THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
MINISTRY OF AGRICULTURE AND RURAL DEVELOPEMENT

ETHIOPIAN STRATEGIC INVESTMENT FRAMEWORK FOR SUSTAINABLE LAND MANAGEMENT

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Contents

Acronyms

ADLI	**Agriculture Development Led-Industrialization**
AfDB	**African Development Bank**
AMAREW	**Amhara Micro-Enterprise, agricultural Research-Extension and Watershed management**
APEI	**Action Plan of the Environment initiative**
CAADP	**Comprehensive Africa Agriculture Development Program**
CBD	**Centre for Biological Diversity**

CBO	**Community Based organization**
CRDA	**Christian Relief and Development Agency**
CSA	**Central Statistics Authority**
CSP	**Country Strategic paper**
DPPA	**Disaster Prevention and Preparedness Agency**
EC	**European Commission**
EDRI	**Ethiopian Development Research Institute**
EFAP	**Ethiopian Forestry Action Plan**
EFPRI	**Ethiopia Food Policy Research Institute**
EIAR	**Ethiopian Institute of Agricultural research**
EPA	**Environmental Protection Authority**
ERR	**Economic rate of Return**
ESIF	**Ethiopia Strategic Investment framework**
FAO	**Food and Agriculture Organization**
FFR	**Financial rate of Return**
FSCB	**Food Security coordination Bureau**
GDC	**German Development Cooperation**
GDP	**Gross Domestic product**
IARC	**International Agricultural Research centre**
ICARDA	**International Centre for Agricultural Research in Dry land Africa**
IFAD	**International Fund for Agricultural Development**
IUCN	**International Union for Conservation of Nature**
MDG	**Millennium Development Goal**
MERET	
MoARD	**Ministry of Agriculture and Rural Development**
MoFA	**Ministry of Foreign affairs**
MoFED	**Ministry of Finance and Economic Development**
MoID	**Ministry of Infrastructure Development**
MoME	**Ministry of Mines and Energy**
MoWR	**Ministry of Water Resources**
NAP	**National Action Program**
NEPAD	**New Partnership for Africa's Development**
NGO	**Non-Government Organization**
PASDEP	**Plan for Accelerated Sustainable Development to End Poverty**
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NAP	**National Action Program**
NEPAD	**New Partnership for Africa's Development**
NGO	**Non-Government Organization**
PASDEP	**Plan for Accelerated Sustainable Development to End Poverty**

A. SUMMARY

1. The Ethiopian Sustainable Land Management Investment Framework (ESIF) provides a holistic and integrated strategic planning framework under which government and civil society stake-holders can work together to remove the barriers, and overcome the bottle-necks, to promoting and scaling up sustainable land management (SLM) within Ethiopia. Land degradation is a multi-dimensional problem, which the piecemeal past efforts of different agencies have failed to tackle

effectively. The ESIF calls for an alternative approach based on multi-sectoral partnerships in which the different stakeholders seek to harmonise and align their investments in a collaborative manner with the aim of alleviating rural poverty through restoring, sustaining and enhancing the productive capacity, protective functions and bio-diversity of Ethiopia's natural ecosystem resources.

2. Ethiopia is characterised by considerable diversity in terms of its bio-physical environment and its cultural and ethnic composition. The varied relief has resulted in a variety of different ecosystems, based on local differences in the micro-climate, soil properties, vegetation types and water resources. In turn this has influenced historical and current settlement patterns. Which have all contributed to Ethiopia being one of the world's biodiversity hotspots and centres of agro-biodiversity.

3. Some 85% of Ethiopia's population of close to 79 million live in rural areas and primarily depend on using their local land resources (soils, water and vegetation) to meet their basic welfare needs (for food, energy, shelter, water, cash etc). Ethiopia's economy is heavily dependent on agriculture, with this sector serving as the main driver of economic growth. Smallholder farmers produce 90-95% of the country's cereals, pulses and oilseeds and form the backbone of the agricultural sector. However the performance of this sector over the last 30 years has been failing to keep up with demands of a growing population, and as a result Ethiopia has been a net importer of grains since 1981/82. Land degradation has been a contributory factor to this decline in agricultural productivity, and overall the annual costs of land degradation are estimated to be at least 2-3% of agricultural GDP.

4. Within Sub-Saharan Africa Ethiopia is considered to be one of the countries most seriously affected by land degradation. By the mid 1980s some 27 million ha or almost 50% of the highland area was considered to be significantly eroded, of this 14 million ha was seriously eroded and over 2 million ha beyond reclamation. Currently it is estimated that some 30,000 ha are lost annually due to soil erosion, while over the whole country some 1.5 billion tons of soil are removed annually by a variety of erosion processes. Soil erosion is the most visible sign of land degradation, however a variety of other degradation processes are at work and the soil erosion problems cannot be tackled without recognising, and addressing, these underlying degradation processes.

5. Ethiopia's land resources are critical to the economic and social development of the country. There is thus an urgent need to reverse the current serious levels of land degradation through promoting and scaling up successful SLM technologies and approaches. However this will require overcoming a number of major gaps, bottlenecks and barriers that have hindered the successful scaling up and mainstreaming of SLM within Ethiopia, in particular: (i) knowledge and technological barriers; (ii) policy and legal barriers; (iii) institutional barriers; and (iv) economic and financial barriers.

6. The ESIF has therefore been formulated with the goal of *serving as a national level strategic planning framework that is to be used to guide the prioritisation, planning and implementation, by both the public and private sector, of current and future investments in SLM with the aim of addressing the interlinked problems of poverty, vulnerability and land degradation at the rural community level*.

7. The overall development objective of the ESIF is to *improve the livelihoods and economic well-being of the country's farmers, herders and forest resource users by scaling up SLM practices with proven potential to restore, sustain and enhance the productivity of Ethiopia's land resources*.

8. The overall environmental objective of the ESIF is to *rebuild Ethiopia's natural capital assets by overcoming the causes, and mitigating the negative impacts, of land degradation on the structure and functional integrity of the country's ecosystem resources*.

9. The ESIF is planned to be implemented in three phases, over a fifteen year period (phase 1: 2009 – 2013, Phase 2: 2014 – 2018, and Phase 3: 2019 – 2013). Activities to be implemented under the auspices of the ESIF would fit within one, or more, of six broad (and interrelated) component areas and these need to be implemented in integration, namely: (i) investment in field based projects and programs for promoting and scaling up SLM; (ii) improving land administration and certification system ; (iii) building the capacity of public and private sector SLM advisory and other support services providers; (iv) improving the enabling policy, legal, institutional and financial environment for SLM; (v) building the ESIF SLM Knowledge Base; and (vi) management and implementation of the ESIF.

10. The anticipated outcomes from these component activities would include:

- An overall reduction in rural poverty and vulnerability, as a result of adopting SLM practices that improve the livelihoods and economic well-being of Ethiopia's farmers, herders and forest resource users.
- An overall reduction in the area of land affected adversely by land degradation, with a corresponding increase in the productive capacity, and protective functions, of Ethiopia's ecosystem resources.
- Removal of the key barrier of insecure land tenure/user rights that has hindered the field level adoption of SLM practices, and secure land tenure/user rights that recognise –special community groups and gender differences.
- Improved knowledge on the suitability of different parts of the country for different land uses guiding the formulation of appropriate federal, regional and woreda level land use policies and plans.
- Improved capacity of the planning, advisory and other essential support services at the federal, regional, woreda and community levels leading to an expansion in the numbers of rural households and communities with the capacity to invest in SLM.
- An improved federal, regional and woreda level enabling policy, institutional, legal, and financial environment for the promotion and scaling up of SLM.
- An enhanced knowledge base contributing to the effective promotion and scaling up of SLM within Ethiopia.
- An effective institutional capacity and operational structure in place to support the implementation of the 15 year ESIF.

11. A variety of existing and pipe line projects would be brought together under the auspices of the ESIF and would provide the initial base line funds required.

Additional incremental funding would be sought from a variety of different sources including: (i) federal, regional and woreda level governments; (ii) development partners (both donor agencies and NGOs); (iii) GEF grants (principally from the SLM focal area, but with additional funding where appropriate from the biodiversity, climate change and international waters focal areas); and (iv) the private and civil society sector (including cash and in kind contributions from the beneficiary rural communities).

12. It is estimated that the investment funding required for the implementation of the 15 year ESIF is as follows:

Current base line funding	US$ 1,303.65 million
Incremental funding required	US$ 5,392.45 million
Total ESIF funding	US$ 6,696.10 million

IB. CONTEXT, RATIONALE AND ELIGIBILITY

B.1. General Background

13. Ethiopia, with a land area of 1.13 million km^2, is characterised by considerable diversity in terms of its bio-physical environment and its cultural and ethnic composition. The varied relief (massive highlands with high and rugged mountains, flat topped plateaus and deep gorges), divided by the Great Rift Valley, and surrounded by lowlands and semi-deserts, has resulted in a variety of different ecosystems based on local differences in the micro-climate, soil properties, vegetation types and water resources. In turn this has influenced historical and current settlement patterns. Across the country there is considerable variation in altitudes, ranging from below the sea level, in the Kobat Sink, Afar Depression, to 4620 m at the summit of Ras Dashen Mountain. The part of Ethiopia known as the Highlands (land over 1,500 masl) makes up around 45% of the total land area.

14. The climate of the country is regulated by the seasonal migration of the Inter Tropical Convergence Zone (ITCZ) following the position of the sun relative to the earth and the associated atmospheric circulation. It is also highly influenced by the complex topography of the country. Traditionally five broad climatic zones are recognised in Ethiopia based on altitude and temperature namely: *Wurch* (cold climate at more than 3,000 masl), *Dega* (temperate like climate – highlands between 2,300-3,000 masl), *Weyna dega* (warm 1,500-2,300 masl), *Kola* (hot and arid climate, less than 1500 masl), and *Berha* (hot and hyper arid climate in the lowlands). These are typically sub-divided according to rainfall (wet over 1,400 mm/yr, moist 900-1,400 mm/yr, and dry below 900 mm/yr). The south-western part is the wettest in the country where average annual rainfall exceeds 2,200 mm, for instance in the Ilubabor zone Rainfall amounts decrease in all directions as one moves from the south-western highlands, with the driest areas averaging less than 200 mm, particularly in the Danakil Depression, the lower Awash River Basin and in Eastern Ogaden.

15. Ethiopia with a population close to 79 million inhabitants[1] is the second most populous country in Sub-Saharan Africa. Some 85% live in rural areas (one of the highest percentages for Sub-Saharan Africa) and primarily depend on utilising their local land resources to meet their basic welfare needs (for food, energy, shelter, water, cash etc). Women account for 48% of the population and about 20% of rural households are headed by women. Almost 50% of the population is under 20 years of age.

16. Ethiopia is a federal republic divided into a number of regional states,[2]. Although Oromo, Amhara and Tigrayans account for three-fourths of the Ethiopian population, the people of Ethiopia are much more diverse than the number of states suggests.

B.2. Economic Background

17. The Ethiopian economy is currently experiencing an unprecedented spell of economic growth, having averaged over 11% annual growth over the last four years, with growth of 8.8% expected for 2007/2008[3]. However Ethiopia's economic growth rate has historically been highly variable due to exogenous shocks, particularly drought and fluctuations in the price of its primary export commodities. This situation has been exacerbated by deteriorating terms of trade in particular the recent steep rise in the price of foods and petroleum products. Food prices have grown at an annualized rate of 24% in the first part of 2008 and the cost of petroleum imports has nearly tripled in the last three years (2006-2008). To achieve the Millennium Development Goal (MDG) of halving poverty by 2015, Ethiopia must sustain an annual economic growth rate of at least 7%. While this is achievable, sustained growth over the long term will require enhanced efforts to strengthen agricultural productivity, which in turn requires greater investment in the sustainable management of the country's land resources.

[1] The population was estimated at 77,127,000 at the end of 2006 with an annual growth rate of 2.31% or just under an additional 2 million people per year.
[2] The regional states are: Afar, Amhara, Benilshangul-Gumuz, Gambela, Harari, Oromia, Somali, Southern Nations, Nationalities, and Peoples Region (SNNPR) and Tigray, and three special urban states Addis Ababa, Dire Dawa and Harrari.
[3] World Bank Country brief April 2008.

B.3 Poverty Situation

18. Ethiopia is one of the world's poorest countries. At US$200 Ethiopia's per capita GDP is much lower than the average for Sub-Saharan Africa. While the problem of poverty is still high, there has been significant progress since 1991 in key human development indicators. Primary school enrollments have tripled, child mortality has almost been cut in half, and the number of people with access to clean water has more than doubled. More recently, poverty reduction has been accelerated. The poverty headcount, which stood at 46% in 1995/96, and 44% in 2000/01, fell to 39% in 2005/06. However Ethiopia is still a long way for achieving many of the UN millennium development goals by 2015, given the country's very low starting point.

19. There are clear disparities in poverty between rural and urban areas. Most rural households live on a per capita income of less than US$ 0.30 a day and still have poor access to most essential services. In addition to high population densities, particularly in the Highlands, shrinking farm sizes and continued land degradation are reducing the sustainability of agricultural production and making it difficult to lift rural households out of poverty and provide them with a sustainable future. Most rural households find it difficult to survive without recourse to seasonal or permanent urban migration in search of the very limited wage employment opportunities. When faced with adverse external circumstances (eg. when there is drought) rural household survival coping strategies can include: (i) engaging in inefficient sharecropping arrangements; (ii) selling their livestock; (iii) removing their children from school; or (iv) reducing expenditure on even the most basic of necessities. Such risk mitigating measures can increase vulnerability by depleting household assets and reducing future production and income earning potential.

B.4. The Agriculture Sector

20. Ethiopia's economy is heavily dependent on agriculture (crop, livestock and forestry production) as the agriculture sector is the main driver of economic growth, accounting for about 50% of GDP, 90% of export revenues, 80% of employment, producing around 70% of the raw material requirements of agro-based domestic industries, and a major source of the nations food supplies. This sector is also expected to play a key role in generating surplus capital to speed up the overall socio-economic development of the country.

21. Smallholder farmers form the backbone of the agricultural sector, cultivating 95% of the cropped area, and producing 90-95% of the country's cereals, pulses and oilseeds. Smallholder farmers are principally concerned with meeting their subsistence needs, and while in the most productive areas any surplus produce will be sold, the amounts are usually limited, while in the more marginal areas many farm households struggle to meet their annual food needs from their own production.

22. The performance of the crop production sub-sector over the last 30 years has shown a fluctuating up and down trend. It has failed to keep up with the demand

from a growing population, as per capita food grain production has steadily decreased over this period. Whereas in the past Ethiopia had been self-sufficient in food, and a net exporter of food grains, it has been a net importer of grain since 1981/82. Population pressure, particularly in the highland farming areas, has led to a decline in farm size, which combined with increasing land degradation, and recurrent droughts, has contributed to declining crop productivity. 22. In 2007 the livestock population was estimated as about 40.3 million cattle, 20.7 million sheep and 16.2 million goats (CSA 2007). The livestock sector contributes approximately 12 to 15% to the overall GDP and about 25-30% to the agricultural GDP. This sub-sector is important for millions of rural households by providing them with food (milk, meat, egg, and blood), farm power, manure, and as an emergency source of cash (one or more animals being sold at times of need). The sub-sector also furnishes raw materials (such as hides, skins, horns, blood, bones, hair, wool, and beeswax) for domestic industries as well as commodities for export.

23. Only 25% of Ethiopia's livestock population graze in the rangelands (i.e. the lowland areas of Afar, Somali, and Borena), while the remaining 75% are kept in the highlands, leading to serious overgrazing in areas already under high agrarian pressure. Shortage of alternative feeds means that most crop residues are fed to livestock. Due to shortages of fuelwood dried dung is increasingly used as fuel. This has had a knock on negative effect on soil productivity by reducing the quantities of organic matter and nutrients that farmers return to the soil

24. Population increases and the subsequent encroachment of agriculture onto marginal areas have significantly reduced the already dwindling forest and woodland resources of the highlands. Natural vegetation is now almost exclusively limited to church compounds, remnants of hedges, very steep and inaccessible areas, the highest parts of the highlands (above 3000 metres), the lowland savannah woodlands of the major watersheds (Abbay, Tekkezze, etc) and the riverine vegetation of streams and small rivers. There is no up to date information on the current area of forest remaining within Ethiopia, or the rate at which deforestation is still occurring. According to data provided by Earthtrends in 2003, Ethiopia had lost 400,000 ha of forest between 1990 and 2000 corresponding to a deforestation rate of 40,000 ha/year. On the other hand, the Ethiopian Forestry Action Plan (EFAP 1994) concluded that the deforestation rate in Ethiopia was between 150,000 and 200,000 ha/year. Ethiopia's once dense natural forests, are believed to have formerly covered about 40 percent of the country's land area, whereas now they may have been reduced to less than 3 percent. Even this remaining forest is being depleted at an alarming rate.

B.5 Water Resources

25. As a result of the relatively high rainfall experienced in some of the highland areas, Ethiopia is relatively well endowed with water resources, having an estimated annual surface runoff close to 122 billion m^3. However these water resources are unevenly distributed both spatially and temporally. Between 80-90% of the country's surface water resources are found within four major river basins – Abay (Blue Nile), Tekeze, Baro Akobo and Omo Gibe. These are located in the west and southwest of

the country with no more than 30-40% of the total population. Whereas the remaining 60% of the population found in the east and central river basins, have access to only 10-20% of the country's surface water resources. Also due to the seasonal, and sometimes erratic, nature of the rainfall there is considerable variation in the amount of surface water available depending on the time of year.

26. The Ethiopian Highlands contain the headwaters of a number of major rivers that flow across its borders and which are vital sources of water for neighbouring and downstream countries, especially the Sudan, Egypt and Somalia. SLM within the upper reaches of these river basins is of vital importance in reducing sedimentation problem for these countries, as what happens within Ethiopia's highlands will affect the quality and quantity of these trans-boundary water resources.

B.6. Energy

27. Some 95% of Ethiopia's energy needs are met from the use of a variety of biomass fuels (fuelwood 77%, crop residues 8.7%, dung 7.7%, charcoal 1.15% and biogas 0.06%). In the rural areas most domestic and cottage industry energy needs are met from such fuels. The remaining energy needs (particularly in urban areas) come from oil products (4.8%), hydro-electricity (1%) and liquid petroleum gas (0.05%). Fuelwood in both urban and rural areas is increasing in cost due to supply shortages. It has been estimated that approximately 38 million metric tones of fuelwood were consumed in Ethiopia in 1995/96. The average daily consumption of fuelwood by Ethiopian households is believed to be approximately 2 kg per capita, but actual consumption varies considerably by region. This heavy reliance on fuelwood and other biomass products is one of the factors contributing to land degradation within the country.

B.7. Bio-diversity and Agro-biodiversity

28. Ethiopia is one of the world's biodiversity hotspots and one of the Vavilov centres of agrobiodiversity. The country contains five recognized biomes: Sudanian, Congo-Guinean, Sahel arid zone, Somali-Maasai, and the Afrotropical and montane. These can be further subdivided into ten natural ecosystems:

- Afroalpine and sub-alpine,
- Dry evergreen montane forest and grassland,
- Moist evergreen montane forest,
- Moist evergreen lowland forest,
- Congo-Guinean forest,
- Acacia woodland and thickets,
- Acacia-Commiphora woodland,
- Combretum-Terminalia woodland/savannah,
- Lakes, wetlands & river systems, and
- Arid ecosystems

29. It is because of this diversity of ecosystems, and the fact that the highlands and arid lowlands to the east are geographically isolated from the rest of the continent, that Ethiopia harbours unique and diverse biological diversity. Within the country between 6,500-7,000 species of vascular plant have been recorded (with 625 endemic and 669 near endemic species, and one endemic plant genus), 862 species of birds (16 endemic species, two endemic genera and another 14 are endemic to the highlands of Ethiopia) 279 species of mammal (35 endemic species and six endemic genera), 201 species of reptiles (10 endemic), and 71 species of amphibian (30 endemic species) (GEF 2006). There are a number of charismatic flagship species, most notably the Chilada Baboon (an endemic genus and the world's only grazing primate), the Mountain Nyala (an antelope endemic to the Afroalpine ecosystem), the Ethiopian Wolf (a palaeartic descent from a wolf-like ancestor that crossed into the Ethiopian highlands just over 100,000 years ago), the Walia Ibex (another palaeartic species confined to areas in the Simien Mountains) and the giant Lobelia plant.

30. Ethiopia has an extensive network of existing protected areas which covers the majority of the important habitats. Currently there are 9 national parks, 3 sanctuaries, 8 reserves and 18 controlled hunting areas covering a total area of about 192,000 km^2. The immediate and major threat to the conservation of protected areas in Ethiopia is human encroachment, habitat destruction/ fragmentation, introduction of alien species, pollution, and overexploitation of wildlife and their habitats beyond their capacity for regeneration. These are all on the increase due to factors such as population pressure, poverty, poor management and lack of awareness.

31. Based on the concept of gene centres, developed by Vavilov in the 1920s, Ethiopia represents one of the eight centres in the world where crop plant diversity is strikingly high and where some of the crops actually became domesticated. Ethiopia is known to be a primary centre of diversity and the probable centre of origin, and the area of domestication, for a number of crops (coffee, teff, nug, safflower, enset, chat, Ethiopian cardamom, etc) and a secondary centre of diversity for crops, whose wild relatives are not found in Ethiopia, such as barley, tetraploid wheats, lentils, faba beans, etc (Engels & Hawkes 1991). Sorghum, with its tremendous diversity in Ethiopia, remains an enigma.

32. When considering Ethiopia's agro-biodiversity, one of the most potent paradoxes is that development agencies, have been introducing and promoting exotic species and cultivars (trees, vegetables, improved crops and livestock), while foreign .private commercial and research companies and institutions are frantically trying to access Ethiopian traditional knowledge and genetic plant resources for technology, plant breeding and commercial development

B.8. Land Degradation

33. Ethiopia is believed to be one of the Sub-Saharan African countries most seriously affected by land degradation. Within Ethiopia land degradation is caused by a variety of complex interrelated degradation processes, which can be grouped as follows:

- ***Soil degradation*** – decline in the productive capacity of Ethiopia's soil resources as a result of adverse changes in their biological, chemical, physical and hydrological properties, which in turn has increased the vulnerability of erosion prone areas to accelerated soil loss through both water and wind erosion.
- ***Vegetation degradation*** – decline in the quantity and quality of the grasses, herbs and woody species found in the country's grasslands, woodlands and forest, combined with a decrease in the ground cover provided by such plants.
- ***Biodiversity degradation*** – loss of wildlife habitats and decline in genetic resources, species and ecosystem diversity (including loss of crop plant genetic resources).
- ***Water degradation*** – decline in the quantity and quality of both surface and ground water resources and increased risk of downstream flood damage.
- ***Climate deterioration*** – adverse changes in the micro and/or macro climatic conditions that have increased the risk of failure of crop and livestock systems and impacted negatively on plant growth in rangelands, woodlands and forests.
- ***Land conversion*** – decline in the total area of land used, or with potential to be used, for crop, livestock and/or forestry as a result of land being converted to urban, industrial, mineral extraction and infrastructure purposes.

34. All of the above processes have contributed to the current levels of land degradation found within the country (for a more detailed description of the different processes see annex 1.

35. About 85% of the country's land surface is considered prone to moderate, to very severe, soil degradation (about 28% severe or very severe). By the mid 1980s some 27 million ha or almost 50% of the highland area was considered to be significantly eroded, of this 14 million ha was seriously eroded and over 2 million ha beyond reclamation. For the highlands as a whole, erosion rates have been estimated to average 35 tons/ha/yr, while the estimated rate from the croplands is at 130 ton/ha/yr. This has led to the conclusion that almost half of Ethiopia's annual soil losses come from the land under cultivation even though this covers only 19% of the country. While soil erosion (particularly by water) has been seen as the main degradation problem in Ethiopia it is important to recognise that sheet, rill and gully erosion, and the scouring and deposition of soil by wind, are the visible symptoms of other, usually less obvious, degradation processes which create the conditions for the initiation of soil erosion. Hence wind and water erosion cannot be tackled effectively without understanding, and tackling, the underlying soil degradation processes.

36. Although there have been no recent surveys to assess the current nature, extent and severity of land degradation within the country, it is generally assumed, based on past work (mostly in the 1970s and 1980s) and recent anecdotal reports, that the problem is serious and getting worse. It is estimated (Berry et al 2003) that:

i. Some 30,000 ha are lost annually due to water erosion, with over 2 million ha already severely damaged;
ii. 1.5 billion tons of topsoil is lost each year from soil erosion;

iii. Annual soil nutrient losses are equivalent to 30 kg/ha of Nitrogen and 15-20 kg/ha of Phosphorus;
iv. 4,000 ha of irrigated land has been lost due to severe salinization; and
v. 62,000 ha of forest and woodland are cleared annually.

B.9. Government Strategies and Policies for Agricultural Development, Food Security and Poverty Alleviation

37. Ethiopia's long-term strategy *of agricultural-development led industrialisation* (ADLI), formulated in the early nineties, recognises the importance of agriculture as the main engine for rapid economic growth with equity. The government, with strong donor support, successfully implemented its first generation poverty reduction strategy (2000/2005) within the framework of the Sustainable Development and Poverty Reduction Programme (SDPRP). This resulted in an increase in pro-poor spending from about 28% of the budget in 2000/01 to 57% in 2004/05, due in part, to direct budgetary support being provided by the donor community.

38. The Government also recognises that any strategy for alleviating rural poverty and food insecurity should be based on generating agricultural growth, with the aim of transforming the agricultural sector from one primarily based on subsistence production, to one based on commercial farming enterprises. To this end, the government has not only continued support to the Agriculture Development Led Industrialisation (ADLI) strategy but also launched a series of development and poverty reduction programmes, including the Agricultural Growth and Rural Development Strategy and Programme (2004), the Food Security Programme (2004) and the Plan for Accelerated and Sustainable Development to End Poverty (PASDEP, in 2006). In all these endeavours, agricultural growth, food security and accelerated rural development, constitute key government policy directions.

39. In 2003 a New Coalition for Food Security was developed based on a review of investments in food security and an identification of the structural causes of chronic and transitory food insecurity. This Coalition outlined a vision for a safety net, which has evolved into the Productive Safety Net Programme. Since 2005/06 the PASDEP has provided the overarching policy strategy for reducing poverty and addressing food security. PASDEP will build on the initiatives pursued under the SDPRP particularly in promoting agricultural and rural development, developing human capital, promoting local capacity building in support of the decentralisation process, increasing household access to primary health care, and responding more effectively to the HIV/AIDS pandemic.

40. PASDEP (2006-2010) focuses on eight initiatives. It firstly seeks to put agricultural development on a commercial footing with increased emphasis on private sector participation underpinned by: (i) investments to improve infrastructure; (ii) enhanced access to financial services, markets, support services in research and extension; (iii) improved efficiency and expanded use of water for irrigation in order to minimise variability of agricultural GDP; (iv) improved land tenure security; and (v) enhanced access to improved farm inputs. Secondly, it seeks to increase agricultural and rural development through the promotion of production technologies that are

compatible with the country's diverse agro-ecological zones in order to best exploit their potential.

41. Agricultural development is seen as the key to economic growth and poverty reduction. However, it is believed that the growth in agricultural production necessary to achieve the MDG # 1 (to eradicate extreme poverty and hunger) cannot be realized by relying on rainfed agriculture alone, particularly in drought prone, high density and food insecure agro-ecological areas. A major effort is therefore to be made under PASDEP to minimise major fluctuations in agricultural GDP - specifically by promoting small-scale irrigation schemes that use water efficiently, and by adopting low-cost technologies that suit the majority of smallholder farmers. Agricultural extension and research services are being reoriented and underpinned by the establishment, or strengthening, of community level institutions necessary for the efficient use of water resources. During the PASDEP period, government plans to increase the area under irrigation by about 323,000 ha, including the development of medium to large-scale irrigation schemes in partnership with the private sector.

42. The remaining six PASDEP initiatives are: (i) the implementation of the national population strategy; (ii) the empowerment of women; (iii) the expansion of the road and communication networks, urban development and water supply; (iv) the management of risks and volatility; (v) the scaling-up of what works well in line with recommendation of the MDG Needs Assessment; and (vi) increased employment creation.

43. It is recognised that improving the performance of the agricultural sector in Ethiopia is a daunting task, as there is no silver bullet solution to hastening agricultural growth. Conditions in the country are highly diverse and each locality has its own mix of factors that promote or hinder production. Hence, the need is for an approach to boosting agriculture that is systematic and which focuses on properly addressing local challenges and opportunities. At the same time support to the sector needs to be scaled up together with concrete actions to improve harmonisation. In response to this challenge government and donors, during a high-level retreat in Debre Zeyt and Addis Ababa in June 2007, agreed to 'foster a process of harmonising development support and identify priority areas of intervention in line with PASDEP'. Three PASDEP focal areas, or pillars for rural economic development and food security, were identified, based on a typology of rural households and enterprises in agriculture[4], namely: (i) agricultural growth — both for high value crops and for transforming subsistence farming, (ii) attaining food security, and (iii) improving the natural resource base (sustainable land management). While presented as separate pillars the reality is that the first two cannot be achieved without addressing the degradation of the country's natural resource base through the promotion and scaling up of SLM technologies and approaches (pillar 3).

44. Ethiopia played an important role in the formulation of the strategic framework document of the New Partnership for Africa's Development (NEPAD). NEPAD was formally adopted at the 37th Summit of the Organisation of African Unity in July 2001, and is an African driven initiative designed to address the current challenges facing

[4] Specifically commercial enterprises, rural households with surplus production potential, and food insecure households.

Africa, in particular escalating poverty, underdevelopment and the continent's continued marginalisation. The challenges and options for change in the agricultural sector are set out in the NEPAD Comprehensive Africa Agriculture Development Program (CAADP). This recognises that combating poverty and underdevelopment requires an expansion of the area under SLM. CAADP focuses on four mutually reinforcing investment 'pillars' aimed at making rapid improvements in Africa's agriculture, food security and trade balance. Namely: (i) extending the area under sustainable land management and reliable water control systems; (ii) improving rural infrastructure and trade related capacities for market access; (iii) increasing food supply and reducing hunger[5]; and (iv) agricultural research, technology dissemination and adoption. CAADP's first pillar is directly concerned with SLM and aims to: (i) reverse fertility loss and resource degradation, and ensure broad-based and rapid adoption of sustainable land and forestry management practices in the small-holder as well as commercial sectors; and (ii) improve management of water resources while expanding access to irrigation.

B.10. Government Environmental Strategies and Policies

45. Both the Federal and the Regional governments have consistently shown a strong commitment to address the issue of land degradation. There is a profound national and regional sense of urgency as Ethiopians become more and more aware of the imminent and serious ecological threats posed by land degradation and the subsequent negative impacts to national development and livelihoods. The federal and regional governments have to date enacted a wide range of policies, strategies, action plans and programs with the aim of addressing land degradation and associated cross-cutting themes. The inclusion of several articles in the federal constitution of 1995 demonstrates the commitment of the country to environmental issues. For example, Article 44 of the constitution guarantees the right to live in a "clean and healthy environment," and Article 92 requires that the design and implementation of programs and projects of development shall not damage or destroy the environment.

46. Prior to the ratification of the United Nations Convention to Combat Desertification (UNCCD), Ethiopia developed the "Conservation Strategy of Ethiopia" (CSE) in April 1997 with the help of the World Conservation Union (IUCN). The CSE provides an umbrella strategic framework, detailing principles, guidelines and strategies for the sustainable conservation and management of the country's natural resources and biodiversity.

47. The National Action Program (NAP) to Combat Desertification was originally prepared in 1998, through a participatory consultative process, that involved relevant governmental and non-governmental organizations, civil societies, grassroots level communities and professionals. It was reviewed and updated in 2007, and advocates a five year (2007-2012) action program involving a range of activities related to the following priority areas: (i) managing natural resources leading to sustainable development; (ii) improving knowledge on drought and desertification;

[5] This pillar also includes a key sub-component concerned with investments to reduce the frequency and severity of disasters and emergencies complemented with targeted safety nets.

(iii) improving the socio-economic environment; (iv) improving basic infrastructure; (v) promoting alternative livelihoods; (vi) rural credit programmes, including establishment of a fund to combat desertification and the effects of drought; (vii) intensification and diversification of agriculture; (viii) promoting awareness and participation; (ix) improve institutional organization and capacity; and (x) empowerment of women.

48. Other environmental strategies and policies include: (i) the 20-year Ethiopian Forestry Action Program (EFAP) formulated in 1994; (ii) the Ethiopian Water Sector Strategy formulated by the Ministry of Water Resources in 2001 and its 15 year (2002-2016) water sector development program; and (iii) the Ethiopian National Biodiversity Strategy and Action Plan prepared in 2005 in fulfilment of the country's obligations following ratification of the UN Convention on Biodiversity.

49. Ethiopia actively participated, through a consultative process led by African experts, in the preparation of the NEPAD, strategic, long-term continent-wide Action Plan of the Environment Initiative (APEI) aimed at addressing short term economic growth challenges with long term environmental, poverty eradication and social development imperatives. The objective of the APEI is to support the African member states in the implementation of the UNCCD, and to meet the need for regional institutional support in the fields of: (i) information and communication systems; (ii) monitoring and evaluation; (iii) research and development; (iv) extension and dissemination; (v) human resource capacity building; (vi) networking between centres of excellence; (vii) public awareness raising and education; (viii) civil society participation; and (ix) South-South cooperation. The action plan is organized in programmatic and project activity clusters that are to be implemented over a period of 10 years. Those related to the concerns of the ESIF include, among others, combating land degradation, drought and desertification, cross border conservation of natural resources and climate change.

B. 11. The Institutional Environment for Sustainable Land Management

Federal Government Institutions

50. The key federal level government institutions with a mandate and responsibility for issues related to SLM include:

- ***The Ministry of Agriculture and Rural Development (MoARD)*** – replaced the former separate Ministries of Agriculture and Rural Development in January 2004. The MoARD has responsibility for: (i) enhancing market led agricultural development; (ii) food security; (iii) water harvesting and small-scale irrigation; (iv) conservation and utilisation of forest and wildlife resources; (v) monitoring events affecting agricultural development and maintaining early warning systems (disaster prevention and preparedness activities); (vi) control of plant and animal diseases and migratory pest outbreaks, (vii) overseeing the distribution of high quality agricultural inputs; and (viii) promotion and expansion of extension services provided to small-scale farmers, pastoralists and private investors including establishing and running a network of agriculture and rural technology training centres. The

MoARD is the lead agency for the development and implementation of the ESIF.

- ***The Environmental Protection Agency (EPA)*** – has lead responsibility for the implementation of the Ethiopian national action plan to combat desertification. The role of EPA is to coordinate environmental matters amongst the different sectoral ministries and agencies and to ensure that all development interventions comply with the country's environmental norms and established guidelines. It also has a legal mandate to produce a national State of the Environment Report every two years.

The Ministry of Water Resources (MoWR) – is responsible for undertaking river basin studies and determining the country's ground and surface water resource potential in terms of volume and quality, and then facilitating their utilization. It also oversees the study, design and construction of medium and large scale dams and irrigation works. The National Meteorological Agency (NMA) falls under this ministry and prepares and disseminates monthly, seasonally & annual climate bulletins and seasonal and annual hydro-meteorological bulletins

- ***The Ethiopian Institute of Agricultural Research (EIAR)*** – is responsible for coordinating the various research programs of the national network of agricultural research stations including on-farm trials and demonstrations. It is also responsible for the research component of the Rural Capacity Building Project which includes support for: (i) agricultural mechanisation; (ii) crop research; (iii) livestock research; and (iv) natural resource management.

- ***The Institute for Biodiversity Conservation (IBC)*** – was formed by upgrading the former Plant Genetic Resources Centre of the MoARD and extending its mandate to cater not only for plant genetic resources but also for animal and microbial genetic resources. The IBC has lead responsibility for implementing the UN CBD within Ethiopia.

- ***The Ministry of Mines and Energy (MoME)*** – has set up the Ethiopian Rural Energy Development and Promotion Centre to develop and disseminate efficient and appropriate energy technologies and facilities, and in particular to develop renewable energy development projects in rural areas.

- ***The Ministry of Finance and Economic Development (MoFED)*** – has lead responsibility for facilitating the flow of funds to those agencies responsible for the implementation of SLM activities. It also has overall responsibility for the formulation of the country's economic development policies and plans.

- ***The Ministry of Education (MoE)*** – has lead responsibility for the development and promotion of environmental education within the formal education sector.

- ***The Ministry of Infrastructure Development (MoID)*** – has overall responsibility for all issues related to infrastructure development (roads, postal services, telecommunications, electricity generation and distribution).

- ***The Ministry of Federal Affairs (MoFA)*** – is responsible for building capacity within the Regional States with regard to policy formulation, development planning, conflict management, peace and order, and social and environmental awareness.

- ***The Ministry of Women's Affairs (MoWA)*** – was established in 2005 to ensure that the rights and interests of women are given due recognition and protection at the national level, and to create the necessary enabling environment for women to actively participate in political, economic and social activities and ensure that policies, legislations, programs and projects by the federal government organs are gender sensitive.

- ***The Food Security Coordination Bureau (FSCB)*** – is responsible, in collaboration with key development partners, for the development of strategies and programs for ensuring food security within those parts of Ethiopia that are regularly chronically food insecure. Through programs such as the Productive Safety Net the FSCB promotes a range of SLM interventions related to moisture retention, water harvesting, soil and water conservation, and afforestation.

- ***The Ethiopian Development Research Institute (EDRI)*** – which has a mandate to undertake sectoral and cross cutting policy research studies related to economic, social and environmental development within Ethiopia;

- ***Higher Learning Institutions*** – several Ethiopian universities provide higher learning and research opportunities related to SLM. Addis Ababa University offers post–graduate programmes in Environmental Science (Science Faculty), Environmental Engineering (Faculty of Technology), Environment and Development (IDR), Environmental Economics (Faculty of Business and Economics) and Biodiversity Conservation (Biology Department). Mekele University has an undergraduate study program on Environment and Natural Resources and has research projects on dry-land agriculture and natural resources management. Hawassa, Haromaya, Arbaminch and Jimma Universities also address the issue of land degradation/desertification through their regular education and research programs.

Regional Government Institutions

51. In 1995 the Ethiopian government promulgated a new constitution which established a decentralised federal system with the country divided into a series of semi-autonomous Regional States[6]. Most responsibilities for the planning and implementation of development policies and programs (including the management and utilisation of their natural resources) were decentralised to the Regional States. Each region has its own set of government institutions which largely replicate those at the federal level. Most, but not necessarily all, of the Regions will have their own:

[6] Namely: Afar, Amhara, Benilshangul-Gumuz, Gambela, Harari, Oromia, Somali, Southern Nations Nationalities and Peoples Region (SNNPR) and Tigray, and three special urban states Addis Ababa, Dire Dawa and Harrari.

(i) Bureau of Agriculture and Rural Development; (ii) Bureau of Finance and Economic Development: (iii) Bureau of Water Resources; (iv) Regional Environmental Protection, Land Administration and Use Authority; (v) Food Security Agency; (vi) Bureau of Regional Disaster Prevention and Preparedness; and (vii) Regional Agricultural Research Institute.

Woreda Institutional Responsibilities

52. In 2002 the government introduced a second phase of decentralization, making the woredas the centre of socio-economic development with the aim of empowering local (woreda*)* administrations, thereby bringing the government closer to the people, and enabling it to be more responsive to local needs. The woredas now have economic autonomy and receive direct block grants from the regional level. They act as the base unit for representation in the federal and regional assemblies, making them a suitable point of merger between political empowerment and economic development at the grassroots level. Each woreda now has an elected council, from which are elected a woreda administrator and deputy who exercise overall leadership. The administrator chairs the woreda cabinet, which consists of the heads of the various government departments found at this level. These are now political appointees. The cabinet decides on the budget allocations to the various departments from the block grant.

53. With the empowerment of the woredas, the role of federal and regional agencies is changing. Originally, decentralization meant that implementation was the responsibility of the regional bureaus. As a result of this second phase of decentralization, the regional levels now focus mainly on policy and on supervisory activities. Resources and responsibilities for service delivery and project implementation have been moved to the woreda offices. In practice, however, both woreda and regional policies are still guided by federal sector policies and by cross-sector strategies and programs. The federal authorities also retain an active role with respect to trans-regional issues such as river basin management, multiregional forests, and trunk roads.

Non-Governmental Organisations (NGOs)

54. Non-Governmental Organisations (NGOs) have been involved in the economic and social life of Ethiopia from the early 20th century. However their importance as institutions, , Their involvement in the development efforts of the country started with the drought-induced famine of 1973/74. Initially their primary focus was on emergency famine relief, however since then they have become more actively involved in a much wider development agenda. Currently NGOs (both indigenous and international) support a wide range of projects and programs related to the following broad development sectors:

- Food security including: (i) food crop production; (ii) livestock development; (iii) soil and water conservation; (iv) afforestation; and (v) economic livelihood diversification (particularly through the provision of micro financial services).
- Health and domestic water supplies, including: (i) health facilities; (ii) health care services (including health education); and (iii) development of safe water sources.

- Reproductive health and family planning.
- HIV/AIDS.
- Construction of education facilities (formal and non-formal).
- Capacity building, including: (i) human resource development; (ii) organisational development; and (iii) institutional development.
- Urban and rural physical infrastructure development (houses, roads, bridges etc).
- Emergency operations, including: (i) provision of food relief; (ii) distribution of seeds for replanting; and (iii) provision of emergency facilities.

55. There are currently over 500 domestic and international NGOs working in Ethiopia. Of these some 350[7] have come together under the umbrella of the Christian Relief and Development Association (CRDA) for the purpose of coordinating development efforts, promoting information exchange, networking for advocacy and lobbying purposes, and building capacity (particularly amongst indigenous NGOs). While set up in 1973/74 to coordinate the efforts of those NGOs involved in the famine relief efforts, its current membership has broadened significantly and includes many secular and non-Christian religious organisations. At least 300 of the CRDA NGOs are directly involved in SLM related activities, investing some US$ 30 million annually in the promotion of a range of SLM interventions.

Community-based Organisations (CBOs)

56. There are a large number of community-based organisations (CBOs) operating at the community level that currently, or have the potential, to play an important role in the facilitation, planning and implementation of SLM interventions at the community level. Some may be formal organisations established with the support of government and donor supported programs (eg. agricultural marketing cooperatives, credit unions, water users associations etc), while others may be traditional social/ cultural groups that have evolved within particular communities for social welfare and mutual self help purposes (eg. Iddir dabbo and mahbir social groups).

B. 12. International Development Partners

57. A number of multi-lateral and bilateral donors and international development agencies have provided (and are continuing to provide) financial and technical support to the federal and regional governments for improved management of the country's land resources. The on-going and pipe line projects and programs from these international development partners will provide much of the base line funding for the proposed ESIF activities. The key international development partners include:

Multilateral Donors

58. The main multi-lateral donor development partners include:

[7] Of which about 70% are local NGOs and 30% international NGOs.

- *The World Bank* – is the lead implementing agency for GEF grant funding within Ethiopia. On-going and pipe line SLM related projects funded by the World Bank include: (i) the Food Security Project; (ii) the Productive Safety Nets Project; (iii) the Pastoral Community Development Project phases I&II; (iv) the Rural Capacity Building Project; (v) the Irrigation and Drainage Project; (vi) the Sustainable Land Management Project; (vii) the Tana & Beles Integrated Water Resources Development Project; and (viii) the Ethiopia/Nile Basin Initiative.

- *The World Food Program (WFP)* – has a long history of supporting 'food-for-work' soil and water conservation efforts in Ethiopia. The WFP is currently supporting the following on-going projects: (i) the Managing Environmental Resources to enable Transition to better Livelihoods Project (MERET); (ii) the Food Security Project; and (iii) the Productive Safety Nets Project.

- *The International Fund for Agricultural Development (IFAD)* – has a history of providing low-interest loans and grants for programs and projects in Ethiopia that seek to enable rural poor people to overcome poverty themselves. IFAD is currently supporting the following on-going projects: (i) the Agricultural Marketing Improvement Programme; (ii) the Rural Financial Intermediation Programme; (iii) the Participatory Small-scale Irrigation Development Programme; (iv) the Pastoral Community Development Project; and (v) the Community-Based Integrated Natural Resources Management Project in Lake Tana Watershed Project.

- *The United Nations Development Programme (UNDP)* – in Ethiopia is implementing a programme for Food Security and Recovery in which environment and natural resource management is an integral part. The environment and natural resource management component aims to build national capacity to: (i) implement federal/regional environmental policy strategies, laws and action plans enhanced; (ii) implement the water sector development programme; and (iii) ensure environmental convention obligations compliance. Specific SLM related on-going and pipe line projects include: (i) the Small Grants Project; (ii) the Environment/Natural Resources Project; and (iii) the Capacity Building for Sustainable Land Management in the Drylands of Ethiopia Project.

- *The Global Environment Facility (GEF)* – through the TerrAfrica Strategic Investment Program (SIP) will provide incremental grant financing to Ethiopia in support of investments for combating land degradation through SLM. GEF funding has been approved for the World Bank Sustainable Land Management Project, while provisional approval has been given to the following two projects currently under preparation: (i) the UNDP Capacity Building for Sustainable Land Management in the Drylands of Ethiopia Project; and (ii) the IFAD Community-Based Integrated Natural Resources Management Project in Lake Tana Watershed Project.

- *The African Development Bank (AfDP)* – portfolio for Ethiopia includes the following on-going and pipe line SLM related projects: (i) the National

Livestock Development Project; and (ii) the Rural Finance Intermediation Support Project and iii) the Agricultural Sector Support project. .

- *The European Commission (EC)* – signed a new Country Strategy Paper (CSP) with the Government in December 2007 for 2008–13, with a total budget of € 644 M. One of the priority areas identified in the CSP is food security and rural development. Specific projects are in the process of being identified but are expected to include support for agricultural markets and livestock development, and improved natural resource management to address degradation.

Bilateral Donors

59. The main bi-lateral donor development partners include:

- *German Development Cooperation (GDC)* – has been actively involved (with funding from both GTZ and KfW) in a range of SLM activities through the Sustainable Utilisation of Natural Resources for Improved Food Security Project (SUN). This project is expected to continue into 2009. GDC SLM related pipe line projects for start up in 2009 include: (i) the Sustainable Land Management Project (replacement for the SUN project); (ii) the Participatory Forest Management Project; and (iii) the Rural Energy Project.

