	Geographic coverage: all host countries for CDM and JI projects. Type: all CDM and JI projects were eligible, including LULUCF projects.
<b>Size</b>	\$ 180 million
<b>Contact</b>	<a href="http://carbonfinance.org">http://carbonfinance.org</a> - <a href="mailto:helpdesk@carbonfinance.org">helpdesk@carbonfinance.org</a>

### **Sindicatum Carbon&Energy Fund**

<b>Objective</b>	To finance projects that create carbon credits and clean energy worldwide, most of which will be expected to be registered under the KP
<b>Investors</b>	Open to institutional investors
<b>Project eligibility</b>	Geographic coverage: global Type: energy efficiency, fuel switch, clean coal and similar projects. Companies with GHG abatement technology with immediate project applications are also eligible.
<b>Size</b>	Not disclosed
<b>Contact</b>	<a href="http://www.sindicatum.com">www.sindicatum.com</a>

### **Spanish Carbon Fund**

<b>Objective</b>	The fund was established to purchase emission reductions at a competitive cost to contribute to Spain's emission reduction targets, while promoting renewable energy and energy efficiency projects in developing countries and EITs, and building knowledge and experience on carbon finance among the fund's participants and stakeholders.
<b>Investors</b>	The fund is open to private and public Spanish participants.
<b>Project eligibility</b>	Geographic coverage: all JI and CDM countries that are World bank borrowing member countries and parties to the UNFCCC that have signed the KP, with a focus on Latin America, North Africa and Europe. Type: All JI and CDM projects, with a sustainable development component, in renewable energy, biomass and agricultural waste, urban waste management and industrial processes.
<b>Size</b>	Euro 220 million
<b>Contact</b>	<a href="http://carbonfinance.org">http://carbonfinance.org</a> - <a href="mailto:helpdesk@carbonfinance.org">helpdesk@carbonfinance.org</a>

### **Swedish JI/CDM Programme**

<b>Objective</b>	To gain experience in the use of the JI and CDM mechanisms and contribute to their development. To acquire emission reductions at a competitive price. To gain experience in order to provide support to Swedish companies intending to invest in JI/CDM.
<b>Investors</b>	Swedish Energy Agency only.
<b>Project eligibility</b>	Geographic coverage: KP signatory countries in Asia, Latin America, Africa and Central/Eastern Europe. Type: The Swedish JI/CDM programme priorities renewable energy, energy efficiency and small/medium sized projects.
<b>Size</b>	Euro 25 million
<b>Contact</b>	<a href="http://www.energimyndigheten.se">www.energimyndigheten.se</a> - <a href="mailto:josefin.hedbrandh@energimyndigheten.se">josefin.hedbrandh@energimyndigheten.se</a>

## Trading Emissions Plc

Objective	The fund is an AI-listed investment company established to offer investors exposure to the carbon market through the acquisition of tradable environmental instruments and direct investments to leverage such instruments, particularly carbon credits generated from CDM and JI projects. As such, TEP operates as both a carbon fund and a carbon market/clean technologies venture capital investor.
Investors	TEP is listed on the London Stock Exchange Alternative Investment Market, allowing any individual or company to become a shareholder of the company.
Project eligibility	Geographic coverage: no preference for any particular geographic region Type: no preference for any particular type of technology; CDM, JI and voluntary market projects are of interest, from any geographical region, including North America.
Size	Pound 310 million
Contact	<a href="http://www.tradingemissionsplc.com">www.tradingemissionsplc.com</a> - <a href="mailto:info@tradingemissionsplc.com">info@tradingemissionsplc.com</a>

## UK Government Carbon Offsetting Fund

Objective	The fund will offset emissions arising from air travel by UK government officials and ministers. The portfolio will offset emissions for a period of three years, from April 2006 to April 2009.
Investors	UK government bodies
Project eligibility	Geographic coverage: CDL-eligible countries Type: CDM projects
Size	Pound 2,49 million to buy 255,000 CERs from trading Emission Plc
Contact	<a href="mailto:carbonoffsetting@defra.gsi.gov.uk">carbonoffsetting@defra.gsi.gov.uk</a>

## Umbrella Carbon Facility

Objective	The UCF is an aggregating facility to pool funds from existing World Bank-managed carbon funds and other participants for the purchase of emission reductions from large projects.
Investors	Public and private entities in countries which are parties to the UNFCCC, and whose participation has been approved by the trustee, and the existing carbon funds for which the World Bank is the trustee.
Project eligibility	Geographic coverage: NA Type: Large-scale projects with emission reductions of more than 10 Mt of CO <sub>2</sub>
Size	Euro 776 million
Contact	<a href="http://carbonfinance.org">http://carbonfinance.org</a> - <a href="mailto:helpdesk@carbonfinance.org">helpdesk@carbonfinance.org</a>