- *United States Agency for International Development (USAID)* – provided significant support for SLM related activities through the recently completed Amhara Micro-enterprise Development, Agricultural Research, Extension and Watershed Management Project (AMAREW). Other on-going and pipe line USAID projects include: (i) Ethiopia Land Tenure and Administration Project; (ii) Pastoral Livestock Improvement Project; (iii) Policy Research Support Program; (iv) Ecotourism; and (v) support for the Government Safety Net Project.

Norway – amongst the donors is the *chef de file* with primary responsibility for mobilising support for the government's implementation of the UNCCD. In this regard it is providing most of the co-financing for the UNDP/GEF Capacity Building for Sustainable Land Management in the Drylands of Ethiopia Project. It also supports Ethiopia's efforts towards poverty eradication through: (i) natural resource management and food security assistance; (ii) strengthening national and local management of natural resources and improved food security in vulnerable areas; (iii) building competence and capacity in natural resource management and environmental monitoring.

- *Sweden* – has previously provided s*ignificant su*pport for a number of soil and water conservation programs, such as in the Borkana catchment, Wollo region. Currently it is supporting a pilot land certification project in two woredas under the Amhara Rural Development Project.

- *Finland* – has provided support in the past for afforestation programs (notably in Nazareth and Debre Berhan) and is expected to provide future support for the ESIF SLM program with special focus on Land administration and tenure and the scaling up of land management activites.

- *Netherlands* – sponsored the Golina-Homrat Catchment Reclamation Project, and have provided funding to FAO for the Sustainable Land Management Project in Kafa Zone SNNPR. Dutch funding is also expected to provide future support for Land Tenure and Administration and land management component of the ESIF SLM

International Development/Research Agencies

60. The main international development/research partners include:

- *The Food and Agriculture Organisation of the united nations (FAO)* – has a long history of involvement in SLM activities in Ethiopia. It implemented a major soil and water conservation project, funded by UNDP, from 1979-1994. Experience gained from this was fundamental to the development of the MoARD guidelines on Community-based Participatory Watershed Development. Currently its main field activities have been through the Dutch funded Sustainable Land Management Project in Kafa Zone SNNPR. In addition a number of FAO short term technical cooperation projects (TCPs) have supported emergency interventions for smallholder agriculturalists and agro-pastoralists/pastoralists adversely affected by droughts and floods. FAO has provided direct technical assistance and financial support for the drafting of the ESIF and establishing national and regional level SLM platforms.

- *International Agricultural Research Centres (IARCs)* – have over the years supported a number of agricultural research programs within Ethiopia. In particular: (i) the World Agroforestry Research Centre[8]; (ii) the International Centre for Agricultural Research in Dry Areas (ICARDA); (iii) the International Crops Research Institute for the Semi-arid Tropics; and (iv) the International Food Policy Research Institute (IFPRI).

- *The Horn of Africa Initiatives. It is an initiative on food security by the UN Secretary -General for the Horn of Africa and facilitated jointly by WFO and FAO and owned by the Government. It aims at implementing a number of activities which can successfully improve the food security of vulnerable populations, increase their resilience to shocks, build institutional capacity and create enabling environment needed to break out of the cycle of poverty. SLM is an area where the initiative will have involvement and support the government undertake the ESIF SLM*

B.13. Gaps, Barriers and Bottlenecks to Promoting and Scaling Up SLM

61. There are a number of major gaps, bottlenecks and barriers that have hindered the successful scaling up and mainstreaming of SLM within Ethiopia, in particular:

[8] Formerly the International Centre for Research into Agroforestry (ICRAF).

- *Knowledge and technological barriers* – Although Ethiopia has gained considerable experience over the last 30-40 years, with implementing a range of different soil conservation projects and programs, this has not been adequately documented. The MOARD has over the past decade documented over 50 technologies and 27 approaches in varying agroecological zones and currently engaged in developing an overview book of 33 technologies and 8 approaches screened to be scaled up through SLM. There is, however, very little information on the current situation with regard to the nature, extent and severity of land degradation in different parts of the country. Most estimates of land degradation are based on extrapolating the results of work done in the 1970s and 1980s to the present. This makes it difficult to identify where the greatest need is, and the specific degradation processes that should be addressed. The lack of good baseline land degradation data is an issue that will need to be addressed by the ESIF as without this it will be difficult to monitor and assess its environmental impact.

- *Land tenure/user rights* – Land users without secure long term rights to use the land will have little incentive to invest in SLM practices because of uncertainty as to whether they would be the ones to benefit. During the time of the emperor a feudal land tenure system operated in which most farmers were tenants or share croppers with little incentive to improve the quality of the land for their absentee landlords. During the Marxist Derg regime, that assumed power in 1975, all land was nationalised and the government undertook a series of rural land distributions until it was overthrown in 1991. Frequent land redistributions during this time exacerbated the land users' feelings of insecurity over their long term user rights. Recognising this problem the current Government of the Ethiopia's Peoples Revolutionary Democratic Front (EPRDF), while reaffirming that all land in Ethiopia belongs to the state which it holds in trust for the people, has enacted the Federal Rural Land Administration and Use Proclamation, which confers indefinite tenure rights, rights to 'property produced on the land', rights to inter-generational tenure transfer, rights to land exchange ('to make small farm plots convenient for development'), and some rights for leasing to land users. The law makes provision for the registration and certification of tenure rights. The proclamation also specifically addresses degradation of rural land, including defining the obligations of tenure holders to sustain the land, with specific requirements depending on slope, requirements for gully rehabilitation, restrictions on free grazing, and protection of wetland biodiversity. This Proclamation also has provisions indicating that there will be no further land redistribution, except under special circumstances.

- *Social and cultural barriers* – A variety of social and cultural norms can hinder the adoption of SLM practices and will need to be recognised and addressed by the communities themselves. What are taken as social and cultural norms typically evolve and change over time, as individual communities adapt to external circumstances and resolve internal desires for change. Such social and cultural barriers can therefore be overcome as and when the community perceive it to be in their own self interest to allow their norms to evolve and change. Two social and cultural barriers are of particular concern, namely

those related to gender disparities and the free grazing of animals (especially post harvest).

- While the Constitution guarantees gender equality and supports affirmative action, traditional attitudes significantly impede women empowerment. On average, women have fewer years of schooling and heavier workloads than men. They perform about 70% of farm work but women tend to be excluded from control and inheritance of property and have less access to extension services (cultural norms typically limit their contact with male extension workers). Women also suffer disproportionately from environmental degradation as they have to walk long distances to collect water and firewood. They also continue to shoulder a higher burden of rural poverty due to their vulnerable socio-economic position, and the incidence of poverty in female-headed households is much higher than in male-headed households. Culturally sensitive gender awareness programs will be needed to break down the barriers that limit the opportunities for women to participate fully in the planning and implementation of SLM activities.
- It is the norm for individual farm plots to be freely open to post harvest communal grazing. While this contributes some manuring it also results in: (i) the complete removal of all crop residues, leading to a loss of protective ground cover and minimal nutrient recycling; (ii) destruction of topsoil structure through trampling; (iii) damage to soil conservation structures as animals walk over them; and (iv) uncontrolled grazing makes it difficult to establish and maintain trees, shrubs and grass strips within farm lands.

- *Policy and legal barriers* –Land degradation and SLM issues still need to be fully internalized and prioritized in the country's poverty reduction strategies, public expenditure frameworks and sectoral development policies. Within Ethiopia, current legislation relevant to land degradation and SLM needs to: (i) recognise ecological problems; (ii) develop effective land management programs and targets; and (ii) establish socially acceptable mechanisms for their enforcement.

- *Institutional barriers* – Weak capacity amongst the research and advisory support service providers has made it difficult for them to meet the needs of the land users for technical advice on locally appropriate SLM technologies. Poor coordination and collaboration between the various institutional stakeholders has resulted in duplication of effort and conflicting approaches with regard to the use of incentives for SLM.

- *Economic and financial barriers* – These have resulted in the financial resources available for SLM not being commensurate to the needs. SLM has been largely overlooked, and there has been a failure to recognise that ultimately the welfare of rural households and the sustainable economic development of their communities depends on restoring, sustaining, and enhancing, the productive capacity of their local land resources. Furthermore lack ofeconomic and pricing policies have resulted in unsustainable pressures

on these land resources while effective incentives for SLM have yet to be developed and/or are insufficiently applied. Poverty and lack of resources has forced many land users to pursue short term coping strategies rather than investing in long term sustainability. This has been exacerbated by a lack of affordable credit for investing in SLM.

B.14. Rationale and Justification for Increased Investment in SLM

62. Ethiopia's land resources are critical to the economic and social development of the country. The agriculture sector is the main driver of economic growth, accounting for about 50% of GDP, 90% of export revenues and 80% of employment. Most rural households directly depend on their local land resources for their livelihoods. Annual crop production is the most important, contributing to about 61% of household income. Small-scale low-input rain fed, primarily subsistence, agriculture is the dominant form of production. The Government has placed great emphasis on this sector as it sees it as having a vital role to play in attaining economic growth, alleviating poverty and becoming food secure.

63. Current levels of land degradation have significant economic costs for the country as a whole. This has been estimated at an annual cost of between 2-3% of Agricultural GDP.. This is a conservative estimate as it doesn't take into account the off-site effects of land degradation. However back in 1991 a detailed economic assessment of land degradation in the Ethiopian Highlands (NCSS 1991) suggested a much higher figure, estimating that in 1990 the economic costs of land degradation were equivalent to 8% of agricultural GDP, and that continuing soil erosion and leaching of nutrients was contributing to an on-going annual decline of agricultural GDP of between 0.46 and 0.6% per annum.

64. While there may be some uncertainty as to the actual economic costs of land degradation, the fact that there are significant losses to the country has been recognised by the Government of Ethiopia. However this has not as yet resulted in a commensurate level of investment in controlling and reversing land degradation so as to reduce such losses. Although there have been significant soil conservation efforts over the last 30-40 years, the amounts invested as a percentage of GDP are small when compared to what land degradation is costing the country. The ESIF will therefore seek to address this by promoting significantly greater investment in SLM as a means of restoring, sustaining, and enhancing the productive capacity and protective functions of the country's land resources.

65. There have been few studies within Ethiopia to determine the economic benefits of SLM. Those that have been undertaken show that there are significant costs associated with many of the measures promoted by past soil conservation projects (notably labour and the opportunity cost of land taken out of annual crop production for the construction of conservation structures). The benefits are harder to quantify but typically include increased yields – due to increased water retention and availability within the farm plots – and the value of forage and fuelwood grown on the soil conservation structures. When selecting successful SLM practices for scaling up, the ESIF will consider the economics in order to identify those where the expected benefits to the land user (and society as a whole) justify the investment costs.

66. The Sustainable Land Management Project, of the Government of Ethiopia and the World Bank, which is due to start in October 2008 will be one of the ESIF baseline investment projects. The economic and financial analysis undertaken for this project illustrates that investing in SLM can generate worthwhile economic and financial returns. The overall Economic Rate of Return (ERR) for the project has been calculated as 10-17%, while the Financial Rate of Return (FRR) as 8-11%, over a 25 year period. This is without taking into account other environmental benefits that are difficult to quantify in monetary terms, such as reduced soil erosion and improved biodiversity. From the farmers' point of view, participation in the project would appear quite attractive compared to alternative opportunities, as it would expect to generate for them a financial rate of return of 8-11%. Such expectations are considered realistic based on the results of the ex-post economic and financial analysis of the World Food Program funded Managing Environment Resources for Transition Project (MERET). This was implemented in moisture-deficit areas of Ethiopia, and generated an ERR of 13.5-13.8 % for 25 years. Although project specific, such figures for the potential economic and financial benefits, provide a clear justification for increased investment in SLM under the auspices of the ESIF.

B.15. Local Ownership

67. The Government of Ethiopia is committed towards developing a 'country-wide' programmatic framework for SLM, and has formalized the decision to develop and implement a 15 year country specific SLM Investment Framework (the ESIF). A programmatic approach is consistent with the Paris Declaration on Aid Effectiveness that the Government of Ethiopia adopted in March 2005, and with the approach advocated by the TerrAfrica partnership which the government has supported since its inception in July 2004. In order to oversee and coordinate the development and implementation of the ESIF, the Government has formally established a National SLM Platform (comprising of a multi-sectoral and multi-stakeholder National Steering Committee and Technical Committee, and supported by a Secretariat). To date regional SLM platforms have been established, following regional stakeholder consultation workshops, in Gambela, Amhara, Oromiya, SNNPR, Benishangul Gumuz, and in Tigray.

68. While the initial drafts of the ESIF were prepared with the assistance of consultants[9] (both domestic and international), the process was driven by the National SLM Platform, in particular its Technical Committee under the guidance of the SLM Secretariat based in the Ministry of Agriculture and Natural Resources (MoARD). Members of both these institutions have contributed to the ESIF through a process of brain storming and consultation as well as providing detailed comments at each stage of the drafting process.

69. The implementation of the ESIF and the functioning of the National SLM Platform will be supported by a collective, multi-partner, coordinated effort. Several

[9] Recruited by FAO.

Development Partners[10] (DPs) have agreed to technically and financially contribute to the implementation of the ESIF and to the strengthening and functioning of the SLM Platform through different delivery mechanisms (e.g. TA and advisory services, investments, pool of resources, etc.), based on their experience, country dialogue and comparative advantages.

70. The ESIF will be implemented in association with the Strategic Investment Program for SLM in Sub-Saharan Africa (SIP). The SIP is a multi-agency[11] regional umbrella investment program that strategically uses GEF resources to leverage and catalyze additional resources to finance country-specific SLM investments in Sub-Saharan Africa (SSA). In Ethiopia, incremental GEF-SIP financing will be specifically used to secure ecosystem stability critical to increase and sustain agricultural productivity and water availability by (i) strategically supporting the implementation of the ESIF and (ii) supporting the National SLM Platform established by the Government.

B.16. Linkages to Country Priorities

71. Given the link between land degradation, crop failure and malnutrition in Ethiopia, and the fact that about 85% of the population is rural, land degradation is one of the key factors underlying the country's low and declining agricultural productivity, persistent food insecurity, and rural poverty. Land degradation is therefore considered to be one of the main development challenges in Ethiopia, and preventing and addressing the problem has been repeatedly identified as a development priority in all recent national strategies and policy documents, notably the Poverty Reduction Strategies (SDPRP and PASDEP), the ADLI policy, the Conservation Strategy of Ethiopia, the National Food Security Strategy, the National Action Plan for Combating Desertification, among others.

72. Ethiopia is a party to (i) the Convention on Biological Diversity (CBD) (ratified 05/04/1994); (ii) The United Nations Convention on Combating Desertification (UNCCD) (ratified 27/06/1997); (iii) the United Nations Framework Convention on Climate Change (UNFCCC) (ratified 05/04/1994), and (iv) the Kyoto Protocl (ratified 14/04/2005). The ESIF will assist Ethiopia to meet its international obligations to these conventions.

73. Ethiopia has endorsed the Comprehensive Africa Agriculture Development Programme (CAADP) developed under the New Partnership for Africa's Development (NEPAD). The investment objectives of the ESIF are in line with the key pillars of the CAADP, specifically:

- Extending the area under sustainable land management and reliable water control systems.
- Increasing food supply and reducing hunger.
- Agricultural research, technology dissemination and adoption,

[10] Including AfDB, FAO, European Commission, German Development Cooperation, the Global Mechanism of the UNCCD, Irish Cooperation, IFAD, Royal Norwegian Embassy (*chef de file* for the implementation of the UNCCD), SIDA, UNDP, USAID, the World Bank, WFP.
[11] The SIP is a strategic partnership of the World Bank, AfDB, FAO, IFAD, UNDP and UNEP.

74. The ESIF likewise fits with the goals and objectives of the TerrAfrica program, in that it will build capacity and strengthen the enabling environment around SLM within the country, and seek to remove the barriers to scaling up the mainstreaming and financing of SLM. It will do this by:

- harmonizing and coordinating efforts at the policy, strategy, technical and program levels;
- expanding and consolidating actions that support SLM;
- qualitatively and quantitatively increasing flows of knowledge, information and expertise to and from members of the national and regional SLM platforms;
- better mobilizing and channelling of financial resources; and
- encouraging and supporting the different federal, regional and local level stakeholders in their commitment and efforts towards SLM.

C. THE ETHIOPIAN SUSTAINABLE LAND MANAGEMENT INVESTMENT FRAMEWORK

C.1. The Goal and Objectives

Goal

75. The goal of the Ethiopian Sustainable Land Management Investment Framework (ESIF) is to:

> *Provide a national level strategic planning framework that is used to guide the prioritisation, planning and implementation, by both the public and private sector, of current and future investments in SLM with the aim of addressing the interlinked problems of poverty, vulnerability,land degradation and declining productivity of agricultural lands at the rural community level.*

ESIF Development Objective

76. The overall development objective of the ESIF is to:

> *Improve the livelihoods and economic well-being of the country's farmers, herders and forest resource users by scaling up SLM practices with proven potential to restore, sustain and enhance the productivity of Ethiopia's land resources.*

ESIF Environmental Objective

77. The overall environmental objective of the ESIF is to:

> *Rebuild Ethiopia's natural capital assets by overcoming the causes, and mitigating the negative impacts, of land degradation on the structure and functional integrity of the country's ecosystem resources.*

Purpose

78. The purpose (broad objectives) of the ESIF is to:

i. Reduce the incidence of poverty and vulnerability amongst Ethiopia's communities by increasing the number of rural households with improved livelihoods as a result of investing in locally appropriate SLM practices;
ii. Scale up successful SLM technologies and approaches so as to restore, sustain and enhance ecosystem functions and services over a wider geographic area;
iii. Develop a program framework for mainstreaming the concepts and principles of SLM into the natural resource based development plans and activities of the Federal, Regional and Woreda Governments;

iv. Align and harmonise current, and future, support for SLM provided by donors, development agencies, NGOs and other international and domestic partners around a common shared vision and program framework;

v. Provide a common set of guiding principles for screening SLM investments so as to ensure that, irrespective of their size and location, each one will contribute to the realisation of the overall national and regional level development and environmental objectives of the program framework.

vi. Promote cross-sectoral and multi-stakeholder cooperation and collaboration through multi-level partnerships, that recognise the different skills and comparative advantages of each stakeholder and the synergistic benefits that can be realised by pooling resources and working together.

vii. Guide the identification, prioritisation and cost effective targeting of investment resources for SLM according to a common set of economic, social and environmental criteria that reflect the interests of stakeholders at the federal, regional, woreda and community levels.

C.2. ESIF Concepts and Guiding Principles

The Concept of Sustainable Land Management

79. In the context of the ESIF, sustainable land management is a deliberate human process through which degradation can be halted or reversed. It requires Ethiopian land users, individually and/or collectively, to care for, and manage, their local land resources (soil, water, animal and plant resources) so as to obtain an optimum range of products of social and economic value, while preserving, restoring and/or enhancing their productive capacity, and ecological functions and services, for both the present and future generations.

ESIF Guiding Principles

80. Combating land degradation and promoting the sustainable use of Ethiopia's land resources (specifically its soil, water, plant and animal resources) under the ESIF should be based on the following key guiding principles:

Ecological Sustainability: the management and exploitation of Ethiopia's land resources should be undertaken in a manner that is compatible with the maintenance and/or enhancement of essential ecological processes, bio-diversity (including not only its natural fauna and flora but also its crop plant diversity) and the natural resource base. Thus all technologies and production processes used for sustaining and increasing crop, livestock and forestry production should have a beneficial rather than adverse environmental impact.

Social and Cultural Sustainability: the management and exploitation of Ethiopia's land resources should be undertaken in a manner that: (i) will increase people's ability to control the utilisation of their local resources and other factors that determine their livelihood opportunities; (ii) is compatible with the culture and values of the people affected by it; (iii) maintains and strengthens community identity; (iv) ensures that the costs and benefits of SLM are shared equitably between and within communities and individual households; and (v) encourages public private investment partnerships for the realisation of common SLM benefits.

Economic Sustainability: the management and exploitation of Ethiopia's land resources should be undertaken in a manner that is economically efficient (i.e. the benefits are commensurate with the costs) and which ensures the resources are used and managed in a way that will retain their potential to support future generations. It also means optimizing both the tangible and intangible economic benefits for the greatest possible number of people while ensuring, as far as the needs for sustainability of the country's natural resources permits, no one suffers economic hardship. Likewise it means ensuring that incentives (eg. cash payments, food for work, free inputs) aimed at encouraging the realisation of public 'goods' do not reduce the incentives for private investment in SLM.

Livelihood Sustainability: the management and exploitation of Ethiopia's land resources should be undertaken in a manner that enables those, whose livelihoods are dependent on their utilisation, to engage in a diverse range of livelihood activities

that will meet their immediate basic welfare needs (for cash, food, water, fuel and shelter) while ensuring that the productive potential, and ecosystem functions and services, of these resources is restored, sustained and enhanced, thereby enabling them, and succeeding generations, to use them for meeting future livelihood needs.

Institutional Sustainability: the community-based organizations, non government organisations (NGOs), private sector companies, and Woreda, Regional and Federal level government institutions, responsible for conducting and/or supporting the planning, implementation and monitoring of SLM activities should have the capacity (skills, manpower, equipment, facilities and budget) to sustain the delivery of the services required from them.

Some Key Technical Concepts and Principles Underlying SLM

81. The following are some of key technical concepts and principles that underlie SLM in Ethiopia:

plant yields are reduced more by a shortage of soil moisture in low rainfall areas and water logging in high rainfall areas, hence emphasis will be placed on rain water management and in particularly on water harvesting. All practices including agronomic, vegetative and structural measures, which improve and increase soil moisture, shall be implemented in combination and in integrated manner.

Structural measures shall be a considered useful in areas where establishing measures such as agronomic and vegetative measures becomes difficult under the conditions such as, steep slopes, shallow soils, low rainfall areas and in cases where surplus water needs to be disposed using waterways and other disposal systems, to reinforce the establishing of cost effective SLM measures.

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run-off in farm plots should be reduced (by encouraging infiltration) before trying to control its overland flow; consequently, agronomic measures (reduced tillage, organic matter replenishment, better crop management, maintenance of ground cover) are potentially good in preventing erosion and run-off.

in semi-arid environments crop production is dependent on increasing the effectiveness of what limited rainfall is received, through using a combination of agronomic (including conservation tillage), vegetative and structural practices that minimise surface runoff losses, and maximise the infiltration and retention of water within the rooting zone;

the primary emphasis should not just be on tackling the dramatic visual symptoms of land degradation (e.g. gullies), instead the need is to identify, understand, and properly address, the underlying, and usually less obvious, soil biological, physical and chemical degradation processes that lead to accelerated erosion.

improved organic matter management is the key to maintaining soil productivity (improved soil nutrient levels, soil moisture retention, soil structure and resistance to erosion);

it is only after farmers have made improvements to the biological, physical and hydrological properties of their soils, that they can expect to get the full benefits from the use of improved crop varieties and the supply of additional plant nutrients, in the form of chemical fertiliser;

pastoral production systems are influenced by a range of different livelihood objectives hence blueprint interventions aimed at boosting single outputs (e.g. meat) using simplistic management tools (eg. fixed carrying capacity) as part of standardised models (e.g. private ranches) are unlikely to work unless complimented by other interventions such as watershed management. In this connection the Community Based Participatory Watershed Management Guideline shall be developed for pastoral areas taking into account parameters governing the pastoral conditions.

C.3. Some Essential Prerequisites for Scaling Up Successful SLM Technologies and Approaches

82. In the context of the ESIF the following are considered to be essential prerequisites for scaling up successful SLM technologies and approaches at the community level:

- ***Aspiration for change***. There must be an internal demand by individual land users and rural communities to change their current land management practices. This requires that there is: (i) recognition at the local level that land degradation is a problem; (ii) a desire to do something about it; and (iii) the belief that the present situation can be changed for the better.

- ***Active community-based participation***. The beneficiary communities must be in a position to actively participate in the decision making process involved in formulating and implementing SLM plans that seek to address the problems of land degradation and non-sustainable rural livelihoods within their local area. They should be the principle actors when it comes to: (i) identifying the problems; (ii) reviewing the options (solutions) for overcoming them; (iii) selecting the most promising technologies and approaches; and (iv) planning for the implementation of an agreed set of SLM interventions. This requires building on rural people's inherent skills and capability and empowering them through people centred learning approaches to formulate and implement their own development plans, and to develop and disseminate their own SLM technologies. This should be based on a partnership between the rural communities and the concerned development agencies, with the latter acting in a facilitatory capacity rather than being the principle drivers for change.

- ***Leadership***. The process is greatly facilitated where a single individual or group become the champion(s) for change. Whereas in the initial stages an external facilitator such as an NGO or government agency may be required to take on this role, the aim should be to hand over this leadership role to an individual or group within the community.

- ***Social capital***. Community organisations, networks and partnerships (private as well as public) have a vital role to play in promoting change. Where possible the aim should be to build on and strengthen existing ones, however where these are lacking it will be necessary to invest in their development as they are essential for facilitating bonding, bridging and linking within the community.

- ***Secure land user rights***. A prerequisite for investing in SLM is that the investors believe that their user rights are sufficiently secure over the medium to long term to ensure that they will be the ones to benefit from making any changes and improvements. In the densely populated Highlands land certification, recognising private property rights and ownership for individual farm plots, is expected to enhance the willingness of individuals to invest in improving their land resource assets. Whereas in some areas land is communally owned and the concept of private individual ownership of land is not part of the culture, traditional rights and responsibilities for the use and management of communal forest and rangeland resources are still respected hence secure individual land user rights are not currently required for promoting SLM. However what may be needed is to make changes in the laws and policies governing land so as to provide such communities with a statutory legal basis for enforcing communal rights and management responsibilities for the use of their local land resources.

- ***Controlled livestock grazing***. The current traditional practice of unregulated free grazing (particularly post harvest) that is followed in most of the country's farming areas has hindered the adoption of many SLM practices. No farmer is going to invest in planting trees, shrubs and fodder strips within their farm plots if they are going to be at risk from a neighbours free grazing animals. Likewise many conservation agriculture practices, such as leaving crop residues on the soil surface, or growing green manure cover crops, to provide protective ground cover, or planting short term perennial crops (such as Pigeon Pea), are not viable SLM interventions when livestock are free to graze anywhere. Even physical soil conservation structures can be damaged as livestock trample over them. Thus a prerequisite for the successful adoption and scaling up of many SLM practices is that rural communities devise culturally acceptable mechanisms for controlling the grazing of livestock within their private farm lands and communal woodlands and grazing areas.

- ***Supportive policies***. SLM is greatly influenced by the policy environment in which land users have to operate. Current development policies at the woreda, regional and federal levels may facilitate or hinder the promotion of SLM, hence need to be assessed and where necessary changed.

- ***Ecosystem and cultural diversity***. The highly variable nature of the climate, topography and geology of Ethiopia means that the country's land resources are characterised by a great variety of ecological processes, ecosystems and biodiversity. Likewise the country's settlement history and regional make up has resulted in considerable ethnic and cultural diversity. Hence this diversity needs to be recognised and taken into consideration when scaling up

successful SLM practices so as to avoid the past mistakes when soil conservation programs promoted blanket recommendations of 'best practices' over large parts of the country, irrespective of ecosystem and cultural differences.

- ***Quick and tangible benefits***. Immediate tangible financial and/or social benefits to the community or individual are a prerequisite for the adoption of improved land management practices. Resource poor rural households will have little interest in adopting SLM practices that only offer long term environmental benefits, particularly if there are short term costs. Hence before they will change their current land management practices they must believe that this will have a positive impact on their current financial and/or social circumstances. SLM therefore has to offer such benefits as: (i) increased yields within the first year of implementing changes; (ii) a reduction in the costs of labour; (iii) reduced risk of crop failure; (iv) improved livestock survival and productivity; (v) increased protection against natural hazards such as flooding, dust storms, landslides; and/or (vi) increased social stability and reduced inter and intra community land use conflicts.

- ***Low risk of failure***. Resource-poor rural households, by their very nature, are risk adverse; hence any change to the current *status quo* must have a low level of risk associated with it.

- ***Market opportunities***. If there is to be a change in practices that are contingent on the production of new or alternative crops/products, then markets need to be present and assured to effect this change.

- ***Innovation and appropriate technologies***. External and internal innovations, new technologies and information are important components in change. With respect to internal innovation and appropriate technologies this would include the revival of traditional/local knowledge. External innovations reflect new developments in techniques and technologies that, if adopted, effect a positive change to the production system. This includes learning new skills and acquiring the knowledge required to promote SLM.

- ***Offer a choice of technologies rather than single standard solutions***. SLM programs should aim to: (i) provide the land users with an understanding of the basic principles (of soil, rainwater and plant management); (ii) offer a range of options appropriate to the local area (eg several alternatives rather than recommending a single standard practice) and (iii) then let the target beneficiaries choose and experiment thereby enabling them to put together their own SLM package based on their specific needs and circumstances.

- ***Avoidance of perverse incentives***. It is essential that those who make use of their local land resources for crop, livestock and/or forestry production see that investment in SLM is in their own self interest, rather than something the government, a donor or an NGO pays them to do. As a result of the way many past soil conservation projects and programs have been implemented there is a widespread perception amongst rural communities that they can expect to receive 'food for work',, " cash for work" or other free inputs as payment for

the construction of terraces, check dams and other soil and water conservation structures within their own land. Care is therefore needed not to perpetuate such perceptions when considering what, if any, direct incentives are needed for promoting SLM at the community level.

- ***Understand and address the root causes***. Dealing with the direct causes (pressures) of land degradation is more successful when the root causes (driving forces) are also understood and addressed as part of a holistic and integrated approach.

- ***Multi-sectoral and integrated approach***. Narrow sector based projects have limited success in addressing the multi-dimensional problem of land degradation. Hence the need is for a comprehensive and integrated approach involving public and private partnerships between different sectoral agencies and other stakeholders.

C.4 Prioritization Criteria

83. In the past the priority focus has been on the development and promotion of improved SLM practices targeted on Ethiopia's food insecure areas. These are mostly located in the lower potential parts of the highlands where crop production is limited by low and erratic rainfall, steep slopes and low soil fertility. Such areas are frequently in need of food aid and emergency relief and for social welfare/equity reasons SLM efforts have been directed at combating household food insecurity. In contrast the World Bank SLM project is giving priority to the so-called 'high potential areas' where current agricultural production and long-term food security is under threat from land degradation, hence investing in SLM is expected to produce worthwhile economic benefits.

84. The current lack of a consensus as to what constitutes a priority area for SLM, has meant that most past projects and programs have been identified and implemented on an ad hoc piecemeal basis. To assist in the cost-effective targeting of investment resources under the ESIF, it is important to have a common set of economic, social and environmental criteria, that reflect the interests of stakeholders at the federal, regional, woreda and community levels. A priority ESIF area (woreda, watershed, village etc) would be one where the investment of scarce resources (financial, manpower and others) in SLM can be justified on the basis of the high value attached to the economic, social and/or environmental benefits that would accrue to Ethiopian 'society'.

85. Ultimately the decision on which areas to invest in first will be a political decision, however it is possible to recognise a number of key economic, social and environmental criteria (see below) that can be used to assist decision makers when considering the order of priority in which to address the SLM problems of different areas.

Economic Prioritisation Criteria

86. To be considered, from the economic perspective, as a priority area for SLM one or more of the following should apply:

Primary criteria

i. The area falls within an agro-ecological zone that has high potential for crop, livestock and/or forestry production – while land degradation in such areas may not yet be severe, pressures on the land are increasing and timely investment in preventive SLM practices will maintain and enhance that potential thereby avoiding the need for more expensive rehabilitation measures at a later date.

ii. The area falls within an agro-ecological zone that has high potential for crop, livestock and/or forestry production – land degradation is already extensive and increasing in severity but has not yet reached the state where it is irreversible, hence investment in SLM rehabilitation and prevention measures, to restore, sustain and enhance the productive potential of the area, would provide significant economic benefits.

iii. The area falls within a semi-arid/arid agro-ecological zone that is currently being used for, and/or has potential for supporting traditional or improved agro-pastoralism/ pastoralism based livelihood systems – while the area's grazing resources may be affected by degradation investing in SLM would allow those communities engaged in agro-pastoralism/ pastoralism to realise more secure and higher economic returns from their animal and vegetation resources through restoring, sustaining and/or enhancing the productivity of their ecosystem resources.

iv. The area falls within the upper reaches of a major river basin whose water resources are currently being used, or have the potential to be used, for: a) hydro-electricity generation; b) medium to large scale irrigation; and/or c) serve as a primary source of water for domestic and industrial purposes in the country's major towns and cities. Investment in SLM would be justified as a means of mitigating/preventing downstream flooding and siltation thereby protecting and reducing the maintenance costs of past, present and future investment in downstream water resource infrastructure.

Secondary criteria

i. The area is representative of a particular agro-ecological zone that has high potential for crop, livestock and/or forestry production and would serve as a valuable demonstration for scaling up SLM within the zone.

ii. The area currently has, or could easily develop, the necessary market infrastructure required for: a) the supply of any external inputs required for SLM; and b) the selling of surplus agricultural production.

Social Prioritisation Criteria

87. To be considered, from the social perspective, as a priority area for SLM one or more of the following should apply:

Primary criteria

i. The area currently is home to a large number of resource poor rural households whose livelihoods and basic welfare are seriously threatened by land degradation and where SLM interventions have the potential to alleviate rural poverty and provide viable improved livelihoods – investment is primarily justified according to equity and social welfare/poverty alleviation criteria rather than based primarily on maximising economic returns.

ii. The area is in regular receipt of food aid and other forms of emergency relief and SLM has the potential to mitigate the effects of low rainfall, and reduce the risk of flooding and other forms of natural disasters – investment is primarily justified as a means of reducing the areas dependence on emergency relief, and limiting the cost to government of sustaining such vulnerable communities.

iii. The area is one where conflicting demands for, and pressures on, scarce and degrading land resources is leading to increasing tension and conflicts between different communities (eg. between settlers engaged in sedentary farming and pastoralists engaged in extensive grazing) and where multi-stakeholder SLM interventions have the potential to support multiple uses and accommodate the livelihood needs of different communities – investment is primarily justified for reducing conflicts by developing equitable ways for sharing the costs and benefits from restoring, sustaining and enhancing the productivity of shared land resources, between and within different communities.

Secondary criteria

i. The area is representative of a particular agro-ecological zone and ethnic community(ies) and would serve as a valuable demonstration of how resource poor rural households can be helped to improve their livelihoods and social welfare and/or reduce land use conflicts through SLM.

ii. The area currently has, or could easily develop, the necessary market infrastructure required for: a) the supply of any external inputs required for SLM; and b) the selling of surplus agricultural production.

Environmental Prioritisation Criteria

88. To be considered, from the environmental perspective, as a priority area for SLM one or more of the following should apply:

Primary criteria

i. The area is in a relatively un-degraded state with the original biodiversity of the areas natural ecosystems having been retained within areas of virtually undisturbed natural habitat – SLM investment would focus primarily on protection to maintain it in its present condition.

ii. The area still contains viable populations of species of fauna and flora that are endemic to Ethiopia or globally rare, but whose survival is increasingly threatened by land degradation and inappropriate land use – SLM would focus on reducing the threats, improving protection and restoration of degraded habitats.

iv. The area contains valuable genetic crop plant resources in the form of different land races of agricultural crops (such as coffee, teff, nug, safflower, enset, chat, Ethiopian cardoman, barley, tetraploid wheats, lentils, faba beans and sorghum) or wild relatives of commercially grown crops (notably stands of wild coffee) which are threatened by commercial farming (based on the use of a limited number of cultivars) and clearing of land for resettlement and expansion of cultivation – preserving such plant resources is justified as a component of SLM as the genetic diversity within Ethiopia's wild and cultivated crop varieties has considerable economic value both nationally and globally and this is currently under utilised.

Secondary criteria

i. The area has significant potential to support the development of eco-tourism based livelihood enterprises thereby providing a local incentive for the protection and restoration of the area's natural biodiversity.

ii. The area has potential for the development of Access and Benefit Sharing Agreements for the exploitation of local crop plant genetic resources and traditional knowledge.

C.5. ESIF Components

89. Activities to be undertaken under the auspices of the ESIF would fit within one, or more, of the following six broad component areas:

- Component 1 – Investment in field based projects and programs for promoting and scaling up SLM
- Component 2 – Improving the administration and tenure of Ethiopia's Land Resources
- Component 3 – Building the capacity of public and private sector SLM advisory and other support services providers
- Component 4 – Improving the enabling policy, legal, institutional and financial environment for SLM
- Component 5 – Building the ESIF SLM Knowledge Base
- Component 6 – Management and implementation of the ESIF

90. Although these six components are described separately, and each one has been subdivided into a number of sub-components, they should not be seen as stand alone activities to be implemented as separate projects. Promoting SLM requires a multi-dimensional approach as it involves a variety of cross cutting activities. For this reason most of the individual investment projects, to be designed and implemented under the ESIF, can be expected to be multi-focal rather than sector specific and to include a mixture of the following components and sub-components. The following sections should be taken as indicative of the range of activities that would be undertaken under the auspices of the ESIF. It is not an exhaustive list, and other activities could be considered as components/sub-components so long as they conform to the underlying concepts and principles of the ESIF.

91. It is the field level investments in SLM (component 1) that will lead directly to restoring, sustaining and enhancing the productive capacity and protective functions of Ethiopia's land resources and addressing the problems of rural poverty and vulnerability. However there are a number of barriers and bottlenecks that currently hinder the adoption and scaling up of SLM activities within Ethiopia. The activities proposed for components 2-5 are aimed at removing these, thereby contributing to the successful realisation of the component 1 objectives.

Component 1 – Investment in Field Based Projects and Programs for Promoting and Scaling Up SLM

92. The objectives of component 1 are to:

iii. Address the links between land degradation, rural poverty, vulnerability and food insecurity through the promotion of field level SLM interventions
ii. Promote area specific field level investment in SLM practices so as to restore, sustain and enhance the productive capacity and protective functions of Ethiopia's diverse land resources. Implement at a wider scale the good practices documented and screened for scaling up at various localities and agro-ecologies by mobilizing land users and the needed resources.

93. This ESIF component is the one that would require the greatest amount of investment given that its focus is on promoting and scaling up SLM by working with many different rural communities and land user groups over a wide geographic area. The bulk of the activities under this component are expected to be delivered through area based SLM investment projects involving co-financing from one or more of the following: (i) government (federal, regional and woreda); (ii) GEF; (iii) international donor/development agencies; (iv) international and/or domestic NGOs; and (v) the beneficiary rural communities. Each project would be expected to conform to the concepts and principles of the ESIF. In particular field level SLM interventions should be identified, planned and implemented according to the principles and practice of community-based participatory planning, as set out in: (i) the MoARD Community Based Participatory Watershed Development Guidelines; and (ii) the EPA Woreda and Community Environmental Management Plan for Sustainable Development Guidelines.

94. One of the key principles of the ESIF is that there is no universal set of best SLM practices that should be promoted as standard by each investment project. Instead individual SLM investment projects would be expected to take into consideration the local ecological and socio-economic circumstances when determining which best practices are appropriate for scaling up within a specific geographic area. Likewise such projects, particularly those undertaken in farming areas, would be expected to identify and promote a balanced mix of SLM agronomic, vegetative, structural and management technologies[12]. In the past there has been an over reliance on the promotion of costly physical soil and water conservation structures with insufficient attention given to lower cost alternatives (eg. grass strips, conservation tillage and other improved crop husbandry practices).

95. As appropriate each investment project would also promote locally appropriate SLM practices with the potential to mitigate the effects of climate change, such as: (i) soil management practices designed to encourage the infiltration of rainwater into the rooting zone; (ii) harvesting and storage of water for local small-scale irrigation; and (iii) increasing carbon sequestration through: a) planting of trees and shrubs on farm and in woodlots, b) by restoring the protective vegetative cover in degraded forests, woodlands and grazing areas, and c) improved soil organic matter management within farmlands.

96. Although eleven separate sub-component areas are outlined below, in many cases there would be overlapping areas of interest, and individual component 1 investment projects may contain activities related to two or more of the sub-components. Likewise they may include one or more of the sub-components listed under component 3. They would also be expected to include activities related to building the capacity of the civil society/community based organisations and land user groups that would participate in the planning and implementing of the project's field level SLM activities. They would also involve extension/training activities using people centred learning approaches aimed at raising the skills and capacity of the land users themselves (farmers, herders, forest users etc) with regard to the development and adoption of locally appropriate SLM practices.

- ***Sub-component 1.1 – Community-based participatory watershed management in high potential areas***: The MoARD has identified 177 priority

[12] SLM agronomic technologies are measures such as mixed cropping, optimum plant spacing, early planting, contour cultivation, minimum tillage, mulching, compost/manure application, use of N fixing grain legumes in crop rotations, etc which: (i) are usually associated with annual crops; (ii) are repeated routinely each season or in a rotational sequence; (iii) are of short duration and not permanent; (iv) do not lead to changes in slope profile; (v) are not zoned; and (vi) are independent of slope.
SLM vegetative technologies are measures such as grass strips, hedge barriers, windbreaks, etc which: (i) involve the use of perennial grasses/pasture legumes, shrubs or trees; (ii) are of long duration; (iii) often lead to a change in slope profile; (iv) are often zoned on the contour or at right angles to wind direction; and (v) are often spaced according to slope.
SLM structural technologies are measures (some times referred to as engineering or physical measures) such as terraces, banks, bunds, cut off drains, artificial waterways, check dams etc which: (i) lead to a change in slope profile; (ii) are of long duration or permanent; (iii) are carried out primarily to control runoff and erosion; (iv) require substantial inputs of labour or money when first installed, and often for maintenance; (v) are zoned on the contour; and (vi) are spaced according to slope.
SLM management technologies are measures such as land use change, area closure, rotational grazing, etc. which: (i) involve a fundamental change in land use; (ii) involve no agronomic and structural measures; (iii) often result in improved vegetative cover; and (iv) often reduce the intensity of use.

watersheds[13] in high potential farming areas that would be the target areas for this component. The World Bank Sustainable Land Management Project, scheduled to begin June 2008, will support community-based activities in 35 of these[14]. The focus for this subcomponent would be on those areas where timely investment in SLM will produce worthwhile economic and financial returns for both the beneficiary farm households and Ethiopian society as a whole, through maintaining and enhancing crop, livestock and forestry production on a sustainable basis in those areas with high potential for such enterprises.

- ***Sub-component 1.2 – Community-based watershed management in food in-secure areas***: This subcomponent would focus on the medium potential farming areas where land degradation is contributing to food insecurity. Because of the lower potential of such areas the economic returns (in terms of increased yields) from investment in SLM may be lower than in the areas covered under sub-component 1.1. However by addressing current land degradation problems SLM has the potential to restore, sustain and enhance the productive potential of the area's land resources enabling the practitioners to achieve household food security through increasing the outputs from their various land resource based livelihoods. On-going projects include GTZ Sustainable Use of Natural Resources for Food Security project, FAO/Netherlands Sustainable Land Management Project in Kafa zone SNNPR, Tana Beles Integrated Water Resources Development Project.

- ***Sub-component 1.3 – Community-based SLM safety net/disaster mitigation***: This subcomponent would focus on the low potential farming areas where land degradation, and natural disasters (drought and flooding) are contributing to severe food insecurity and where the rural inhabitants are in regular need of food aid and emergency relief. The economic returns from investing in SLM will be much lower than for sub-components 1.1 & 1.2 however investment is justified from a social welfare/equity perspective, and there are potential cost savings through reducing the need for food aid and other forms of emergency relief. The focus of SLM interventions would be on measures that would improve the livelihoods of the vulnerable communities through mitigating the effects of low rainfall[15], reduce the risk of flooding and other forms of natural disaster. On-going projects include MERET, Productive Safety Net Program.

- ***Sub-component 1.4 – Community-based participatory development of pastoral areas***: This subcomponent would focus on those areas where agro-pastoralism/ pastoralism provides the primary source of livelihood for the beneficiary rural communities. The main focus would be on promoting SLM practices that would restore, sustain and enhance the productive potential of

[13] The size of these watersheds varies between 3,125 ha and 16,900 ha, with an average size of of about 8,500 ha. Within each watershed there is typically some 15-20 sub-watersheds.

[14] Covering a total land area of about 320,000 ha (0.25% of Ethiopia's land area), and benefiting some 250,000 people (about 0.4% of Ethiopia's rural population) in Amhara, Oromiya, SNNP, Tigray, Beneshangul Gumuz, and Gambela Regions.

[15] Such as: (i) conservation tillage to increase effective rainfall through better infiltration into the soil profile; (ii) cross slope barriers to trap and retain surface runoff until it has time to infiltrate; (iii) water harvesting and surface storage for supplementary irrigation; and (iv) irrigation using boreholes and wells tapping groundwater resources.

the natural rangelands. Note activities related to the improved management of communal grazing lands within mixed farming areas would be undertaken under sub-components 1.1-1.3. On-going projects include IFAD Pastoral Community Development Project, USAID Pastoral Livestock Improvement Project (PLI). A package for pastoral area integrated development shall also be developed to strengthen this.

- ***Sub-component 1.5 – Community-based participatory communal forest/woodland resource management***: This subcomponent would focus on those areas where communal forests/woodlands are used for primary livelihood purposes by rural communities. In those areas where communal forests/woodlands are part of a mixed crop, livestock and forestry system, improved management of these would usually be undertaken as part of community-based watershed management (sub-components 1.1-1.3). This component would also support and encourage the communities to benefit from Non Timber products that would be obtained from community managed forests

- ***Sub-component 1.6 – Community-based participatory development of water resources for irrigation and/or fisheries***: This sub-component would focus on those areas where the soil and water resources have the potential to support sustainable rural livelihoods based on medium to large scale (100-200 ha plus) irrigation and/or fisheries (aquaculture). In those areas where irrigation and aquaculture are undertaken on a small-scale, as part of a mixed farming system, improved management would usually be undertaken as part of community-based watershed management (sub-components 1.1-1.3). Proposed projects include IFAD Participatory Small-scale Irrigation Development Programme.

- ***Sub-component 1.7 – Protection and restoration of critical areas representative of Ethiopian natural biodiversity and key habitats for endemic and/or globally endangered species***: This sub-component would focus on those areas (both within and outside officially protected areas) that have been identified as critical for the preservation of Ethiopia's natural biodiversity and which are currently threatened by inappropriate land uses, and poor land management practices, leading to habitat degradation. Activities would focus initially on completing the demarcation and preparation of management plans for the 58 Regional Forest Priority areas. In conjunction with sub-components 5.7 & 5.8 this sub-component would also seek to identify Ethiopia's critical wetland resources, determine the current threats, and develop management plans for their protection and restoration. Where appropriate this sub-component would explore the options for adding value to the natural biodiversity through the development of eco-tourism.

- ***Sub-component 1.8 – Conservation and commercialisation of Ethiopia's crop plant diversity***: This sub-component would focus on developing and promoting measures for both in-situ and ex-situ conservation of Ethiopia's diverse crop plant genetic resources (both cultivated and wild varieties). It would also explore the use of Access Benefit Sharing Agreements as a means of placing a commercial value on these plant resources and the

indigenous knowledge about their properties. The Institute of Biodiversity Conservation and Research would take the lead in this sub-component.

- ***Sub-component 1.9 – Meeting rural energy needs***: This sub-component would work with interested communities to assess their energy requirements for cooking, heating and lighting, and identify locally appropriate ways of meeting them on a sustainable basis. The principle focus would be on increasing the availability of woody biomass as fuel through on farm planting, and woodlots/plantations, of suitable trees and shrubs. In addition the development and promotion of fuel efficient stoves would be pursued as a means of reducing demand. Studies would also be undertaken into the options for making better use of the country's solar and wind energy resources. Also the production of biogas from manure would be explored as an alternative to burning dried dung as fuel. Activities under this sub-component would be usually undertaken as part of larger community-based SLM projects (notably sub-components 1.1-1.5). However it is anticipated that there would be a need for some stand alone studies to investigate new and innovative ways to meet rural energy needs (a number of NGOs have begun to undertake such investigations, and they would be encouraged to look at the options for scaling up suitable technologies). In some parts of Ethiopia there may be scope for rural households to engage in the production of the raw materials for the production of bio-fuels (eg. growing Jatropha and sugar cane). However it is anticipated that, the bulk of the production of bio-fuels, would be undertaken by large scale private sector commercial companies. Any scaling up of bio fuel production will need to be carefully assessed to ensure that it doesn't compete with land for food production (thereby undermining food security) or lead to significant loss of rangeland and biodiversity resources.

- ***Sub-component 1.10 – Promoting SLM within large scale commercial land use enterprises***: This sub-component is targeted at improving the way large scale commercial land users (both state run and private sector enterprises involved in the production of annual and/or perennial crops, livestock rearing and private and public forestry) manage their land resources. The ESIF would not directly invest in these enterprises but would support such investments by providing technical assistance and information on appropriate SLM practices. The ESIF would though seek to monitor the wider economic, social and environmental impact of such enterprises (sub-components 5.3 & 6.3), to ensure that they have a positive rather than negative impact, and to advise where there may be a need for mitigative measures to correct any adverse consequences of opening up large-scale commercial land use enterprises including trading of SLM products.

- ***Sub-component 1.11 – Mitigating the potential negative environmental impact of mining, infrastructure development, and settlement construction***: In addition to the physical scars on the landscape such economic development activities as mining/quarrying, infrastructure development (roads, pipelines, electricity grids) and settlement construction (clearing of land for new housing, factories, offices, shops etc) can result in serious downstream water quality problems where chemicals, sewage, and

eroded sediment are washed out of such sites due to a lack of measures for controlling rainwater runoff. In some areas such development activities can also lead to the destruction of areas of natural biodiversity (eg. when a new road is constructed through a natural forest or wetland area). This sub-component would work with the Ministry of Mines and Energy, Ministry of Transport, and the Environment Protection Authority, to develop a legally enforceable set of guidelines on the necessary mitigative measures that need to be put in place by those responsible for such developments, to ensure there is minimal adverse environmental impact on Ethiopia's water and other land resources.

- ***Sub-component 1.12 Development of a land suitability assessment expert system for guiding the development of land use policies and plans***: This sub-component would support efforts to address current knowledge gaps with regard to the suitability of different parts of Ethiopia for different land uses. The aim would be for the MoARD to develop a GIS based expert system that could assist federal, regional and woreda level senior government officials and development planners to review the qualities of the available land resources, and compare these with the requirements for particular land use types, so as to identify and demarcate those areas (at the federal, regional and woreda planning levels) that would be highly suitable, moderately suitable, marginally suitable or not suitable. In the context of planning for SLM investments the expert system would be used to identify: (i) areas where current land uses are problematic (ie. productivity is low because the land use is only marginally suited to the bio-physical conditions of the area); (ii) the types of improved land management practices (eg. terracing, water harvesting, irrigation etc) that might be required to mitigate the constraints currently limiting the suitability of an area for a particular land use; (iii) alternative land uses that could be promoted as more suited to the land qualities of particular areas (i.e. new land uses that if introduced would provide rural households with more productive and sustainable livelihoods); and (iv) critical wetlands, forests, natural grasslands that should be excluded from economic development activities because of their importance for the preservation of Ethiopia's biodiversity. The starting point for the expert system would be the maps and data used to identify and subdivide the country into different agro-ecological zones (AEZ).

- ***Sub-component 1.13 – Formulation of federal and regional policies and and woreda level land use plans***: This sub-component would support the efforts of federal, regional and woreda level authorities to formulate appropriate land use policies and plans for their areas of jurisdiction. At the woreda level this subcomponent would support the scaling up of the EPA program dealing with the preparation of Woreda and Community Environmental Management Plans for Sustainable Development (WCEMPSD) and ensure that the issues of land suitability and SLM are fully covered in the Woreda level plans. These policies and macro level land use plans would serve to guide the prioritisation, and preparation, of the individual community-based land use plans for the field level promotion of SLM investments (see *component 1 - Investment in field based projects and programs for promoting and scaling up SLM*). This sub-component would draw heavily on the MoARD land suitability expert system (sub-component 2.5) as well as considering the

appropriate land tenure/user rights required to encourage land users to invest in SLM (sub-components 2.1, 2.2 and 2.3).

97. The *expected outputs* from component 1 would include:

- An increased number of rural communities actively participating in the formulation and implementation of their own community-based plans for combating land degradation and low agricultural production;
- A significant expansion in the land area managed according to the concepts and principles of SLM with a corresponding reduction in the area affected by moderate to severe land degradation;
- A reduction in the number of poverty stricken households, due to increased household incomes, after the adoption of SLM practices that restore, sustain and/or enhance the productivity of their crop, livestock and/or forestry based livelihood enterprises;
- An expansion in the area of restored and protected natural habitats with a corresponding reduction in the current threats to Ethiopia's endemic and endangered species of fauna and flora, and sensitive commercialisation of Ethiopia's natural biodiversity resources through the development of eco-tourism;
- Improved in-situ and ex-situ conservation of Ethiopia's diverse crop plant genetic resources (both cultivated and wild varieties), and increased realisation of the commercial value of these resources through the development of additional Access Benefit Sharing Agreements;
- Improved rural energy supplies through a combination of increased fuel wood production, promotion of energy efficient stoves and the development of alternative renewable energy sources (biogas, solar and wind power);
- An expansion in the numbers of large scale commercial land users (both state run and private sector enterprises involved in the production of annual and/or perennial crops, livestock rearing and forestry) managing their land resources according to the concepts and principles of SLM; and
- A reduction in the negative impact of developing land for mining/quarrying, infrastructure development (roads, pipelines, electricity grids) and settlement construction (clearing of land for new housing, factories, offices, shops etc) through the adoption of SLM based mitigative measures.
- An increase in the income of households in the program intervention areas
- An increase in the vegetative cover of the watersheds
- An operational land use suitability expert system guiding the land use development plans and policies of senior officials and planners at the federal, regional and woreda levels;

98. The *expected outcomes* from component 1 would be: (i) *an overall reduction in rural poverty and vulnerability, as a result of adopting SLM practices that improve the livelihoods and economic well-being of Ethiopia's farmers, herders and forest resource users;* and (ii) *an overall reduction in the area of land affected adversely by land degradation, with a corresponding increase in the productive capacity, and protective functions, of Ethiopia's ecosystem resources.*

Component 2 – Improving the administration and tenure of Ethiopia's Land Resources

Objectives

99. The objectives of component 2 are to:

i. address the barrier of insecure land tenure/user rights that hinders the field level adoption of SLM practices;
ii. put in place an enforceable and transparent land administration, certification and use policies and regulations.
iii. ensure that the granting of land tenure/user rights is equitable and takes account of the needs of women and ethnic minorities for secure access to Ethiopia's land resources;
iv. address the gaps in knowledge concerning the suitability of Ethiopia's land resources to be used for different purposes; and
v. ensure that land suitability is properly considered in the development of federal, regional and woreda level land use policies and plans.

100. Activities undertaken under this component would seek to improve the current land administration systems for recording and demarcating Ethiopia's land resources with regard to: (i) defining who has the right to use those resources; and (ii) determining the suitability of those resources to be used for different purposes. One of the critical barriers to SLM within the country is that land resource users, without secure long term rights to use their local land resources, will have little incentive to invest in SLM practices because of uncertainty as to whether they will be the ones to benefit. The development of federal, regional and woreda level plans and policies for the sustainable utilisation of the country's land resources are hindered by gaps in knowledge with regard to the inherent qualities of these land resources and the bio-physical and economic requirements of different land uses (essential for determining land use suitability).

101. The bulk of the activities under component 2 would fall within the following eight sub-component areas:

- ***Sub-component 2.1 – Completion and updating of the first stage land certification process***: This sub-component would support efforts to complete the registration and issuing of first-phase land certificates so as to ensure that all of Ethiopia's rural households and small towns dwellers have recognised secure land user rights to those parcels of land they use on an individual household basis for crop, livestock, forestry and/or fisheries production. Activities would also be directed at ensuring the completeness, quality and updating of records of these first stage certificates so as to maintain confidence in the process. Specific efforts would be made to ensure that the registration process is equitable and gives specific recognition to the land tenure/user rights of women and ethnic minorities. Regional governments have provided the first stage land certification to a total of about 7.3 million

households and it is planned to provide to 13 million HHs in the coming few years.

- ***Sub-component 2.2 – Registering traditional use and property rights and responsibilities for the use and management of communal land resources***: This sub-component would seek to develop and validate effective arrangements for protecting and enhancing traditional rights and management responsibilities for the use of communal land resources (grazing lands, forests/woodlands, water resources etc). Options to consider would include: (i) the registration and granting of certificates recognising the exclusive rights of the members of a particular community/user group to the use of specific communal land areas; (ii) measures for protecting the traditional rights of access to communal resources (for fuel, fodder, water, medicinal plants, wild foods etc) for women, poor/land less households and the marginalized groups and (iii) the development of a legal framework for enabling such communities/user groups to formulate and enforce local byelaws that govern the access to, use of, and management responsibilities for, these communal resources.

  Sub-component 2.3 – Development and initiation of the second stage land certification process: This sub-component would support efforts to develop cost effective procedures for adding spatial data (geographic location, land area, maps depicting plot boundaries) to the first stage certificates. Current pilot efforts to develop such second stage certificates will be reviewed as to their technical accuracy, costs and replicability. This review will also determine in what situations the extra costs associated with the second stage land certification process can be justified in terms of extra SLM benefits (ie. under what circumstances are land users with second stage certificates prepared to invest more in the sustainable management of their land resources than those with only first stage certificates). This information will guide the identification of the regions and woredas in which to initiate the scaling up of the second stage land certification process. Second stage land certification has been provided in four regions with the supported of projects (ELTAP supported certification of 614,000 parcels of 153,000 HHs: and SIDA in Amhara.has similarly supported the second level certification)
- ***Sub-component 2.4 – Building the capacity of the federal, regional and woreda level land administration institutions, the Ethiopian Mapping Agency (EMA)*** and higher learning institutions This sub-component would support efforts to improve the capacity of those institutions at the federal, regional and woreda levels, with responsibility for rural land certification and administration, to support both the first and second stage land certification process. This would be done through building the required professional capacity (knowledge, skills) of existing staff, as well as increasing the operational capacity (manpower, budget, equipment and facilities) of their institutions. Capacity building activities for the EMA will focus on strengthening its ability to generate accurate maps and geo-referenced data for all those who require such information for their field survey work and GIS database systems[16].

[16] Scaling-up the surveying and registration of individual plots of land will require improving the accuracy of GPS equipment by installing CORS (continuously operating reference stations) that provides correction factors to

- ***Sub-component 2.5 – Development of public information and administration (PIA) programs***: This subcomponent would support the establishment of regional and woreda level PIA programs aimed at raising awareness amongst rural land users on their land use rights and obligations and informing other stakeholders as to the contents, and implications, of the federal, regional and woreda rural land laws and regulations. This sub-component would build on the PIA work initiated by the USAID Ethiopia: Strengthening Land Tenure and Administration Program (ELTAP).

- ***Sub-component 2.6 – Improving legal recourse for tenure security and dispute resolution***: This sub-component would improve the capacity of regional and woreda level authorities to provide rural land users with access to legal recourse for resolving disputes over land use rights. This would include providing training on property/land use rights, and the federal and regional land proclamations and regulations governing such rights, to: (i) regional supreme and high court judges; (ii) woreda judges; and (iii) regional and woreda rural land administration officials.

- ***Sub-component 2.7 – land valuation***
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102. The *expected outputs* from component 2 would include:

- All the rural households of Ethiopia with land holdings, used on a private/individual basis for crop, livestock, forestry and/or fisheries based livelihood enterprises issued, with at least a first stage certificate guaranteeing their land tenure/user rights;
- Women and marginalized community groups with secure rights of access to use Ethiopia's land resources;
- A set of validated land administration measures for protecting and enhancing traditional rights and management responsibilities for the use of communal land resources (grazing lands, forests/woodlands, water resources etc);
- A set of cost-effective procedures for scaling up the second stage land certification process;
- Improved capacity amongst those federal, regional and woreda level institutions responsible for rural land certification and administration, tenure security and dispute resolution;
- A set of federal, regional and woreda level policies and plans for the promotion of area specific suitable land uses; and
- Increased capacity of the private sector to provide relevant services

103. The *expected outcome* from component 2 would be *the removal of the key barrier of insecure land tenure/user rights that has hindered the field level adoption of SLM practices, secure land tenure/user rights that recognise special community groups and gender differences, and improved knowledge on the suitability of*

make GPS readings more accurate. USAID's ELTAP project has provided resources to EMA for installing 4 CORS in different parts of the country but they are not enough in addressing the country's need. Additional CORS will be required (up to 12) to cover the nation adequately.

different parts of the country for different land uses guiding the formulation of appropriate federal, regional and woreda level land use policies and plans.

Component 3 – Building the Capacity of Public and Private Sector SLM Planning, Advisory and Other Support Services Providers

104. The objectives of component 3 are to:

i. Mainstream the concepts and principles of SLM within the development plans and activities including issues of gender of the public and private sector agencies providing planning, advisory and other support services to rural land users;
ii. Increase the technical skills and operational capacity of those public and private sector agencies involved in providing planning, advisory and other essential support services for the promotion and scaling up of SLM best practices.

105. Activities undertaken under this component would focus on building the technical skills (knowledge) and operational capacity (manpower, budget, equipment and facilities) amongst the various public and private sector agencies, operating at the federal, regional and woreda levels, that are involved in providing planning, advisory and other essential support services to rural land users for the promotion and scaling up of SLM best practices. Note activities related to building the capacity of the land users themselves (farmers, foresters, pastoralists, agro-pastoralists, etc), and the civil society/community based organisations to which they belong, so that they can develop and adopt locally appropriate SLM practices would be undertaken as an integral part of the implementation of the component 1 individual field level SLM investment projects.

106. The bulk of the activities under component 3 would fall within the following six sub-component areas. In many cases the tasks and activities listed would be undertaken as specific sub-components of component 1 field level projects, rather than as stand alone projects. While sub-components 3.1-3.3 are specifically related to SLM, sub-components 3.4-3.6 might at first sight appear less directly related. However the inadequate supply of farm inputs, limited access to markets for the sale of surplus produce, and a lack of credit for purchasing seasonal inputs and equipment, can be critical barriers and bottle necks to the adoption of SLM by resource poor rural households. It is for this reason they are considered an essential part of the overall ESIF component activities.

- ***Sub-component 3.1 – Building the capacity of the policy makers, development planners, development practitioners and the land users*** : This sub-component would focus on building capacity within the federal, regional and woreda level government policy makers, development planners ***development practitioners and the land users*** to (within their respective areas of jurisdiction): (i) formulate strategies and action plans for the scaling up of successful SLM technologies and approaches; (ii) determine the priority needs and target areas for SLM investments; and (iii) design and appraise SLM investment projects and programs that would address these needs (iv) make sound planning of SLM interventions and implement the plans . The

aim is to mainstream the concepts and principles of SLM into the federal, regional and woreda level strategic development plans and policies. This sub-component will therefore include a set of awareness raising activities so as to sensitise key senior officials, policy makers and development planners as to the importance of SLM for sustaining rural economic development, alleviating rural poverty, and achieving food security.

- ***Sub-component 3.2 – Building the capacity of advisory (extension) service providers***: This sub-component would focus on building capacity within the regional and woreda level government and NGO extension services to: (i) support community-based participatory SLM planning and technology development; and (ii) to adopt new people centred learning extension approaches based on innovative and participatory adult learning methods[17]. On-going projects include the Rural Capacity Building Project.

- ***Sub-component 3.3 – Building the capacity of research support service providers***: This sub-component would focus on building the technical skills (knowledge) and operational capacity (manpower, budget, equipment and facilities) amongst the federal, and regional agricultural research institutions to undertake adaptive and participatory research with rural land users to identify locally appropriate SLM solutions to problems of land degradation and low crop, livestock and/or forestry production. The SLM approach known as conservation agriculture[18] (CA) is steadily gaining acceptance in many parts of Sub-Saharan Africa but has not yet been studied in any detail in Ethiopia. This is one area where there is an urgent need for adaptive research to develop CA systems suited to the different cropping systems and agro-ecological zones of Ethiopia as an alternative to the traditional reliance on physical soil conservation works for tackling land degradation. This sub-component would therefore provide support for the development of research into this specific area. Baseline funding for this sub-component is available through the Rural Capacity Building Project.

- ***Sub-component 3.4 – Strengthening input supply service providers***: This sub-component would focus on improving the supply of inputs to rural communities through working with private traders, agricultural cooperatives and unions, to improve their knowledge of: (i) where and how to obtain the different inputs; (ii) how to store them safely; and (iii) how and for what purpose they should be used (so they can pass this information on to the end users). Large scale commercial (private sector) input suppliers would be encouraged to support the development of a network of smaller scale input suppliers (private traders, agricultural cooperatives and unions) at the woreda

[17] Such as the Farmer Field School (FFS) approach developed by FAO and the FTCs' as an alternative to the top down teach and visit (T&V) extension approach which involves guided practical field based investigations, through which the land users have the opportunity to learn for themselves about particular crop production and land degradation problems and how to solve them.

[18] Conservation agriculture (CA) is a holistic approach to agricultural production based on enhancing natural soil biological regeneration processes involving: (i) improved soil organic matter management for the efficient use of rainfall, soil moisture and plant nutrients; and (ii) the maintenance of soil physical properties through keeping mechanical tillage to the absolute minimum required for direct planting/seeding. The following interrelated criteria distinguish CA from conventional agricultural systems: (i) reduced or zero tillage; (ii) permanent soil cover (plant residues and/or cover crops); (iii) crop rotation; and (iv) minimal in-field traffic.

and community levels for the distribution of their products in a cost-effective and responsible manner.

- ***Sub-component 3.5 – Strengthening market service providers***: This sub-component would focus on improving the market infrastructure through which rural communities can dispose of their surplus crop, livestock and forestry produce to private traders, agricultural cooperatives and unions. It would also include improving access to, and use of, market information by both potential sellers and buyers. This sub-component would be guided by the experience of the IFAD Agricultural Marketing Improvement Programme.

- ***Sub-component 3.6 – Strengthening credit/financial service providers***: This sub-component would focus on improving access to credit and financial services by rural communities. This would include strengthening and expanding existing micro-finance institutions and training potential clients on how best to use and benefit from such services. Where appropriate, efforts would be directed at the establishment of rural savings and credit cooperatives. This sub-component would be guided by the experience of the IFAD Rural Financial Intermediation Programme.

107. The *expected outputs* from component 3 would include:

- Improved capacity amongst those agencies responsible for policy making and development planning to formulate SLM related policies and development plans and design SLM investment projects and programs;
- Improved capacity amongst the advisory (extension) service providers to support the efforts of rural communities to tackle the degradation of their land resources through the adoption of area specific SLM practices;
- Improved capacity amongst the federal and regional research institutions to undertake adaptive and participatory research as a means of assisting rural communities to find locally appropriate solutions to area specific SLM problems;
- Improved capacity amongst private sector traders to provide rural communities with the inputs (seed, planting material, fertiliser, agro-chemicals, equipment, machinery etc) they may require for the adoption of area specific SLM practices;
- An improved market infrastructure enabling rural communities to dispose of their surplus crop, livestock and forestry produce to private traders, agricultural cooperatives and unions; and
- Rural communities with improved access to credit and financial services for meeting the incremental investment costs of adopting SLM.

108. The *expected outcome* from component 3 would be *improved capacity of the planning, advisory and other essential support services at the federal, regional, woreda and community levels leading to an expansion in the numbers of rural households and communities with the capacity to invest in SLM.*

Component 4 – Improving the Enabling Policy, Legal, Institutional and Financial Environment for SLM

The objective of component 4 is to:

> *Identify and address, key barriers and bottlenecks to SLM within the policy, legal, institutional and financial environment.*

109. Activities undertaken under this component would seek to improve the enabling policy, legal, institutional and financial environment. The focus would be on identifying the key policy, legal, institutional and financial barriers and bottlenecks to SLM and then determining how they might be addressed. In some cases this would require special studies to identify which of these can be changed, and to then formulate recommendations on what changes are required, to create the right enabling environment for the adoption and scaling up of SLM. In other cases it would involve incremental investments to build on current efforts to address specific barriers and bottlenecks.

The bulk of the activities under component 4 would fall within the following four sub-component areas:

- ***Sub-component 4.1 – Review, improvement and support the implementation of the policy environment for SLM***: This sub-component would involve a series of special studies to review the land use and economic development policy environment at the federal, regional and woreda levels. The purpose being to identify the key policy barriers and bottlenecks that can be changed in order to create the right enabling policy environment for the adoption and scaling up of SLM. This would involve reviews of individual sector policies (eg. for crop development, livestock, forestry and fisheries) as well identifying the options for multi-focal policies for cross cutting issues (eg. food security, poverty alleviation, watershed/river basin management). The pipe line EDRI/ IFPRI Policy Research Support Program is expected to initiate the review of agriculture development and natural resource management related policies, while the FAO National Forestry Program Facility will support the review of Ethiopian forestry policy.

- ***Sub-component 4.2 – Review and improvement of the institutional environment for SLM***: This sub-component would involve a series of institutional stakeholder analysis exercises to determine the mandate and institutional responsibilities for the key public and private sector institutions that have a role to play in the promotion and scaling up of SLM. As part of this process each of the stakeholder institutions would be encouraged to undertake a self assessment of their strengths and weaknesses. These would be used to assess to what extent current institutional structures and capacity are suitable, and make recommendations on what changes and capacity building may be needed to overcome them. The analysis would also look at the impact of the decentralisation process to determine the current strengths and weaknesses of the regional and woreda government level institutions with regard to the promotion of SLM within their areas of jurisdiction. This analysis would provide the basis for developing institutional capacity building ***and institutional policy advocacy*** at these levels. One of the outputs from the analysis would be a recommendation on the most appropriate mechanism for

facilitating a multi-sector approach and promoting inter-agency coordination and collaboration at all levels.

- ***Sub-component 4.3 – Review and improvement of the legislative environment including enforcement of policies for SLM***: This sub-component would focus on the review, harmonisation and revision of the legislative and regulatory environment for SLM at the federal, regional and woreda levels. The aim would be to create the right balance between enabling, and enforcement, legislation for combating land degradation and encouraging SLM. The review would look at the body of environmental legislation that relates to the use and management of Ethiopia's natural resources (soils, forestry, grassland, water, wildlife etc). The aim would be to identify what is sector specific, and what is multi-focal where the need is for cross cutting legislation. The review would also consider what federal, regional and woreda level legislative instruments are required to enable rural communities and/or specific user groups to formulate and enforce their own local bye-laws for the utilisation and management of both private and communal land resources.

- ***Sub-component 4.4 – Identification of alternative financial mechanisms for funding SLM interventions***: Currently the bulk of the investment funds for SLM activities comes from the federal government, donors and NGOs, this sub-component would investigate and make recommendations on alternative sources of funding that could be tapped to support the promotion and scaling up of SLM. In particular those that would come under the heading of 'payment for environmental services'. Options to be considered would include: (i) payments for carbon sequestration (lessons to be learnt from the UNDP regional CDM project); (ii) 'debt for nature' swops to fund biodiversity conservation and restoration; (iii) an additional environmental levy on the entry fee to national parks/game reserves to pay for SLM activities within neighbouring buffer zones; and (iv) charging a small levy on the fees paid for hydro-electricity, or water supplies for irrigation, domestic and industrial purposes, which is then used to provide financial incentives for land users in upstream catchment areas to adopt environmentally sensitive land management practices for the maintenance of water quality and quantity. It would also explore ways to encourage individual woreda governments to invest part of the capital investment grant they receive from the federal government in promoting SLM within their area.

110. The *expected outputs* from component 4 would include:

- A set of recommendations detailing where the promotion and scaling up of SLM requires changes in the current policy environment;
- An improved institutional capacity for the promotion and scaling up of SLM, including agreement on a mechanism for multi-sectoral inter-agency coordination and collaboration;
- A set of recommendations detailing where the promotion and scaling up of SLM requires changes in the current legislative environment; and
- A set of recommendations on alternative sources of investment funding for the promotion and scaling up of SLM.

111. The *expected outcome* from component 4 would be *an improved federal, regional and woreda level enabling policy, institutional, legal, and financial environment for the promotion and scaling up of SLM.*

Component 5 – Building the SLM Knowledge Base

112. The objectives of component 1 are to:

i. Address the lack of information on the best SLM technologies and approaches for scaling up within Ethiopia particularly in the pastoral and semipatoral lowland areas;
ii. Promote the systematic documentation of the various SLM technologies and approaches that have been used within Ethiopia to combat land degradation and promote sustainable crop, livestock, forestry and fisheries production; and
iii. Address the lack of up to date information on the nature, extent and severity of the different land degradation processes affecting SLM within Ethiopia.

113. Activities undertaken under this component would focus on building a sound knowledge base for all those involved in the promotion and scaling up of SLM within Ethiopia. Such information being essential for the design and implementation of SLM area based investment projects (component 1). This would be achieved by filling current knowledge gaps, and developing and operating a cost effective information management system for the collection, storage, analysis and dissemination of SLM related data. The aim is to improve Ethiopia's capacity to provide all concerned stakeholders with high quality, customised knowledge that they can use to: (i) support decision-making; (ii) inform policymaking; (iii) advance SLM mainstreaming (in particular in the federal, regional and woreda level development policies and poverty reduction strategies, as well as in the donor and NGO strategies and sector plans for Ethiopia); (iv) guide future public and private sector investment; (v) scale up successful SLM technologies and approaches; and (vi) monitor and evaluate the environmental and socio-economic impact of SLM activities.

114. It would involve a review of existing data sets (including archived data from past projects) and current institutional information storage and retrieval systems (particularly those of the MoARD, MoWR and EPA) with the aim of identifying key gaps, and improving the sharing and dissemination of SLM related information. A key component of this would be the documentation and dissemination of local level experience with successful SLM technologies and approaches as part of a strategy for scaling up the geographic area impact of existing SLM successes on the inter-related problems of land degradation, declining agricultural productivity, food insecurity and rural poverty.

115. The bulk of the activities under component 5 would fall within the following three sub-component areas:

- ***Sub-component 5.1 – Establishing an Ethiopian SLM Information System (ESLMIS)***: The aim of this sub-component is to establish a

knowledge based system for providing federal, regional, woreda and local level public and private sector stakeholders with the information they require for the promotion and scaling up of SLM interventions. The core of this would be the existing MoARD Knowledge Management System. However the ESLMIS would include links to other institutions with related information systems (such as the Ethiopian Water Resources Information System and the information system of the Environmental Protection Authority) through the formulation and signing of inter-agency data sharing/networking agreements. Likewise the central MoARD database would be linked to regional SLM centres to facilitate the collection and accessing of information from, and within, each region. The World Bank Sustainable Land Management Project includes a sub-component for providing some support for the development of the MoARD Knowledge Management System.

- ***Sub-component 5.2 – Documenting successful SLM technologies and approaches***: This sub-component would build on the existing ETHIOCAT database using the WOCAT[19] methodology. The aim is to systematically document the wide range of SLM technologies and approaches that have been successfully used over the last 30-40 years by government, NGO and donor projects and programs for combating land degradation and promoting sustainable crop, livestock and forestry production in different parts of the country. This documentation exercise would also cover the wide range of indigenous SLM practices developed and used by individual land users and rural communities in different parts of the country. Extension agents and technical experts, involved in field level SLM projects and programs, would be encouraged to use the WOCAT tools primarily as way for them to assess for themselves the effectiveness of their recommended technologies and approaches, but with the bonus of producing data that can be entered into the ETHIOCAT database, thereby making it available to others. Note ETHIOCAT will be one of the core components of the ESLMIS.

- ***Sub-component 5.3 – Monitoring and assessment of land degradation within Ethiopia***: The initial purpose of this sub-component is to provide a comprehensive and nation-wide assessment, for the ESIF, of the present nature, extent and severity of the different land degradation processes affecting SLM within Ethiopia. This would serve as the base line against which to monitor and assess changes in land degradation as a result of implementing the ESIF. The National Soil Laboratory (NSL) of the MoARD has the mandate, but not yet the institutional capacity, to monitor and assess various forms of land degradation, hence this sub-component would work with the NSL to build such capacity. The base line, and subsequent, data and maps generated by this sub-component would be made accessible to interested stakeholders through its inclusion in the ESLMIS. This

[19] The World Overview of Conservation Approaches and Technologies (WOCAT) is a global program, with its secretariat in Bern Switzerland, that has developed an internationally recognised standard set of tools for assessing and documenting soil and water conservation technologies and approaches. Ethiopia has been a collaborating partner since the start of WOCAT and has established its own country specific version of the global database (ETHIOCAT). The global WOCAT database currently contains information documented in Ethiopia on 46 technologies and 21 approaches. More detailed information on a selected sample of these can be found in the ETHIOCAT database of the MoARD.

subcomponent would help provide much of the land degradation data required by the EPA when preparing its biannual State of the Environment reports.

- Sub-component 5.4 – Improving availability of SLM technologies which evolve as result of researching, and adaptation. The initial purpose of this sub-component is to enhance applied research so that it provides the SLM program in testing and demonstrating technologies and approaches for effectiveness and applicability in varying localities for wide scale r implementation and adoption

116. The *expected outputs* from component 5 would include:

- An operational Ethiopian SLM Information System (ESLMIS) providing information at multiple levels to those involved in promoting and scaling up SLM within Ethiopia;
- A comprehensive database documenting a wide range of indigenous, introduced and research derived, SLM technologies and approaches successfully used for restoring, sustaining and/or enhancing crop, livestock and/or forestry production in one or more of Ethiopia's ecosystems;
- An up to date assessment as to which areas of Ethiopia are affected by land degradation with detailed information on the nature, extent, and severity of the land degradation processes involved in each area.

117. The *expected outcome* from component 5 would be *an enhanced knowledge base contributing to the effective promotion and scaling up of SLM within Ethiopia*.

Component 6 – Management and Implementation of the ESIF

118. The objectives of component 6 are to:

i. Promote the development of a common vision of SLM, and to achieve consensus on how best to achieve this, at all levels within Ethiopia;
ii. Improve inter-agency coordination at the federal, regional and woreda levels for the promotion and scaling up of SLM across the whole of Ethiopia;
iii. Facilitate the review and revision of the ESIF through establishing a system for regularly monitoring and evaluating its impact;
iv. Promote the sharing of the experience gained from implementing the ESIF with other TerrAfrica countries and international development partners,

119. Activities under this component would focus on building a broad based coalition of Ethiopian stakeholders at the federal, regional and woreda levels, to guide and assist with the management and implementation of the ESIF. A ctivities would also include a sub-component specifically for the sharing of experiences with these countries and the various international development partners involved.

120. The bulk of the activities under component 6 would fall within the following four sub-component areas:

- ***Sub-component 6.1 – Building the federal, regional and woreda SLM Platforms***: This sub-component would initially focus on establishing and operationalising functional SLM platforms at the federal level, and in each of the regions. Subsequently this would be extended to the woreda level, with woreda SLM platforms being set up as, and when, individual woredas become actively involved in the development and implementation of one, or more, of the ESIF components/sub-components. The aim of this sub-component is to develop a multi-level partnership, comprising a series of SLM platforms and forums through which federal, regional, woreda and community level stakeholders are brought together for the purpose of advocating a common vision of SLM, sharing analyses, setting the foundations for strengthening and harmonizing policy dialogues and strategies, and improving coordination at all levels for the promotion and scaling up of SLM across the whole of Ethiopia.

- ***Sub-component 6.2 – Management support to the coordination and implementation of the ESIF***: This sub-component would aim at building the capacity of the SLM Secretariat and Technical Committee to coordinate and implement the ESIF. Management support would include the convening of periodic donor roundtable conferences to coordinate and harmonise the financial and technical support provided by the ESIF international development partners.

- ***Sub-component 6.3 – Monitoring and evaluation of the ESIF results***: This sub-component would develop an M&E system to enable those responsible for implementing the ESIF to monitor and evaluate the results and update/revise the ESIF as needed in the light of experience gained from its implementation. This would be undertaken in conjunction with sub-component 5.3.

- ***Sub-component 6.4 – Sharing experiences of the ESIF within Ethiopia, other countries and international partners***: This sub-component would aim at sharing Ethiopia's experience with the ESIF with other Sub-Saharan Africa countries involved in the TerrAfrica program. This would be done through participation in inter country meetings, workshops and exchange visits, as well as through the sharing of publications and other multi-media materials. Through this process Ethiopia would contribute to building up the global TerrAfrica Knowledge Base. This sub-component would also support similar networking with other regional and international SLM and land administration networks and programs.

121. The *expected outputs* from component 6 would include:

- One federal, nine regional, and a steadily increasing number of woreda, SLM platforms established and operational;
- A functioning SLM Secretariat and Technical Committee coordinating the implementation of the ESIF;

- An M&E system developed and being used to monitor and evaluate the implementation of the ESIF; and
- A series of inter country meetings, workshops and exchange visits held within and outside Ethiopia for the purpose of sharing the experience gained from implementation of the ESIF and similar investment frameworks developed by other Sub-Saharan Africa countries.

122. The *expected outcome* from component 6 would be *an effective institutional capacity and operational structure in place to support the implementation of the 15 year ESIF*.

D. ESIF IMPLEMENTATION

D.1 Coordination and Implementation Arrangements

123. The ESIF will be implemented by bringing together federal, regional, woreda and local/community level stakeholders within a multi-level cooperative partnership. This will be used to: (i) arrive at, and advocate, a common shared vision of SLM within Ethiopia; (ii) share the analysis of the barriers and bottlenecks to promoting and scaling up SLM at the local, regional and federal levels; (iii) reach agreement on the changes needed in the policy, legal and institutional environment to facilitate the adoption of SLM; (v) document and disseminate information on successful SLM technologies; (vi) harmonise development approaches and incentive strategies; and (vii) improve coordination at all levels.

Federal Level

124. At the federal level the Federal Government of Ethiopia has assigned overall lead responsibility for the implementation of the ESIF to the MoARD. The federal ESIF multi-stakeholder platform comprises a National SLM Steering Committee, and a National SLM Technical Group, both of which are supported by the National SLM Secretariat which is located in an office in the Natural Resources Division of the MoARD.

125. The National SLM Steering Committee (NSC) is chaired by the State Minister for Natural Resources, MoARD, and has high level representation from the Ministry of Finance and Economic Development, Ministry of Water Resources, Environmental Protection Authority, Ethiopia Institute for Agricultural Research, Regional Administrations and one representative of the development partners. The NSC serves as the umbrella committee for SLM initiatives through out Ethiopia. In particular, it is responsible for providing guidance to government pertaining to policies relevant to integrated land (soil, water, vegetation) management. The NSC will provide strategic directions for the development of an action-based SLM platform and set priorities for program and project work. In general the NSC will deal with higher level policy issues. Its main functions will be to ensure harmonization, coordination, and alignment of SLM activities in the country and also to play a strong SLM advocacy role. (For detailed duties and responsibilities see annex 2.)

126. The National SLM Technical Committee (NTC) comprises nominated senior technical staff from the following institutions: MoARD, Ministry of Water Resources, Environmental Protection Authority, Ethiopia Institute for Agricultural Research, Institute of Biodiversity, the Ethiopia Development Research Institute. Development partners with programs in SLM are also represented on this body. The role of the NTC is to provide technical and managerial support to the NSC for effective implementation of the multi-donor financed SLM Programs and projects implemented by the various organizations under the ESIF. (For detailed duties and responsibilities see annex 2.)

127. The National SLM Secretariat is responsible for providing logistical and administrative support for the day to day activities involved in the implementation of the ESIF. These include arranging all meetings of the NSC and NTC. It is also responsible for routine liaison with the counterpart institutions responsible for the regional and woreda level SLM platforms. (For detailed duties and responsibilities see annex 2.)

128. The National SLM Secretariat will also periodically convene federal level SLM consultation workshops bringing together representatives of the different stakeholder institutions involved in the federal level SLM platform to: (i) raise awareness about, and reach consensus agreement on, the concepts and principles of SLM as they apply to the situation in Ethiopia; (ii) report on and review progress with the implementation of the ESIF; (iii) harmonise and coordinate on-going and future SLM investment activities; (iv) share past and present experiences with the development and scaling up of SLM technologies and experiences; (v) review progress with the elimination of the technical, policy, legal, institutional and financial barriers and bottlenecks to SLM and determine what further work is needed to overcome the remaining ones; and (vi) review and refine ESIF targets and priority areas.

Regional Level

129. At the regional level primary responsibility for the implementation of the ESIF lies with the Bureau of Agriculture and Rural Development. The regional SLM platform consists of regional counterpart institutions to the NSC and NTC (for detailed duties and responsibilities see annex 2). Representatives of the various regional level stakeholders will periodically get together in regional SLM consultation workshops.

Woreda Level

130. At the woreda level primary responsibility for the implementation of the ESIF lies with the Woreda Office of Agriculture and Rural Development. Representatives of the various woreda level stakeholders will periodically get together in woreda SLM consultation workshops.

D.2 Stakeholder Involvement

131. Annex 3 details the various roles and functions of the different actors that will be involved in the promotion and scaling up of SLM within Ethiopia under component 1 of the ESIF. Community level stakeholder involvement will be critical to the success of the field projects to be implemented under the umbrella of the ESIF. Planning for SLM activities within specific areas will therefore follow the principles and practice of community-based participatory planning, as set out in: (i) the MoARD Community Based Participatory Watershed Development Guidelines; and (ii) the EPA Woreda and Community Environmental Management Plan for Sustainable Development Guidelines.

132. Stakeholders at all levels, through their participation in their respective SLM platforms (at the federal, regional and woreda levels) will be in a position to report back on their experience with the implementation of specific ESIF activities, and have a say in their updating and revision.

D.3 Monitoring and Evaluation Strategy

133. A full M&E system will be developed during the first year of the phase I ESIF activities (sub-component 6.3). This will be expected to cover: (i) sub-component project activities and financial expenditure; (ii) impact on organisational capacity building; (iii) environmental impact; (iv) beneficiary impact; and (v) participatory monitoring and impact assessment at the community level.

134. Key outcome indicators will include:

- Expansion in the area of land managed in accordance with the concepts and principles of SLM;
- Decrease in the area of land seriously affected by land degradation;
- Increase in area rehabilitated, ecosystems restored and carbon sequestrated

- Reduction in the number of poor rural households, and in particular a reduction in those regularly requiring emergency food aid and disaster relief;
- Rise in the productivity of those crop, livestock, forestry and/or fisheries livelihood enterprises that have invested in SLM;
- Increase in the number of rural land users investing in SLM as a result of being granted secure tenure/land user rights;
- Increase in the number of rural land users able to access timely and effective advisory support services (both public and private sector) for the adoption of SLM practices; and
- Expansion in the SLM knowledge base with a corresponding increase in the number of policy makers, planners, development workers, research scientists, academics and land users able to access that information through the ESLMIS.

D.4 Replicability and Scaling Up Strategy

135. Lessons learnt from the implementation ESIF activities will be used to guide the replication, and scaling up, of successful SLM technologies and approaches in other parts of Ethiopia with similar bio-physical, socio-economic and cultural/ethnic conditions. This process will be greatly assisted by the gradual building up of Ethiopia's SLM knowledge base, over the life of the ESIF, and in particular through the systematic documentation of the experiences gained/lessons learnt, and then making this available to all stakeholders through the Ethiopian SLM Information System.

D.5 Sustainability

136. ***Institutional Sustainability:*** Implementation of the ESIF will involve promoting cooperation and collaboration amongst existing institutions, at the federal, regional and woreda government levels, all of which can be expected to continue to exist after the termination of the final phase of the ESIF. The proposed institutional capacity building activities (component 3) are designed to ensure that personnel in both the public and private sector support service providers, operating at the federal, regional and woreda levels, will have the skills and facilities required to enable them to continue promoting and scaling up SLM activities.

137. ***Financial Sustainability:*** Financial sustainability of the ESIF will be ensured through mainstreaming the concepts and principles of SLM into the environmental management, and economic development, plans and policies of the federal, regional and woreda governments and their sectoral technical agencies. It is also to be expected that as these different levels of government gain a better appreciation of the economic costs associated with land degradation this will increase their willingness to invest in its control. Likewise by identifying and raising awareness of the financial benefits that can be realised through the adoption of SLM practices this can be expected to increase the amount of investment (cash, labour and land) made by the private sector (small-scale as well as large-scale commercial land users) in SLM.

D. 6 Implementation Plan

138. The ESIF is planned to last 15 years (January 2009 – December 2023) and be implemented in three five year phases:

1. ***Phase 1 (January 2009 – December 2013)***
2. ***Phase 2 (January 2014 – December 2018***

Phase 3 (January 2019 – December 2023)
During all the phases it will undertake the following major area of focus ***simultaneously***

These include:

- promoting and scaling up SLM through the planning and implementation of area based SLM investment projects on priority area
-
- developing the SLM knowledge base, creating the necessary enabling policy, legal, institutional and financial environment, and building the capacity of the advisory and other support service providers. It would also initiate the process of planning and implementing area based investment projects for the promotion and scaling up of SLM within those areas identified as in immediate need of priority attention.

- building on the experience gained from phase 1 to review, and further improve, the enabling environment and institutional capacity, while expanding the area managed according to the concepts and principles of SLM through the planning and implementation of additional area based SLM investment projects in those areas considered as next in need of priority attention.

- seeking to consolidate the gains made during phases 1&2 while addressing the remaining knowledge, policy, legal, institutional and financial barriers and bottlenecks. It would also

D. 7 Financing Plan

139. A variety of existing and pipe line projects would be brought together under the auspices of the ESIF and would provide the initial base line funds required. Additional incremental funding would be sought from a variety of different sources including: (i) federal, regional and woreda level governments; (ii) development partners (both donor agencies and NGOs); (iii) GEF grants (principally from the SLM focal area, but with additional funding where appropriate from the biodiversity, climate change and international waters focal areas); and (iv) the private sector and civil society (including cash and in kind contributions from the beneficiary rural communities).

140. The investment funding required for the implementation of the 15 year ESIF outlined in the earlier sections is estimated as follows (see annex 5 for a detailed breakdown by component and sub-component):

Current base line funding	US$ 1,303.65 million
Incremental funding required	US$ 5,392.45 million
Total ESIF funding	US$ 6,696.10 million

The funds shall be used on the basis of
80% of the total cost for on ground investment.(60% for on ground action to scaling up SLM, 20% for capacity building and enabling environments 20of the total will be used for scaling up SLM practices. It is envisaged that communities will be contributing substantially in labour estimated at 20% of the total cost, and the Government financial contribution share will be 20% of the total funding

E Annexes

ANNEX 1. LAND DEGRADATION IN ETHIOPIA – SOME CONCEPTS AND DEFINITIONS

Introduction

141. When land is degraded, its productivity is reduced and may continue to decline unless steps are taken to prevent this. Unchecked, land degradation may result in an almost total loss of the productive capacity of the land to produce anything of value to humanity. Land degradation is widespread in Ethiopia. In some cases it has already progressed to the stage where the land is so degraded that it would be uneconomic to invest in its rehabilitation, as the cost would far exceed the value of the land's future productive capacity. In such situations the only cost effective option may be to close the degraded area and allow it to recover over a period of time through purely natural processes. However in most other areas, which are less severely degraded, there is scope for restoring, sustaining and enhancing the land's productive capacity, through the adoption of the appropriate sustainable land management (SLM) measures. To do this successfully requires a good understanding of the nature and extent of land degradation in such areas in order to identify the most appropriate intervention measures.

142. For land to lose its productive capacity a variety of degradation processes will have been at work. These are primarily natural processes that are related to the biological and physical characteristics of the local ecosystem resources. Under purely natural conditions land degradation is generally a slow and gradual process, however human activities can accelerate these natural degradation processes, leading to a rapid decline in the productive capacity of an affected area. Loss of productive capacity is rarely due to just one land degradation process, which is why implementation of the Ethiopian Strategic Investment Framework (ESIF) for SLM needs to be based on a comprehensive understanding of the different degradation processes at work within the country, and to recognise that their impact in a particular locality will be determined by area specific natural and human factors.

Defining Land Degradation

143. For the purposes of the ESIF land degradation can be defined as follows:

Land degradation is the reduction in the capability of the land to produce benefits from a particular land use under a specified form of land management.

144. This relatively simple definition has at its heart recognition of:

The ecological capability of the land to be used for different purposes;
The socio-economic factors determining how the land is used; and
The ecological goods and services wanted from the land (the benefits).

Land degradation Types

145. Land degradation in Ethiopia is caused by a variety of complex interrelated degradation processes. These can be grouped into six major land degradation types, each of which can be subdivided according to a specific sub-set of degradation processes. Within Ethiopia the various degradation processes that have contributed to a loss in productive capacity within the country's ecosystem resources can be grouped into the following major land degradation types:

Soil degradation
Vegetation degradation
Bio-diversity degradation
Water resource degradation
Climate deterioration
Land conversion/alienation

A. Soil degradation

146. Soil degradation occurs when there is a decline in the productive capacity of an area's soil resources as a result of adverse changes in their biological, chemical, physical and hydrological properties. Such negative changes will in turn increase the vulnerability of erosion prone areas to accelerated soil loss through both water and wind erosion. In this regard it should be noted that sheet, rill and gully erosion, and the scouring and deposition of soil by wind, are the visible symptoms of other, usually less obvious, land degradation processes - the most important being adverse changes (degradation) in the physical, biological, chemical and hydrological properties of the soil. It is such changes that create the conditions for the initiation of soil erosion. It is therefore necessary to recognise the full range of soil degradation processes, and address them, rather than merely treat the visible symptoms. Soil erosion by wind and/or water cannot be tackled effectively without understanding, and tackling, the other key underlying soil degradation processes.