Additional proposed funds that are not yet active:

**Forest Carbon Partnership Facility:**

**Fund:** Proposed Readiness Fund US\$20 million,  
and Proposed Carbon Fund US\$40 million

**Eligibility:** Open

**Examples of African projects:** None implemented yet.

Developing and industrialized countries have requested the World Bank to explore a framework for piloting activities that would reduce emissions from deforestation and degradation using a system of policy approaches and performance-based payments. The proposed framework is called the Forest Carbon Partnership Facility. The Forest Carbon Partnership Facility (FCPF) will assist developing countries in their efforts to reduce emissions from deforestation and degradation – REDD - by providing value to standing forests. The Forest Carbon Partnership Facility will build the capacity of developing countries in tropical and subtropical regions to reduce emissions from deforestation and forest degradation and to tap into any future system of positive incentives for REDD. The Partnership will work through two separate mechanisms:

- **Readiness Mechanism:** This will assist approximately 20 developing tropical and sub-tropical countries in preparing themselves to participate in a future, large-scale, system of positive incentives for REDD.
- **Carbon Finance Mechanism:** A few countries that will have successfully participated in the Readiness Mechanism may be selected, on a voluntary basis, to participate in the Carbon Finance Mechanism, through which the FCPF will pilot incentive payments for REDD policies and measures in approximately five developing countries.

Further Information:

[http://carbonfinance.org/docs/FCPF\\_Booklet\\_English\\_version\\_2.pdf](http://carbonfinance.org/docs/FCPF_Booklet_English_version_2.pdf)

**Carbon Partnership Facility:**

Fund: Data Not Available

Eligibility: Data Not Available

Examples of African projects: None implemented yet.

The new proposed Carbon Partnership Facility (CPF) is designed to develop emission reductions and support their purchase over long periods after 2012. Its objective and business model are based on the need to prepare large-scale, potentially risky investments with long lead times, which require durable partnerships between buyers and sellers.

The new CPF will employ a governance structure that features the balanced participation of buyers and sellers. Host country governments and donors will also directly participate in the governance of the CPF in an advisory capacity. Donor contributors may include governments and other public and private entities. Closer collaboration and partnership between all parties in the carbon market is expected to make carbon finance an even more effective tool in climate change mitigation and development, and will provide a unique operational level opportunity for the parties involved to exchange views and discuss issues of mutual interest.

Further Information:

<http://carbonfinance.org/Router.cfm?Page=CPF&ItemID=41756&FID=41756>

## A.2 Adaptation funds

### Strategic Priority for Adaptation (SPA)

**Objective** Reduce vulnerability and to increase adaptive capacity to the adverse effects of climate change in the focal areas in which the GEF works

**Investors** Annex I countries

**Project eligibility** Geographic coverage: Non Annex I countries  
Type: Biological Diversity, climate change, international waters, land degradation, POPs

**Size**

**Contact**

### Least Developed Countries Fund (LDCF)

**Objective** To address the extreme vulnerability and limited adaptive capacity of Least Developed Countries (LDCs).

**Investors** Annex I countries

**Project eligibility** Geographic coverage: Only LDC in Non Annex I countries  
Type: Health, Agriculture, water, infrastructure

**Size**

**Contact**

### Special Climate Change Fund (SCCF)

**Objective** The SCCF, established in response to guidance from the Conference of the Parties to the UNFCCC, was originally aimed at supporting activities in the following areas: Adaptation; Technology transfer; Energy, transport, industry, agriculture, forestry, and waste management; Economic diversification

**Investors** Annex I countries

**Project eligibility** Geographic coverage: Non Annex I countries  
Type: Health, Agriculture, Water, Infrastructure

**Size** The resources for adaptation now amount to about \$65 million

**Contact**

### Adaptation Fund

**Objective**

**Investors** Annex I countries (to meet their emission reduction commitments)

**Project eligibility** Geographic coverage: "Particularly vulnerable" developing country parties; AOSIS  
Type: Water resources, agriculture, coastal zone management and marine resources, ecosystem management

**Size**

**Contact**





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**The Global Mechanism of the UNCCD at the  
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00142 Rome, Italy  
Tel. +39 06 5459 2155  
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