147. A key failing of many past soil conservation programs in Ethiopia is that they have assumed that soil erosion is the principle problem to be addressed. Hence they have focused almost solely on the construction of physical earth works to control runoff, typically as it leaves the farm plot. Instead it is important to start by recognising the underlying adverse changes in soil properties, and promoting measures that will improve soil conditions within the plot itself. This will not only increase in-situ infiltration of rainfall (thereby lessening the volume and velocity of runoff and risk of erosion) but also have greater appeal to farmers because such measures will increase yields through improving the soils capacity to sustain and enhance plant growth.

148. **The key processes that result in the degradation of a soil's biological properties** include:

Loss of soil organic matter through a failure to replace the organic matter lost during the growing of crops (made worse by the increasing use of crop residues and dung for fuel rather than being returned to the soil), burning of grasslands, removal of leaf litter in forest lands, and exacerbated by a shortening or cessation of traditional fallowing practices etc;

Reduction in the numbers and activity of beneficial soil organisms such as bacteria, rhizobia, mycorrizha, worms, termites etc (often due to deterioration in the soils physical, chemical and hydrological properties); and

Increase in the numbers and activity of harmful soil organisms such as nematodes, parasitic weeds etc. (often the result of poor crop rotation and crop hygiene practices).

149. **The key processes that result in the degradation of a soil's chemical properties** include:

Decline in the number and availability of soil nutrients (NPK, secondary and trace elements) through leaching, removal in harvested products, losses when topsoil erosion occurs, with insufficient nutrients returned in the form of organic manures and/or chemical fertilisers;

Chemical imbalances and toxicities through application of inappropriate types and quantities of fertiliser;

Changes in soil pH (acidification or alkalinisation) in recent years there has been an expansion in the area where increasing soil acidity is affecting crop yields;

Salinisation due to the build up of salts through poor water management practices in irrigation schemes and poor grazing practices in naturally saline grassland areas[20]; and

Chemical pollution from over use of agro-chemicals, plastic mulches or poor management of industrial and mining wastes[21].

150. **The key processes that result in the degradation of a soil's physical properties** include:

Surface crusting and compaction through the impact of raindrops, animal hooves and farm machinery;

Loss of topsoil structure through excessive tillage[22] and loss of soil organic matter; and

Sub-soil compaction due to ploughing and/or hoe cultivation each year to a constant depth.

151. **The key processes that result in the degradation of a soil's hydrological properties** include:

[20] While salinisation is a major problem in some semi-arid/arid lowland areas of Ethiopia with potential for irrigated crop production, it is just one (although a very important) form of soil chemical degradation, as the soil's chemical properties will have changed through the accumulation of salts in the soil profile to levels that will adversely affect crop yields and the growth of many types of natural vegetation.

[21] While currently not a significant problem in Ethiopia there is a risk that it could increase as large scale high input commercial farming expands. Locally there are reports of contaminated soils in areas where pesticides have leaked from their storage containers.

[22] This is particularly a problem associated with the growing of teff where the land is cultivated a minimum of six times to produce a very fine seed bed tilth.

Waterlogging involving a rise in the water table close to the soil surface due to poor irrigation practices, or loss of deep rooted vegetation whose water needs would have kept the water table low; and

Aridification involving a decrease in soil moisture availability, typically due to reduced rain water infiltration following deterioration in the soil's physical structure, in many of Ethiopia's semi-arid areas this has exacerbated the impact of drought on crop yields thereby contributing to food insecurity.

152. ***The key soil erosion processes*** within Ethiopia can be grouped into the following two broad categories:

Water erosion - is widespread and can occur in all parts of the country whenever rainfall is intense (eg. during a severe storm[23]) and surface runoff occurs. This category includes processes such as splash, sheet, rill and gully erosion. *Splash erosion* commonly initiates water erosion and occurs when rain drops fall onto the bare soil surface. Their impact can break up surface soil aggregates and splash particles into the air. As water runs over the soil surface it has the power to pick up particles released by splash erosion and also the capacity to detach particles from the soil surface. This may result in *sheet erosion* where soil particles are removed from the whole soil surface on a fairly uniform basis. Where runoff becomes concentrated into channels *rill and gully erosion* may result. Rills are small rivulets of such a size that they can be worked over with farm machinery. Gullies are much deeper (often being several metres deep and wide) and form a physical impediment to the movement, across the slope, of farm machinery. Soils that have lost organic matter and had their structural stability degraded through excessive tillage, are more vulnerable to water erosion. Likewise surface and subsoil compaction reduces the amount of rainfall that can infiltrate into the soil leading to increased surface runoff and increased risk of water erosion.

Wind erosion – is widespread in Ethiopia's lowland arid/semi-arid zones, and includes both the removal and deposition of soil particles by wind action and the abrasive effects of moving particles as they are transported. In areas with extensive loose sandy material wind erosion can lead to the formation of mobile sand dunes that cause considerable economic losses through engulfing adjacent farm land, pastures, settlements, roads and other infrastructure. In farmland areas wind erosion occurs when soil is left bare of vegetation, and the topsoil has been reduced to a fine tilth, as a result of cultivation. It also occurs in overgrazed grassland areas that have lost their protective vegetative cover, and in forest/woodland areas following the cutting of trees and shrubs, and in particular following the removal of the leaf litter and herbaceous ground cover. The risk of wind erosion is highest in the dry season, especially just prior to the onset of the rains, due to the combination of strong winds, dry topsoil, and poor vegetative ground cover.

[23] Even though the total annual rainfall in Ethiopia's arid/semi-arid areas may be low, the amount and intensity of rainfall received during an isolated storm event can result in high rates of surface runoff leading to severe water erosion.

B. Vegetation Degradation

153. Vegetative growth in different parts of Ethiopia is limited by a range of natural factors, notably cool temperatures at high altitude, low and erratic rainfall, low soil water availability, and shallow soils with low inherent fertility. In response a number of highly specialised vegetation types have evolved, adapted to the local climate, topography and soils. Vegetation degradation within the country involves a combination of the following:

reduction in vegetative biomass – with fewer plants, at lower density, with reduced vigour producing less leaves, stems, flowers, fruits, seeds, etc (resulting in reduced yield of grassland, forest and woodland products);

reduction in vegetative ground cover – with expanding areas of bare ground occurring in formerly vegetated areas (making such areas more vulnerable to erosion due to the loss of protective ground cover);

reduction in the quality of the vegetative biomass – where, although the total biomass may be about the same, plant species of high value (for fodder, timber, fuelwood, food, medicines etc) have been replaced by species of lower, or no value;

decline in number of plant species – with the impoverishment of natural vegetation types through the reduction in quantity, and at times total loss, of individual plant species that were originally part of the vegetation association;

degradation of individual plants – which have been damaged through excessive removal of above, and below, ground parts for timber, fuelwood, fodder, fruits, food, medicine etc.

154. It should be noted that vegetation degradation is concerned with adverse changes in the quantity and quality of the plants to be found in grassland, forest and woodland areas. Grassland and forest land degradation covers more than just vegetation degradation as other degradation processes will also be at work notably soil, water and biodiversity degradation.

C. Biodiversity Degradation

155. Ethiopia is one of the world's bio-diversity hotspots and one of the Vavilov centres of agro-biodiversity. Ethiopian biodiversity is being increasingly threatened and reduced, making the country one of the most degraded biodiversity hotspots in the world. Biodiversity degradation involves a number of different processes, in particular:

habitat destruction – many areas of the original natural vegetation have been destroyed through clearing for agriculture, draining of wetlands, overgrazing of grasslands, wholesale cutting of forests and woodlands, expansion of urban areas, building of roads etc. Not only has this had an impact on Ethiopia's flora but it has adversely affected the fauna associated with the lost habitats;

habitat disturbance – even where the habitat has not been lost, disturbance through livestock herding, hunting, fuelwood gathering and collection of medicinal plants can lead to a reduction in the numbers of wild animals present;

individual species decline – unregulated hunting of particular game species, uncontrolled trapping of wild birds (for food, falconry and as cage birds), and over collection of rare plants (for food, medicines and as horticultural specimens), has increased the threat of local and global extinction for a number of the species of fauna and flora found within the country;

reduced ecosystem diversity – the selective harvesting of particular plant species for fuel, fodder, food, medicines etc, can have a negative impact within particular ecosystems by reducing their relative numbers compared to the other species present;

invasion by alien species – a number of alien species introduced intentionally (eg. *Prosopsis juliflora*) or accidentally (eg. *Parthenium hysterophorus*) have become aggressive invaders seriously threatening the natural biodiversity in a variety of different ecosystems.

reduction in the genetic pool – many of the wild relatives of plants that have been domesticated for agricultural purposes are at risk of being lost from the clearing of forests, woodlands, grasslands and wetlands for cultivation, as well as overgrazing in the rangelands. Indigenous land races of a variety of different crops[24] are in danger of being lost as agricultural development programs have focused on the promotion of a limited number of improved cultivars.

D. Water Resource Degradation

156. Water resource degradation in Ethiopia includes:

Increased fluctuations in quantity of surface water 'stream' flow leading to increased storm peak flows and reduced dry season flow as a higher proportion of the rain falling during storm events is lost rapidly as surface runoff rather than infiltrating into the soil;

Increased incidence of downstream flooding as upstream areas become degraded and can no longer absorb the volume of rainfall received during storm events;

Drying up of rivers, springs, lakes, ponds, boreholes etc more frequently and for longer periods of the year, as water is lost in surface runoff rather than infiltrating to replenish groundwater levels;

Reduced groundwater recharge due to increased surface rainwater runoff;

Lowering of the ground water table due to reduced recharge and increased extraction;

[24] Some of these crops are unique to Ethiopia, such as teff and enset, while others are of global importance such as coffee, wheat, sorghum and barley.

Increased sediment load in streams and rivers due to increased soil erosion in their catchment areas;

Reduced water storage capacity due to sedimentation of reservoirs;

Pollution of surface and ground water resources from human and animal wastes, agro-chemicals, industrial and mining wastes.

157. The headwaters of the Blue Nile fall entirely within Ethiopia. Thus degradation in the quality and quantity of the water resources within this area has trans-boundary consequences for the downstream users of those resources in Sudan and Egypt.

E. Climate Deterioration

158. Climate deterioration includes:

Micro-climatic changes – such as local level reduction in rainfall, increase in storm events, decrease in length of cropping season, etc;

Macro-climatic changes – such as changes in the rainy season characteristics, increase in number and intensity of dust storm events etc.

159. Some of these climatic changes may be reversible through appropriate SLM measures. In this regard there is evidence from other dryland areas in the world that restoring good vegetative cover in degraded grassland and woodland areas can increase local rainfall while reducing the incidence of dust storms. However macro and micro climate changes may be the result of global warming, caused by external factors outside Ethiopia's direct control. While some SLM measures have the potential to locally mitigate the effects of macro-climate change (water harvesting, mulching etc), SLM within Ethiopia can make a global contribution to combating climate change by promoting measures with potential for carbon sequestration (afforestation, restoration of degraded forests/woodlands, cover-cropping/green manures, improved soil organic matter management etc).

F. Land Conversion/Alienation

160. Land conversion, or alienation from specified forms of land use, is one of the factors that can lead to a decline in the total land area currently, or with the potential to be, used for natural resource based productive activities (eg. crop, livestock and/or forestry production). This can be due to:

Conversion to urban settlements, industrial parks, roads, railways, airports, etc;

Quarrying and mineral extraction;

Closure and alienation of grasslands, forests, woodlands from any form of economic use (eg. total bans on free grazing, logging, fuelwood gathering[25]).

[25] While temporary closure is a valid SLM measure to allow a degraded area to recover, its important to plan from the outset as to how such an area may brought back into some form of sustainable use once the resource has

161. In addition the conversion of large blocks of semi-natural forest and grazing areas into commercial farms and resettlement areas, while it may result in significant economic returns to the land users, has in a number of areas resulted in negative environmental and social consequences. In particular this may lead to the loss of the natural biodiversity, and a loss of livelihoods for those rural communities who had traditionally used such areas for the harvesting of non-timber forest products and/or as the basis for pastoral livestock systems.

The Causes of Land Degradation Within Ethiopia

162. A variety of different factors have contributed to the current levels of land degradation within Ethiopia. There are specific bio-physical circumstances, related to the country's diverse ecological environment, that increase the risk of land degradation taking place, and these constitute the *natural factors*. While it may be possible to take mitigative measures, to minimise their negative effects, they are by and large fixed constraints that have to be worked with, rather than directly changed. The unsuitable land uses, and inappropriate land management practices, followed constitute the *direct (human) causes or pressures* on the land. Alleviating these involves persuading land users to change their management practices. The underlying factors which constitute the *root causes or driving forces*, primarily relate to the socio-economic circumstances of the rural land users (farmers, pastoralists and forest users) and the social, cultural, economic and policy environment in which they operate. These are the barriers and bottlenecks that need to be addressed by the ESIF for SLM.

163. The most important *natural factors* relate to the risk of:

Water erosion – steep slopes, high intensity rainstorms, erodible soils;

Wind erosion – strong winds, semi-arid/arid climatic zones with sparse vegetative cover;

soil fertility decline – strong leaching of soil nutrients, rapid decay and mineralisation of soil organic matter, weathered acidic soils low in organic matter and soil nutrients;

Decline in soil physical properties – weak structured soils low in organic matter;
salinization – semi-arid/arid climates with high evaporation rates and low leaching intensity;

Vegetation degradation – low and erratic rainfall limits vegetative recovery following disturbance; and

Decline in water quality and quantity – alternating abundance and scarcity according to the season (wet or dry), or natural climatic cycle (El Niño/La Niña).

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recovered enough to allow it to be sustainably used, rather than seeking to permanently alienate it from any form of future productive use. Without planning for its reuse the danger is that local people will ignore the ban once the area has recovered and without agreement on how it can be used the resource will be over exploited leading to further degradation.

164. The *direct (human) causes, or pressures* on the land include:

Improper management of the land for the cultivation of annual rainfed, irrigated and/or perennial crops;

Poor management of natural forest and tree plantation/woodlot areas;

Removal and degradation of natural vegetation through deforestation and/or overexploitation of local species;

Overgrazing of natural and planted pastures

Poor management and over use of surface and groundwater resources; and
Poorly planned and managed urban and industrial development (resulting in the physical loss of good farm land, pastures and forest areas as well as on- and off-site pollution).

165. The key *root causes or driving forces* of particular importance in Ethiopia are:

Poverty/economic disadvantage (poor people cannot afford to forgo short term production/resource exploitation for the sake of long term sustainability);

Population pressure[26] has resulted in small land holding sizes, in high potential areas, with traditional fallowing practices abandoned as individual plots are of necessity cultivated on a continuous basis[27];

High input costs, low produce prices, and other market failures are disincentives to investing in improved land management practices;

under nourishment and ill health are interlinked, rural households with food shortages are more susceptible to the ravages of malaria, HIV-AIDS and tuberculosis, which in turn reduces their ability to produce their own food, or earn their livelihoods in off-farm employment;

rural households with insecure user rights, for their farm plots, pasture and forest resources, are less willing to invest in ensuring future productivity, being unsure as to whether they will be the ones to benefit

inappropriate development policies driven by short term production targets that ignore long term sustainability;

an unintended legacy from past government, donor and NGO programs[28] is that rural communities believe soil conservation is something they should be paid to do rather than something that is in their own self interest; and

[26] In 2006 it was estimated that 85% of Ethiopia's 77 million population lived in rural areas and depended for the bulk of their welfare and livelihood needs on utilising their local land resources for crop, livestock and/or forestry production.
[27] Farmers with small land holdings are also reluctant to reduce their plots further by taking land out of production for the construction of soil conservation earthworks in their fields.
[28] Most of which have relied on food for work, free inputs and other perverse incentives to get land users to participate in the construction of soil conservation works.

weak/non-existent advisory support services limiting land users access to improved farm inputs and knowledge of alternative land use enterprises and locally appropriate SLM practices.

ANNEX 2. ROLES AND RESPONSIBILITIES OF THE SLM PLATFORMS

Federal Level Roles and Responsibilities:

The National SLM Platform Steering Committee (SC)

166. The National SLM Platform Steering Committee NSC is the umbrella committee for SLM initiatives through out Ethiopia. In particular, it is responsible for providing guidance to government pertaining to policies relevant to integrated land (soil, water, vegetation) management. The NSC will provide strategic directions for the development of an action-based SLM platform and set priorities for program and project work. In general the NSC will deal with higher level policy issues. Its main functions will be to ensure harmonization, coordination, and alignment of SLM activities in the country and also play a strong SLM advocacy role.

Duties and responsibilities will include:

- Undertaking SLM policy dialogue and development;
- Providing political guidance/ strategic direction to mainstream SLM in the government policy agenda;
- Overseeing the work of the SLM Technical Committee;
- Approving strategic directions and guidelines for implementation of SLM projects and programs in line with agreed approaches, principles and practices;
- Designing and coordinating resource mobilization strategies and efforts and directing the use of pooled funds; and
- Initiating and following up the establishment of SLM Regional Committees

Procedures for meetings:

- The committee will meet at least once a quarter (every three months)
- Meetings shall be convened by the Chairman, or on the request of 2/3 of the members
- Meeting agenda shall be proposed by the Chairman or any NSC member
- Decisions shall be made after thorough discussions and attempts will be made to reach a consensus. Failure to reach a consensus will elicit a vote in which a simple majority will be needed to adopt a particular decision. In case of a vote tie, the chairman will break the tie.

Organization

- The State Minister of the Ministry of Agriculture and Rural Development will by default be Chairman of the NSC
- The Secretary of the NSC shall be appointed by the Chairman and he/ she shall be responsible for keeping records of meetings and the work of the committee

Membership / Composition of the NSC

The NSC shall comprise State Ministers and Heads of the following organizations and institutions:

- Ministry of Agriculture and Rural Development
- Ministry of Finance and Economic Development (Member)
- Ministry of Water Resources (Member)
- Environmental Protection Authority (Member)
- Ethiopian Institute of Agricultural Research (Member)
- Federal Food Security Co-ordination Bureau, MOARD (Member)
- Ethiopian Development Research Institute
- A representative of donor organizations

National Technical Committee (NTC)

167. The National Technical Committee will work under the overall guidance of the SC and will be responsible for translating SLM policies into actions on the ground. Therefore, the NTC will support all relevant projects and programs work to achieve synergies and results on the ground. The NTC will have more 'managerial' functions (e.g. based on directions provided by the (NSC).

168. The NTC in general will provide technical and managerial support for effective implementation of the multi-donor financed SLM Programs and projects implemented by the various organizations under the National SLM Platform.

Duties and responsibilities:

- Provide technical and managerial advice to the NSC on major SLM issues
- Initiate and lead the development of appropriate SLM manuals, working procedures and best practices, and follow up their implementation and scaling up while also supporting the dissemination and review of the manuals, which include among others the Community Based Participatory Watershed Development (CBPWD) guideline
- Guide revisions of policy documents and work at regional levels.
- Discuss and approve proposals for capacity building
- Discuss and approve short, medium and long term proposals for scaling up of SLM best practices
- Nominate and design specialized task forces to undertake special investigations and studies as and when deemed necessary
- Provide technical guidance and advice for organizing meetings, workshops and conferences of relevance on lessons learned, of action-based SLM initiatives and monitoring and evaluation
- Follow up the development and implementation of programs and projects in SLM.
- Follow up the undertaking of specific technical assessments and studies as required.
- Support the SLM secretariat in liaising with institutions and/or individuals designated at regional levels for SLM coordination and guidance
- Undertake the review of proposals for all SLM programs undertaken by organizations and supported by donors

- Review and provide suggestions for the revision of the TVET curriculum with the view to incorporate / mainstream SLM.
- Prepare capacity building proposals for upgrading DAs and Woreda experts' skills in SLM and the use of the CBPWD guideline.
- Identify possible sources of support for capacity building initiatives, including technical assistance

Procedures

- Agenda for the meeting shall be proposed by the Chairman or the Secretary or any member of the NSC
- Decisions shall be made after thorough discussions and attempts will be made to reach a consensus. Failure to reach a consensus will elicit a vote in which a simple majority will be needed to adopt a particular decision. In case of a vote tie, the chairman will break the tie.
- Meeting shall be convened on Wednesdays of the Second Week of every month.

Organizations and membership

169. Institutions shall nominate members to the NTC on permanent basis for about four years, and shall not keep changing them unless there is sufficient reason to do so. This is to avoid discontinuity of work and difficulties that may be encountered by the newly assigned experts in discharging their responsibilities.

170. The members of the NTC shall be Department Heads or Experts assigned by Ministries, Development partners (International, bilateral, multilateral organizations), NGOs / CSOs, Research Organizations, Universities and others. TC will compose of members from the institutions below:

- Ministry of Agriculture and Rural Development
  - Head, Natural Resources (Chairman)
  - Extension Department (Member)
  - SLM Coordinator (Secretary)
- Ministry of Water Resources (Member)
- Environmental Protection Authority (Member)
- Ethiopian Institute of Agricultural Research (Member)
- Federal Food Security Co-ordination Bureau, MOARD (Member)
- Oromiya Bureau of Agriculture and Rural Development
- Institute of Biodiversity
- A representative of Universities
- A CSO / NGO representative
- World Bank
- World Food Program
- German Technical Assistance
- UNDP
- ENTRO (the Nile Basin initiatives)

The SLM Secretariat

171. In general the SLM secretariat will undertake the day-to-day activities of the National SLM Program and the facilitation/coordination of the National SLM platform. It will be housed in the Ministry of Agriculture and Rural Development. The Secretariat will have the following duties and responsibilities.

Duties and responsibilities

- Coordinate the day to day activities of the SLM program in Ethiopia
- Systematically collate SLM-relevant technical data and information, lessons and know-how gained from ongoing as well as previous interventions and international experiences
- Liaise with institutions and / or individuals designated at regional levels for SLM coordination and guidance
- Supervise and coordinate the formulation of the World Bank / GEF-financed SLM program, including the selection of consultants, supporting and facilitating the day to day activities of the consultants and reviewing the consultant's reports and follow up program integration
- Prepare annual work plans, action plans and activity details of the SLM committees
- Prepare activity and financial reports of the SLM program
- Work out financial utilization plans of the pooled resources for SLM and submit it the SC for approval and decision
- Keep all records of the committees and the SLM platform
- Organize and coordinate workshops and trainings on SLM related subjects when directed by the Technical Committee
- Coordinate and undertake the overall secretarial activities of the SLM platform
- Prepare SLM related newsletters, brochures, leaflets and other media of communication to promote the SLM program

Organization

172. The SLM secretariat shall be institutionalized under the Natural Resources Sector, Ministry of Agriculture and Rural Development. It will have a program coordinator assigned by the State Minister of MoARD. It will have staffs that are responsible to carry out activities that enable proper functioning of the secretariat such that it will be able to discharge the duties and responsibilities given. It will have the following staff composition:

- A Coordinator
- Technical Advisors

Regional and Woreda level SLM platforms

Regional platform

173. The regional SLM Platform is the umbrella unit responsible for the over implementation of the SLM program at regional level. It is composed of lead regional bureaus, NGOs, CBOs, higher learning institutions and as appropriate private

sectors. The regional platform, which will be housed by the regional BoARD will have the following members[29]:

- Bureau of Agriculture and Rural Development
- Bureau of Finance and Economic Development
- Bureau of Water Resources
- Environmental Protection, Land Administration and Use Authority
- Food Security
- Regional Agricultural Research Institute
- NGOs active in areas of SLM
- Representative of Community Based organization

Regional Technical Committee

174. The regional technical committee will liaise with the National Technical Committee and will be responsible for overseeing the implementation of the ESIF component activities within its region. All technical issues related to the promotion and scaling up of SLM interventions at regional level will be the responsibility of the regional technical Committee. Technical committee members will be selected from the institutions listed above and will be chaired by the BoARD Natural Resources management department head. Major duties of the regional TC include:

- Provide technical and managerial advice to the regional SC;
- Provide technical advice to the woredas in course of SLM program implementation
- Review annual work plans, activity reports and submit to the regional SC for approval
- Discuss and approve proposal for capacity building
- On a regular bases supervise on the ground activity implementation at Woreda level and provide technical support as required;
- Provide technical guidance and advice for organizing meetings, workshops and conferences;

Working Procedures:

- Agenda for meeting shall be prepared by the regional SLM focal person, while any member of the TC can propose agenda items
- Decision shall be made after through discussions
- Minutes of meeting should be properly recorded and documented
- The regional TC will meet at the end of each month

Woreda SLM Platform

175. The Woreda SLM Platform will have similar arrangement to the region with inclusion of Kebele representatives. Sector offices to be included in the platform among others will include the Woreda Office of Agriculture and Rural Development, Water Desk, Food Security Desk, Environment Desk, Capacity Building Office, as

[29] List may be modified to reflect each region's specific institutional set up.

well as a Woreda council representative, and representative of the NGOs/CBOs working in the woreda, etc.

Woreda Technical Committee

176. The major responsible body for the actual implementation of the SLM program is the Woreda. Woredas have the overall responsibility for planning, implementing and reporting the progress of program implementation. The Woreda SLM Technical Committee will be hosted at the Woreda Office of Agriculture and Rural Development. The head of this office will serve as the chairman while other members will be drawn from the institutions represented on the Woreda SLM platform.

ANNEX 3. Roles and Functions of the 'Actors' In Sustainable Land Use Management at the Field Level within Ethiopia

Role	Functions	Actors
Advocacy	Problem recognition (initial realisation that there is a problem that needs to be addressed) Problem awareness raising (within the community and with agencies that may be able to help) Consensus building (amongst different stakeholders on the need to take action) Creating the demand, and willingness to work together, to address the problem	Concerned individuals (champions for change) within and outside the affected community Iddir debbo social groups, mahbir groups, other community based common interest & womens' groups Community leaders, respected elders Government and NGO technical experts and community development workers with knowledge about a specific area Staff of donor and NGO projects working in adjacent areas
Planning	Appraisal Problem Identification Development of solutions Formulation of plans	Individual resource poor rural households Male/female household members Rural communities Iddir dabbo social groups, mahbir groups, other community based common interest & womens' groups 'External' participatory SLM planning facilitators (Regional and Woreda government, donor project, and/or NGO staff) Managers/planners of commercial companies engaged in large scale forestry/agriculture

Role	Functions	Actors
Implementing	Implementers/technology adopters Technology appraisers/modifiers Innovators Land managers	Individual resource poor rural households Male/female household members Rural communities Iddir dabbo social groups, mahbir groups, other community based common interest & womens' groups Managers/employees of commercial companies engaged in large scale forestry, agriculture and ranching Federal, Regional and Woreda government staff engaged in managing state farms, ranches, plantations, forest reserves and national parks/game reserves
Supporting	Advisory support service providers Transmitters (disseminating information to and from land users) Trainers/learning facilitators Consultants/information and technical assistance providers	Federal, Regional and Woreda government extension staff (generalists and subject matter specialists) Staff employed by donor projects (extension agents and subject matter specialists) NGO development workers/extension agents Sales/technical support staff of commercial agriculture/forestry input and equipment suppliers
	Input providers	Federal, Regional and Woreda government and parastatal marketing agencies Agricultural cooperatives and unions NGOs and donor projects Private traders Commercial companies

Role	Functions	Actors
	Produce purchasers/market providers	Federal, Regional and Woreda government and parastatal marketing agencies Agricultural cooperatives and unions Private traders Commercial companies Saw Mills
	Credit providers	Federal, Regional and Woreda government credit services Agricultural cooperatives and unions Banks & Credit Unions NGOs (revolving funds) Equb (social savings groups)
	Infrastructure suppliers/developers	Ministry of Housing and Infrastructure MoARD NGOs Donor Projects Private sector companies
Facilitating (providing the potential means)	Information providers	Federal, Regional and Woreda government technical line agencies NGOs and private sector input suppliers Parastatal and private sector commodity buying agencies Individual government and NGO subject matter specialists University departments and academic institutes National and international research libraries and information services Newspapers, TV and Radio
	Technology developers	Federal, Regional and Woreda government and NGO research workers 'Farmer' innovators

Role	Functions	Actors
	Support system designers	Federal, Regional and Woreda government planners
	Policy formulators	Senior officials in Federal, Regional and Woreda government departments Senior officials and advisors in donor agencies Federal, Regional and Woreda government elected representatives
	Legislators	Federal, regional and woreda level politicians/ legislative bodies
	Fund providers	MoFED, Regional BoFED and Woreda OFED NGOs Donor agencies

ANNEX 4. ESIF FOR SLM – LOGICAL FRAMEWORK

ntion Logic	Indicators of performance	Sources of verification	Assumptions & Risks
ALL GOAL			
e as a national level c planning framework o be used to guide the ation, planning and entation, by both the and private sector, of and future investments with the aim of sing the interlinked ns of poverty, bility and land ation at the rural nity level.	• Government, donor and NGO agencies addressing land degradation through a common shared SLM vision. • A strategic planning framework for investment in SLM in place and being used to guide the prioritisation, selection and design of new projects and programs. • The concepts and principles of SLM mainstreamed into the natural resource based development plans and activities of the Federal, Regional and Woreda Governments. • Cross sectoral multi-stakeholder partnerships, operating at multiple levels (federal, regional, woreda and community) cooperating and collaborating in the promotion and scaling up of SLM.	• ESIF progress and evaluation reports • Minutes of the ESIF federal level steering committee, technical committee and multi-stakeholder SLM fora. • Minutes of the ESIF regional level steering committee, technical committee and multi-stakeholder SLM fora • The environmental management, and development, plans and policies of: (i) federal, regional and woreda governments; and (ii) the concerned technical sectoral agencies. • The planning documents, progress and evaluation reports of SLM investment projects and programs implemented under the ESIF.	• Strong commitment b Ethiopian government address the problems promoting and scaling SLM. • Regional and woreda governments recognis degradation is a probl and believe SLM prov way of addressing the problem. • Donor agencies and N are willing to align and harmonise current, an future, support for SL around a common sha vision and program framework.
CT OBJECTIVES			
mental Objective			
rove the livelihoods onomic well-being of untry's farmers, s and forest resource by scaling up SLM es with proven al to restore, sustain hance the productivity opia's land resources.	• The causative factors underlying the link between poverty, vulnerability and land degradation understood, and measures to mitigate the negative impacts identified. • Locally validated SLM practices providing higher returns to the households and communities that adopt them than they got from their former land use activities	• Beneficiary environmental and socio-economic impact assessment surveys. • Project and CSIF progress and evaluation reports. • SLM environmental and socio-economic impact assessment guideline manuals. • Woreda, regional and federal government official statistics. • Special case studies.	• The promotion of SLM practices will reduce r poverty and economic vulnerability. • Ethiopia's ecosystem resources (if well man have the inherent pote to provide the country inhabitants with susta livelihoods and to mee economic well-being r

ntion Logic	Indicators of performance	Sources of verification	Assumptions & Risks
mental Objective			
uild Ethiopia's natural assets by overcoming uses, and mitigating gative impacts, of land ation on the structure nctional integrity of the y's ecosystem ces.	• The concepts and principles of SLM incorporated into community level projects and regional and federal level programs for mitigating the causes and negative impacts of land degradation on the structure and functional integrity of the country's ecosystem resources. • Measurable improvement in the quantity and quality of the goods and services provided by Ethiopia's ecosystems.	• Local, regional and national environmental impact assessment surveys • Project and ESIF progress and evaluation reports. • SLM environmental impact assessment guideline manuals	• Land degradation Ethiopia can be re and has not yet adva the stage that it is no feasible to restor structure and fu integrity of the co ecosystems.
d Outcomes			
rall reduction in rural y and vulnerability, as t of adopting SLM es that improved the ods and economic ing of Ethiopia's s, herders and forest ce users.	• An increased number of rural communities actively participating in the formulation and implementation of their own community-based plans for combating land degradation and low agricultural production • A reduction in the number of poverty stricken households, due to increased household incomes, following the adoption of SLM practices.	• Investment project and ESIF progress and evaluation reports. • Individual community-based participatory SLM plans. • Case studies and special beneficiary impact surveys.	• Ethiopia's ecosystem resources when well managed and protec can provide rural households with sustainable and profi livelihoods. • SLM has the potentia provide rural househo with higher incomes they could obtain fro previous land manag practices.

ntion Logic	Indicators of performance	Sources of verification	Assumptions & Risks
rall reduction in the land affected ely by land ation, with a onding increase in ductive capacity, and ive functions, of a's ecosystem ces.	• A significant expansion in the land area managed according to the concepts and principles of SLM with a corresponding reduction in the area affected by moderate to severe land degradation. • An expansion in the area of restored and protected natural habitats with a corresponding reduction in the current threats to Ethiopia's endemic and endangered species of fauna and flora.	• Investment project and ESIF progress and evaluation reports. • Case studies and special environmental impact surveys • Periodic land degradation assessment surveys and reports of the .National Soil Laboratory.	• Investment in the pro and scaling up of successful SLM technologies and approaches will resu measurable environm improvements.

ntion Logic	Indicators of performance	Sources of verification	Assumptions & Risks
al of the key barrier of e land tenure/user hat has hindered the vel adoption of SLM es, and secure land user rights that ise ethnic and gender nces.	• All rural households with land holdings, used on a private/individual basis for crop, livestock, forestry and/or fisheries based livelihood enterprises issued, with at least a first stage certificate guaranteeing their land tenure/user rights. • Women and ethnic minorities with secure rights of access to use Ethiopia's land resources. • A set of validated land administration measures for protecting and enhancing traditional rights and management responsibilities for the use of communal land resources (grazing lands, forests/woodlands, water resources etc). • A set of cost-effective procedures for scaling up the second stage land certification process. • Improved capacity amongst federal, regional and woreda level rural land certification and administration institutions.	• Land administration/certification project and ESIF progress and evaluation reports. • Case studies and special beneficiary impact surveys.	• Secure land tenu rights will lead to inc willingness to invest ir

ntion Logic	Indicators of performance	Sources of verification	Assumptions & Risks
ed knowledge on the ity of different parts of untry for different land uiding the formulation opriate federal, al and woreda level e policies and plans.	• An operational land use suitability expert system guiding the land use development plans and policies of senior officials and planners at the federal, regional and woreda levels • A set of federal, regional and woreda level policies and plans for the promotion of area specific suitable land uses	• ESIF progress and evaluation reports. • Monthly, quarterly and annual reports of the land suitability expert system and periodic user surveys. • Query based searches of the land suitability expert system to determine its accuracy and usefulness in identifying land suitability. • Published federal, regional and woreda level land use/development policies and plans.	• Information on suitability will lead formulation of appropriate use/development and plans.

ntion Logic	Indicators of performance	Sources of verification	Assumptions & Risks
ed capacity of the g, advisory and other al support services at eral, regional, woreda mmunity levels to an expansion in mbers of rural olds and nities with the y to invest in SLM.	• The advisory (extension) service providers supporting the efforts of rural communities to tackle the degradation of their land resources through the adoption of area specific SLM practices; • The federal and regional research institutions undertaking adaptive and participatory research as a means of assisting rural communities to find locally appropriate solutions to area specific SLM problems; • Private sector traders providing rural communities with the inputs (seed, planting material, fertiliser, agro-chemicals, equipment, machinery etc) they require for the adoption of area specific SLM practices; • An improved market infrastructure enabling rural communities to dispose of their surplus crop, livestock and forestry produce to private traders, agricultural cooperatives and unions; and • Rural communities with improved access to credit and financial services for meeting the incremental investment costs of adopting SLM.	. Investment project and ESIF progress and evaluation reports . Monthly, quarterly and annual reports outlining activities undertaken by individual advisory support agencies and research institutions. . Specially commissioned advisory support service providers users surveys.	• That a network of and private sector a and other support providers exist, or built up during the p the ESIF, so as m immediate and lon needs of Ethiopia' communities for re and extension inputs, markets financial services.

ntion Logic	Indicators of performance	Sources of verification	Assumptions & Risks
roved federal, l and woreda level g policy, institutional, nd financial nment for the ion and scaling up of	• An expansion in the number of rural households and communities with recognised and secure land use rights; • A published set of recommendations detailing where the promotion and scaling up of SLM requires changes in the current policy environment; • An agreed mechanism in place for multi-sectoral inter-agency coordination and collaboration; • A published set of recommendations detailing where the promotion and scaling up of SLM requires changes in the current legislative environment; and • A published set of recommendations on alternative sources of investment funding for the promotion and scaling up of SLM.	• ESIF progress and evaluation reports. • The environmental management, and economic development, plans and policies of the federal, regional and woreda level governments. • The federal, regional and woreda level proclaimed laws, rules and regulations governing land use and SLM related issues. • The published reports of the various special studies undertaken under component 2.	• A willingness on the p the federal, regional a woreda governments review and make cha the current policy, institutional, legal, and financial environment to facilitate the promo and scaling up of SLM • Increased security of tenure will be an ince adopt SLM.

ntion Logic	Indicators of performance	Sources of verification	Assumptions & Risks
anced knowledge ontributing to the e promotion and up of SLM within a.	• An operational Ethiopian SLM Information System (ESLMIS) in place providing information at multiple levels to those involved in promoting and scaling up SLM within Ethiopia; • A comprehensive ETHIOCAT database within the ESLMIS containing documented information on a minimum of 100 indigenous, and research derived, Ethiopia SLM technologies and approaches; • A completed up to date assessment showing which areas of Ethiopia are affected by land degradation and providing detailed information on the nature, extent, and severity of the land degradation processes involved in each area.	• ESIF progress and evaluation reports. • Monthly, quarterly and annual reports of the ESLMIS and periodic user surveys. • Searches of the ETHIOCAT database to determine the quantity and quality of the data stored on SLM technologies and approaches. • Monthly, quarterly and annual reports of the National Soil Laboratory and special reports documenting the results from the land degradation assessments.	• Commitment of the M to establish and maint ESLMIS. • Willingness amongs different insti stakeholders to shar related data. • There is a dema information on SLM a this can be met throu establishment of ESLMIS. • The National Soil Lab has the mandate interest in undertaki assessment of degradation and develop the capac undertake this work.

ntion Logic	Indicators of performance	Sources of verification	Assumptions & Risks
ctive institutional y and operational re in place to support lementation of the 15 SIF.	• One federal and nine regional SLM platforms established and operational; • A functioning SLM Secretariat and Technical Committee coordinating the implementation of the ESIF; • An M&E system developed and being used to monitor and evaluate the implementation of the ESIF; and • A series of inter country meetings, workshops and exchange visits held within and outside Ethiopia for the purpose of sharing the experience gained from implementation of the ESIF and similar investment frameworks developed by other Sub-Saharan Africa countries.	• ESIF progress and evaluation reports.	• The federal, regional woreda governments and support the establishment of the platforms and make s available to serve on respective SLM steer committees and tech committees. • The National SLM secretariat has the sk manpower and finan resources to manage ESIF on a day to day

Annex 5. Financial diagnostics and resource mobilization strategy for ESIF_SLM

Acronyms

ADLI	Agricultural-development led industrialization
AMAREW	Amara Agricultural Research, Extension and Watershed
AMIP	Agricultural Marketing Improvement Programme
CSIF	Country Strategic Investment Framework
CBO	Community-based Organizations
CES	Compensation for ecosystems services
CRDA	Christian Relief and Development Association
CSA	Central Statistical Authority
CSE	Conservation Strategy of Ethiopia
CSO	Civil Society Organization
EDRI	Ethiopian Development Research Institute
EFAP	Ethiopian Forestry Action Plan
EFAP	Ethiopian Forestry Action Programme
EIAR	Ethiopian Institute of Agricultural Research
ELTAP	Ethiopia Land Tenure and Administration Program
EPA	Environmental Protection Agency
ESIF	Ethiopian Strategic Investment Framework
FSCB	Food Security Coordination Bureau
IBC	Institute for Biodiversity Conservation
MERET	Managing Environmental Resources to enable Transition
MoARD	Ministry of Agriculture and Rural Development
MoFED	Ministry of Finance and Economic Development
MoWR	Ministry of Water Resources
MRE	Mining and Rural Electrification
NAP	National Action Program
NMA	National Meteorological Agency
NRD	Natural Resource Development
NSC	National Steering Committee
ODA	Official Development Assistance
PASDEP	Plan for Accelerated and Sustained Development to End Poverty
PBA	Program-Based Approach
PBS	Protecting Basic Services
PES	Payments for Environmental Services
PIP	Public Investment Program
PSNP	Productive Safety Net Program
RUFIP	Rural Financial Intermediation Programme
SDPRP	Sustainable Development and Poverty Reduction Program
SIP	Strategic Investment Program
SLM	Sustainable Land Management
SNNP	Southern Nations, Nationalities, and Peoples
UNFCCC	United Nation Framework Convention on Climate Change

1.1 Financial flows to SLM

1. Financing sources can be categorized as external and internal. Stocktaking on existing and potential internal and external financial resources were made in the number of relevant public and donors organizations to indicate the type of activities and amount of funds associated to various activities that can be related to SLM directly or indirectly.

2. As a rule, government agencies request budget for specific program/project activities based on the sectoral plans or country-wide strategy such as PASDEP. To this effect, owing to the thematic breadth, the scope and the national definition of the SLM, and its linkage to other conventional principles on environment issues, many of the programs/projects that have been carried out currently by MoARD (NRD, PSNP, and irrigation), MoWR, and MoME (ministry of mine and energy) can be considered as contributors to SLM and related practices. Existing financial flows refers to the magnitude or amount of financial resources that are available from various sources (treasury, revenue, external assistance, loans) for the execution of SLM-related activities in Ethiopia. Because funding modalities differ from source to source, the type of financial resource can range from grants to loans. Different types of activities under different sectoral departments, programs/projects can be identified as SLM or related activity.

3. Conventionally, most of federal funds to SLM related activities will be mobilized through the MoARD, the MoWR and MoME (ministry of mine and energy) programs and projects. Given that, the public budget is the primary source of potential funding in to SLM relates sectors during PASDEP plan period 2006/07- 2009/10. This financial flow has substantiated the importance and the level of relative budget share of these sectors compare to the overall total government budget expenditure. The actual total capital budget expenditure by the above three institutions was 4,404.1 million USD and accounts for 31.7% of the total Federal capital budget expenditure by all public agencies in the plan period (2001-09) which was 13,886.7 million USD. Large proportion of the federal funds is allocated to investment/ capital expenditures by these institutions compare to other non-SLM related sectors.

4. The following table indicates federal budget allocated to the above mentioned key sectors with their respective major activities. The financial figures, at best used as a good proxy indicator of funds allocated for SLM and related activities. And it would be possible to identify and consider among these activities and budget expenditure to start a more thorough financial analysis.

Table 1: Financial flows (Government Capital Expenditures from all sources) towards SLM-related Sectors during 2001/02- 2008/09 (Million USD)

Key Organization	Major Activities	Total Amount (2001-09)	Link to SLM	2007/08	2008/09 Current budget
MoARD and Natural Resource	Conservation of natural resources, food security, research and extension services, promotes sustainable use of land, water, biodiversity, Disaster management, combat desertification, conservation of Biodiversity, Environmental Protection.	2560.8	Major activities and budgets are direct supports to SLM Activities	436.0	617.6
Water Resources	Promote clean water and sanitation, river basin studies, Support water harvesting and small-medium scale irrigation large scale dams and irrigation works, climate prediction activities	1223.9	Direct support to sustainable use of land and water,	240.3	378.9
Mine and Energy	Disseminate efficient and appropriate energy technologies and facilities, and develop renewable energy sources, reduce deforestation	619.5	Indirect supports environmental and forest resources	126.8	155.8
	Total expenditure of the 3 key sectors	**4404.1**		803.1	1152.4
	Total Federal Expenditure of all Public Organization	**13886.7**		2710.2	3929.6
	% Share of the 3 key sectors	**31.7**		29.3	29.6

Source: MoFED, Budget Consolidation and Economic Sector Departments, June, 2009
Note Average official exchange rate was taken as 1 USD = 8.9 Eth. Birr for 2001/02 – 08/09

5. External sources of funding are another financial source obtained from outside the country sources, such as bilateral and multilateral donors, multinational corporations, international NGOs, charitable foundations and the like. These sources have traditionally contributed the bulk of funds for SLM and environment-related activities in Ethiopia .Accordingly, project funds are available from a wide range of financier, including multilateral and bilateral donors, international NGOs and CBOs on the base of certain pre-conditions where the development proposals have to meet specified criteria of the funding agencies.

6. Analyses of Financial Flows from External Sources were made to identify the funding sources, the modality/instruments of funding, additional funding opportunities and to indicate potential resources. Major multi-lateral and bilateral donors and international development agencies, which are committed to provide (and are continuing to provide) financial and technical support to the ongoing development efforts including the implementation of the country's SLM programs/projects.

7. These Bilateral and Multilateral donors provide various grants and loans to support Government's development agenda within Ethiopia. To this end, it has a wide set of funding instruments ongoing and in the pipeline that already do or can support the implementation of the ESIF-SLM. In general these Bilateral and Multilateral development partners have funded different on-going and pipe line SLM related projects with the overall total amount of USD 2.73 billion (1.1 billion and 1.63 billion) respectively during the program period of (2002 – 2015). The following table indicates detail of the externals financial flow.

Table 2: Analysis of Financing Flows from External Sources

Sector	Funding Source	Modality/instruments	Program Years		Amount (in 000' USD)
			Starting years	Program Period	
	Bi-lateral				
Agriculture/Multi-sectoral	USA	Project/Technical Support	2005	2005-09	100,236
Agriculture/Multi-sectoral	Canada	Pooled/Basket Funding (WB)	2007	2007-10	193,200
Education	Sweden	Project/Technical Support	2005	2004-10	86,349
Water	Finland	Sector Support	2007	2007-11	11,150
Multi-sectoral	Norway	Grant	2008	2008-09	53,650
Rural Development	Austria	Direct Budget Support	2008	2008-12	8,200
Agriculture/Natural Resources	*Germany	Project/Technical Support	2005	2005-09	25,424
PSNP/Water & sanitation	**UK	Project/Technical Support	2007	2007-12	99,000
Irrigation & water projects	*France	Direct Budget Support	2006	2005-10	18,324
Natural resource & water Supply	Japan	Project/Technical Support		2005-09	150,209
Rural Develop & Water/Hydro-P	*Italy	Loans & Budget support	2005	2005-09	220,000
PBS program & Agriculture	*Spain	Direct Budget Support	2008	2008-10	11,750
	Multilateral				
Rural Development & Water,	WB	Pooled/Basket Funding, Grant and technical support	2002	2003-15	1,028,502
Natural resource & road construction,	WFP	Project/Technical Support and Grants	2007	2007-11	50,400
Agriculture, food security, PSNP and capacity building, marketing	EU	Direct Budget Support, Grants, and project/technical support	2005	2005-13	174,200
Agricultural marketing, Pastoral development and Irrigation	IFAD	Grants and project/technical support	2002	2003-15	92,900
Multi-sectoral (Agriculture, water, Irrigation)	ADB	Grants and loans	1998	1998-10	208,670
Natural Resource and Environmental sector	GEF	Pooled/Basket Funding	2005	2005-09	2,190
Agricultural research, SWC, SLM programs	FAO	Project/Technical Support	2005	2005-09	22,100
Rural development, research and water resources	UNDP	Grant, project/technical support	2005	2005-09	49,400

Source: MoFED, Bilateral and Multilateral Cooperation Departments, March, 2009.

Note: WFP have provide about 115,210 tons of food grain during 2007-11

* the amount of Bilateral assistance of these countries expressed in Euro

** Used Pound as currency

1.2 Planning/Policy Development Framework

8. Constitution of 1995 nationalized all land which is held in trust by the State for the people. In July 2005, the Federal Parliament enacted the Federal Rural Land Administration and Use Proclamation, which reaffirms ownership of rural land by the State, but confers indefinite tenure rights, rights to 'property produced on the land', rights to inter-generational tenure transfer, rights to land exchange ('to make small farm plots convenient for development'), and some rights for leasing to land users. The law makes provision for the registration and certification of tenure rights. The proclamation also specifically addresses degradation of rural land, including defining the obligations of tenure holders to sustain the land, with specific requirements depending on slope, requirements for gully rehabilitation, restrictions on free grazing, and protection of wetland biodiversity. This Proclamation also has provisions indicating that there will be no further land redistribution, except under special circumstances. Regional States have also enacted legislation to strengthen tenure security, modelled after the federal law.

9. To improve land tenure security, the Regional States began a process of providing "simple" temporary landholding certificates, up to 2006/07 land certificates were issued to 6.3 million households out of a total of 13 million rural households in the four major Regional States – Amhara, Oromia, Tigray, and Southern Nations, Nationalities, and Peoples (SNNP). The Government also target to provide Stage 1 certificates to the remaining 6.8 million households. On the other hand, 20 million land certificates (i.e. covering 20 million plots) issued recently. While 1 million households received permanent certificates of land administration, with geo-referencing and mapping of individual land parcels.

10. With regard to SLM, in the last two decades, in an effort to combat land degradation problems, several policies, strategies, programs and laws had been enacted. Moreover, The Government is committed towards developing a 'country-wide' programmatic framework for SLM, and has formalized the decision to develop and implement a 15 year country specific SLM Investment Framework (the ESIF). A programmatic approach is consistent with the Paris Declaration on Aid Effectiveness that the Government of Ethiopia adopted in March 2005, and with the approach advocated by the TerrAfrica partnership which the government has supported since its inception in July 2004. In order to oversee and coordinate the development and implementation of the ESIF, the Government has formally established a National SLM Platform (comprising of a multi-sectoral and multi-stakeholder National Steering Committee and Technical Committee, and supported by a Secretariat). To date regional states' SLM platforms have been established, following regional stakeholder consultation workshops, in Gambela, Amhara, Oromiya, SNNPR, Benishangul Gumuz, and in Tigray.
11. At the international level, Ethiopia ratified the United Nations Convention to Combat Desertification in June 1997 and prepared National Action Programme to Combat Desertification. These measures signal Ethiopia's commitment to work with other nations to address the issue of land degradation, particularly in dry lands.
12. The ESIF will be implemented in association with the Strategic Investment Program (SIP) for SLM in Sub-Saharan Africa. The SIP is a multi-agency[30] regional umbrella investment program that strategically uses GEF resources to leverage and catalyze additional resources to finance country-specific SLM investments in Sub-Saharan Africa (SSA). In Ethiopia, incremental GEF-SIP financing will be specifically used to secure ecosystem

[30] The SIP is a strategic partnership of the World Bank, AfDB, FAO, IFAD, UNDP and UNEP.

stability critical to increase and sustain agricultural productivity and water availability by (i) strategically supporting the implementation of the ESIF and (ii) supporting the National SLM Platform established by the Government.

13. The National Action Program (NAP) to Combat Desertification was originally prepared in 1998, through a participatory consultative process, that involved relevant governmental and non-governmental organizations, civil societies, grassroots level communities and professionals. It was reviewed and updated in 2007, and advocates a five year (2007-2012) action program involving a range of activities related to the following priority areas: (i) managing natural resources leading to sustainable development; (ii) improving knowledge on drought and desertification; (iii) improving the socio-economic environment; (iv) improving basic infrastructure; (v) promoting alternative livelihoods; (vi) rural credit programmes, including establishment of a fund to combat desertification and the effects of drought; (vii) intensification and diversification of agriculture; (viii) promoting awareness and participation; (ix) improve institutional organization and capacity; and (x) empowerment of women.

14. The process of national plan preparation is the responsibility and mandate of Ministry of Finance and Economic Development (MoFED). In the planning process of Macro-Economic and Fiscal Framework, the Ministry of Finance and Economic Development perform the following plan preparation processes: prepare a three year rolling plan, provides a three year forecast of the (GDP, Revenue and Expenditure and source of financing, financing of expenditure, allocation of the federal expenditure and the total subsidies to Regions, capital and recurrent expenditures for the federal government);

1.3 Institutional framework

15. The Government has formally established a National SLM Platform (comprising of a multi-sectoral and multi-stakeholder National Steering Committee and Technical Committee, and supported by a Secretariat) chaired by the State Minister for the Federal Ministry of Agriculture and Rural Development (MoARD). To date regional SLM platforms have been established, following regional stakeholder consultation workshops, in Gambela, Amhara, Oromiya, SNNPR, Benishangul Gumuz, and in Tigray.

Table 3: Institutional framework of key public agencies with their mandate and role in SLM

Organization/ Stakeholder/ Group	Mandates	Role in SLM	Achievements/ Challenges	Organizational Capacity/ Capacity needs
The Ministry of Agriculture and Rural Development (MoARD) and its regional counterpart (BoARD)	Rural development & agriculture. Lead agency for the development and implementation of the ESIF for SLM.	Natural resource management formulation of agricultural and related policies, provide technology packages, technical backstopping, food security; water harvesting, small-scale irrigation; water shade management; conservation forest and wildlife resources	A significant expansion in the practice of SLM; reduction in severe land degradation; expansion in the area of restored and protected as natural habitats; Large No of farmers with land certification; Secure land tenure/user rights; Knowledge and technological barriers; Land tenure and willingness to invest;	Effective institutional capacity and operational structure needed; scaling up of SLM; need planning and advisory capacity; National Soil Laboratory and mapping facilities; Need for more staff training; special beneficiary impact surveys and ESIF evaluation;
Environmental Protection Agency (EPA) and its regional counterpart (REPA)	Implementation of the national action plan to combat desertification and securing the national environment	Coordinate and create partnership on environmental matters amongst sectoral ministries and agencies; rehabilitation of degraded ecosystems; mainstreaming of the environmental issues and pollution control	SLM practiced in area of herders and forest resource users; enforce regulatory measures which may reduce deforestation, land degradation and pollution; integrate emerging issues of Climate change adaptation and mitigation	backstopping for the regional and woreda environmental agencies; ensure the SLM institutional and scaling up process; need more manpower and training
Ministry of Water Resources (MoWR) and its regional counterpart (BoWR)	Undertaking river basin and ground and surface water resource potential master plan studies and then facilitating	study, design and construction of medium and large scale dams and irrigation works as well as watersheds	Lot of hydro-power and irrigations dams constructed and provide production services; No of water users	Building the technical skills and operational capacity (manpower, budget, equipment

	their utilization.	management; prepares and disseminates meteorological data	association established across the country; monthly, seasonally & annual climate data and bulletins prepared;	and facilities) of the federal and regional Water resource institutions; Needs detail study on environmental impact of water resources

1.4 Legislative framework

16. Ethiopia is a party to (i) the Convention on Biological Diversity (CBD) (ratified 05/04/1994); (ii) The United Nations Convention on Combating Desertification (UNCCD) (ratified 27/06/1997); (iii) the United Nations Framework Convention on Climate Change (UNFCCC) (ratified 05/04/1994), and (iv) the Kyoto Protocl (ratified 14/04/2005). The ESIF will assist Ethiopia to meet its international obligations to these conventions.
17. Ethiopia has endorsed the Comprehensive Africa Agriculture Development Programme (CAADP) developed under the New Partnership for Africa's Development (NEPAD). The investment objectives of the ESIF are in line with the key pillars of the CAADP, specifically.

18. Ethiopia developed the "Conservation Strategy of Ethiopia" (CSE) in April 1997 with the help of the World Conservation Union (IUCN), prior to the ratification of the United Nations Convention to Combat Desertification (UNCCD). The CSE provides an umbrella strategic framework, detailing principles, guidelines and strategies for the sustainable conservation and management of the country's natural resources and biodiversity.

19. The preparation of the Ethiopian Forestry Action Programme (EFAP) was initiated in 1990. Two thousand copies of the final EFAP report, which became available in December 1994, were disseminated to the country's regions, donors, NGOs and other relevant government agencies, with the support of UNDP. The regionalization of EFAP started 1996 and, accordingly, regions have developed their own RFAP based on EFAP. Five regions identified actions, strategies and specific projects that address their priorities in forest conservation and development (FAO, 1998).

20. The Conservation Strategy of Ethiopia, the Ethiopian Forestry Action Plan and the National Action Plan to combat desertification are among the most relevant policy initiatives taken by the government to confront forest resources degradation.

21. The Forestry Conservation, Development and Utilization Proclamation No. 542/2007 is currently serving as the forest policy statement of the country. Though, significant progress has been made in reorienting forest polices and strategies to help lay the foundations for sustainable forest management.

22. According to the land proclamation of 1975, all forest land areas of 80 ha and more belong to the State and the use of forest land is based on a system of quotas issued by the forest administration. Technicians in the field locate areas of forest from which the quotas can be cut. The charges paid depend on the type of tree species and its value, its location, volume and the type of product.

23. According to the Forestry Proclamation No. 542/2007 there are two types of forest ownership in Ethiopia: State forests and Private Forests. State forests shall be utilized in accordance with management plans either approved by the Ministry or the appropriate regional body. Farmers are entitled to lifelong, inheritable and transferable rights to the use of land and trees planted thereon. Further more, any person who develops forest on his land holding or in a state forest area given to him on concession shall be given assurance to his ownership of the forest.

24. The proclametion promote private forest development through private individuals, associations, governmental and non-governmental organizations and business organizations who want to develop forest. The proclamation provide them right to obtain rural land in areas designated for forest development in accordance with regional land administration and utilization laws.

25. The Forestry Proclamation indicate that farmers, semi-pastoralists, investors, associations, governmental and non-governmental organizations and business organizations shall be given the necessary support to produce quality and competitive forest products for local and international markets.

26. The overall rights and responsibilities for the conservation and development of forests rest on the government. Local communities have the responsibility to cooperate in the effort made by the government to protect and develop forests. The private sector has the opportunity to develop forest resources based on the lease agreement made on the use of land made with the respective regional governments. The private sector is entitled to use his forest products both for own use or sale.

27. Ethiopia is party to multilateral environmental agreements (MEAs), which require member states to facilitate the establishment/strengthening of national programs for the sound management of hazardous wastes and other wastes. Countries that are party to the MEAs have accepted specific obligation to avoid or minimize waste generation and to ensure the availability of adequate facilities for their waste management operation so as to protect human health and the environment (Basel Convention, 1989).

28. The Environmental Pollution Control Proclamation (Proclamation 300/2002) prohibits the release of pollutants into the environment by any person engaged in any field of activity. Any person who causes any pollution shall be required to clean up or pay the cost of cleaning up the polluted environment. Installation of a sound technology that avoids or reduces, to the required minimum, the generation of waste and, when feasible, recycling of waste is encouraged. The proclamation further stipulates that a permit is required to generate, keep, store, transport, treat or dispose of any hazardous waste.

29. The EPA has also prepared the “Provisional Standard for Industrial Pollution Control” (EPA, 2003) and a regulation for the enforcement of the standards in Ethiopia. In the Provisional Standard for Industrial Pollution Control, two approaches were suggested for both the existing and new industries: cleaner production and Best Available Technologies/or Techniques. A “Draft Proposal of Ambient Environmental Standards” (EPA, 2004) has also been prepared.

30. Other environmental and forestry strategies and policies, laws, regulations and legislations impacts directly on the forestry sector as well as SLM are:
    - The Ethiopian Water Resources Management Policy, the Water Sector Strategy formulated by the Ministry of Water Resources in 2001 and its 15 year (2002-2016) water sector development program;

- The National Population Policy of Ethiopia
- National Policy on Bio-diversity Conservation
- The Energy Policy
- The Environmental Policy of Ethiopia
- Environmental Impact Assessment Proclamation
- Forestry Conservation, Development and Utilization Proclamation No. 542/2007.
- Forest and Wildlife Conservation and Development Proclamation (No. 192/1980).
- the Ethiopian National Biodiversity Strategy and Action Plan prepared in 2005 in fulfilment of the country's obligations following ratification of the UN Convention on Biodiversity.
- Exploitation of Private Forest Regulations (L. N. No. 346 of 1968).

31. Ownership of rural and urban land including all natural resources is vested under the 1994 Ethiopian Constitution. There is no constitutional mechanism for sale or private exchange of land although there is a provision of 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. Substantial relocation of land to accommodate the landless took place in Amhara national Regional state in 1997 following a proclamation that allowed the sale of improvement in land but did not allow its sale, exchange, or use as collateral.

32. The right to inter-generational transfer of tenure was confirmed under Proclamation 456/2005 and some provision allowed for leasing and exchanging land through within strict limits. This proclamation also made provision for the certification on inheritance of the land rights.

33. The Government of Ethiopia constitutionally reaffirms that all land in Ethiopia belongs to the state which it holds in trust for the people. Further more, the Federal Rural Land Administration and Use Proclamation, confers indefinite tenure rights, rights to 'property produced on the land', rights to inter-generational tenure transfer, rights to land exchange ('to make small farm plots convenient for development'), and some rights for leasing to land users. The law makes provision for the registration and certification of tenure rights. Nevertheless, the land users' have feeling of insecurity over their long term user rights.

1.5 Human Resources/Capacities

34. *Lack of a stable coordination mechanism*: The national coordination body is not efficient and fully operational to execute its duties and responsibilities. The coordination and collaboration between the various institutional stakeholders including donors and NGOs is poor resulted in duplication of effort and conflicting approaches with regard to the use of incentives for SLM. Likewise, SLM projects and related environmental activities have broad, multidisciplinary and cross sectoral nature linking various stakeholders from farmers to investors. The activities are diverse and beyond agriculture including mining, infrastructure development and other cross cutting development areas. Financial resources and project activities owned by various stakeholders at different level has to be consolidated and identified for the purpose of evaluation and follow-up.

35. *Knowledge and technological barriers* – Good practices and experiences in execution of a range of different soil conservation projects and programs over three decades has not been exhaustively documented. There is also very little information on the current situation

of the nature, extent and severity of land degradation in different parts of the country. This makes it difficult to identify where the greatest need is, and the specific degradation processes that should be addressed. The lack of good baseline land degradation data is an issue that will need to be addressed by the ESIF.

36. Data should be shared through appropriate knowledge management. Knowledge management refers to the process of collecting, organizing, analyzing and sharing information among different stakeholders. MoARD should establish an information system for sharing data among stakeholders. Web-based databases and resource libraries facilitate the sharing of information and ensure that new information is disseminated.

37. *Socio-cultural barriers and lack of awareness* – There remains a clear deficiency in understanding the land degradation-to-desertification phenomenon and its acceptance as a problem in need of priority actions. A variety of social and cultural norms is mentioned to hinder the adoption of SLM practices and will need to be recognised and addressed by the communities. Social and cultural barriers can therefore be overcome through wide community awareness creation and familiarization program. When the community perceive that the SLM and environmental conventions are very important for their livelihood, they have shown their own self interest to allow their norms to evolve and change. Two social and cultural barriers are of particular concern, namely those related to gender disparities and the free grazing of animals (especially post harvest).

38. To this effect, raising public awareness on SLM and environmental convention has to be advocated by the top level ministers and authorities through public Medias and other possible ways of communication.

1.6 Policy Recommendations

39. Policy issues are critical in the enabling environment making increasingly difficult to successful scaling up and mainstreaming of SLM and to adopt some of the new principles and multi-faceted approach to resource mobilization in Ethiopia. The capacity to mobilize resources does not depend on overcoming all the barriers that have been identified, however, resolving some would serve to substantially improve the efficiency of raising financial resources and achieve the objectives of SLM in a more effective manner. Some of policy issues and recommendations to be considered are:

40. *Policy and legal Issues* – Policy environment to enable the scaling up and implementation of SLM, especially at grass root (community) level has several limitations. The existence of an effective enabling policy, legal, regulatory, institutional and financial environment plays critical role in scaling up and mainstreaming of SLM activities. Therefore, land degradation and SLM issues need to be fully internalized and prioritized in the country's national priorities and has given a higher priority in poverty reduction strategies, public expenditure frameworks and sectoral development policies and PASDEP. Within Ethiopia, current legislation relevant to land degradation and SLM needs to: (i) recognise the crucial consequences of various ecological problems; (ii) develop effective land management programs and targets; and (iii) establish socially acceptable mechanisms for their enforcement.

41. *Institutional Capacity* – Weak capacity amongst the implementing public institution federal, regional and woreda level, research and advisory support service providers has made it difficult to meet the needs of the land users for technical advice on locally appropriate SLM technologies. Therefore, the realization of SLM activities requires strong institutional setup with man power and logistical capacity, mobilization of a lot of recourses, awareness creation among stakeholders, technical and logistical capacity of various institutions at different levels (federal, regional and woreda). The current manpower and organizational structure of the national and regional task forces has to be strengthened in its capacity to shoulder all the duties and responsibilities specified on ESIF document. Particularly, the implementation capacity of the SLM projects at grass root level has to be build up in terms of man power, structure, office facilities and other logistics all the way along different levels.

42. *Stable coordination mechanism*: At present, the national and regional coordination level is not fully operational to execute duties and responsibilities related to SLM implementation. The coordination and collaboration between the various institutional stakeholders including donors and NGOs is weak resulted in duplication of effort and inconsistent approaches with regard to the use of incentives for SLM. In contrast, SLM projects and related environmental activities have broad, multidisciplinary and cross sectoral nature linking various stakeholders from farmers to investors. The activities are diverse and beyond agriculture including mining, infrastructure development and other cross cutting development areas. Thus, the established national and regional SLM coordination body, which composed of various concerned stakeholders with specific mandate of coordination and execution, is needed to avoid overlapping responsibilities and redundancies. Furthermore, donors' coordination which remains weak has to strengthen.

2. FINANCIAL DIAGNOSTICS

2.1 Analysis of Internal Financial Sources, Instruments and Mechanisms

2.1.1 Public Finance

43. The scale and pace of development needs of Ethiopia is huge, correspondingly the financing needs are also great. In order to mobilize domestic resources to finance the huge demand for accelerating growth and poverty eradication, the Government has embarked on comprehensive tax policy and administration reforms. As a result, tax revenue has shown steady growth. Government had created improved business environment that helped to increase private savings and investment. Further, the devolution process has also helped to create conducive environment for social mobilization to complement government resources for expanding economic and social services. In spite of this, the available domestic resources have not matched the increasing level of financing requirements, given the low level of per capita income, and export earnings. This has necessitated supplemental external resource flows. Ethiopia has been mobilizing external resources from bilateral and multilateral sources to complement domestic efforts to accelerate growth and poverty eradication. Ethiopia has also benefited from global initiatives of debt cancellation. Given the scale of the needs for rapid growth, human development, infrastructure and capacity building, Ethiopia will continue to make concerted efforts to effectively mobilize available external resource opportunities.

44. The greatest challenge, however, is the unpredictability of external assistance in terms of timing, level and form of delivery. Accordingly, there is a need for further dialogue/discussion with development partners in the context of scaling up, improved predictability of external finance, harmonization, promoting trade and investment, enhancing capacity to trade as well as to assist on the part of our development partners on improvement in Foreign Direct Investment (FDI) flows.

45. The success of the domestic resource mobilization efforts already underway including: (i) improvements in domestic revenue mobilization by the Government, which have seen revenues rise from 1.12 billion USD in 2001/02 to over 5.02 billion USD in 2007/08, and the reforms of the recent past, which lay the basis for substantial further revenue increases during the period of the PASDEP; (ii) the increasing levels of community involvement and contribution to the developments process, and opportunities created for community and social mobilization; (iii) the expansion in number of activities of the CSOs and NGOs as well as private citizens, and their increasing engagement, which can both contribute resources, more implementation capacity, and innovative approaches to solving development challenges; and (iv) increases in private investment and saving. All of these combine to potentially increase the level of resources being directed in support of the development program beyond the levels forecast today

46. On the basis of the envisaged macroeconomic policies and the expected outturn during the Plan for Accelerated and Sustained Development to End Poverty (PASDEP) period, the costs of the programs for poverty-oriented sectors have been assessed, consistent with a program that sustains macroeconomic stability during the medium term.

47. Regarding Ethiopia's public expenditure management, it is important to note at the outset the significant pro-poor bias in spending allocations, and the effort being made to cover recurrent expenditures through domestic revenues.

48. While there are limits to the surpluses available locally, every effort will be made to mobilize additional resources outside of the tax system. For example, there is scope for using more local materials and community labor in the school building program; and in many cases communities are already contributing to the costs of hiring additional teachers. Regions and local governments are increasingly raising revenue locally that augments the public expenditure envelope, and the on-going *woreda* devolution will also help mobilize community contributions to activities like rural roads, education, health, and water supply programs. Cost-recovery mechanisms are also being introduced and enhanced for urban services such as water supply, for higher education, in the form of the graduate tax, increasing the amount of resources mobilized, and reducing the demands on direct treasury spending.

2.1.2 Budget Preparation Process

49. Budget preparation process started with budget hearing (held between April to May each year at MoFED), a meeting that gives the opportunity to the federal public bodies to explain and justify their budget request to MoFED, so that it enables MoFED to proceed to the preparation of a draft recommended budget. During the budget hearing a lot of issues are taken into consideration for both capital and recurrent budget requests. The Ministry of Finance and Economic Development prepares the recommended budget based on the budget request of public bodies/sectors. Preparing the recommended budget is when the budget requests of public bodies are reviewed, adjusted and

consolidated into a budget for both recurrent and capital expenditures. The requested recurrent and capital budget will be reviewed in relation to government policies and priorities, total expenditure ceiling and from the allocated ceilings of each public body. The recommended budget includes the Federal government recurrent and capital budget, the subsidies to Regional Governments and Administrative Councils and an estimate of resources will be submitted to the Council of Ministers. Once the budget is approved and appropriated by the House of Peoples Representatives, MoFED will prepare the budget allocation guideline and the notification to public bodies and their budget institutions with the source of finance and line item of expenditures. Notification of the approved budget to public bodies. Public bodies shall submit their investment program within the specified submission time, last week of December and perform all budget preparation activities /development of unit costs, before the budget call is sent to them so that they can submit their budget request in time.

50. The execution of the approved national budget and regional subsidy is performed by the implementing sector organizations and/or other government agencies at all level. The Ministry of Finance and Economic Development (MoFED) based on the public sector budget request and the share of regional subsidies prepare, reviewed, adjusted and consolidated the recommended budget into both recurrent and capital expenditures. Finally the national budget is submitted to the Council of Ministers and House of Peoples Representatives for approval while Regional and Administrative Councils subsidies budget are approved by Council of House of Federation in accordance with the approved subsidy formula.

2.1.3 Fiscal and Policy Instruments

51. Fiscal instruments used as tools of generating financial resources for implementation of SLM activities in Ethiopia are depend on various revenue sources. Although the national budget constitutes the most significant source of financial resources, other fiscal instruments can also be considered. It should be noted, however, that their applicability will often depend on the existence of broader enabling conditions such as laws and regulation. Currently the bulk of the investment funds for SLM activities come from the national budget. Recently, alternative sources of funding that could be tapped to support the promotion and scaling up of SLM have grown, particularly, those that would come under the heading of non traditional sources 'payment for environmental services' and various charges/taxes, tax exemptions as well as private investment are becoming crucially important.

52. Besides, national budget, grants, Protecting Basic Services (PBS) and Debt Relief, various other fiscal or economic instruments among which some of the most common and practically applied by federal and regional government as well as municipal administrations include: payments for carbon sequestration and charcoal production, payment on water supply; deforestation and illegal logging taxes; environmental levy on tourist destinations; tax on industry based on the pollution it emits, environmental levies within municipalities jurisdictions.

53. Tax is a powerful fiscal instrument for revenue collection in that land taxes could be useful mechanisms to regulate land degradation problems. Nevertheless, the complexity is that land taxes are not tagged with environmental management; proper management of lands is not encouraged through tax relief and tax exemptions so far and in short, we couldn't

make the exiting land taxation system acquiescent to our crucial problem of land degradation.

54. The trend in countries fiscal situation has experiencing an unprecedented growth implying that the economy has shown noted improvements. The total budget revenue including grants & debt relief collected during year 2004/05 – 2008/09 indicates an increase of about 60 percent (USD 4,170 million) between the two years and annual average over 15 percent over the last five years. See table 4 below

55. Another key feature of Ethiopian fiscal situation is the fiscal decentralization of government budgets in to regions and woredas since 2002/03. About 35-40% of federal revenue expenditure is disbursed at regional level (with further decentralization to the woreds level), while only 15-20% of the total revenue is collected regionally. These federal funds are apportioned to regions and woredas in the form of block grants.

Table 4: Summary of Consolidated Federal Revenue 2004/05 - 2008/09 (million USD)

Description of Fiscal Instruments	**2004/05**	**2005/06**	**2006/07**	**2007/08**	**2008/09**
Total revenue and grants	**2,264**	**2,614**	**3,301**	**4,931**	**6,433**
Total revenue	**1,751**	**2,194**	**2,449**	**3,746**	**4,924**
Tax revenue	1,393	1,591	1,950	2,747	3,638
Direct taxes	442	501	581	740	1,248
• Income and profits tax	384	420	536	634	-
• Agriculture income tax	17	9	11	13	-
• Rural land use fee	16	14	15	17	-
• Urban land lease fee	25	58	19	77	-
Indirect taxes	951	1,090	1,369	1,554	2,390
Non-tax revenue	358	603	499	999	1,285
External grants and Debts	513	419	852	1,186	1,510

Source: MoFED, Budget Consolidation and Economic Sector Departments, March, 2009

2.1.4 Local and Municipal Budgets

56. Since the decentralization of (2002/03), resources and responsibilities for service delivery and project implementation have been moved to the local/woreda governments and municipal administration. In practice, however, both woreda and regional as well as municipal policies are still guided by federal sector policies and by cross-sector strategies and programs. The federal authorities also retain an active role with respect to trans-regional issues such as river basin management, multi-regional forests, and trunk roads and other special service areas in metropolis.

57. These budgets/funds are provided by the federal government and development partners/donors, and channelled into specific programs/projects implemented by the regional states in specific watershed areas of the selected local or urban administration. The mobilization of most of the budgets to the regional and local/woreda administration are generally pooled from both government treasury and external sources provided in the form of block grants to regions and woredas. Due to the fact that the regional government is capable of only collecting 15-20% of annual revenues, the major source of regional expenditure (35-40%) is public budget subsidy provided by the federal government in the form of block grants.

58. Conversely, municipalities have their own autonomous administrative units that enjoy limited fiscal independence within their jurisdiction and thereby provide an uncomplicated and direct pathway for channeling funds in to various development endeavors. They have the autonomy to collect revenue or accept funding from external (or internal) sources, without needing to channel the funds to MoFED. Unfortunately, for the purpose of this study there is no data on the municipalities' budgets.

59. They prepare their budget with minimal involvement of a federal or regional authority. Municipal budgets are approved by the council of municipal administration. Though, municipal budgets constitute relatively smaller amounts of funds, we may consider as potential entry point for mobilizing funds with less complications. Municipalities should mainstream SLM into their budgets. Budget requests should include funding for SLM-related activities that are to be carried out at the local level and funded primarily by the municipal budget. To this effect, federal and regional governments and relevant sector agencies should establish acquaintances with local and municipalities to strengthen their capacities in revenue collection, fund acceptance and management for SLM-related activities.

2.1.5 National funds

60. National funds can be replenished in a number of ways for the SLM related projects among which: national budget allocations; mutual/ pooled resources from sector ministries; tax revenue, or revenue from fines and charges; external resources (grants/loans and debt relief); voluntary private or association contributions through professionals, CBOs funds, philanthropic funds and etc.

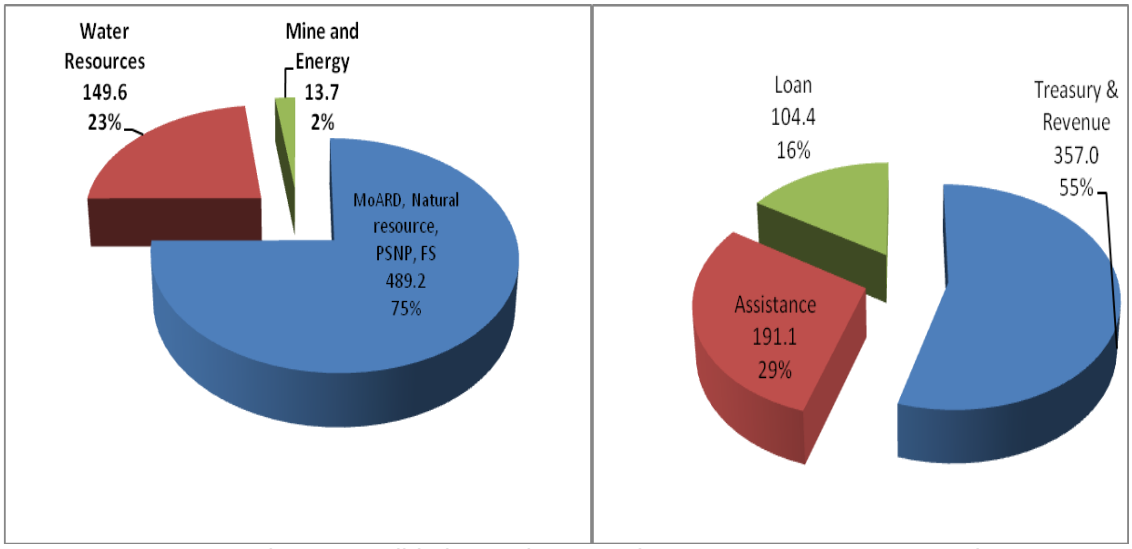
61. The major financial source pertaining to SLM-related sectors is domestic budget. This budget is the primary source of potential national funding to SLM-related activities. It is the

first line of funding to be considered in the mobilization of resources for programme/project financing. Given that, the public budget is the primary source of potential funding, it is important to examine financial flows of the national funds.

62. The national budget allocated for the implementation of development and poverty-oriented sector programs during the PASDEP period for sectors that have SLM-associated mandates (that actually dedicated to SLM or that contributes to SLM indirectly) assessed. Some of the major federal institutions implementing SLM related activities are MoARD, the EPA, MoWR and MoME (ministry of mines and energy). These government agencies include many departments, offices and programs/projects that have special national funds dedicated to the SLM implementation. Further research is required to identify disaggregated financial resources data spent by all SLM implementers. Hitherto, the total quantity of financial resources (capital budget expenditure) for the 3 key public agencies which are major implementer of SLM and related projects during 2001-09 including the PASDEP plan period (2005/06-2009/10) was estimated to abut 4404.1 million USD or 31.7% of the overall national capital budget allocated to finance all public agencies.

63. Conversely, analysis of financial flow in to SLM related activities in fiscal year 2007/08 was shown that the total capital budget expenditure allocated for more than 70 SLM related projects and activities (see annex 1) implemented by MoARD (PSNP, Natural Resource, FS), Water Resource (Irrigation), Mining and Energy was about 652.5 million USD. The relative share of domestic budget (treasury and revenue) is about 357 million USD[31] or 55% of the total budget. The following figure 1 indicates the relative size of existing domestic and external financial sources allocated as capital budget expenditures for projects related to SLM under the key implementing sectors in 2007/08.

Figure 1: Relative Size of Government Capital Expenditures to SLM related Projects by Source of Finance and key sector (Budget-2007/08 in millions USD)



Source: MoFED, Budget Consolidation and Economic Sector Departments, March, 2009

64. National funds flows in to Regional SLM Projects/programs are another area where stocktaking has been made. Currently, numerous activities have been done through

[31] Average official exchange rate as 1 USD = 8.9 Eth. Birr in 2007/08

different sector agencies, development partners and national regional states to realize SLM project/programs. Many SLM related project activities were made possible through mobilization of both public finance and external sources to regional and woreda/district levels. These funds are provided by the federal government and development partners/donors, and channelled into specific programs/projects implemented by the regional states in specific watershed areas of the project woredas. The mobilization of most of the funds to the regional SLM project activities are generally pooled from both government treasury and external sources. The federal government provided budget of 35-40% in the form of block grants to regions and woredas.

65. Hitherto, regional and woreda level SLM platforms (steering and technical committees) formed; various meetings and workshops were held in all regions. SLM project activities are carried out in 177 watershed areas across the country by the financial and technical support provided by SLM partner organizations (WB, GTZ, WFP and FAO) and the government own sources in some regions. Table 5 below indicates the relative size of financial flows in to regional SLM project activities (2007-11).

Table 5: Regional Financial Flow to Local SLM project activities (watersheds) 2007-2011(in USD)

Region	Watershed Area (Ha)	No. Kebele /Localities	Labour Force	Budget Estimate
Amhara	79,625	73	115,455	5,561,794
Oromya	72,320	100	248,663	8,011,856
SNNPR	62,913	66	112,339	4,829,167
Tigray	14,905	11	22,716	1,063,839
Benshangul	21,900	18	18, 724	1,261,458
Gambela	20,500	11	9,152	1,008,406
Total	**272,163**	**279**	**508,325**	**21,736,519**

Source: National SLM Secretariat office, Progress Report Feb. 2009.

2.1.6 Private sources of funding

66. The private sector could contribute to judicious resource utilization through good practice of a market-based PES schemes which seem promising instruments for environmental conservation as they establish and invest in various development projects. As they establish a direct link between sellers and buyers of produces and environmental services, they contribute to national revenue through taxes, charges, PES and compensate for environmental problems on the use water, land, forest, agriculture and other environmental services.

67. Where there are enabling public resources to be used to deliver a greater range and volume of services, the private sector could be a sources of funding and contribute capital through taking ownership positions, reducing the pressure on the public budget to fund new investments. The most obvious areas of private sector growth include: in the agricultural and rural sector, where millions of farmers both large and small as well as investors are of course all private sector actors involved, and there is substantial growth of private supply of inputs and services. Through strengthening the enforcement of (taxes/royalties/penalties) regulations and laws pertaining to the land, forest, mining, industries, water and irrigation schemes and other environmental issues the private sector will provide wide range of PES in both rural and urban areas.

2.1.7 Policy Recommendations

68. *Economic and financial policies* –Lack of economic, pricing and marketing policies on the valuation of environmental resources have resulted in strong pressures on the land resources while effective incentives for SLM have yet to be developed and/or are insufficiently applied. Poverty and lack of resources has forced many land users to pursue short term coping strategies rather than investing in long term sustainability. This has been exacerbated by a lack of affordable credit for investing in SLM. Therefore, establishing the long term economic costs, building demand for SLM friendly trade and economic activity, where economic valuation of environmental resources may be fostering positive land use practices and can be an important input into the policy debate on SLM, reducing land degradation and promote widespread awareness building in developing SLM response.

69. *Budget release and Utilization:* Financial limitation is very critical problem in that not only resources limitation but also inadequate capacity to utilize the available resources including poor procurement performance is important. Donors have set various pre-conditions and modalities to financing of SLM projects. Therefore, CSIF-SLM should wherever possible adopt flexible and decentralised financial mechanisms which are compliant to implementation modalities of each donor so as to enhance and scale up the execution of the national SLM projects judiciously.
70. *Incentives and Value Addition*: Increased incentives for private sectors and other land users to invest in SLM and related products through introduction of new SLM technology and the value addition related to SLM investments are policy inputs to increase financial sources to SLM. Thus, supporting development of markets for SLM technologies and products and strengthening the development of private sector and producers' organizations to promote markets for SLM friendly activities and products is a potential area to increase investments on SLM.

71. *Integrate PES with other economic activities*: If the ecosystem services are integrated with other economic activities, the PES transaction costs will be spread over many benefits. For example, planting of Acacia in the semi-arid part of the regions produces both the biodiversity ecosystem services and Gum Arabic, which is commercially useful. However, the economic activities that are combined with ecosystem services (choose ecosystem services that have multiple uses) should not lead to destruction of the natural resources that provide the ecosystem services.

2.2 External Funding Sources, Instruments and Mechanisms

2.2.1 Sources: Major Donors

72. The most important external sources of funding in Ethiopia are bilateral and multilateral donors. These donors differ from one another in their preferred intervention areas, their instruments of financial allocation, and their funding prerequisites and conditions. The external sources of funding reviewed in this section fall into two categories: bilateral and multilateral. Bilateral cooperation is defined as country-to-country, or government-to-government, Official Development Assistance (ODA) or development agreements. Multilateral aid consists of funds managed by multilateral agencies to which several international parties contribute.

73. In the context of the current changing aid architecture and the potential use of external financing, sectoral and regional (programs & projects) budget support to SLM and related activities were assessed. The Ethiopian SLM investment framework (CSIF) platform provides a framework for donor support of the SLM program. This is an umbrella for funding although it is not envisaged that there will necessary be common funding arrangements. Constraints for mobilizing external sources of funding for SLM in this new context identified.

74. A number of multi-lateral and bilateral donors and international development agencies have provided (and are continuing to provide) financial and technical support to the federal and regional governments to strengthen the implementation of the country's SLM. The on-going and pipe line projects and programs from these international development partners will provide much of the base line funding for the proposed SLM activities. The key international development partners include:
75. *Multilateral Donors:* the World Food Program (WFP), the World Bank (WB), International Fund for Agricultural Development (IFAD), United Nations Development Programme (UNDP), Global Environment Facility (GEF), African Development Bank (ADB), European Union (EU), and Food and Agriculture Organisation of the United Nations (FAO), the International Food Policy Research Institute (IFPRI) and others.
76. *Bi-lateral Donor:* The main *Bi-lateral Donor* development partners include German Development Cooperation (GDC/GTZ), United States Agency for International Development (USAID), Canada, Sweden, Finland, Netherland, Norway, Italy, Austria, United Kingdom, France, Spain, Japan, China, Saudi Arabia, Kuwait, South Korea and India.

77. *Non-Governmental Organisations (NGOs)/CSOs:* Currently NGOs (both indigenous and international) support a wide range of development efforts of the country including projects and programs related to SLM and other development sectors. There are currently over 500 domestic and international NGOs working in Ethiopia. Of these about 70 % domestic and 30% are international NGOs organized under the umbrella of the Christian Relief and Development Association (CRDA) for the purpose of coordinating development efforts, promoting information exchange, networking for advocacy and lobbying purposes, and building capacity (particularly amongst indigenous NGOs).

2.2.2 Donor Delivery Modalities and Funding Schemes

2.2.2.1 National Development Priorities

78. Given the link between land degradation, crop failure and food security/malnutrition in Ethiopia, and the fact that about 85% of the population is rural, land degradation is one of the key factors underlying the country's low and declining agricultural productivity, persistent food insecurity, and rural poverty. Land degradation is therefore considered to be one of the main development challenges in Ethiopia, and preventing and addressing the problem has been repeatedly identified as a national development priority. In all recent national strategies and policy documents, notably the Poverty Reduction Strategies (SDPRP and PASDEP), the ADLI policy, Rural Development Policies and Strategies, the Conservation Strategy of Ethiopia, the National Food Security Strategy, the National Action Plan for Combating Desertification, among others, the issue of addressing problem of land degradation is prioritized.

79. More specifically, PASDEP has provided the overarching policy strategy and priority to address land degradation with the main elements of strategy to strengthen tenure security by expanding the on-going land certification program; building capacity in community-based approaches to watershed management; scaling up successful models for watershed management; and strengthening natural resource information management practices and innovations in sustainable land management (SLM).

80. The investment objectives of the ESIF are in line with the key pillars of the CAADP specifically: Extending the area under sustainable land management and reliable water control systems; increasing food supply and reducing hunger; and Agricultural research, technology dissemination and adoption.

81. Likewise, the National Action Program (NAP) to Combat Desertification was given priority to enhance activities related to SLM and clearly links project activities into available resource within the implementing institutions.

82. The majority of development partners and multilateral agencies follow country-specific strategies and act in accordance with the above mentioned national priorities and advance their development assistance through credible sectoral strategies to address the ongoing development efforts. The development of PASDEP and above indicated various priorities and conventions, for example, would provide a tool for requesting assistance from other donors interested in funding activities for the improvement of socio-economic conditions in the country.

2.2.2.2 Delivery Modalities and Funding Mechanisms

83. It is important to understand donors' and other developments partners' financing modalities and mechanisms currently prevailing in the country in order to requests financial supports for targeted appropriate institutions which can involve in the implementation of SLM project interventions. Therefore, CSIF should wherever possible adopt flexible and decentralised financial mechanisms which are compliant to implementation instrument of each donor so as to enhance and scale up the execution of the national SLM projects.

84. In Ethiopia, the most important budget support and funding for the SLM investments is provided by multilateral and bilateral donors on conditions and fulfilment of certain criteria set by respective donor agencies. To this effect, currently a large part of development resources from donors are disbursed to SLM project activities carried on regions/woreda through annual budget allotment to targeted sector agencies.

85. To demonstrate a commitment to sustainability of investments and a continued momentum for strengthen and scaling up SLM interventions, currently Ethiopia dedicates significant resources from the national budgetary resources as co-financing funds, for investment funding.

86. Various funding modalities are suggested to channel support to Ethiopian CSIF; among which 'pool funding' seem a preferred modality to support the implementation of the ESIF. However, not all DPs would agree on pooling their funds. There are other modalities to support the ESIF and to channelled resources through, parallel financing and technical

assistance (and any of these modality of support is exclusive) - not to preclude possible support from any of these sources.

87. In addition, other main financing modalities of donor support to public investment for SLM project interventions are identified. As a result of changes in donor's funding modalities, the following common requirements have to be fulfilled by the recipient country to implement development programs/projects.
    - Budget support: in this modality, selected project activities in the budget preparation process are funded directly from the state budget;
    - Basket funding: Activities which fit into a specific programme are funded by an earmarked fund supported by several donors/financing organizations.
    - Project funding: Activities are funded through projects funded inside or outside of the state budget.
    - Co-financing: Ministerial budgets are often the source of co-financing for projects funded primarily by donors. Traditionally, co-financing has often taken the form or non-monetary, in-kind contributions. In the new approach adopted by donors, however, more emphasis is placed on government contributions. Governments will be expected to raise a significant amount of financial resources, before being supplemented by donor funds. This approach is being adopted to ensure efficiency in resource spending and commitment and ownership by the government towards the undertaken initiatives.

88. Some of the major implementation and delivery mechanisms of the donor's support to the various program and project activities including SLM in Ethiopia include:

    - Sector-wide programs (such as Sector-Wide Approaches (SWAps)) in Natural Resources Management, Agriculture, Forestry and Land management;
    - Projects, such as:
    - watershed management
    - Water harvesting and small scale irrigation projects
    - community-based development projects
    - Research and extension projects
    - Disaster management projects
    - SLM projects

89. The other delivery mechanisms/projects may be limited to supporting selected lines of intervention which fall within their broad scope of activities. It should be stressed though, that individual rural development projects may combine several sectoral themes and could therefore support a wider range of SLM activities. The above lists are provided only to illustrate where specific thematic projects are most likely be used as key delivery mechanisms for SLM investments.

90. External sources of funding are from outside the country sources, such as bilateral and multilateral donors, multinational corporations, international NGOs, charitable foundations and the like. These sources have traditionally contributed the bulk of funds for SLM and environment-related activities in Ethiopia. The general programme approach is that donor funds will be allocated to specific activities that fall within country national priorities and – in many cases – to which other sources of funding, namely public budget co-financing have been committed. Similarly, most donors/ funding agencies have very similar stated intervention areas, regardless of how these are expressed by each donor.

91. Accordingly, project funds are available from a wide range of financier, including multilateral and bilateral donors, international NGOs and CBOs on the base of certain pre-conditions where the development proposals have to meet specified criteria of the funding agencies.

92. The commitment and approach of most multilateral and of bilateral donors agencies is the building of partnerships with NGOs and CBOs, which are eligible to funding schemes beyond the reach of public institutions. In this process the role of government institutions would be to act as linkage between the NGOs and the funding opportunities. Involvement of donors includes providing guidance on funding schemes, assisting the development and appraising of submitted development proposals.

93. Major multi-lateral and bilateral donors and international development agencies, which are committed to provide (and are continuing to provide) financial and technical support to the ongoing development efforts including the implementation of the country's SLM programs/projects are:

2.2.3 Multilateral Donors

94. *The World Bank (WB)*: is the major donor and lead implementing agency of various grants and strongly committed to support this important Government's agenda within Ethiopia. To this end, it has a wide set of funding instruments ongoing and in the pipeline that already do or can support the implementation of the ESIF, including the (PBS) Protection of Basic Service Program (US$ 215 m); the Productive Safety Net Program (US$ 175); the IDA/GEF SLM Program (US$ 29 m); the IDA Tana Bele and GEF Water Resource development projects (US$ 45 m); diverse Climate Change initiatives; and specific Technical Assistance in the context of TerrAfrica. However, specific/additional resource allocation to SLM depends on the highest level of Government's commitment to use IDA allocations for this sector.

95. In general WB has funded different on-going and pipe line SLM related projects with the overall total grant amount of USD 1028.52 million during the program period of (24/06/2002 – 31/10/2015). About 20 ongoing SLM related programs and projects including the above mentioned one and: the Food Security Projects; the Pastoral Community Development Project phases I&II; the Rural Capacity Building Project; the Irrigation and Drainage Project; the Sustainable Land Management Project; fertilizer support project, water supply projects and the Ethiopia/Nile Basin Initiative are funded.

Table 6: WB Funded on-going and pipe line SLM related projects

No	Name of Donors	Major Activities related to SLM	Total grant Amount (million USD)	program period
	The World Bank (WB)	(PBS) Protection of Basic Service Program	215.0	2002 -2015
		PSNP	175.0	
		the IDA/GEF SLM Program	29.0	
		IDA Tana Bele and GEF Water Resource development projects	45.0	
		Other ongoing SLM related programs and projects	564.52	
	Sub total		**1028.52**	

Source: MoFED, Bilateral and Multilateral Cooperation Departments, March, 2009

96. *The World Food Program (WFP):* has a long history of supporting 'food-for-work' soil and water conservation efforts in Ethiopia and will continue its support to the SLM agenda through the MERET-plus Program. The WFP is currently supporting on-going projects: the Managing Environmental Resources to enable Transition to better Livelihoods Project (MERET); the Food Security Project; and the Productive Safety Nets Project. The main funding scheme of WFP is the uses food material through food monetization program. About 61% of project cost (payment for labor) is food while the rest to cover project expenses including transportation and purchase of hand tools provided in cash.

97. WFP has funded diverse on-going and pipe line SLM projects with the over total grant amount of USD 416.44 million and (1,244,502 tons food) during 6th program phases since 80's (1980 – 2011). In most recent case WFP has provide funds both in food and cash term (50.4 million USD & 115,210 tons food).

Table 7: WFP (MERET Project) Major Activities related to SLM (1980-2011)

Program Phase	Major Activities related to SLM	Amount of Food (ton)	Total USD million	Years
1st and 2nd	Environmental protection, land rehabilitation, SWC, Afforestation and road construction, irrigation, pond and dam construction	819,911	214.0	1980-1994
3rd		119,196	53.0	1995-1998
4th		170,571	55.94	1999-2002
5th		134,824	43.1	2003-2006
6th		115,210	50.4	2007-2011
	Total	**1,244,502**	**416.44**	

Source: WFP MERET project Activity profile, 2009.

98. *The European Union (EU)*: EU has supporting various food security and PSN projects in Ethiopia. Currently EU is supporting the different on-going projects and signed a new Country Strategy Paper (CSP) with the Government in December 2007 for program period of 2008–13, with a total budget of € 644 million (about USD 870). One of the priority areas identified in the CSP is food security and rural development. Specific projects are expected to include PSNP, Food security, Rehabilitation of Flood affected Population, support for agricultural markets and livestock development, improved natural resource management to address degradation and Scaling up of Participatory Forestry management.

Table 8: EU Supported SLM Related Projects

S.N	Project Title	Project No	Project Cost Euro in Million	Signature Date	Completion Date
1	Productive Safety Nets Program	9 ACP ET 012	78.0	25/10/05	31/12/08
2	Productive Safety Nets Program	BL 21.02.02.Food	20.0	29/03/07	30/04/2010
3	Rehabilitation of Flood Affected Population	9 ACP ET 027	7.0	15/11/07	30/06/2011
4	Livestock Sector Capacity Building for Agricultural Export Sector	STABEX99 FMO/8 ACP ET 6&7	1.2	4/9/2007	31/12/2010
5	Scaling up of Participatory Forestry Management	10 ACP ET 007	6.0	29/01/09	31/12/2013
6	PSNP	10 ACP ET 002	42.0	29/01/09	31/05/2010
7	Livestock Development	10 ACP ET -----	10.0		
8	Agricultural Marketing	10 ACP ET -----	10.0		

	Development				
	Total		**174.2**		

Source: MoFED, Bilateral and Multilateral Cooperation Departments, March, 2009

99. *The International Fund for Agricultural Development (IFAD*): has a history of providing low-interest loans and grants for rural programs and projects in Ethiopia that seek to enable rural poor people to overcome poverty themselves. IFAD in particular has emphasized the need for commitment to a development strategy directed towards the rural poor with some of the projects related to SLM.

100. Currently IFAD supports on-going projects such as: the (AMIP) Agricultural Marketing Improvement Programme; (RUFIP) the Rural Financial Intermediation Programme; the Participatory Small-scale Irrigation Development Programme; the Pastoral Community Development Project; and the Community-Based Integrated Natural Resources Management Project in Lake Tana Watershed Project. Some of the ongoing programs/projects supported by IFAD are indicated in the following table.

Table 9: IFAD Major Project Activities related to SLM during (14-Jan-2002 - 30-Sep-2015)

No	Project/Program	Credit/Grant Amount in million USD	Signing Date	Closing Date
1	AMIP	27.20	20-Jan-2005	20-Feb-2012
2	Pastoral Community Development	20.00	10-Oct-2003	31-Dec-2009
3	RUFIP	25.70	14-Jan-2002	13-Sep-2010
4	Small-Scale Irrigation Dev't Project	20.00	13-Jun-2007	30-Sep-2015
	Total	**92.9**		

Source: MoFED, Bilateral and Multilateral Cooperation Departments, March, 2009

101. *The African Development Bank (ADB):* has portfolio for Ethiopia includes some of the 14 on-going and pipe line SLM related projects: the National Livestock Development Project; the Rural Finance Intermediation Support Project; the Agricultural Sector Support project; Koga Irrigation and Watershed Management Project; and Rural Water Supply and Sanitation Project. The following table shows indicative potential financial resources committed from ADB.

Table 10: ADB Supported Major SLM related programs/Projects

No	**Project/Program**	**Credit/Grant Amount in MUSD**	**Signing Date**	**Closing Date**
1	National Livestock Development Project	27.00	20-Nov-98	30-Jun-09
2	Koga Irrigation and Watershed Management Project	32.59	19-Jul-01	30-Jun-09
3	Koga Irrigation and Watershed Management Project	1.33	19-Jul-01	30-Jun-09
4	Genale-Dawa Basin Master Plan Study	3.93	16-Nov-01	30-Jun-09
5	Rural Finance Intermediation Support Program	27.17	13-Oct-03	31-Dec-09
6	Rural Finance Intermediation Support Program	8.00	13-Oct-03	31-Dec-09
7	Awash River Flood Control And WS Study	1.83	15-Oct-03	30-Jun-09
8	Livestock Development Master Plan Study	2.34	5-Mar-04	30-Jun-09

9	Agriculture Sector Support Program	21.24	12-Feb-04	31-Dec-10
10	Agriculture Sector Support Program	17.76	12-Feb-04	31-Dec-10
11	Fisheries Resources Development Plan Study	0.92	16-May-05	30-Jun-09
12	Institutional Support Project to the MoWA	1.06	15-Sep-04	30-Jun-09
13	Harar Water Supply and Sanitation Project	19.89	8-Nov-02	31-Dec-10
14	Rural Water Supply and Sanitation Project	43.61	25-Feb-06	31-Dec-10
	Total	**208.67**		

Source: MoFED, Bilateral and Multilateral Cooperation Departments, March, 2009

102. *Other UN agencies (GEF, UNDP and FAO)*: these agencies have a long history of involvement in SLM related activities in Ethiopia. They have provided direct technical assistance and financial support for various on going SLM Related Programs/Projects. The following table shows amounts of financial assistance committed to a number of programs/projects during 2005-2009 in million USD.

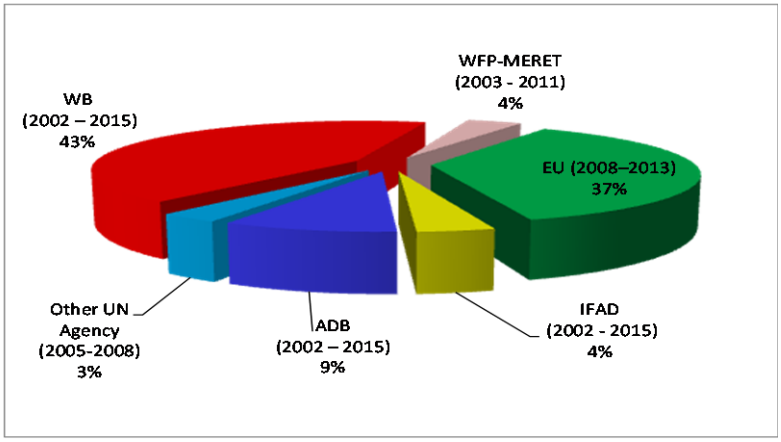
Table 21: Other UN Agency Supported SLM Related Programs/Projects (2005-2008) (million USD)

No	Donor/Project Program Name	Total Allocation (2005-2009)
1	GEF	2.19
2	FAO	22.1
3	UNDP	49.40
	Total	**73.69**

Source: MoFED, Bilateral and Multilateral Cooperation Departments, March, 2009

103. *Figure 2* below indicates the relative potential size of financial resources multilateral and UN agencies/donors committed to support SLM related projects/ programs. The figure indicates the major donors' financial resources contribution (in percent) to ongoing SLM programs with in respective investment period.

Figure 2: Multilateral Donor's Potential Resources Committed to SLM Investment (2002 - 2015)



Source: MoFED, Bilateral and Multilateral Cooperation Departments, March, 2009

2.2.4 Bi-lateral Donor

104. Bilateral donors and international development agencies have provided (and are continuing to provide) financial and technical support to the federal and regional governments for improved management of the country's land resources. The on-going and pipe line projects and programs from these international development partners will provide

much of the base line funding for the proposed ESIF activities. The key bilateral development partners and their major SLM related development projects/programs described in the following table:

Table 32: External Financial flow to SLM/related sectors from different Bilateral donors

S.N	Project Title	Currency in '000	Program Period	Sector	Total Amount
1	USA	USD	2005-09	Agriculture	100,236
2	Canada	USD	2007-10	Agriculture/Multi-sectoral	193,200
3	Sweden	USD	2004-10	Education	86,349
4	Finland	USD	2007-11	Water	11,150
5	Norway	USD	2009	Agriculture/water	53,650
6	Austria	USD	2008-12	Agriculture	8,200
7	Germany	EURO	2005-09	Agriculture/Natural Resources	25,424
8	United Kingdom	Pound	Oct.2007-12	PSNP/Water & sanitation/PBS	99,000
9	France	EURO	2005-10	Irrigation & water projects	18,324
10	Japan	USD	2005-08	Agriculture & water	150,209
11	Italy	EURO	2005-08	Water/Hydro power II project	220,000
12	Spain	EURO	2008-10	PBS program & Agriculture	11,750

Source: MoFED, Bilateral and Multilateral Cooperation Departments, March, 2009

105. *German Development Cooperation (GDC)*: is committed and willing to continue its support to the SLM agenda. It has provided a bilateral assistance for the ongoing SLM projects and actively involved (with funding from both *GTZ* and *KfW*) in a range of SLM activities through the Sustainable Utilization of Natural Resources for Improved Food Security Project (SUN) in previous years. Currently, this project is replaced by the SLM and continues into 2009. GDC SLM related pipe line ongoing projects in 2009 include: the Sustainable Land Management Project (replacement for the SUN project); the Participatory Forest Management Project; and the Rural Energy Project. The total amount of budget breakdown for the already agreed upon SLM projects, contributed by German Government is about 25.424 million EURO, through: a) Financial cooperation 13.284 Million EUR b) Technical Cooperation GTZ: 10.4 Million EUR and DED: 1.74 Million EUR through CIM. Support to this sector beyond 2011 will depends on the Government's commitment and priorities.
106. *The United States (USA):* operates mostly through its development agency USAID. USAID is committed to support the implementation of the second component of the ESIF through the Ethiopia Land Tenure and Administration Program (ELTAP). USAID has provided significant support for SLM related activities through the recently completed Amhara Micro-enterprise Development program; Agricultural Research, Extension and Watershed Management Project (AMAREW); and other on-going and pipe line USAID projects include: (i) Ethiopia Land Tenure and Administration Project; (ii) Pastoral Livestock Improvement

Project; (iii) Policy Research Support Program; (iv) Ecotourism; and (v) support for the Government Safety Net Project.

107. The amount of financial resources for ongoing and pipeline SLM projects indicated above assisted by USAID (2005-2009) is about 100.236 million USD.

108. *Canada*: has supported various SLM related projects such as Productive Safety Net program (cash through WB), rural capacity building and (PBS) Protection of Basic Service Program Component II (Cash through WB). The total amount of budget contribution committed to these projects during a period of 2007-2010 is about 193.2 million USD.

109. *Sweden:* also provides financial assistance to development efforts in the country. Some of the ongoing SLM related projects financed by Sweden are Institutional Development of Wondo Genet Forestry and Land Survey Bahir Dar University with total outlay of 86.35 million USD for 2004-2010.

110. *Finland*: currently supports two SLM related projects, Rural Water Supply and Environmental program in Amhara IV and Rural Water Supply and Environmental program in Bensangul Gumuz regions with the total budget of 11,150 million USD in 2007-2011.

111. *Norway*: is committed to provide financial assistance to ongoing (2008-09) Environment-Natural resources & Food security programs and Hydro Power & promotion of Nile Basin Initiative with about USD 53.65 million.

112. *Austria*: support Rural Development program in the Amhara Region with total budget of 8.2 million USD in years 2008-12.

113. *United Kingdom*: provides financial and technical assistance for projects such as PSNP Extension, Water and Sanitation (FA) and Water and Sanitation (TA) for years 2007 – 2012 with total budget support of 99.0 million Pound.

114. *France*: has provided a bilateral assistance for the ongoing SLM related projects and actively involved in supporting Debre Birhan Water Supply and Sanitation project, Irrigation Development projects in three Regions, and institutional support for the integrated Water Management of the Blue Nile Basin for the years (2007 -2009) with the total amount of budget 18.3 million EURO.

115. *Japan*: government has funded different on-going and pipe line SLM related projects with the overall total budget amount of USD 150.209 million during the program period of (2006 – 2011). Some of the projects are Water Supply in Afar Ph II, Water Supply in Tigray, Ethiopian Water Technology Center Project, Participatory Forest Management in Belete Gara Oromia Region, and Water project Phase II.

116. *Italy*: has provided financial and technical assistance for various development endeavours in the country including the direct support to Arsi-Bale Rural development in Oromia region and Gilgel Giibe Hydro power II Project. The amounts of financial assistance (Loan) committed to Gilgel Giibe Hydro power II Project for the years 2005-09 is about 220 million EURO.

117. *Spain*: is as well provide bilateral financial supports specifically for two SLM related projects, PBS program and Rural Development programs with the total budget support of 11.75 million EURO in the years 2008-2010.

2.2.5 Base line funding currently Available from External Sources

118. The quantity of financial resources from external sources that will be readily available in the next 6 years for SLM-related projects implemented in the period up to 2015 was assessed and indicated in the table 13. A compilation of this data from both bilateral and multilateral sources could indicate possible funds available in the mentioned years. Because of the extended range of timeframe between project signing and closing dates, it was difficult to disaggregate the budget allocation for each year. These possibly available funds represented the "total costs" of various projects, which is a proxy of actual disbursements to SLM-related activities.

Table 13: General Funds Available in the next 6 years for SLMrelated activities from External Sources

S.N	External Sources	Currency	Total Amount in '000	Program Period
1	USA	USD	100,236	2005-09
2	Canada	USD	193,200	2007-10
3	Sweden	USD	86,349	2004-10
4	Finland	USD	11,150	2007-11
5	Norway	USD	53,650	2008-09
6	Austria	USD	8,200	2008-12
7	Germany	EURO	25,424	2005-09
8	UK	Pound	99,000	2007-12
9	Spain	EURO	11,750	2008-10
10	Italy	EURO	220,000	2005-09
11	*WB*	USD	938,380	2004– 15
12	WFP-MERET	USD	93,500	2003 -11
13	EU	USD	870,000	2008–13
14	IFAD	USD	72,900	2002 - 15
15	ADB	USD	110,500	2004 –15

Source: Extracted from MoFED, Bilateral and Multilateral Cooperation Departments, March, 2009

2.2.6 Donor Coordination Mechanisms

119. The ESIF-SLM will be implemented by bringing together federal, regional, woreda and local/community level stakeholders as well as development partners (Donors) within a multi-level cooperative partnership. Donor coordination mechanisms emphasize the need to build partnerships, particularly with the stakeholders that are most directly involved in the SLM projects/programs affected by land degradation. Many donors also provide funding directly to NGOs, CSOs and local authorities that shred vision of SLM within specific localities or watershed area. Some donors (GEF and WB) have built partnerships with groups of NGOs or public agencies or local institutions and communities that work on the SLM and provide small grants for those eligible for the funds. They provide financial assistance for those directly involved in implementation of activities and increases the flow of resources and ensures their more efficient use. Public institutions should therefore work with these groups to bring them into contact with the available opportunities, and should offer guidance on how to benefit from cooperation.

120. Therefore, NGOs and CBOs maintain strong ties to communities and should have work at the local level. They represent an important entry point in the strategy, and their collaboration is instrumental to the success of SLM programme activities.

121. Donors should assist public agencies in identifying NGOs and CBOs that have sufficient capacities to carry out projects successfully. Donors and public agencies should establish strong ties with local NGOs and CBOs. Involvement of NGOs/CSOs in SLM should start with the setting of local priorities and MoARD should accredit NGOs as partners to assist in implementing SLM projects and programs. The MoARD should link NGO/CBOs work plans to one another and to the SLM work plan at the MoARD. The MoARD should offer guidance and assistance on available funds, and means for obtaining access to them.

2.2.7 Foreign Direct Investment (FDI)

122. A report released by the United Nations Conference on Trade and Development (UNCTAD) shows that Foreign Direct Investment (or FDI) into Ethiopia has increased. Similarly, World Investment Reports (WIR) also illustrate the trends in foreign direct investment inflows to Ethiopia increased from US $255 million in 2002, to $465 million in 2003, to $545 million in 2004. Furthermore, while the total FDI inflows around the world have actually decreased since 2002, FDI in to Ethiopia has increased to $717 in 2008. Similar sources indicate that Ethiopia in 2009 will feel the effects of the global slowdown as real GDP growth dips to a forecast 6.9% from an estimated 9.6% in 2008. Weak external demand will weigh on economic expansion as many of Ethiopia's key export markets fall victim to a recession. In addition, aid inflows could decline as the fiscal balance sheets of developed nations come under strain.

123. According to the 2008 WIR, if new Official Development Assistance (ODA) inflows were allocated according to the countries priorities, the investment climate would be improved further still, by providing opportunities for foreign firms to invest productively in various sectors of development that related to SLM.

2.2.8 Limitation on Mobilization of External Funding Sources

124. The capacity to mobilize resources does not depend on overcoming all the barriers that have been identified, however, resolving some would serve to substantially improve the efficiency of raising financial resources and achieve the objectives of SLM in a more effective manner. Some of gaps and bottlenecks are discussed bellow.

125. *Delayed of budget release and inefficient utilization:* Financial limitation is very critical problem. However, not only resources limitation but also inadequate capacity to utilize available resources is observed to be a constraint.

126. *Number of Pre-conditions*: Donors have set various a numbers of pre-conditions and modalities to financing of SLM projects. As a result of changes in donor's funding modalities, the recipient country have to be fulfilled requirements to implement development programs/projects. This conditionality of financial resources is another barrier limiting the timely utilization of resources for SLM implementation.

127. *Global Economic crises*: The trends in global crises would drop the availability of financial resource delivery through time with at project level.

128. *Absence of matching funds or co-financing,* both at federal and regional level besides poor report and record keeping system are all issues to be considered. Slow rate of budget transfer and delay of release from donors and all Federal Institutions to beneficiary woredas is another barrier; there is also lack of trust from donors' side on the implementation capacity of implementing organizations.

129. *Stable and Efficient coordination mechanism*: The coordination mechanisms among public agencies and donors are not efficient and fully operational to execute various duties and responsibilities. The coordination and collaboration between the different institutional stakeholders including donors and NGOs is poor resulted in duplication of effort and conflicting approaches with regard to the use of incentives for SLM.

3. INNOVATIVE RESOURCE MOBILIZATION

3.1 Innovative Funding Sources, Instruments and Mechanisms

130. Various changes have taken place in the international development financing mode, prompting a shift towards the adoption of a more sustainable and structured programme of financing mechanism that is aligned with priorities of the beneficiary countries. Consequently, an additional set of new financing modalities, procedures and instruments have emerged for mobilization of new sources of funding in order meet long-term financing needs.

131. Explore funding information from non-traditional or innovative funding mechanisms will involve analysis of various global and/or national initiatives, funding partnerships and emerging funds including private initiatives that could provide opportunities for investments in SLM. Following, possible sources of non-traditional funding sources are assessed.

3.1.1 Compensation for Environmental Services (CES)

132. Identifying alternative financial mechanisms for funding SLM interventions on sustainable base is critical task in assuring the continuation of SLM investment in the country. Currently the bulk of the investment funds for SLM activities come from the federal government, donors and NGOs. Exploring and recommending possible alternative sources of funding that could be tapped to support the promotion and scaling up of SLM, particularly, those that would come under the heading of CES and 'payment for environmental service' is crucially important.

133. Ethiopia is a party to the Convention on Biological Diversity (CBD) (ratified 05/04/1994). The UNCBD is one of the principal international agreements for the conservation of biological diversity (biodiversity), requiring Parties to "adopt economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity" (Article 11). The UNCBD's COP has referred to the importance of economic incentives in a number of COP decisions, and has offered recommendations on the design and implementation of incentive measures.

134. Various possible fiscal or economic instruments are used as tools of generating financial sources for SLM. Among some of the alternative financial sources (innovative financing) that would be most applicable and considered as 'payment for environmental service' in Ethiopia would include:
   - Payments for carbon sequestration and Charcoal production
   - PES on domestic water supply and irrigation;
   - Deforestation taxes
   - Environmental levy on the entry fee to national parks/game reserves and protected areas
   - Appropriate PES on investment projects, industries and mining projects;
   - Improving PES in various industrial, commercial and service provision sectors within Municipalities' jurisdictions
   - Enforcement of regulations and laws pertaining to taxes

135. Recently, Payments for Environmental Services (PES) have received increasing attention as a means to 'correct' these market failures by translating non-market values of the environment into financial incentives for local actors to provide environmental services including SLM investment. PES is widely supported as one of the promising mechanisms for resource transfer for agriculture, nature management, mining and fisheries. PES of Ethiopia as a case where environmental degradation and poverty are firmly intertwined would be appropriate to address SLM interventions.

3.1.2 PES on Domestic Water Supply and Irrigation

136. Often, the term PES is used as broad umbrella for any kind of (market-based) transaction for environmental conservation including eco-certification and charging entrance fees of nature parks to tourists. Here, the focus is on PES mechanisms that comprise payments to providers of hydrological services based on contracts (domestic water supply and irrigation water for crop and fruit production) specifying restrictions on the use of water resources, or environmental results.

137. Currently, water resources in Ethiopia are open access resources contributing to unrestricted use which may lead to depletion of some of these resources. This is meant to change open access of irrigation water in some part of the country such as Central Rift Valley with the introduction of water fees for water users. This could be a good practice of a market-based PES schemes which seem promising instruments for environmental conservation as they establish a direct link between sellers and buyers of ES, and may contribute to income redistribution.

138. Setting up PES in accordance with the overall regulatory framework of Ethiopia on water, land, forest and agriculture is timely issue to compensate for environmental problems. One of the feasible possibility for alternative funding source is set PES on irrigation water for horticulture, crop and fruit production in Ethiopian where appropriate, specially in areas like Central Rift Valley where Irrigated agriculture mainly occurs along the tributaries of Lake Ziway, i.e. the Meki and Ketar river, along the shores of Lake Ziway and along the Bulbula river connecting Lake Ziway with Lake Abyata. The development of irrigated agriculture has been associated with the rapid decrease in lake levels. For example, the size of Lake Abyata has reduced by approximately 50% during the last decade (*Jean Carlo R. de Francisco, Jan. 2009*). The gradual decline of wood stocks, over-grazing of common

pastures and lack of proper soil management has resulted in the sharp increase of the area with degraded land.

139. Likewise, other intensive commercial and state owned irrigation schemes (agriculture and horticulture) will cause rapid pollution of surface flows and slow but persistent pollution of groundwater flows with nitrogen and pesticides; causing pollution and diseases to people residing around streams. Hence, setting appropriate PES for irrigation and domestic water supply in these commercial farms including flower farms will equally important.

3.1.3 Payments for Carbon Sequestration and Charcoal production;

140. Charcoal meets an overwhelming proportion of energy needs (80 percent of urban households' energy needs) in Ethiopia where its production and forest clearing action remain a risky and highly hazardous environmental problem. With inefficient charcoal burning/ production methods such as earth-mound kilns, only 10 percent of the wood used in charcoal production is actually converted into charcoal. The rest goes to waste. This gives rise to severe soil erosion and land degradation, general forest destruction exacerbating climatic changes.

141. Besides a 2007 proclamation on the conservation, development and utilization of forests, Ethiopia is yet to ratify its policy on charcoal. Currently, a number of ministries – MoARD, EPA, MoFED, regional and woreda administration, the police – handle controlling of charcoal production and transportation by setting a number of road side check points in an uncoordinated manner. They confiscate as a penalty and sell charcoal as PES to compensate for the ecosystem.

142. The REDD Programme is intended to support demonstration of reduction the emission activities through explicit aim of promoting market-based REDD and payment for ecosystem services. Hence, efforts have made to explore opportunities through carbon finance' companies which advocates policies to reduce deforestation using economic incentives to encourage countries to protect their carbon reservoirs in standing forests. In doing so, the needs of local and indigenous communities should be addressed when action is taken to reduce emissions from deforestation and forest degradation.

143. Therefore, strengthening the measures on carbon sequestration and charcoal production and setting more appropriate PES (charging sellers/buyers of ecosystem services and products) is an innovative form of financial resources and promoting natural resource conservation and creating markets.

3.1.4 Deforestation Duties

144. Introduction and applying a higher tax rate on illegal forest exploitation (logging activities and deforestation etc.) where disincentive activities that cause deforestation can carry on. In general, deforestation duties are unit payments applied to either number of trees or each unit of local land size or size of wood extracted. They can be partially exempted if the logging enterprises/person engages in reforestation within a certain period.

145. For instance: in Ethiopia, permissions are needed for tree cutting and are obtained from the local administration/woredas and MoARD offices at different levels. Individuals (those

who live in locality) ask for permits from the local administration/MoARd, which allow them to cut 'forest' trees. However, the costs/PES permits are negligible (sometime with out payment). Hence, setting the use of 'deforestation taxes' is preferable and considered as PES where the receipts from these proposed deforestation taxes go into forestation programs.

3.1.5 An Additional entry fee to Parks/Protected areas

146. There are lots of such areas across the country. An additional environmental levy on the entry fee to national parks/game reserves and protected areas to pay for eco-systems or exemption of some taxes of eco-tourisms are another PES which might be encouraged the implementation of SLM activities within neighboring buffer zones or to improve the environmental service provided by respective reserved areas. In such protected areas, charge schemes can include entrance fees, concession payments for tourism, and hunting and fishing fees. .

3.1.6 Appropriate PES in Economic Development such as industries, commercial and mining projects

147. Any investment projects (commercial, industrial and mining sector) have to be critically evaluated and judged by EPA and concerned public regulatory agency through Environmental Impact Assessment (EIA) or an independent and accredited third party and institutions on Climate Change, proven by a baseline study and validated by monitoring reports both before establishment and after implementation.

148. The government or concerned agency (EPA) has to apply direct regulation with the aim to cut back pollution and environmental hazards (effluents products) by reducing the current situation to an optimal level. For instance, Ethiopia's industrial sector is made up of small, scattered and a lot of obsolete enterprises providing valuable employment and production, but contributing to pollution. Hence, the government (EPA) and other independent regulatory party should regulate the environmental pollution with appropriate use of conventional regulatory mechanisms through PES (e.g., taxes).

3.1.7 Improving PES on Managing Adverse Impacts of Municipal Waste

149. Municipalities have collected various levies and service charges in the form of taxes and penalties within their jurisdictions and possess relatively full independence over management of their funds for approval of allocations or expenditure. Even though, a detailed assessment of the municipalities budgets was not carried out during this study, municipal budgets could contribute sizeable funding as innovative financial sources for environmental/SLM activities through collection of various PES in the form of taxes and penalties within and around urban areas. Municipal budgets may therefore be considered as an entry point for mobilizing funds for environmental rehabilitation and SLM activities.

150. Waste management is an integral part of environmental protection. Although complete information on the status of waste management and payment for services in different cities and towns is not available at the moment, a recent report by the Addis Ababa City Administration has clearly indicated that PES has been done on municipal waste disposal through both privately organized waste handler and municipal services which can

transport, reprocess, handle and manage prevailing waste. Most of the municipal green wastes which are mixed with wastes such as plastics, rubber and metals could be sorted and collected separately and used for composting.

151. Among others also, imposing vehicle and fuel taxes as PES on a large numbers of various types of vehicles is good entry point for PES. Especially, vehicles with obsolete and old standards are contributing to high carbon emission. Hence, the municipalities and other relevant government institutions has to design more inclusive and appropriate vehicle import and fuel taxes in future so as to raise additional funds and revenues for the PES. This could be another potential financial sources raised as taxes for environmental measures.

3.1.8 Market facilitation for PES

152. Markets for SLM related products are not well developed in Ethiopia. Provision of ecosystem services involves tradeoffs that need to be carefully considered before sellers decide to enter into the PES market. For example, planting trees for eco-tourism will take land area that could be used for producing agricultural products. Hence, a systematic analysis of opportunity costs and priority of the geographic areas should be made where PES would be the best option. Producers are reluctant to invest in SLM where it implies higher production costs where access to markets for specific SLM products is limited. In general marketing of SLM related products is affected negatively by the overall low capacity that traders have in marketing agricultural inputs and outputs, there may be scope for policymakers to identify appropriate interventions to facilitate market development. Increase the capacity of local buyers, intermediaries and sellers of ecosystem services to participate in markets is an area to consider for sustainability of resource mobilization.

153. Reasonable transaction costs. The costs that ecosystem service buyers and sellers incur to find each other, negotiate contracts and monitor agreed measurements of quantity and quality are usually quite high. The transaction costs are especially high for smallholder suppliers of ecosystem services (Waage, et al., 2006). Strategies of reducing the high transaction costs include organizing farmers in groups of ecosystem service providers. Collective provision of ecosystem services realizes economies of scale by reducing the transaction costs and also increases the bargaining power of small producers (Swallow, et al., 2005).

154. Local benefits of PES: The ecosystem services should have local benefits in order to increase their local ownership. Some of the global ecosystem services like carbon sequestration and biodiversity may not have significant direct benefits locally. Hence if the forest is under a PES market, an arrangement could be made to allow local residents to collect firewood from dead trees. Such local benefits could help to foster local ownership of the forest. Natural resources providing ecosystem services with no local benefits are likely to be sabotaged and/or encroached and enforcement of their conservation could be hard.

3.2 Policy Recommendations

155. *Enforcement of Regulations and laws pertaining to taxes and Royalties:* Apart from the above mentioned innovative sources of financing, it would also be necessary to explore ways to encourage each woreda administration and municipality to invest part of their revenue or capital investment grant they receive from the federal/regional government in promoting SLM and environmental protection within their area. Accordingly, access to the budgets of decentralized government entities, such as woredas/district budget or municipalities, would provide useful information on alternative funding sources, since these are often involved in the provision of services to the local population. Local governments may also constitute an independent source of funding, since they have fiscal autonomy.

156. *Integrate emerging issues of Climate change adaptation and mitigation*, bio-fuels and food prices, as well as opportunities for PES, ecosystem and landscape approaches, sustainable agriculture intensification, sustainable resilient agro-pastoral systems, agro-biodiversity, and relations of all these to food security.

157. *Explore options for subsidies or taxation to promote SLM*: Some sectors or product value chains may be amenable to subsidization or taxation, particularly where there is scope to identify the extra costs of adoption of SLM practices or land degradation. The cost, economic impact, and feasibility of any such system would have to be explored in detail but could offer opportunity to further incentivize SLM adoption.

158. *Identify and implement regulatory measures which may reduce land degradation*: Increased regulation, including penalties, for industries, quarries and mining projects that are contributing significantly to land degradation and environmental pollution. The costs and feasibility (including equity considerations) of such options should be explored prior to development of any regulatory regime. Enforcement of such regulations should also be strengthened. On the other hand, the strengthening the enforcement of taxes/royalties regulations and laws pertaining to the land, forest, industries, investment projects, water and irrigation schemes and other environmental issues will provide wide range of PES in both rural and urban areas.

4. RESOURCE MOBILIZATION STRATEGY

4.1 Resource Mobilization

159. In preceding sections, various financial sources, funding modalities and approaches to mobilize internal, external and innovative sources of funding were discussed. Currently, mobilization of most of external development assistance funding requires some form of internal investments in the form of financial contributions (co-financing) or in the form of in-kind contributions to SLM programs and projects. Furthermore, many donors are shifting towards programme-based approaches and budgetary support as opposed to project-based funding, raising further the importance of mainstreaming of SLM into the appropriate national instruments. Besides, the international development financing modes shift towards the adoption of a more structured programme of financing mechanism that is aligned with priorities of the beneficiary countries. As a result, an auxiliary set of new financing mode that relies on domestic sources have to be adopted for mobilization of new sources of funding to meet long-term financing needs of ESIF-SLM on sustainable.

160. A resource mobilization strategy serves as planning framework for sustainable investment in ESIF-SLM and could be used to guide the prioritisation, selection and design of new projects and programs based on available resources. To this effect, the concepts and principles of SLM should mainstreamed into the natural resource based development plans and activities of the Federal, Regional and Woreda Governments. Strengthening of cross sectoral multi-stakeholder partnerships, operating at multiple levels (federal, regional, woreda and community) cooperating and collaborating in the promotion and scaling up of SLM is critically important.

161. The mobilization of substantial resources for SLM implementation requires concerted, coordinated efforts by governments, development partners and other key stakeholders. There is a growing potential to mobilize additional funding for SLM implementation through non-traditional sources and innovative methods. This, however, requires governments to enter into focused partnerships with actors (private, CSOs and NGOs) that have not previously been involved. Success will therefore depend largely on a demonstration of mutual benefit, trust and accountability.

162. Following are strategic objectives to implement the resource mobilization in the perspective of both internal and external resource and to ensure their long-term sustainability.

4.2 Enabling Environment for Resource Mobilization

163. The existence of an effective enabling policy, legal, regulatory, institutional and financial environment plays an important role in mobilizing resources for SLM. Ethiopia has given a higher priority on SLM/national action programme (NAP) issues in PASDEP, Ethiopia's poverty reduction strategy programme for 2006-2010. There is substantial increase in financial resources for SLM-related investments due to improved enabling environment for

multilateral and bilateral partners to work with the Government of Ethiopia and to establish a national framework for scaling up investment for SLM and NAP priorities in the PRSP.

164. Resource mobilization strategy enables various stakeholders to make use of financial resources so as to resolve constraints and creating enabling environment for mobilization of more financial resources to SLM projects sustainably. It should be explicable that resource mobilization need not be restricted to increasing monetary flows only, but may also cover human resources and capacity as well as technical resources.

165. As a result of the ongoing improvement in the enabling environment for development partners to work with the Government of Ethiopia, mainstreaming and partnership-building on SLM have a higher priority on National Action Programme (NAP) issues in PASDEP (the Plan for Accelerated and Sustained Development to End Poverty) – Ethiopia's poverty reduction strategy programme (PRSP) for 2006-2010. The case in point is that Federal capital budget expenditure performance during fiscal years 2001/02-08/09 had shown an increasing pattern amounting for more than US$ 4404.1 million allocated to SLM-related investments under key sectors within the plan period. Similarly, a substantial amount of financial resource has been pooled together from multilateral and bilateral sources for SLM related projects and programs amounting to about USD 2730 million in the years 2002-2015 implying big emphasis were given on mobilization of resources to implement SLM-related investments in the country.

166. Experience has demonstrated that although mainstreaming and partnership-building are lengthy processes, they are effective means of mobilizing financial resources for SLM implementation under current mechanisms for delivering development financing, particularly within the framework of poverty reduction strategies. The major pillars (enablers) facilitating resource mobilizations are described below.

4.2.1 Mainstreaming

167. Mainstreaming is a continuous effort to integrate SLM and other Environmental convention in to priorities of Government decision-making and the political culture. Experience has shown that mobilization of substantial flows of finance cannot be achieved without mainstreaming of SLM programs in national and international policy, planning and budgetary Processes and overarching national development frameworks. Government ownership of this process and support from development cooperation partners is fundamental to success.

4.2.2 Partnership-building

168. A partnership is another opportunity that must be built to enhance the mobilization of resources. Establishing a partnership among government, bilateral and multilateral development cooperation, the private sector and the civil society is crucial to achieve specified development outcomes and impact at all levels. The mobilization of substantial financing for SLM implementation requires concerted, coordinated efforts by governments, development partners and other key stakeholders. This requires governments to enter into focused partnerships with actors that have not previously been involved. Success will therefore depend largely on a demonstration of mutual benefit, trust and accountability.

169. The government of Ethiopia has made continuous efforts to improve donor partnership arrangements in order to enhance the effectiveness of partnership mechanisms, expand the timeframe to allow for greater impact and strengthen the relevance to development agendas including the SLM strategic objectives, mainstreamed strategies and national priorities.

4.2.3 Knowledge Management

170. Knowledge management is one of the pillars that enable resource mobilization and implementation of SLM activities. Results can only be achieved if all institutional activities are backstopped and substantiated by technical and non-technical knowledge. SLM constituencies need to be aware of and able to access the development financing instruments available at country levels in order to leverage investments, identify traditional and innovative sources of funding from which they could benefit, and articulate the arguments needed to influence policy reform.

4.2.4 Scaling-up of best Practices

171. The scaling up covers both geographic scaling-up, to cover a wider physical land area, and thematic scaling-up, in which activities are undertaken on specific SLM-related themes that are of wider relevance than the pilot geographic SLM interventions selected by the communities. The thematic interventions may include studies, surveys, technologies, applied or action research, training or other interventions in a specified SLM or SLM planning theme. Therefore, it is important to disseminate the good management practices and technologies in to the “high potential areas” where long-term food security is under threat from land degradation. To do this will require incentives, institutional mechanisms, capacity building, and financing to facilitate wider adoption across the country.

172. To this effect, the Ethiopian Agricultural Research Institute and MoADR have been working with development partners, particularly GTZ, SIDA, World Food Program, CIDA, and UNDP and FAO to develop best management practices for sustainable land management. These efforts have led to successful models for improving sustainable land management, focusing largely on the food insecure areas.

4.2.5 Harmonization of Policies

173. Improving the overall policy context for SLM has positively influenced budgetary reform processes and national development planning cycles. Analyzing all relevant policies have a potential impact on natural resource management and sustainable development –and proposing improvements to the overall policy context of the country and improving the enabling policy framework in support of SLM. Hence, in future Ethiopia will have undertaking harmonization of public policies with respect to creating enabling environment for SLM.

4.2.6 Participatory Decision Making

174. Including representatives of farmer organizations and community members in decision making that set priorities for SLM activities, technologies, research and extension programs. For example, a committee of farmers, research, extension service providers at woreda/district or kebele (smallest admin unite) level could be formed to provide coordination and guidance on the SLM research and extension activities in local areas. This could create higher motivation and on-farm research to actively involve community and extension service providers and increase the focus on SLM. This could in turn create an enabling environment for SLM to have local resources as budget and enhance scale up of SLM activities.

4.2.7 Market facilitation and Payment for Ecosystem Services

175. There is a large potential for PES involving both public and private buyers and sellers in Ethiopia, however PES markets have not been well established in many countries due to a number of constraints. These include lack of capacity, high transactions costs, lack of data on the potential of PES, weak collective action of smallholder suppliers and sellers of PES, among others.

4.3 Plan for Implementing the Strategy

176. Resource mobilization strategy will be put into full operation by bringing together development partners, federal, regional, woreda and local/community level stakeholders within a multi-level cooperative partnership. Implementation of resource mobilization strategy has to be focused on the country-level interventions and the facilitation of donors and country agreements to finance SLM projects. In addition to the available current resources, the implementation of resources mobilization strategy will broaden the funding bases through identification of the most promising sources of financing to complement flows of official development assistance to SLM.

177. The plan for implementation of resource mobilization strategies has to be aligned with ESIF which is planned to last 15 years and serves as planning framework for sustainable investment in ESIF-SLM. During the implementation period the following major area will also been focused on simultaneously.
    - Promoting and scaling up (improve availability of appropriate SLM technologies, research and adaptation) SLM through the planning and implementation of area based SLM investment projects on priority areas;
    - Developing the SLM knowledge base (raising public awareness and information on SLM and environmental convention) creating the necessary enabling policy, legal, institutional and financial environment, and building the capacity of the advisory and other support service providers. It would also initiate the process of planning and implementing area based investment projects for the promotion and scaling up of SLM within those areas identified as in immediate need of priority attention.
    - Building on the experience gained from previous resource mobilization performance to review, and further improve, the enabling environment and institutional capacity. Expanding the area managed according to the concepts and principles of SLM through

the planning and implementation of additional area based SLM investment projects will enhance mobilization of substantial finance for SLM implementation

- Consolidating the achievements and success made during different phases of implementation while addressing the remaining knowledge, policy, legal, institutional and financial barriers and bottlenecks would also improve financial flow to wards SLM.
- Build a broad based alliance for resource mobilization and implementation of the SLM through: Strengthening the coordination structure of national, regional, woreda and community SLM Platforms including sharing experiences of the ESIF-SLM with other countries and international partners.

5. REVIEW OF KEY POLICY RECOMMENDATION

178. Strengthening the Existing Coordinating Mechanisms and Structures of National and Regional SLM Platform:

- Efforts should be made to take advantage of existing capacity -- government structures, Donors, NGOs, CBOs and other institutions at all level that have a stake in land management and environmental protection -- in planning and implementing the CSIF-SLM strategies and projects designed to implement or enforce the obligations and the provisions of the international conventions.
- This will help avoid unnecessary overlap and duplication of effort, as well as ensure continuity in determining coordinated priorities and follow-up action in an integrated manner.
- This will also help mobilization and avoid misallocation of resources where a non-integrated approach may result in the creation of redundant institutions that will not necessarily enhance existing capacity.

179. ***Mainstreaming and Scaling up SLM Policies***: Mainstreamed the SLM issues within and across national strategies and sectoral policies, laws/regulations on agriculture (livestock, forestry, inland fisheries, wildlife/protected area management), tourism, energy, and rural infrastructure, trade, market, research, and land tenure, public expenditure frame-works, and across development agencies for successful development strategies and programmes.

180. Building demand for SLM at the grass-roots level

- Greater awareness of the benefits of SLM among land users, ultimately leading to increased adoption of SLM technologies or practices.
- Promote essential SLM practices to improve demand and create greater understanding of root causes of land degradation. This can create better informed demand for SLM practices or technologies. This is a long-term process that needs to be implemented through practical training involving a wide range of stakeholders including farmer organizations and community leaders.
- Create incentives to build SLM demand through education and training community members may still to adopt some SLM technologies. There may be a need to use regulations or incentive based approaches to promote adoption of essential SLM practices.

181. Explore Economic Incentives and Market Facilitation to adopt SLM

- Identify various payments (subsidies, taxation) for ecosystem services (PES) as a means of both recognizing the services provided by ecosystems and encouraging more

sustainable use of natural resources. The attention has mainly be given in protection of biodiversity, carbon sequestration and watershed protection services. There is substantial potential for increasing SLM through PES activities.

- A number of PES programmes could be designed around biodiversity conservation with joint agreements between government owned forest reserves or game parks and communities in the proximity of the protected area offers a large potential for ecosystem service market involving local buyers and sellers. These arrangements are likely to strengthen the enforcement of the poorly enforced conservation regulations in public natural resources involving both public and private buyers and sellers.
- Carbon sequestration ecosystem services could have also direct positive impacts on SLM investment.

182. Strengthen farmer-extension-research linkages to generate appropriate SLM technologies

- Increased supply of appropriate SLM technologies and practices for dissemination and greater responsiveness of research and extension systems to SLM needs as identified by land users.
- Formulate policies requiring all researchers conducting on-farm research to actively involve extension service providers and farmers and increase the focus on SLM. Provide extension services and farmers a specific role and budget to be involved in or contract on-farm SLM research activities.
- Include representatives of farmer organizations in decision making forums that set priorities for agricultural and SLM research and extension programmes. For example, a committee of farmers, research, extension service providers at zonal or woreda level could be formed to provide coordination and guidance on the SLM research and extension activities in local areas.
- Strengthen exchange of experience among best practicing and performing regions, woredas or localities with regard to SLM activities using local technologies that could be easily adopted.

183. Promotion of Land Certification and women's land rights in land registration

- Strengthening the existing process of providing landholding certificates in all regions of the country including targeting provision of Stage 1 certificates and permanent certificates of land administration.
- Increasing women's land right helps to improve land management and increase productivity.
- Establish a process that supports greater dialogue and negotiation among civil society representatives of women farmers, government elected leaders and land administrators, and customary authorities to build political support for increased land rights for women.
- Registration of land rights has to take into account women's rights to land ownership. One approach to address this problem is to stipulate that married men should only receive land titles that also include the names of their wives. Even though this may be hard to implement due to the influence of the customary institutions among government officials, the governments need to enact regulations to enforce their stated policies of gender equality.

184. Promotion of tenure security

- Land tenure policies that reinforce the security of tenure give land users greater assurance that they will benefit from long term investments in SLM.

- Avoid land redistribution and other policies that undermine the security of landholders and the functioning of land rental markets. Since land rental markets generally help improve access of land-poor households to land and increase productivity and efficiency, policies that do not support this should be avoided.
- Explore options for subsidies or taxation to promote SLM: Some sectors or product value chains may be amenable to subsidization or taxation, particularly where there is scope to identify the extra costs of adoption of SLM practices or land degradation. The cost, economic impact, and feasibility of any such system would have to be explored in detail but could offer opportunity to further incentivize SLM adoption.
- Support development of new markets for SLM friendly products: Support for development of new markets or the linkage or development of producers' organizations to penetrate new markets for SLM friendly products. Public sector purchasing of such products – where economically feasible – may also help strengthen such markets.

6. MONITORING IMPLEMENTATION OF THE STRATEGY

185. Development of effective SLM monitoring system is critical to enable stakeholders (government, donors, CSOs and communities) to identify priority problems, undertake effective responses, and assess the impacts of those responses for implementing the ESIF – SLM as well as monitor and evaluate the results and update/revise the ESIF as needed in the light of experience gained from its implementation. The initial purpose of monitoring ESIF– resource mobilization strategy is to provide a comprehensive and nation-wide assessment, on the result of ESIF, of the present nature, extent and severity of the different land degradation processes affecting SLM within Ethiopia. This would serve as the base line against which to monitor and assess changes in land degradation as a result of implementing the ESIF. Furthermore, decentralization policies are giving local governments and communities in Ethiopia more authority and control over protection and use of local natural resources.

186. A participatory and cost-effective SLM monitoring system is therefore an important input to SLM policymaking so as to create all inclusive and bottom up community land management decisions. The fact that communities and community organizations have crucial roles to play in influencing land management, controlling environmental externalities, organize labour groups to involve in conservation measures and other management decisions related to local SLM implementation will be a logical ground to give due emphasis to adopt a participatory monitoring strategy.

187. The implementation strategy of the full range of SLM related activities would require integration of community-based natural resource management (NRM) and community-driven development programmes. Such a system could also combine a scientific approach based on appropriate technologies and practices as well as development of a full land degradation monitoring and evaluation system, which would likely require extensive work and may be a long term process but it nonetheless forms an important element of the SLM (M&E) system.

7. References

1. Appraisal of Payment for Environmental Services related to water management in the Central Rift Valley, Ethiopia, Strategy & Policy Brief #4, November – 2008.
2. Environmental Policy of Ethiopia. Environmental Protection Authority, EPA (2003), Addis Ababa.
3. Federal Democratic Republic of Ethiopia Ministry of Agriculture and Rural Development (MoARD), Ethiopian Strategic Investment Framework (CSIF), SLM Secretariat, August, 2008.
4. Federal Democratic Republic of Ethiopia Ministry of Finance and Economic Development (MoFED), Budget Proclamations, Directives and Documents, Last Modified January 26, 2008.
5. Federal Democratic Republic of Ethiopia, Central Statistical Agency (CSA), 2007 Statistical Abstract, Addis Ababa, 2008.
   GEF Strategic Investment Program for Sustainable Land Management in Sub-Saharan Africa (SIP), Country SLM Investment Framework Guidelines, Draft 13 July 2006.
6. Guidelines, Developing Integrated Financing Strategies for Sustainable Land Management. An Introduction for Least Developed Countries and Small Islands Developing States, UNDP-GEF, March 2008.
7. Integrated Financing Strategy for combating Desertification in Lebanon, (GM – UNCCD), and in partnership with UNDP,
8. Integrated Financing Strategy for Sustainable Land Management, Global Mechanism for the UNCCD 2008.
9. Pan-Tropical Scoping Study of Compensation for Ecosystem Services: Conceptual Foundations,
10. Policies for Scaling up Sustainable Land Management: A Resource Guide for Policymakers Final draft, June 6, 2008.
11. Preconditions for a Payment for Environmental Services establishment at Central Rift Valley Ethiopia, Jean Carlo Rodriguez de Francisco, 29 January 2009.
12. Progress report on the Global Mechanism of the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, IFAD, Rome, 13-14 February 2008.
13. Regional initiative on financial resource mobilization for strengthening the implementation of the UNCCD in the regional implementation annex V for Central and Eastern Europe (CEE), GM & UNCCD, June 2008.
14. Searching for Tenure Security, The Land System and New Policy Initiatives in Ethiopia. Forum for Social Studies Discussion Paper, No. 12, Dessalegn Rahmato (2004).
15. Sustainable Land and Natural Resources Management - Supporting GoK in developing a Strategic Investment Framework. FAO brief for Meeting of EDCG Group on December 8, 2008.
16. TerrAfrica, Guidelines series, Policies for Scaling up Sustainable Land Management: A Resource Guide for Policymakers. Prepared by FAO in cooperation with IFPRI, November 26, 2007.
17. What is driving the Charcoal Industry into a Dead End? Lesson from East Africa's Sustainable Charcoal Business, World Agro-forestry Centre – (ICRAF 2004).
18. Why Past Environmental Rehabilitation Programs Have Had Limited Results. FSS, Civil Society and Environmental Policy Dialogue. Government and Environmental Policy. Consultation Papers on Environment, 5: 13-19, Ababu Anage (2004).

8.

FINANCIAL DIAGNOSTICS AND FORMULATION OF RESOURCE MOBILISATION STRATEGY FOR SLM IN ETHIOPIA

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This document was developed in the context of the GM's CSIF Approach for Resource Mobilization Strategy and Mainstreaming of Sustainable Land Management in Ethiopia. It is designed to provide national context, tools, methods and information on the funding opportunities from national, bilateral and multilateral sources as well as from non-traditional funding mechanisms (existing and emerging) that could contribute to the financing of ESIF-SLM and other UNCCD related investments process.

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ACRONYMS

ADLI	Agricultural-development led industrialization
AMAREW	Amara Agricultural Research, Extension and Watershed
AMIP	Agricultural Marketing Improvement Programme
CSIF	Country Strategic Investment Framework
CBO	Community-based Organizations
CES	Compensation for ecosystems services
CRDA	Christian Relief and Development Association
CSA	Central Statistical Authority
CSE	Conservation Strategy of Ethiopia
CSO	Civil Society Organization
EDRI	Ethiopian Development Research Institute
EFAP	Ethiopian Forestry Action Plan
EFAP	Ethiopian Forestry Action Programme
EIAR	Ethiopian Institute of Agricultural Research
ELTAP	Ethiopia Land Tenure and Administration Program
EPA	Environmental Protection Agency
ESIF	Ethiopian Strategic Investment Framework
FSCB	Food Security Coordination Bureau
IBC	Institute for Biodiversity Conservation
MERET	Managing Environmental Resources to enable Transition
MoARD	Ministry of Agriculture and Rural Development
MoFED	Ministry of Finance and Economic Development
MoWR	Ministry of Water Resources
MRE	Mining and Rural Electrification
NAP	National Action Program
NMA	National Meteorological Agency
NRD	Natural Resource Development
NSC	National Steering Committee
ODA	Official Development Assistance
PASDEP	Plan for Accelerated and Sustained Development to End Poverty
PBA	Program-Based Approach
PBS	Protecting Basic Services
PES	Payments for Environmental Services
PIP	Public Investment Program
PSNP	Productive Safety Net Program
RUFIP	Rural Financial Intermediation Programme
SDPRP	Sustainable Development and Poverty Reduction Program
SIP	Strategic Investment Program
SLM	Sustainable Land Management
SNNP	Southern Nations, Nationalities, and Peoples
UNFCCC	United Nation Framework Convention on Climate Change

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3. NATIONAL CONTEXT

1.1 Country brief: Status of the NAP (CSIF) and Extent of Land Degradation

188. Within Sub-Saharan Africa Ethiopia is considered to be one of the countries most seriously affected by land degradation. By the mid 1980s some 27 million ha or almost 50% of the highland area was considered to be significantly eroded, of this 14 million ha was seriously eroded and over 2 million ha beyond reclamation. Currently it is estimated that some 30,000 ha are lost annually due to soil erosion, while over the whole country some 1.5 billion tons of soil are removed annually by a variety of erosion processes. Soil erosion is the most visible sign of land degradation, however a variety of other degradation processes are at work and the soil erosion problems cannot be tackled without recognising, and addressing, these underlying degradation processes.

189. The Ethiopian Strategic Investment Framework (ESIF) - Sustainable Land Management has been formulated with the goal of serving as a national level strategic planning framework that is to be used to guide the prioritisation, planning and implementation, by both the public and private sector, of current and future investments in SLM with the aim of addressing the interlinked problems of poverty, vulnerability and land degradation at the rural community level. The development objective of ESIF is improving the livelihoods and economic well-being of the country's farmers, herders and forest resource users by scaling up SLM practices and rebuilding Ethiopia's natural capital assets by overcoming the causes, and mitigating the negative impacts, of land degradation. While the overall environmental objective of the ESIF is to: rebuild Ethiopia's natural capital assets by overcoming the causes, and mitigating the negative impacts, of land degradation on the structure and functional integrity of the country's ecosystem resources. And its ultimate purpose is to:

    a. Reduce the incidence of poverty and vulnerability
    b. Scale up successful SLM technologies and approaches
    c. Develop a common shared vision and program framework for mainstreaming the concepts and principles of SLM
    d. Align and harmonise current, and future, support for SLM
    e. Promote cross-sectoral and multi-stakeholder cooperation and collaboration through multi-level partnerships
    f. Guide the prioritisation and cost effective targeting of investment resources for SLM.

190. To this effect ESIF combating land degradation and promoting the sustainable use of Ethiopia's land resources (specifically its soil, water, plant and animal resources) under the ESIF should be based on the following key guiding principles of ecological sustainability, social and cultural sustainability, economical sustainability, livelihood sustainability, as well as institutional sustainability. Thus its essential prerequisites are: aspiration for change, active community-based participation, leadership, social capital, secure land user rights, supportive policies, ecosystem and cultural diversity, quick and tangible benefits, an avoidance of perverse incentives, understanding and addressing the root causes, and a multi-sectoral and integrated approach.

191. One of the key principles of the ESIF is that there is no universal set of best SLM practices that should be promoted as standard by each investment project. Instead individual SLM investment projects would be expected to take into consideration the local ecological and socio-economic circumstances when determining which best practices are appropriate for scaling up within a specific geographic area. Likewise such projects, particularly those undertaken in farming areas, would be expected to identify and promote a balanced mix of SLM agronomic, vegetative, structural, and management technologies. In the past there has been an over reliance on the promotion of costly physical soil and water conservation structures with insufficient attention given to lower cost alternatives (e.g. grass strips, conservation tillage and other improved crop husbandry practices).

1.2 Financial flows towards SLM

192. Financing sources can be categorized as external and internal. Stocktaking on existing and potential internal and external financial resources were made in the number of relevant public and donors organizations to indicate the type of activities and amount of funds associated to various activities that can be related to SLM directly or indirectly.

193. As a rule, government agencies request budget for specific program/project activities based on the sectoral plans or country-wide strategy such as PASDEP. To this effect, owing to the thematic breadth, the scope and the national definition of the SLM, and its linkage to other conventional principles on environment issues, many of the programs/projects that have been carried out currently by MoARD (NRD, PSNP, and irrigation), MoWR, and MoME (ministry of mine and energy) can be considered as contributors to SLM and related practices. Existing financial flows refers to the magnitude or amount of financial resources that are available from various sources (treasury, revenue, external assistance, loans) for the execution of SLM-related activities in Ethiopia. Because funding modalities differ from source to source, the type of financial resource can range from grants to loans. Different types of activities under different sectoral departments, programs/projects can be identified as SLM or related activity.

194. Conventionally, most of federal funds to SLM related activities will be mobilized through the MoARD, the MoWR and MoME (ministry of mine and energy) programs and projects. Given that, the public budget is the primary source of potential funding in to SLM relates sectors during PASDEP plan period 2006/07- 2009/10. This financial flow has substantiated the importance and the level of relative budget share of these sectors compare to the overall total government budget expenditure. The actual total capital budget expenditure by the above three institutions was 4,404.1 million USD and accounts for 31.7% of the total Federal capital budget expenditure by all public agencies in the plan period (2001-09) which was 13,886.7 million USD. Large proportion of the federal funds is allocated to investment/ capital expenditures by these institutions compare to other non-SLM related sectors.

195. The following table indicates federal budget allocated to the above mentioned key sectors with their respective major activities. The financial figures, at best used as a good proxy indicator of funds allocated for SLM and related activities. And it would be possible

to identify and consider among these activities and budget expenditure to start a more thorough financial analysis.

Table 4: Financial flows (Government Capital Expenditures from all sources) towards SLM-related Sectors during 2001/02- 2008/09 (Million USD)

Key Organization	Major Activities	Total Amount (2001-09)	Link to SLM	2007/08	2008/09 Current budget
MoARD and Natural Resource	Conservation of natural resources, food security, research and extension services, promotes sustainable use of land, water, biodiversity, Disaster management, combat desertification, conservation of Biodiversity, Environmental Protection.	2560.8	Major activities and budgets are direct supports to SLM Activities	436.0	617.6
Water Resources	Promote clean water and sanitation, river basin studies, Support water harvesting and small-medium scale irrigation large scale dams and irrigation works, climate prediction activities	1223.9	Direct support to sustainable use of land and water,	240.3	378.9
Mine and Energy	Disseminate efficient and appropriate energy technologies and facilities, and develop renewable energy sources, reduce deforestation	619.5	Indirect supports environmental and forest resources	126.8	155.8
	Total expenditure of the 3 key sectors	**4404.1**		803.1	1152.4
	Total Federal Expenditure of all Public Organization	**13886.7**		2710.2	3929.6
	% Share of the 3 key sectors	**31.7**		29.3	29.6

Source: MoFED, Budget Consolidation and Economic Sector Departments, June, 2009
Note Average official exchange rate was taken as 1 USD = 8.9 Eth. Birr for 2001/02 – 08/09

196. External sources of funding are another financial source obtained from outside the country sources, such as bilateral and multilateral donors, multinational corporations, international NGOs, charitable foundations and the like. These sources have traditionally contributed the bulk of funds for SLM and environment-related activities in Ethiopia .Accordingly, project funds are available from a wide range of financier, including multilateral and bilateral donors, international NGOs and CBOs on the base of certain pre-conditions where the development proposals have to meet specified criteria of the funding agencies.

197. Analyses of Financial Flows from External Sources were made to identify the funding sources, the modality/instruments of funding, additional funding opportunities and to indicate potential resources. Major multi-lateral and bilateral donors and international development agencies, which are committed to provide (and are continuing to provide) financial and technical support to the ongoing development efforts including the implementation of the country's SLM programs/projects.

198. These Bilateral and Multilateral donors provide various grants and loans to support Government's development agenda within Ethiopia. To this end, it has a wide set of funding instruments ongoing and in the pipeline that already do or can support the implementation of the ESIF-SLM. In general these Bilateral and Multilateral development partners have funded different on-going and pipe line SLM related projects with the overall total amount of USD 2.73 billion (1.1 billion and 1.63 billion) respectively during the program period of (2002 – 2015). The following table indicates detail of the externals financial flow.

Table 2: Analysis of Financing Flows from External Sources

Sector	Funding Source	Modality/instruments	Program Years		Amount (in 000' USD)
			Starting years	Program Period	
	Bi-lateral				
Agriculture/Multi-sectoral	USA	Project/Technical Support	2005	2005-09	100,236
Agriculture/Multi-sectoral	Canada	Pooled/Basket Funding (WB)	2007	2007-10	193,200
Education	Sweden	Project/Technical Support	2005	2004-10	86,349
Water	Finland	Sector Support	2007	2007-11	11,150
Multi-sectoral	Norway	Grant	2008	2008-09	53,650
Rural Development	Austria	Direct Budget Support	2008	2008-12	8,200
Agriculture/Natural Resources	*Germany	Project/Technical Support	2005	2005-09	25,424
PSNP/Water & sanitation	**UK	Project/Technical Support	2007	2007-12	99,000
Irrigation & water projects	*France	Direct Budget Support	2006	2005-10	18,324
Natural resource & water Supply	Japan	Project/Technical Support		2005-09	150,209
Rural Develop & Water/Hydro-P	*Italy	Loans & Budget support	2005	2005-09	220,000
PBS program & Agriculture	*Spain	Direct Budget Support	2008	2008-10	11,750
	Multilateral				
Rural Development & Water,	WB	Pooled/Basket Funding, Grant and technical support	2002	2003-15	1,028,502
Natural resource & road construction,	WFP	Project/Technical Support and Grants	2007	2007-11	50,400
Agriculture, food security, PSNP and capacity building, marketing	EU	Direct Budget Support, Grants, and project/technical support	2005	2005-13	174,200
Agricultural marketing, Pastoral development and Irrigation	IFAD	Grants and project/technical support	2002	2003-15	92,900
Multi-sectoral (Agriculture, water, Irrigation)	ADB	Grants and loans	1998	1998-10	208,670
Natural Resource and Environmental sector	GEF	Pooled/Basket Funding	2005	2005-09	2,190
Agricultural research, SWC, SLM programs	FAO	Project/Technical Support	2005	2005-09	22,100
Rural development, research and water resources	UNDP	Grant, project/technical support	2005	2005-09	49,400

Source: MoFED, Bilateral and Multilateral Cooperation Departments, March, 2009.
Note: WFP have provide about 115,210 tons of food grain during 2007-11
* the amount of Bilateral assistance of these countries expressed in Euro
** Used Pound as currency

1.3 Planning/Policy Development Framework

199. Addressing the problem of land degradation has been consistently identified as a major priority for Ethiopia in national policy and strategies documents such as the Sustainable Development and Poverty Reduction Program I (SDPRP), PASDEP (i.e. Plan for Accelerated and Sustained Development to End Poverty (2005/06-2009/10), Conservation Strategy of Ethiopia, National Food Security Strategy, Policy on Pastoral Development, Agricultural Development Policies and Strategies, Environment Policy of Ethiopia and the National Action Plan.

200. Ethiopia's long-term strategy of Agricultural-Development Led Industrialisation (ADLI), formulated in the early nineties, recognise the importance of agriculture as the main engine for rapid economic growth with equity. The government, with strong donor support, successfully implemented its first generation poverty reduction strategy (2000 - 2005) within the framework of the Sustainable Development and Poverty Reduction Programme (SDPRP).

201. To this end, the government has not only continued to support the (ADLI) strategy but also launched a series of development and poverty reduction programmes, including the Plan for Accelerated and Sustained Development to End Poverty (PASDEP) in 2006). The Plan for Accelerated and Sustained Development to End Poverty (PASDEP) has provided the overarching policy strategy for reducing poverty and addressing food security since 2005/06. The Government's most recent strategy to address land degradation is outlined in the (PASDEP) 2005/06-2009/10. The main elements of this national plan to address land degradation are (a) strengthening tenure security by expanding the on-going land certification program; (b) building capacity in community-based approaches to watershed management; (c) scaling up successful models for watershed management; and (d) strengthening natural resource information management, specifically rigorous evaluation, synthesis, and dissemination of best management practices and innovations in sustainable land management (SLM).

202. Likewise, the environment goals and strategies towards the realization of the environmentally sound development during the PASDEP period has set environmentally sound development vision of Ethiopia which addresses the rehabilitation of affected ecosystems; ensure community-led environmental protection and the sustainable use of environmental resources for gender equity and improved livelihood; enhance capacity of ecosystems to deliver goods and services, particularly biomass for food, feed and household energy; remove the adverse impacts of municipal waste; prevent environmental pollution; and, ensure proactively the integration of environmental and ethical dictates especially mainstreaming gender equity in development.

203. Constitution of 1995 nationalized all land which is held in trust by the State for the people. In July 2005, the Federal Parliament enacted the Federal Rural Land Administration and Use Proclamation, which reaffirms ownership of rural land by the State, but confers indefinite tenure rights, rights to 'property produced on the land', rights to inter-generational tenure transfer, rights to land exchange ('to make small farm plots convenient for development'), and some rights for leasing to land users. The law makes provision for the registration and certification of tenure rights. The proclamation also specifically addresses degradation of rural land, including defining the obligations of tenure holders to sustain the land, with specific requirements depending on slope, requirements for gully rehabilitation, restrictions on free grazing, and protection of wetland biodiversity. This Proclamation also has provisions indicating that there will be no further land redistribution, except under special circumstances. Regional States have also enacted legislation to strengthen tenure security, modelled after the federal law.

204. To improve land tenure security, the Regional States began a process of providing "simple" temporary landholding certificates, up to 2006/07 land certificates were issued to 6.3 million households out of a total of 13 million rural households in the four major Regional States – Amhara, Oromia, Tigray, and Southern Nations, Nationalities, and Peoples (SNNP). The Government also target to provide Stage 1 certificates to the remaining 6.8 million households. On the other hand, 20 million land certificates (i.e. covering 20 million plots) issued recently. While 1 million households received permanent certificates of land administration, with geo-referencing and mapping of individual land parcels.

205. With regard to SLM, in the last two decades, in an effort to combat land degradation problems, several policies, strategies, programs and laws had been enacted. Moreover, The Government is committed towards developing a 'country-wide' programmatic framework for SLM, and has formalized the decision to develop and implement a 15 year country specific SLM Investment Framework (the ESIF). A programmatic approach is consistent with the Paris Declaration on Aid Effectiveness that the Government of Ethiopia adopted in March 2005, and with the approach advocated by the TerrAfrica partnership which the government has supported since its inception in July 2004. In order to oversee and coordinate the development and implementation of the ESIF, the Government has formally established a National SLM Platform (comprising of a multi-sectoral and multi-stakeholder National Steering Committee and Technical Committee, and supported by a Secretariat). To date regional states' SLM platforms have been established, following regional stakeholder consultation workshops, in Gambela, Amhara, Oromiya, SNNPR, Benishangul Gumuz, and in Tigray.

206. At the international level, Ethiopia ratified the United Nations Convention to Combat Desertification in June 1997 and prepared National Action Programme to Combat Desertification. These measures signal Ethiopia's commitment to work with other nations to address the issue of land degradation, particularly in dry lands.

207. The ESIF will be implemented in association with the Strategic Investment Program (SIP) for SLM in Sub-Saharan Africa. The SIP is a multi-agency[32] regional umbrella investment program that strategically uses GEF resources to leverage and catalyze additional resources to finance country-specific SLM investments in Sub-Saharan Africa (SSA). In Ethiopia, incremental GEF-SIP financing will be specifically used to secure ecosystem stability critical to increase and sustain agricultural productivity and water availability by (i) strategically supporting the implementation of the ESIF and (ii) supporting the National SLM Platform established by the Government.

208. The National Action Program (NAP) to Combat Desertification was originally prepared in 1998, through a participatory consultative process, that involved relevant governmental and non-governmental organizations, civil societies, grassroots level communities and professionals. It was reviewed and updated in 2007, and advocates a five year (2007-2012) action program involving a range of activities related to the following priority areas: (i) managing natural resources leading to sustainable development; (ii) improving knowledge on drought and desertification; (iii) improving the socio-economic environment; (iv) improving basic infrastructure; (v) promoting alternative livelihoods; (vi) rural credit programmes, including establishment of a fund to combat desertification and the effects of drought; (vii) intensification and diversification of agriculture; (viii) promoting awareness and participation; (ix) improve institutional organization and capacity; and (x) empowerment of women.

[32] The SIP is a strategic partnership of the World Bank, AfDB, FAO, IFAD, UNDP and UNEP.

209. The process of national plan preparation is the responsibility and mandate of Ministry of Finance and Economic Development (MoFED). In the planning process of Macro-Economic and Fiscal Framework, the Ministry of Finance and Economic Development perform the following plan preparation processes: prepare a three year rolling plan, provides a three year forecast of the (GDP, Revenue and Expenditure and source of financing, financing of expenditure, allocation of the federal expenditure and the total subsidies to Regions, capital and recurrent expenditures for the federal government);

1.4 Institutional framework

210. The Government has formally established a National SLM Platform (comprising of a multi-sectoral and multi-stakeholder National Steering Committee and Technical Committee, and supported by a Secretariat) chaired by the State Minister for the Federal Ministry of Agriculture and Rural Development (MoARD). To date regional SLM platforms have been established, following regional stakeholder consultation workshops, in Gambela, Amhara, Oromiya, SNNPR, Benishangul Gumuz, and in Tigray.

211. The key public institutions and other development partners with direct responsibility and mandate for issues related to SLM activities include:

212. ***The Ministry of Agriculture and Rural Development (MoARD)*** has overall responsibility for rural development, agriculture (both crops and livestock), natural resource management and development and agricultural marketing. MoARD focuses on the formulation of agricultural and related policies, preparation of technology packages, and provision of technical backstopping for the regions. It has responsibility for: enhancing market led agricultural development; food security; water harvesting and small-scale irrigation; water shade management; conservation and utilisation of forest and wildlife resources; monitoring events affecting agricultural development and maintaining early warning systems (disaster prevention and preparedness activities); control of plant and animal diseases and migratory pest outbreaks; overseeing the distribution of high quality agricultural inputs; and promotion and expansion of extension services provided to small-scale farmers, pastoralists and private investors including establishing and running a network of agriculture and rural technology training centres. The MoARD is the lead agency for the development and implementation of the ESIF for SLM.

213. ***The Environmental Protection Agency (EPA)*** has the overall responsibility for the coordination and implementation of the Ethiopian National Action Plan to combat desertification and securing the national environment. The role of EPA is to coordinate and create partnership on environmental matters amongst the different sectoral ministries and agencies and to ensure that all development interventions comply with the country's environmental norms and established guidelines. It also has a legal mandate to produce a State of the Environment Report every two years. EPA is also the GEF focal point for GEF-funded projects. Its mandate is for policy and regulation; environmental awareness; EIA on development projects; research into combating desertification; international environmental agreements to which the GoE is a signatory; and backstopping for the regional environmental agencies. The EPA has recently proposed strategic gaols including the rehabilitation of degraded ecosystems; mainstreaming of the environmental issues, 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.

214. ***The Ministry of Water Resources (MoWR***) has a responsibility for undertaking river basin master plan studies and determining the country's ground and surface water resource potential in terms of volume and quality, and then facilitating their utilization. It has primary responsibility for irrigation development over 500ha, although implementation

responsibility may be transferred to the Regional Water Bureaus. It also oversees the study, design and construction of medium and large scale dams and irrigation works as well as watersheds management. The National Meteorological Agency (NMA) falls under this ministry and prepares and disseminates monthly, seasonally & annual climate bulletins and seasonal and annual hydro-meteorological bulletins.

215. ***The Ministry of Mines and Energy (MoME)*** – has set up the Ethiopian Rural Energy Development and Promotion Centre to develop and disseminate efficient and appropriate energy technologies and facilities, and in particular to develop renewable energy development projects in rural areas.

216. ***The Ministry of Finance and Economic Development (MoFED)*** – has lead responsibility for facilitating the flow of funds to those agencies responsible for the implementation of SLM activities. It also has overall responsibility for the formulation of the country's economic development policies and plans.

217. ***The Ethiopian Institute of Agricultural Research (EIAR***) is responsible for coordinating and conducting the various research programs of the national network of agricultural research stations including on-farm trials and demonstrations. It is also responsible for the research component of the Rural Capacity Building Project which includes support for: agricultural mechanisation; crop research; livestock research; and natural resource management. The regional research centres, controlled by the respective regional governments have the responsibility to address specific local and regional problems.

218. ***The Institute for Biodiversity Conservation (IBC***) was formed by upgrading the former Plant Genetic Resources Centre of the MoARD and extending its mandate to cater not only for plant genetic resources but also for animal and microbial genetic resources. The IBC has lead responsibility for implementing the UN CBD within Ethiopia.

219. ***The Ethiopian Development Research Institute (EDRI)*** – which has a mandate to undertake sectoral and cross cutting policy research studies related to economic, social and environmental development within Ethiopia.

220. ***Regional Government:*** The Institutional set up of the Regional Government replicates that of the federal level. Thus, region has its own set of government institutions which largely replicate those at the federal level. Most, but not necessarily all, of the Regions will have their own: Bureau of Agriculture and Rural Development; Bureau of Finance and Economic Development: Bureau of Water Resources; Regional Environmental Protection, Land Administration and Use Authority; Food Security Agency; Bureau of Regional Disaster Prevention and Preparedness; and Regional Agricultural Research Institute.

221. ***Woreda Administration***: In 2002 the government introduced a second phase of decentralization, making the Woredas the centre of socio-economic development with the aim of empowering local (Woreda*)* administrations, thereby bringing the government closer to the people, and enabling it to be more responsive to local needs. The Woredas now have economic autonomy and receive direct block grants from the regional level. They act as the base unit for representation in the federal and regional assemblies, making them a suitable point of merger between political empowerment and economic development at the grassroots level. The woreda administration has 'desks' organized along sectoral lines, and which nearly parallel the federal and regional structure. Woreda rural and agricultural development office has various desks organized to backstop the development agents in each kebeles/villages. In principle, the woreda is where sectors come together and interact to practice their mandates.

222. ***Community-based Organisations (CBOs)*** are operating at the community level that currently, or have the potential, to play an important role in the facilitation, planning and implementation of SLM interventions at the community level. Some may be formal organisations established with the support of government and donor supported programs (For example agricultural marketing cooperatives, credit unions, water users associations and other local level organizations), while others may be traditional social/ cultural groups that have evolved within particular communities for social welfare and mutual self help purposes (for example Iddir, Ikub, Dabbo and Mahbir social groups).

223. ***Non-Governmental Organisations (NGOs)/CSOs*** have been involved in the economic and social life of Ethiopia from the early 20th century. However their importance as institutions and their involvement in the development efforts of the country started with the drought-induced famine of 1973/74. Currently NGOs (both indigenous and international) support a wide range of projects and programs related to various development sectors including SLM. There are currently over 500 domestic and international NGOs working in Ethiopia. Of these some 350 have come together under the umbrella of the Christian Relief and Development Association (CRDA). Current membership has broadened significantly and includes many secular and non-Christian religious organisations. At least 300 of the Christian Relief and Development Association (CRDA) NGOs are directly involved in SLM related activities, investing some US$ 30 million annually in the promotion of a range of SLM interventions.

224. ***International Development Partners***: A number of multi-lateral and bilateral donors and international development agencies have provided (and are continuing to provide) financial and technical support to the federal and regional governments for improved management of the country's land resources. The on-going and pipe line projects and programs from these international development partners will provide much of the base line funding for the proposed ESIF activities. The key international development partners include: the World Bank, the World Food Program (WFP), International Fund for Agricultural Development (IFAD), United Nations Development Programme (UNDP), Global Environment Facility (GEF), African Development Bank (AfDP), European Commission (EC), German Development Cooperation (GDC), United States Agency for International Development (USAID) and Food and Agriculture Organisation of the United Nations (FAO).

Table 3: Institutional framework of key public agencies with their mandate and role in SLM

Organization/ Stakeholder/ Group	Mandates	Role in SLM	Achievements/ Challenges	Organizational Capacity/ Capacity needs
The Ministry of Agriculture and Rural Development (MoARD) and its regional counterpart (BoARD)	Rural development & agriculture. Lead agency for the development and implementation of the ESIF for SLM.	Natural resource management formulation of agricultural and related policies, provide technology packages, technical backstopping, food security; water harvesting, small-scale irrigation; water shade management; conservation forest and wildlife resources	A significant expansion in the practice of SLM; reduction in severe land degradation; expansion in the area of restored and protected as natural habitats; Large No of farmers with land certification; Secure land tenure/user rights; Knowledge and technological barriers; Land tenure and willingness to invest;	Effective institutional capacity and operational structure needed; scaling up of SLM; need planning and advisory capacity; National Soil Laboratory and mapping facilities; Need for more staff training; special beneficiary impact surveys and ESIF evaluation;
Environmental Protection Agency (EPA) and its regional counterpart (REPA)	Implementation of the national action plan to combat desertification and securing the national environment	Coordinate and create partnership on environmental matters amongst sectoral ministries and agencies; rehabilitation of degraded ecosystems; mainstreaming of the environmental issues and pollution control	SLM practiced in area of herders and forest resource users; enforce regulatory measures which may reduce deforestation, land degradation and pollution; integrate emerging issues of Climate change adaptation and mitigation	backstopping for the regional and woreda environmental agencies; ensure the SLM institutional and scaling up process; need more manpower and training
Ministry of Water Resources (MoWR) and its regional counterpart (BoWR)	Undertaking river basin and ground and surface water resource potential master plan studies and then facilitating their utilization.	study, design and construction of medium and large scale dams and irrigation works as well as watersheds management; prepares and disseminates meteorological data	Lot of hydro-power and irrigations dams constructed and provide production services; No of water users association established across the country; monthly, seasonally & annual climate data and bulletins prepared;	Building the technical skills and operational capacity (manpower, budget, equipment and facilities) of the federal and regional Water resource institutions; Needs detail study on environmental impact of water resources

1.5 Legislative framework

225. Ethiopia is a party to (i) the Convention on Biological Diversity (CBD) (ratified 05/04/1994); (ii) The United Nations Convention on Combating Desertification (UNCCD) (ratified 27/06/1997); (iii) the United Nations Framework Convention on Climate Change (UNFCCC) (ratified 05/04/1994), and (iv) the Kyoto Protocl (ratified 14/04/2005). The ESIF will assist Ethiopia to meet its international obligations to these conventions.

226. Ethiopia has endorsed the Comprehensive Africa Agriculture Development Programme (CAADP) developed under the New Partnership for Africa's Development (NEPAD). The investment objectives of the ESIF are in line with the key pillars of the CAADP, specifically.

227. Ethiopia developed the "Conservation Strategy of Ethiopia" (CSE) in April 1997 with the help of the World Conservation Union (IUCN), prior to the ratification of the United Nations Convention to Combat Desertification (UNCCD). The CSE provides an umbrella strategic framework, detailing principles, guidelines and strategies for the sustainable conservation and management of the country's natural resources and biodiversity.

228. The preparation of the Ethiopian Forestry Action Programme (EFAP) was initiated in 1990. Two thousand copies of the final EFAP report, which became available in December 1994, were disseminated to the country's regions, donors, NGOs and other relevant government agencies, with the support of UNDP. The regionalization of EFAP started 1996 and, accordingly, regions have developed their own RFAP based on EFAP. Five regions identified actions, strategies and specific projects that address their priorities in forest conservation and development (FAO, 1998).

229. The Conservation Strategy of Ethiopia, the Ethiopian Forestry Action Plan and the National Action Plan to combat desertification are among the most relevant policy initiatives taken by the government to confront forest resources degradation.

230. The Forestry Conservation, Development and Utilization Proclamation No. 542/2007 is currently serving as the forest policy statement of the country. Though, significant progress has been made in reorienting forest polices and strategies to help lay the foundations for sustainable forest management.

231. According to the land proclamation of 1975, all forest land areas of 80 ha and more belong to the State and the use of forest land is based on a system of quotas issued by the forest administration. Technicians in the field locate areas of forest from which the quotas can be cut. The charges paid depend on the type of tree species and its value, its location, volume and the type of product.

232. According to the Forestry Proclamation No. 542/2007 there are two types of forest ownership in Ethiopia: State forests and Private Forests. State forests shall be utilized in accordance with management plans either approved by the Ministry or the appropriate regional body. Farmers are entitled to lifelong, inheritable and transferable rights to the use of land and trees planted thereon. Further more, any person who develops forest on his land holding or in a state forest area given to him on concession shall be given assurance to his ownership of the forest.

233. The proclametion promote private forest development through private individuals, associations, governmental and non-governmental organizations and business

organizations who want to develop forest. The proclamation provide them right to obtain rural land in areas designated for forest development in accordance with regional land administration and utilization laws.

234. The Forestry Proclamation indicate that farmers, semi-pastoralists, investors, associations, governmental and non-governmental organizations and business organizations shall be given the necessary support to produce quality and competitive forest products for local and international markets.

235. The overall rights and responsibilities for the conservation and development of forests rest on the government. Local communities have the responsibility to cooperate in the effort made by the government to protect and develop forests. The private sector has the opportunity to develop forest resources based on the lease agreement made on the use of land made with the respective regional governments. The private sector is entitled to use his forest products both for own use or sale.

236. Ethiopia is party to multilateral environmental agreements (MEAs), which require member states to facilitate the establishment/strengthening of national programs for the sound management of hazardous wastes and other wastes. Countries that are party to the MEAs have accepted specific obligation to avoid or minimize waste generation and to ensure the availability of adequate facilities for their waste management operation so as to protect human health and the environment (Basel Convention, 1989).

237. The Environmental Pollution Control Proclamation (Proclamation 300/2002) prohibits the release of pollutants into the environment by any person engaged in any field of activity. Any person who causes any pollution shall be required to clean up or pay the cost of cleaning up the polluted environment. Installation of a sound technology that avoids or reduces, to the required minimum, the generation of waste and, when feasible, recycling of waste is encouraged. The proclamation further stipulates that a permit is required to generate, keep, store, transport, treat or dispose of any hazardous waste.

238. The EPA has also prepared the “Provisional Standard for Industrial Pollution Control” (EPA, 2003) and a regulation for the enforcement of the standards in Ethiopia. In the Provisional Standard for Industrial Pollution Control, two approaches were suggested for both the existing and new industries: cleaner production and Best Available Technologies/or Techniques. A “Draft Proposal of Ambient Environmental Standards” (EPA, 2004) has also been prepared.

239. Other environmental and forestry strategies and policies, laws, regulations and legislations impacts directly on the forestry sector as well as SLM are:

- The Ethiopian Water Resources Management Policy, the Water Sector Strategy formulated by the Ministry of Water Resources in 2001 and its 15 year (2002-2016) water sector development program;
- The National Population Policy of Ethiopia
- National Policy on Bio-diversity Conservation
- The Energy Policy
- The Environmental Policy of Ethiopia
- Environmental Impact Assessment Proclamation
- Forestry Conservation, Development and Utilization Proclamation No. 542/2007.
- Forest and Wildlife Conservation and Development Proclamation (No. 192/1980).
- the Ethiopian National Biodiversity Strategy and Action Plan prepared in 2005 in fulfilment of the country’s obligations following ratification of the UN Convention on Biodiversity.
- Exploitation of Private Forest Regulations (L. N. No. 346 of 1968).

240. Ownership of rural and urban land including all natural resources is vested under the 1994 Ethiopian Constitution. There is no constitutional mechanism for sale or private exchange of land although there is a provision of 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. Substantial relocation of land to accommodate the landless took place in Amhara national Regional state in 1997 following a proclamation that allowed the sale of improvement in land but did not allow its sale, exchange, or use as collateral.

241. The right to inter-generational transfer of tenure was confirmed under Proclamation 456/2005 and some provision allowed for leasing and exchanging land through within strict limits. This proclamation also made provision for the certification on inheritance of the land rights.

242. The Government of Ethiopia constitutionally reaffirms that all land in Ethiopia belongs to the state which it holds in trust for the people. Further more, the Federal Rural Land Administration and Use Proclamation, confers indefinite tenure rights, rights to 'property produced on the land', rights to inter-generational tenure transfer, rights to land exchange ('to make small farm plots convenient for development'), and some rights for leasing to land users. The law makes provision for the registration and certification of tenure rights. Nevertheless, the land users' have feeling of insecurity over their long term user rights.

1.6 Human Resources/Capacities

243. *Lack of a stable coordination mechanism*: The national coordination body is not efficient and fully operational to execute its duties and responsibilities. The coordination and collaboration between the various institutional stakeholders including donors and NGOs is poor resulted in duplication of effort and conflicting approaches with regard to the use of incentives for SLM. Likewise, SLM projects and related environmental activities have broad, multidisciplinary and cross sectoral nature linking various stakeholders from farmers to investors. The activities are diverse and beyond agriculture including mining, infrastructure development and other cross cutting development areas. Financial resources and project activities owned by various stakeholders at different level has to be consolidated and identified for the purpose of evaluation and follow-up.

244. *Knowledge and technological barriers* – Good practices and experiences in execution of a range of different soil conservation projects and programs over three decades has not been exhaustively documented. There is also very little information on the current situation of the nature, extent and severity of land degradation in different parts of the country. This makes it difficult to identify where the greatest need is, and the specific degradation processes that should be addressed. The lack of good baseline land degradation data is an issue that will need to be addressed by the ESIF.

245. Data should be shared through appropriate knowledge management. Knowledge management refers to the process of collecting, organizing, analyzing and sharing information among different stakeholders. MoARD should establish an information system for sharing data among stakeholders. Web-based databases and resource libraries facilitate the sharing of information and ensure that new information is disseminated.

246. *Socio-cultural barriers and lack of awareness* – There remains a clear deficiency in understanding the land degradation-to-desertification phenomenon and its acceptance as a problem in need of priority actions. A variety of social and cultural norms is mentioned to hinder the adoption of SLM practices and will need to be recognised and addressed by the communities. Social and cultural barriers can therefore be overcome through wide community awareness creation and familiarization program. When the community perceive that the SLM and environmental conventions are very important for their livelihood, they have shown their own self interest to allow their norms to evolve and change. Two social and cultural barriers are of particular concern, namely those related to gender disparities and the free grazing of animals (especially post harvest).

247. To this effect, raising public awareness on SLM and environmental convention has to be advocated by the top level ministers and authorities through public Medias and other possible ways of communication.

1.7 Policy Recommendations

248. Policy issues are critical in the enabling environment making increasingly difficult to successful scaling up and mainstreaming of SLM and to adopt some of the new principles and multi-faceted approach to resource mobilization in Ethiopia. The capacity to mobilize resources does not depend on overcoming all the barriers that have been identified, however, resolving some would serve to substantially improve the efficiency of raising financial resources and achieve the objectives of SLM in a more effective manner. Some of policy issues and recommendations to be considered are:

249. *Policy and legal Issues* – Policy environment to enable the scaling up and implementation of SLM, especially at grass root (community) level has several limitations. The existence of an effective enabling policy, legal, regulatory, institutional and financial environment plays critical role in scaling up and mainstreaming of SLM activities. Therefore, land degradation and SLM issues need to be fully internalized and prioritized in the country's national priorities and has given a higher priority in poverty reduction strategies, public expenditure frameworks and sectoral development policies and PASDEP. Within Ethiopia, current legislation relevant to land degradation and SLM needs to: (i) recognise the crucial consequences of various ecological problems; (ii) develop effective land management programs and targets; and (iii) establish socially acceptable mechanisms for their enforcement.

250. *Institutional Capacity* – Weak capacity amongst the implementing public institution federal, regional and woreda level, research and advisory support service providers has made it difficult to meet the needs of the land users for technical advice on locally appropriate SLM technologies. Therefore, the realization of SLM activities requires strong institutional setup with man power and logistical capacity, mobilization of a lot of recourses, awareness creation among stakeholders, technical and logistical capacity of various institutions at different levels (federal, regional and woreda). The current manpower and organizational structure of the national and regional task forces has to be strengthened in its capacity to shoulder all the duties and responsibilities specified on ESIF document. Particularly, the implementation capacity of the SLM projects at grass root level has to be build up in terms of man power, structure, office facilities and other logistics all the way along different levels.

251. *Stable coordination mechanism*: At present, the national and regional coordination level is not fully operational to execute duties and responsibilities related to SLM implementation. The coordination and collaboration between the various institutional stakeholders including donors and NGOs is weak resulted in duplication of effort and inconsistent approaches with regard to the use of incentives for SLM. In contrast, SLM projects and related environmental activities have broad, multidisciplinary and cross sectoral nature linking various stakeholders from farmers to investors. The activities are diverse and beyond agriculture including mining, infrastructure development and other cross cutting development areas. Thus, the established national and regional SLM coordination body, which composed of various concerned stakeholders with specific mandate of coordination and execution, is needed to avoid overlapping responsibilities and redundancies. Furthermore, donors' coordination which remains weak has to strengthen.

4. FINANCIAL DIAGNOSTICS

2.1 Analysis of Internal Financial Sources, Instruments and Mechanisms

2.1.1 Public Finance

252. The scale and pace of development needs of Ethiopia is huge, correspondingly the financing needs are also great. In order to mobilize domestic resources to finance the huge demand for accelerating growth and poverty eradication, the Government has embarked on comprehensive tax policy and administration reforms. As a result, tax revenue has shown steady growth. Government had created improved business environment that helped to increase private savings and investment. Further, the devolution process has also helped to create conducive environment for social mobilization to complement government resources for expanding economic and social services. In spite of this, the available domestic resources have not matched the increasing level of financing requirements, given the low level of per capita income, and export earnings. This has necessitated supplemental external resource flows. Ethiopia has been mobilizing external resources from bilateral and multilateral sources to complement domestic efforts to accelerate growth and poverty eradication. Ethiopia has also benefited from global initiatives of debt cancellation. Given the scale of the needs for rapid growth, human development, infrastructure and capacity building, Ethiopia will continue to make concerted efforts to effectively mobilize available external resource opportunities.

253. The greatest challenge, however, is the unpredictability of external assistance in terms of timing, level and form of delivery. Accordingly, there is a need for further dialogue/discussion with development partners in the context of scaling up, improved predictability of external finance, harmonization, promoting trade and investment, enhancing capacity to trade as well as to assist on the part of our development partners on improvement in Foreign Direct Investment (FDI) flows.

254. The success of the domestic resource mobilization efforts already underway including: (i) improvements in domestic revenue mobilization by the Government, which have seen revenues rise from 1.12 billion USD in 2001/02 to over 5.02 billion USD in 2007/08, and the reforms of the recent past, which lay the basis for substantial further revenue increases during the period of the PASDEP; (ii) the increasing levels of community involvement and contribution to the developments process, and opportunities created for community and social mobilization; (iii) the expansion in number of activities of the CSOs and NGOs as well as private citizens, and their

increasing engagement, which can both contribute resources, more implementation capacity, and innovative approaches to solving development challenges; and (iv) increases in private investment and saving. All of these combine to potentially increase the level of resources being directed in support of the development program beyond the levels forecast today

255. On the basis of the envisaged macroeconomic policies and the expected outturn during the Plan for Accelerated and Sustained Development to End Poverty (PASDEP) period, the costs of the programs for poverty-oriented sectors have been assessed, consistent with a program that sustains macroeconomic stability during the medium term.

256. Regarding Ethiopia's public expenditure management, it is important to note at the outset the significant pro-poor bias in spending allocations, and the effort being made to cover recurrent expenditures through domestic revenues.

257. While there are limits to the surpluses available locally, every effort will be made to mobilize additional resources outside of the tax system. For example, there is scope for using more local materials and community labor in the school building program; and in many cases communities are already contributing to the costs of hiring additional teachers. Regions and local governments are increasingly raising revenue locally that augments the public expenditure envelope, and the on-going *woreda* devolution will also help mobilize community contributions to activities like rural roads, education, health, and water supply programs. Cost-recovery mechanisms are also being introduced and enhanced for urban services such as water supply, for higher education, in the form of the graduate tax, increasing the amount of resources mobilized, and reducing the demands on direct treasury spending.

2.1.2 Budget Preparation Process

258. Budget preparation process started with budget hearing (held between April to May each year at MoFED), a meeting that gives the opportunity to the federal public bodies to explain and justify their budget request to MoFED, so that it enables MoFED to proceed to the preparation of a draft recommended budget. During the budget hearing a lot of issues are taken into consideration for both capital and recurrent budget requests. The Ministry of Finance and Economic Development prepares the recommended budget based on the budget request of public bodies/sectors. Preparing the recommended budget is when the budget requests of public bodies are reviewed, adjusted and consolidated into a budget for both recurrent and capital expenditures. The requested recurrent and capital budget will be reviewed in relation to government policies and priorities, total expenditure ceiling and from the allocated ceilings of each public body. The recommended budget includes the Federal government recurrent and capital budget, the subsidies to Regional Governments and Administrative Councils and an estimate of resources will be submitted to the Council of Ministers. Once the budget is approved and appropriated by the House of Peoples Representatives, MoFED will prepare the budget allocation guideline and the notification to public bodies and their budget institutions with the source of finance and line item of expenditures. Notification of the approved budget to public bodies. Public bodies shall submit their investment program within the specified submission time, last week of December and perform all budget preparation activities /development of unit costs, before the budget call is sent to them so that they can submit their budget request in time.

259. The execution of the approved national budget and regional subsidy is performed by the implementing sector organizations and/or other government agencies at all level. The Ministry of Finance and Economic Development (MoFED) based on the public sector budget request and the share of regional subsidies prepare, reviewed, adjusted and consolidated the recommended budget into both recurrent and capital expenditures. Finally the national budget is submitted to the Council of Ministers and House of Peoples Representatives for approval while Regional and Administrative Councils subsidies budget are approved by Council of House of Federation in accordance with the approved subsidy formula.

2.1.3 Fiscal and Policy Instruments

260. Fiscal instruments used as tools of generating financial resources for implementation of SLM activities in Ethiopia are depend on various revenue sources. Although the national budget constitutes the most significant source of financial resources, other fiscal instruments can also be considered. It should be noted, however, that their applicability will often depend on the existence of broader enabling conditions such as laws and regulation. Currently the bulk of the investment funds for SLM activities come from the national budget. Recently, alternative sources of funding that could be tapped to support the promotion and scaling up of SLM have grown, particularly, those that would come under the heading of non traditional sources 'payment for environmental services' and various charges/taxes, tax exemptions as well as private investment are becoming crucially important.

261. Besides, national budget, grants, Protecting Basic Services (PBS) and Debt Relief, various other fiscal or economic instruments among which some of the most common and practically applied by federal and regional government as well as municipal administrations include: payments for carbon sequestration and charcoal production, payment on water supply; deforestation and illegal logging taxes; environmental levy on tourist destinations; tax on industry based on the pollution it emits, environmental levies within municipalities jurisdictions.

262. Tax is a powerful fiscal instrument for revenue collection in that land taxes could be useful mechanisms to regulate land degradation problems. Nevertheless, the complexity is that land taxes are not tagged with environmental management; proper management of lands is not encouraged through tax relief and tax exemptions so far and in short, we couldn't make the exiting land taxation system acquiescent to our crucial problem of land degradation.

263. The trend in countries fiscal situation has experiencing an unprecedented growth implying that the economy has shown noted improvements. The total budget revenue including grants & debt relief collected during year 2004/05 – 2008/09 indicates an increase of about 60 percent (USD 4,170 million) between the two years and annual average over 15 percent over the last five years. See table 4 below

264. Another key feature of Ethiopian fiscal situation is the fiscal decentralization of government budgets in to regions and woredas since 2002/03. About 35-40% of federal revenue expenditure is disbursed at regional level (with further decentralization to the

woreds level), while only 15-20% of the total revenue is collected regionally. These federal funds are apportioned to regions and woredas in the form of block grants.

Table 4: Summary of Consolidated Federal Revenue 2004/05 - 2008/09 (million USD)

Description of Fiscal Instruments	**2004/05**	**2005/06**	**2006/07**	**2007/08**	**2008/09**
Total revenue and grants	**2,264**	**2,614**	**3,301**	**4,931**	**6,433**
Total revenue	**1,751**	**2,194**	**2,449**	**3,746**	**4,924**
Tax revenue	1,393	1,591	1,950	2,747	3,638
Direct taxes	442	501	581	740	1,248
• Income and profits tax	384	420	536	634	-
• Agriculture income tax	17	9	11	13	-
• Rural land use fee	16	14	15	17	-
• Urban land lease fee	25	58	19	77	-
Indirect taxes	951	1,090	1,369	1,554	2,390
Non-tax revenue	358	603	499	999	1,285
External grants and Debts	513	419	852	1,186	1,510

Source: MoFED, Budget Consolidation and Economic Sector Departments, March, 2009

2.1.4 Local and Municipal Budgets

265. Since the decentralization of (2002/03), resources and responsibilities for service delivery and project implementation have been moved to the local/woreda governments and municipal administration. In practice, however, both woreda and regional as well as municipal policies are still guided by federal sector policies and by cross-sector strategies and programs. The federal authorities also retain an active role with respect to trans-regional issues such as river basin management, multi-regional forests, and trunk roads and other special service areas in metropolis.

266. These budgets/funds are provided by the federal government and development partners/donors, and channelled into specific programs/projects implemented by the regional states in specific watershed areas of the selected local or urban administration. The mobilization of most of the budgets to the regional and local/woreda administration are generally pooled from both government treasury and external sources provided in the form of block grants to regions and woredas. Due to the fact that the regional government is capable of only collecting 15-20% of annual revenues, the major source of regional expenditure (35-40%) is public budget subsidy provided by the federal government in the form of block grants.

267. Conversely, municipalities have their own autonomous administrative units that enjoy limited fiscal independence within their jurisdiction and thereby provide an uncomplicated and direct pathway for channeling funds in to various development endeavors. They have the autonomy to collect revenue or accept funding from external (or internal) sources, without needing to channel the funds to MoFED. Unfortunately, for the purpose of this study there is no data on the municipalities' budgets.

268. They prepare their budget with minimal involvement of a federal or regional authority. Municipal budgets are approved by the council of municipal administration. Though, municipal budgets constitute relatively smaller amounts of funds, we may consider as potential entry point for mobilizing funds with less complications. Municipalities should mainstream SLM into their budgets. Budget requests should include funding for SLM-related activities that are to be carried out at the local level and funded primarily by the municipal budget. To this effect, federal and regional governments and relevant sector agencies should establish acquaintances with local and municipalities to strengthen their capacities in revenue collection, fund acceptance and management for SLM-related activities.

2.1.5 National funds

269. National funds can be replenished in a number of ways for the SLM related projects among which: national budget allocations; mutual/ pooled resources from sector ministries; tax revenue, or revenue from fines and charges; external resources (grants/loans and debt relief); voluntary private or association contributions through professionals, CBOs funds, philanthropic funds and etc.

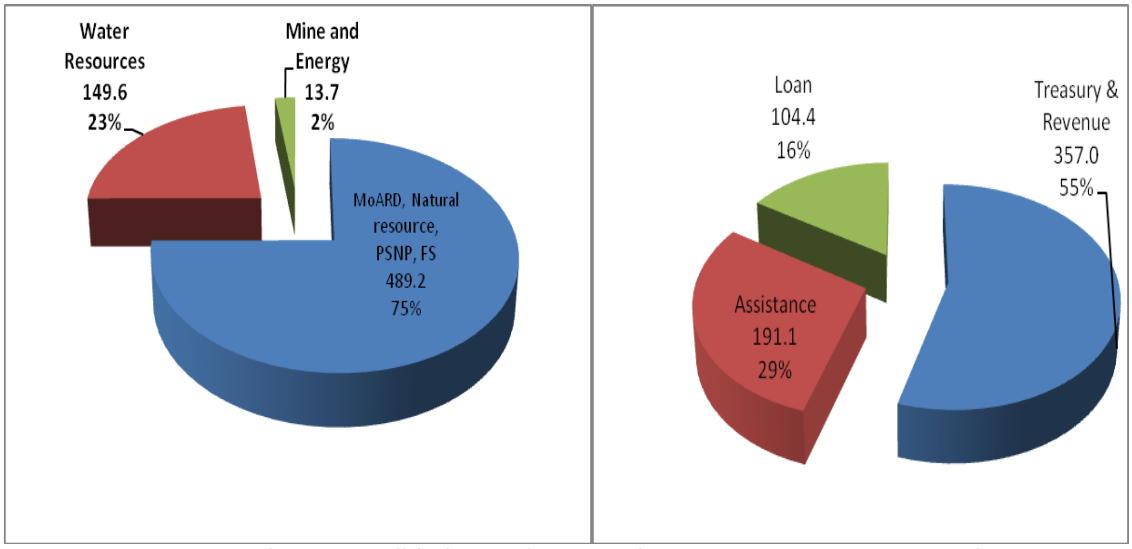
270. The major financial source pertaining to SLM-related sectors is domestic budget. This budget is the primary source of potential national funding to SLM-related activities. It is the

first line of funding to be considered in the mobilization of resources for programme/project financing. Given that, the public budget is the primary source of potential funding, it is important to examine financial flows of the national funds.

271. The national budget allocated for the implementation of development and poverty-oriented sector programs during the PASDEP period for sectors that have SLM-associated mandates (that actually dedicated to SLM or that contributes to SLM indirectly) assessed. Some of the major federal institutions implementing SLM related activities are MoARD, the EPA, MoWR and MoME (ministry of mines and energy). These government agencies include many departments, offices and programs/projects that have special national funds dedicated to the SLM implementation. Further research is required to identify disaggregated financial resources data spent by all SLM implementers. Hitherto, the total quantity of financial resources (capital budget expenditure) for the 3 key public agencies which are major implementer of SLM and related projects during 2001-09 including the PASDEP plan period (2005/06-2009/10) was estimated to abut 4404.1 million USD or 31.7% of the overall national capital budget allocated to finance all public agencies.

272. Conversely, analysis of financial flow in to SLM related activities in fiscal year 2007/08 was shown that the total capital budget expenditure allocated for more than 70 SLM related projects and activities (see annex 1) implemented by MoARD (PSNP, Natural Resource, FS), Water Resource (Irrigation), Mining and Energy was about 652.5 million USD. The relative share of domestic budget (treasury and revenue) is about 357 million USD[33] or 55% of the total budget. The following figure 1 indicates the relative size of existing domestic and external financial sources allocated as capital budget expenditures for projects related to SLM under the key implementing sectors in 2007/08.

Figure 3: Relative Size of Government Capital Expenditures to SLM related Projects by Source of Finance and key sector (Budget-2007/08 in millions USD)



Source: MoFED, Budget Consolidation and Economic Sector Departments, March, 2009

273. National funds flows in to Regional SLM Projects/programs are another area where stocktaking has been made. Currently, numerous activities have been done through

[33] Average official exchange rate as 1 USD = 8.9 Eth. Birr in 2007/08

different sector agencies, development partners and national regional states to realize SLM project/programs. Many SLM related project activities were made possible through mobilization of both public finance and external sources to regional and woreda/district levels. These funds are provided by the federal government and development partners/donors, and channelled into specific programs/projects implemented by the regional states in specific watershed areas of the project woredas. The mobilization of most of the funds to the regional SLM project activities are generally pooled from both government treasury and external sources. The federal government provided budget of 35-40% in the form of block grants to regions and woredas.

274. Hitherto, regional and woreda level SLM platforms (steering and technical committees) formed; various meetings and workshops were held in all regions. SLM project activities are carried out in 177 watershed areas across the country by the financial and technical support provided by SLM partner organizations (WB, GTZ, WFP and FAO) and the government own sources in some regions. Table 5 below indicates the relative size of financial flows in to regional SLM project activities (2007-11).

Table 5: Regional Financial Flow to Local SLM project activities (watersheds) 2007-2011(in USD)

Region	Watershed Area (Ha)	No. Kebele /Localities	Labour Force	Budget Estimate
Amhara	79,625	73	115,455	5,561,794
Oromya	72,320	100	248,663	8,011,856
SNNPR	62,913	66	112,339	4,829,167
Tigray	14,905	11	22,716	1,063,839
Benshangul	21,900	18	18, 724	1,261,458
Gambela	20,500	11	9,152	1,008,406
Total	**272,163**	**279**	**508,325**	**21,736,519**

Source: National SLM Secretariat office, Progress Report Feb. 2009.

2.1.6 Private sources of funding

275. The private sector could contribute to judicious resource utilization through good practice of a market-based PES schemes which seem promising instruments for environmental conservation as they establish and invest in various development projects. As they establish a direct link between sellers and buyers of produces and environmental services, they contribute to national revenue through taxes, charges, PES and compensate for environmental problems on the use water, land, forest, agriculture and other environmental services.

276. Where there are enabling public resources to be used to deliver a greater range and volume of services, the private sector could be a sources of funding and contribute capital through taking ownership positions, reducing the pressure on the public budget to fund new investments. The most obvious areas of private sector growth include: in the agricultural and rural sector, where millions of farmers both large and small as well as investors are of course all private sector actors involved, and there is substantial growth of private supply of inputs and services. Through strengthening the enforcement of (taxes/royalties/penalties) regulations and laws pertaining to the land, forest, mining, industries, water and irrigation schemes and other environmental issues the private sector will provide wide range of PES in both rural and urban areas.

2.1.7 Policy Recommendations

277. *Economic and financial policies* –Lack of economic, pricing and marketing policies on the valuation of environmental resources have resulted in strong pressures on the land resources while effective incentives for SLM have yet to be developed and/or are insufficiently applied. Poverty and lack of resources has forced many land users to pursue short term coping strategies rather than investing in long term sustainability. This has been exacerbated by a lack of affordable credit for investing in SLM. Therefore, establishing the long term economic costs, building demand for SLM friendly trade and economic activity, where economic valuation of environmental resources may be fostering positive land use practices and can be an important input into the policy debate on SLM, reducing land degradation and promote widespread awareness building in developing SLM response.

278. *Budget release and Utilization:* Financial limitation is very critical problem in that not only resources limitation but also inadequate capacity to utilize the available resources including poor procurement performance is important. Donors have set various pre-conditions and modalities to financing of SLM projects. Therefore, CSIF-SLM should wherever possible adopt flexible and decentralised financial mechanisms which are compliant to implementation modalities of each donor so as to enhance and scale up the execution of the national SLM projects judiciously.

279. *Incentives and Value Addition*: Increased incentives for private sectors and other land users to invest in SLM and related products through introduction of new SLM technology and the value addition related to SLM investments are policy inputs to increase financial sources to SLM. Thus, supporting development of markets for SLM technologies and products and strengthening the development of private sector and producers' organizations to promote markets for SLM friendly activities and products is a potential area to increase investments on SLM.

280. *Integrate PES with other economic activities*: If the ecosystem services are integrated with other economic activities, the PES transaction costs will be spread over many benefits. For example, planting of Acacia in the semi-arid part of the regions produces both the biodiversity ecosystem services and Gum Arabic, which is commercially useful. However, the economic activities that are combined with ecosystem services (choose ecosystem services that have multiple uses) should not lead to destruction of the natural resources that provide the ecosystem services.

2.2 External Funding Sources, Instruments and Mechanisms

2.2.1 Sources: Major Donors

281. The most important external sources of funding in Ethiopia are bilateral and multilateral donors. These donors differ from one another in their preferred intervention areas, their instruments of financial allocation, and their funding prerequisites and conditions. The external sources of funding reviewed in this section fall into two categories: bilateral and multilateral. Bilateral cooperation is defined as country-to-country, or government-to-government, Official Development Assistance (ODA) or development agreements. Multilateral aid consists of funds managed by multilateral agencies to which several international parties contribute.

282. In the context of the current changing aid architecture and the potential use of external financing, sectoral and regional (programs & projects) budget support to SLM and related activities were assessed. The Ethiopian SLM investment framework (CSIF) platform provides a framework for donor support of the SLM program. This is an umbrella for funding although it is not envisaged that there will necessary be common funding arrangements. Constraints for mobilizing external sources of funding for SLM in this new context identified.

283. A number of multi-lateral and bilateral donors and international development agencies have provided (and are continuing to provide) financial and technical support to the federal and regional governments to strengthen the implementation of the country's SLM. The on-going and pipe line projects and programs from these international development partners will provide much of the base line funding for the proposed SLM activities. The key international development partners include:

284. *Multilateral Donors:* the World Food Program (WFP), the World Bank (WB), International Fund for Agricultural Development (IFAD), United Nations Development Programme (UNDP), Global Environment Facility (GEF), African Development Bank (ADB), European Union (EU), and Food and Agriculture Organisation of the United Nations (FAO), the International Food Policy Research Institute (IFPRI) and others.

285. *Bi-lateral Donor:* The main *Bi-lateral Donor* development partners include German Development Cooperation (GDC/GTZ), United States Agency for International Development (USAID), Canada, Sweden, Finland, Netherland, Norway, Italy, Austria, United Kingdom, France, Spain, Japan, China, Saudi Arabia, Kuwait, South Korea and India.

286. *Non-Governmental Organisations (NGOs)/CSOs:* Currently NGOs (both indigenous and international) support a wide range of development efforts of the country including projects and programs related to SLM and other development sectors. There are currently over 500 domestic and international NGOs working in Ethiopia. Of these about 70 % domestic and 30% are international NGOs organized under the umbrella of the Christian Relief and Development Association (CRDA) for the purpose of coordinating development efforts, promoting information exchange, networking for advocacy and lobbying purposes, and building capacity (particularly amongst indigenous NGOs).

2.2.2 Donor Delivery Modalities and Funding Schemes

2.2.2.1 National Development Priorities

287. Given the link between land degradation, crop failure and food security/malnutrition in Ethiopia, and the fact that about 85% of the population is rural, land degradation is one of the key factors underlying the country's low and declining agricultural productivity, persistent food insecurity, and rural poverty. Land degradation is therefore considered to be one of the main development challenges in Ethiopia, and preventing and addressing the problem has been repeatedly identified as a national development priority. In all recent national strategies and policy documents, notably the Poverty Reduction Strategies (SDPRP and PASDEP), the ADLI policy, Rural Development Policies and Strategies, the Conservation Strategy of Ethiopia, the National Food Security Strategy, the National Action Plan for Combating Desertification, among others, the issue of addressing problem of land degradation is prioritized.

288. More specifically, PASDEP has provided the overarching policy strategy and priority to address land degradation with the main elements of strategy to strengthen tenure security by expanding the on-going land certification program; building capacity in community-based approaches to watershed management; scaling up successful models for watershed management; and strengthening natural resource information management practices and innovations in sustainable land management (SLM).

289. The investment objectives of the ESIF are in line with the key pillars of the CAADP specifically: Extending the area under sustainable land management and reliable water control systems; increasing food supply and reducing hunger; and Agricultural research, technology dissemination and adoption.

290. Likewise, the National Action Program (NAP) to Combat Desertification was given priority to enhance activities related to SLM and clearly links project activities into available resource within the implementing institutions.

291. The majority of development partners and multilateral agencies follow country-specific strategies and act in accordance with the above mentioned national priorities and advance their development assistance through credible sectoral strategies to address the ongoing development efforts. The development of PASDEP and above indicated various priorities and conventions, for example, would provide a tool for requesting assistance from other donors interested in funding activities for the improvement of socio-economic conditions in the country.

2.2.2.2 Delivery Modalities and Funding Mechanisms

292. It is important to understand donors' and other developments partners' financing modalities and mechanisms currently prevailing in the country in order to requests financial supports for targeted appropriate institutions which can involve in the implementation of SLM project interventions. Therefore, CSIF should wherever possible adopt flexible and decentralised financial mechanisms which are compliant to implementation instrument of each donor so as to enhance and scale up the execution of the national SLM projects.

293. In Ethiopia, the most important budget support and funding for the SLM investments is provided by multilateral and bilateral donors on conditions and fulfilment of certain criteria set by respective donor agencies. To this effect, currently a large part of development resources from donors are disbursed to SLM project activities carried on regions/woreda through annual budget allotment to targeted sector agencies.

294. To demonstrate a commitment to sustainability of investments and a continued momentum for strengthen and scaling up SLM interventions, currently Ethiopia dedicates significant resources from the national budgetary resources as co-financing funds, for investment funding.

295. Various funding modalities are suggested to channel support to Ethiopian CSIF; among which 'pool funding' seem a preferred modality to support the implementation of the ESIF. However, not all DPs would agree on pooling their funds. There are other modalities to support the ESIF and to channelled resources through, parallel financing and technical

assistance (and any of these modality of support is exclusive) - not to preclude possible support from any of these sources.

296. In addition, other main financing modalities of donor support to public investment for SLM project interventions are identified. As a result of changes in donor's funding modalities, the following common requirements have to be fulfilled by the recipient country to implement development programs/projects.

- Budget support: in this modality, selected project activities in the budget preparation process are funded directly from the state budget;
- Basket funding: Activities which fit into a specific programme are funded by an earmarked fund supported by several donors/financing organizations.
- Project funding: Activities are funded through projects funded inside or outside of the state budget.
- Co-financing: Ministerial budgets are often the source of co-financing for projects funded primarily by donors. Traditionally, co-financing has often taken the form or non-monetary, in-kind contributions. In the new approach adopted by donors, however, more emphasis is placed on government contributions. Governments will be expected to raise a significant amount of financial resources, before being supplemented by donor funds. This approach is being adopted to ensure efficiency in resource spending and commitment and ownership by the government towards the undertaken initiatives.

297. Some of the major implementation and delivery mechanisms of the donor's support to the various program and project activities including SLM in Ethiopia include:

- Sector-wide programs (such as Sector-Wide Approaches (SWAps)) in Natural Resources Management, Agriculture, Forestry and Land management;
- Projects, such as:
- watershed management
- Water harvesting and small scale irrigation projects
- community-based development projects
- Research and extension projects
- Disaster management projects
- SLM projects

298. The other delivery mechanisms/projects may be limited to supporting selected lines of intervention which fall within their broad scope of activities. It should be stressed though, that individual rural development projects may combine several sectoral themes and could therefore support a wider range of SLM activities. The above lists are provided only to illustrate where specific thematic projects are most likely be used as key delivery mechanisms for SLM investments.

299. External sources of funding are from outside the country sources, such as bilateral and multilateral donors, multinational corporations, international NGOs, charitable foundations and the like. These sources have traditionally contributed the bulk of funds for SLM and environment-related activities in Ethiopia. The general programme approach is that donor funds will be allocated to specific activities that fall within country national priorities and – in many cases – to which other sources of funding, namely public budget co-financing have been committed. Similarly, most donors/ funding agencies have very similar stated intervention areas, regardless of how these are expressed by each donor.

300. Accordingly, project funds are available from a wide range of financier, including multilateral and bilateral donors, international NGOs and CBOs on the base of certain pre-conditions where the development proposals have to meet specified criteria of the funding agencies.

301. The commitment and approach of most multilateral and of bilateral donors agencies is the building of partnerships with NGOs and CBOs, which are eligible to funding schemes beyond the reach of public institutions. In this process the role of government institutions would be to act as linkage between the NGOs and the funding opportunities. Involvement of donors includes providing guidance on funding schemes, assisting the development and appraising of submitted development proposals.

302. Major multi-lateral and bilateral donors and international development agencies, which are committed to provide (and are continuing to provide) financial and technical support to the ongoing development efforts including the implementation of the country's SLM programs/projects are:

2.2.3 Multilateral Donors

303. *The World Bank (WB)*: is the major donor and lead implementing agency of various grants and strongly committed to support this important Government's agenda within Ethiopia. To this end, it has a wide set of funding instruments ongoing and in the pipeline that already do or can support the implementation of the ESIF, including the (PBS) Protection of Basic Service Program (US$ 215 m); the Productive Safety Net Program (US$ 175); the IDA/GEF SLM Program (US$ 29 m); the IDA Tana Bele and GEF Water Resource development projects (US$ 45 m); diverse Climate Change initiatives; and specific Technical Assistance in the context of TerrAfrica. However, specific/additional resource allocation to SLM depends on the highest level of Government's commitment to use IDA allocations for this sector.

304. In general WB has funded different on-going and pipe line SLM related projects with the overall total grant amount of USD 1028.52 million during the program period of (24/06/2002 – 31/10/2015). About 20 ongoing SLM related programs and projects including the above mentioned one and: the Food Security Projects; the Pastoral Community Development Project phases I&II; the Rural Capacity Building Project; the Irrigation and Drainage Project; the Sustainable Land Management Project; fertilizer support project, water supply projects and the Ethiopia/Nile Basin Initiative are funded.

Table 6: WB Funded on-going and pipe line SLM related projects

No	Name of Donors	Major Activities related to SLM	Total grant Amount (million USD)	program period
	The World Bank (WB)	(PBS) Protection of Basic Service Program	215.0	2002 -2015
		PSNP	175.0	
		the IDA/GEF SLM Program	29.0	
		IDA Tana Bele and GEF Water Resource development projects	45.0	
		Other ongoing SLM related programs and projects	564.52	
	Sub total		**1028.52**	

Source: MoFED, Bilateral and Multilateral Cooperation Departments, March, 2009

305. *The World Food Program (WFP):* has a long history of supporting 'food-for-work' soil and water conservation efforts in Ethiopia and will continue its support to the SLM agenda through the MERET-plus Program. The WFP is currently supporting on-going projects: the Managing Environmental Resources to enable Transition to better Livelihoods Project (MERET); the Food Security Project; and the Productive Safety Nets Project. The main funding scheme of WFP is the uses food material through food monetization program. About 61% of project cost (payment for labor) is food while the rest to cover project expenses including transportation and purchase of hand tools provided in cash.

306. WFP has funded diverse on-going and pipe line SLM projects with the over total grant amount of USD 416.44 million and (1,244,502 tons food) during 6th program phases since 80's (1980 – 2011). In most recent case WFP has provide funds both in food and cash term (50.4 million USD & 115,210 tons food).

Table 7: WFP (MERET Project) Major Activities related to SLM (1980-2011)

Program Phase	Major Activities related to SLM	Amount of Food (ton)	Total USD million	Years
1st and 2nd	Environmental protection, land rehabilitation, SWC, Afforestation and road construction, irrigation, pond and dam construction	819,911	214.0	1980-1994
3rd		119,196	53.0	1995-1998
4th		170,571	55.94	1999-2002
5th		134,824	43.1	2003-2006
6th		115,210	50.4	2007-2011
	Total	**1,244,502**	**416.44**	

Source: WFP MERET project Activity profile, 2009.

307. *The European Union (EU)*: EU has supporting various food security and PSN projects in Ethiopia. Currently EU is supporting the different on-going projects and signed a new Country Strategy Paper (CSP) with the Government in December 2007 for program period of 2008–13, with a total budget of € 644 million (about USD 870). One of the priority areas identified in the CSP is food security and rural development. Specific projects are expected to include PSNP, Food security, Rehabilitation of Flood affected Population, support for agricultural markets and livestock development, improved natural resource management to address degradation and Scaling up of Participatory Forestry management.

Table 8: EU Supported SLM Related Projects

S.N	Project Title	Project No	Project Cost Euro in Million	Signature Date	Completion Date
1	Productive Safety Nets Program	9 ACP ET 012	78.0	25/10/05	31/12/08
2	Productive Safety Nets Program	BL 21.02.02.Food	20.0	29/03/07	30/04/2010
3	Rehabilitation of Flood Affected Population	9 ACP ET 027	7.0	15/11/07	30/06/2011
4	Livestock Sector Capacity Building for Agricultural Export Sector	STABEX99 FMO/8 ACP ET 6&7	1.2	4/9/2007	31/12/2010
5	Scaling up of Participatory Forestry Management	10 ACP ET 007	6.0	29/01/09	31/12/2013
6	PSNP	10 ACP ET 002	42.0	29/01/09	31/05/2010
7	Livestock Development	10 ACP ET -----	10.0		
8	Agricultural Marketing	10 ACP ET -----	10.0		

	Development				
	Total		**174.2**		

Source: MoFED, Bilateral and Multilateral Cooperation Departments, March, 2009

308. *The International Fund for Agricultural Development (IFAD*): has a history of providing low-interest loans and grants for rural programs and projects in Ethiopia that seek to enable rural poor people to overcome poverty themselves. IFAD in particular has emphasized the need for commitment to a development strategy directed towards the rural poor with some of the projects related to SLM.

309. Currently IFAD supports on-going projects such as: the (AMIP) Agricultural Marketing Improvement Programme; (RUFIP) the Rural Financial Intermediation Programme; the Participatory Small-scale Irrigation Development Programme; the Pastoral Community Development Project; and the Community-Based Integrated Natural Resources Management Project in Lake Tana Watershed Project. Some of the ongoing programs/projects supported by IFAD are indicated in the following table.

Table 9: IFAD Major Project Activities related to SLM during (14-Jan-2002 - 30-Sep-2015)

No	Project/Program	Credit/Grant Amount in million USD	Signing Date	Closing Date
1	AMIP	27.20	20-Jan-2005	20-Feb-2012
2	Pastoral Community Development	20.00	10-Oct-2003	31-Dec-2009
3	RUFIP	25.70	14-Jan-2002	13-Sep-2010
4	Small-Scale Irrigation Dev't Project	20.00	13-Jun-2007	30-Sep-2015
	Total	**92.9**		

Source: MoFED, Bilateral and Multilateral Cooperation Departments, March, 2009

310. *The African Development Bank (ADB):* has portfolio for Ethiopia includes some of the 14 on-going and pipe line SLM related projects: the National Livestock Development Project; the Rural Finance Intermediation Support Project; the Agricultural Sector Support project; Koga Irrigation and Watershed Management Project; and Rural Water Supply and Sanitation Project. The following table shows indicative potential financial resources committed from ADB.

Table 10: ADB Supported Major SLM related programs/Projects

No	**Project/Program**	**Credit/Grant Amount in MUSD**	**Signing Date**	**Closing Date**
1	National Livestock Development Project	27.00	20-Nov-98	30-Jun-09
2	Koga Irrigation and Watershed Management Project	32.59	19-Jul-01	30-Jun-09
3	Koga Irrigation and Watershed Management Project	1.33	19-Jul-01	30-Jun-09
4	Genale-Dawa Basin Master Plan Study	3.93	16-Nov-01	30-Jun-09
5	Rural Finance Intermediation Support Program	27.17	13-Oct-03	31-Dec-09
6	Rural Finance Intermediation Support Program	8.00	13-Oct-03	31-Dec-09
7	Awash River Flood Control And WS Study	1.83	15-Oct-03	30-Jun-09
8	Livestock Development Master Plan Study	2.34	5-Mar-04	30-Jun-09

9	Agriculture Sector Support Program	21.24	12-Feb-04	31-Dec-10
10	Agriculture Sector Support Program	17.76	12-Feb-04	31-Dec-10
11	Fisheries Resources Development Plan Study	0.92	16-May-05	30-Jun-09
12	Institutional Support Project to the MoWA	1.06	15-Sep-04	30-Jun-09
13	Harar Water Supply and Sanitation Project	19.89	8-Nov-02	31-Dec-10
14	Rural Water Supply and Sanitation Project	43.61	25-Feb-06	31-Dec-10
	Total	**208.67**		

Source: MoFED, Bilateral and Multilateral Cooperation Departments, March, 2009

311. *Other UN agencies (GEF, UNDP and FAO)*: these agencies have a long history of involvement in SLM related activities in Ethiopia. They have provided direct technical assistance and financial support for various on going SLM Related Programs/Projects. The following table shows amounts of financial assistance committed to a number of programs/projects during 2005-2009 in million USD.

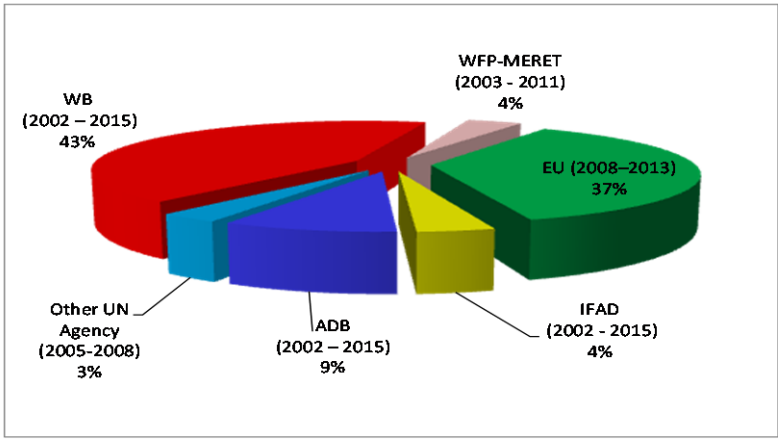
Table 51: Other UN Agency Supported SLM Related Programs/Projects (2005-2008) (million USD)

No	Donor/Project Program Name	Total Allocation (2005-2009)
1	GEF	2.19
2	FAO	22.1
3	UNDP	49.40
	Total	**73.69**

Source: MoFED, Bilateral and Multilateral Cooperation Departments, March, 2009

312. *Figure 2* below indicates the relative potential size of financial resources multilateral and UN agencies/donors committed to support SLM related projects/ programs. The figure indicates the major donors' financial resources contribution (in percent) to ongoing SLM programs with in respective investment period.

Figure 4: Multilateral Donor's Potential Resources Committed to SLM Investment (2002 - 2015)



Source: MoFED, Bilateral and Multilateral Cooperation Departments, March, 2009

2.2.4 Bi-lateral Donor

313. Bilateral donors and international development agencies have provided (and are continuing to provide) financial and technical support to the federal and regional governments for improved management of the country's land resources. The on-going and pipe line projects and programs from these international development partners will provide

much of the base line funding for the proposed ESIF activities. The key bilateral development partners and their major SLM related development projects/programs described in the following table:

Table 62: External Financial flow to SLM/related sectors from different Bilateral donors

S.N	Project Title	Currency in '000	Program Period	Sector	Total Amount
1	USA	USD	2005-09	Agriculture	100,236
2	Canada	USD	2007-10	Agriculture/Multi-sectoral	193,200
3	Sweden	USD	2004-10	Education	86,349
4	Finland	USD	2007-11	Water	11,150
5	Norway	USD	2009	Agriculture/water	53,650
6	Austria	USD	2008-12	Agriculture	8,200
7	Germany	EURO	2005-09	Agriculture/Natural Resources	25,424
8	United Kingdom	Pound	Oct.2007-12	PSNP/Water & sanitation/PBS	99,000
9	France	EURO	2005-10	Irrigation & water projects	18,324
10	Japan	USD	2005-08	Agriculture & water	150,209
11	Italy	EURO	2005-08	Water/Hydro power II project	220,000
12	Spain	EURO	2008-10	PBS program & Agriculture	11,750

Source: MoFED, Bilateral and Multilateral Cooperation Departments, March, 2009

314. *German Development Cooperation (GDC)*: is committed and willing to continue its support to the SLM agenda. It has provided a bilateral assistance for the ongoing SLM projects and actively involved (with funding from both *GTZ* and *KfW*) in a range of SLM activities through the Sustainable Utilization of Natural Resources for Improved Food Security Project (SUN) in previous years. Currently, this project is replaced by the SLM and continues into 2009. GDC SLM related pipe line ongoing projects in 2009 include: the Sustainable Land Management Project (replacement for the SUN project); the Participatory Forest Management Project; and the Rural Energy Project. The total amount of budget breakdown for the already agreed upon SLM projects, contributed by German Government is about 25.424 million EURO, through: a) Financial cooperation 13.284 Million EUR b) Technical Cooperation GTZ: 10.4 Million EUR and DED: 1.74 Million EUR through CIM. Support to this sector beyond 2011 will depends on the Government's commitment and priorities.
315. *The United States (USA):* operates mostly through its development agency USAID. USAID is committed to support the implementation of the second component of the ESIF through the Ethiopia Land Tenure and Administration Program (ELTAP). USAID has provided significant support for SLM related activities through the recently completed Amhara Micro-enterprise Development program; Agricultural Research, Extension and Watershed Management Project (AMAREW); and other on-going and pipe line USAID projects include: (i) Ethiopia Land Tenure and Administration Project; (ii) Pastoral Livestock Improvement

Project; (iii) Policy Research Support Program; (iv) Ecotourism; and (v) support for the Government Safety Net Project.

316. The amount of financial resources for ongoing and pipeline SLM projects indicated above assisted by USAID (2005-2009) is about 100.236 million USD.

317. *Canada*: has supported various SLM related projects such as Productive Safety Net program (cash through WB), rural capacity building and (PBS) Protection of Basic Service Program Component II (Cash through WB). The total amount of budget contribution committed to these projects during a period of 2007-2010 is about 193.2 million USD.

318. *Sweden:* also provides financial assistance to development efforts in the country. Some of the ongoing SLM related projects financed by Sweden are Institutional Development of Wondo Genet Forestry and Land Survey Bahir Dar University with total outlay of 86.35 million USD for 2004-2010.

319. *Finland*: currently supports two SLM related projects, Rural Water Supply and Environmental program in Amhara IV and Rural Water Supply and Environmental program in Bensangul Gumuz regions with the total budget of 11,150 million USD in 2007-2011.

320. *Norway*: is committed to provide financial assistance to ongoing (2008-09) Environment-Natural resources & Food security programs and Hydro Power & promotion of Nile Basin Initiative with about USD 53.65 million.

321. *Austria*: support Rural Development program in the Amhara Region with total budget of 8.2 million USD in years 2008-12.

322. *United Kingdom*: provides financial and technical assistance for projects such as PSNP Extension, Water and Sanitation (FA) and Water and Sanitation (TA) for years 2007 – 2012 with total budget support of 99.0 million Pound.

323. *France*: has provided a bilateral assistance for the ongoing SLM related projects and actively involved in supporting Debre Birhan Water Supply and Sanitation project, Irrigation Development projects in three Regions, and institutional support for the integrated Water Management of the Blue Nile Basin for the years (2007 -2009) with the total amount of budget 18.3 million EURO.

324. *Japan*: government has funded different on-going and pipe line SLM related projects with the overall total budget amount of USD 150.209 million during the program period of (2006 – 2011). Some of the projects are Water Supply in Afar Ph II, Water Supply in Tigray, Ethiopian Water Technology Center Project, Participatory Forest Management in Belete Gara Oromia Region, and Water project Phase II.

325. *Italy*: has provided financial and technical assistance for various development endeavours in the country including the direct support to Arsi-Bale Rural development in Oromia region and Gilgel Giibe Hydro power II Project. The amounts of financial assistance (Loan) committed to Gilgel Giibe Hydro power II Project for the years 2005-09 is about 220 million EURO.

326. *Spain*: is as well provide bilateral financial supports specifically for two SLM related projects, PBS program and Rural Development programs with the total budget support of 11.75 million EURO in the years 2008-2010.

2.2.5 Base line funding currently Available from External Sources

327. The quantity of financial resources from external sources that will be readily available in the next 6 years for SLM-related projects implemented in the period up to 2015 was assessed and indicated in the table 13. A compilation of this data from both bilateral and multilateral sources could indicate possible funds available in the mentioned years. Because of the extended range of timeframe between project signing and closing dates, it was difficult to disaggregate the budget allocation for each year. These possibly available funds represented the "total costs" of various projects, which is a proxy of actual disbursements to SLM-related activities.

Table 13: General Funds Available in the next 6 years for SLMrelated activities from External Sources

S.N	External Sources	Currency	Total Amount in '000	Program Period
1	USA	USD	100,236	2005-09
2	Canada	USD	193,200	2007-10
3	Sweden	USD	86,349	2004-10
4	Finland	USD	11,150	2007-11
5	Norway	USD	53,650	2008-09
6	Austria	USD	8,200	2008-12
7	Germany	EURO	25,424	2005-09
8	UK	Pound	99,000	2007-12
9	Spain	EURO	11,750	2008-10
10	Italy	EURO	220,000	2005-09
11	*WB*	USD	938,380	2004– 15
12	WFP-MERET	USD	93,500	2003 -11
13	EU	USD	870,000	2008–13
14	IFAD	USD	72,900	2002 - 15
15	ADB	USD	110,500	2004 –15

Source: Extracted from MoFED, Bilateral and Multilateral Cooperation Departments, March, 2009

2.2.6 Donor Coordination Mechanisms

328. The ESIF-SLM will be implemented by bringing together federal, regional, woreda and local/community level stakeholders as well as development partners (Donors) within a multi-level cooperative partnership. Donor coordination mechanisms emphasize the need to build partnerships, particularly with the stakeholders that are most directly involved in the SLM projects/programs affected by land degradation. Many donors also provide funding directly to NGOs, CSOs and local authorities that shred vision of SLM within specific localities or watershed area. Some donors (GEF and WB) have built partnerships with groups of NGOs or public agencies or local institutions and communities that work on the SLM and provide small grants for those eligible for the funds. They provide financial assistance for those directly involved in implementation of activities and increases the flow of resources and ensures their more efficient use. Public institutions should therefore work with these groups to bring them into contact with the available opportunities, and should offer guidance on how to benefit from cooperation.

329. Therefore, NGOs and CBOs maintain strong ties to communities and should have work at the local level. They represent an important entry point in the strategy, and their collaboration is instrumental to the success of SLM programme activities.

330. Donors should assist public agencies in identifying NGOs and CBOs that have sufficient capacities to carry out projects successfully. Donors and public agencies should establish strong ties with local NGOs and CBOs. Involvement of NGOs/CSOs in SLM should start with the setting of local priorities and MoARD should accredit NGOs as partners to assist in implementing SLM projects and programs. The MoARD should link NGO/CBOs work plans to one another and to the SLM work plan at the MoARD. The MoARD should offer guidance and assistance on available funds, and means for obtaining access to them.

2.2.7 Foreign Direct Investment (FDI)

331. A report released by the United Nations Conference on Trade and Development (UNCTAD) shows that Foreign Direct Investment (or FDI) into Ethiopia has increased. Similarly, World Investment Reports (WIR) also illustrate the trends in foreign direct investment inflows to Ethiopia increased from US $255 million in 2002, to $465 million in 2003, to $545 million in 2004. Furthermore, while the total FDI inflows around the world have actually decreased since 2002, FDI in to Ethiopia has increased to $717 in 2008. Similar sources indicate that Ethiopia in 2009 will feel the effects of the global slowdown as real GDP growth dips to a forecast 6.9% from an estimated 9.6% in 2008. Weak external demand will weigh on economic expansion as many of Ethiopia's key export markets fall victim to a recession. In addition, aid inflows could decline as the fiscal balance sheets of developed nations come under strain.

332. According to the 2008 WIR, if new Official Development Assistance (ODA) inflows were allocated according to the countries priorities, the investment climate would be improved further still, by providing opportunities for foreign firms to invest productively in various sectors of development that related to SLM.

2.2.8 Limitation on Mobilization of External Funding Sources

333. The capacity to mobilize resources does not depend on overcoming all the barriers that have been identified, however, resolving some would serve to substantially improve the efficiency of raising financial resources and achieve the objectives of SLM in a more effective manner. Some of gaps and bottlenecks are discussed bellow.

334. *Delayed of budget release and inefficient utilization:* Financial limitation is very critical problem. However, not only resources limitation but also inadequate capacity to utilize available resources is observed to be a constraint.

335. *Number of Pre-conditions*: Donors have set various a numbers of pre-conditions and modalities to financing of SLM projects. As a result of changes in donor's funding modalities, the recipient country have to be fulfilled requirements to implement development programs/projects. This conditionality of financial resources is another barrier limiting the timely utilization of resources for SLM implementation.

336. *Global Economic crises*: The trends in global crises would drop the availability of financial resource delivery through time with at project level.

337. *Absence of matching funds or co-financing,* both at federal and regional level besides poor report and record keeping system are all issues to be considered. Slow rate of budget transfer and delay of release from donors and all Federal Institutions to beneficiary woredas is another barrier; there is also lack of trust from donors' side on the implementation capacity of implementing organizations.

338. *Stable and Efficient coordination mechanism*: The coordination mechanisms among public agencies and donors are not efficient and fully operational to execute various duties and responsibilities. The coordination and collaboration between the different institutional stakeholders including donors and NGOs is poor resulted in duplication of effort and conflicting approaches with regard to the use of incentives for SLM.

5. INNOVATIVE RESOURCE MOBILIZATION

3.1 Innovative Funding Sources, Instruments and Mechanisms

339. Various changes have taken place in the international development financing mode, prompting a shift towards the adoption of a more sustainable and structured programme of financing mechanism that is aligned with priorities of the beneficiary countries. Consequently, an additional set of new financing modalities, procedures and instruments have emerged for mobilization of new sources of funding in order meet long-term financing needs.

340. Explore funding information from non-traditional or innovative funding mechanisms will involve analysis of various global and/or national initiatives, funding partnerships and emerging funds including private initiatives that could provide opportunities for investments in SLM. Following, possible sources of non-traditional funding sources are assessed.

3.1.1 Compensation for Environnemental Services (CES)

341. Identifying alternative financial mechanisms for funding SLM interventions on sustainable base is critical task in assuring the continuation of SLM investment in the country. Currently the bulk of the investment funds for SLM activities come from the federal government, donors and NGOs. Exploring and recommending possible alternative sources of funding that could be tapped to support the promotion and scaling up of SLM, particularly, those that would come under the heading of CES and 'payment for environmental service' is crucially important.

342. Ethiopia is a party to the Convention on Biological Diversity (CBD) (ratified 05/04/1994). The UNCBD is one of the principal international agreements for the conservation of biological diversity (biodiversity), requiring Parties to "adopt economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity" (Article 11). The UNCBD's COP has referred to the importance of economic incentives in a number of COP decisions, and has offered recommendations on the design and implementation of incentive measures.

343. Various possible fiscal or economic instruments are used as tools of generating financial sources for SLM. Among some of the alternative financial sources (innovative financing) that would be most applicable and considered as 'payment for environmental service' in Ethiopia would include:
   - Payments for carbon sequestration and Charcoal production
   - PES on domestic water supply and irrigation;
   - Deforestation taxes
   - Environmental levy on the entry fee to national parks/game reserves and protected areas
   - Appropriate PES on investment projects, industries and mining projects;
   - Improving PES in various industrial, commercial and service provision sectors within Municipalities' jurisdictions
   - Enforcement of regulations and laws pertaining to taxes

344. Recently, Payments for Environmental Services (PES) have received increasing attention as a means to 'correct' these market failures by translating non-market values of the environment into financial incentives for local actors to provide environmental services including SLM investment. PES is widely supported as one of the promising mechanisms for resource transfer for agriculture, nature management, mining and fisheries. PES of Ethiopia as a case where environmental degradation and poverty are firmly intertwined would be appropriate to address SLM interventions.

3.1.2 PES on Domestic Water Supply and Irrigation

345. Often, the term PES is used as broad umbrella for any kind of (market-based) transaction for environmental conservation including eco-certification and charging entrance fees of nature parks to tourists. Here, the focus is on PES mechanisms that comprise payments to providers of hydrological services based on contracts (domestic water supply and irrigation water for crop and fruit production) specifying restrictions on the use of water resources, or environmental results.

346. Currently, water resources in Ethiopia are open access resources contributing to unrestricted use which may lead to depletion of some of these resources. This is meant to change open access of irrigation water in some part of the country such as Central Rift Valley with the introduction of water fees for water users. This could be a good practice of a market-based PES schemes which seem promising instruments for environmental conservation as they establish a direct link between sellers and buyers of ES, and may contribute to income redistribution.

347. Setting up PES in accordance with the overall regulatory framework of Ethiopia on water, land, forest and agriculture is timely issue to compensate for environmental problems. One of the feasible possibility for alternative funding source is set PES on irrigation water for horticulture, crop and fruit production in Ethiopian where appropriate, specially in areas like Central Rift Valley where Irrigated agriculture mainly occurs along the tributaries of Lake Ziway, i.e. the Meki and Ketar river, along the shores of Lake Ziway and along the Bulbula river connecting Lake Ziway with Lake Abyata. The development of irrigated agriculture has been associated with the rapid decrease in lake levels. For example, the size of Lake Abyata has reduced by approximately 50% during the last decade (*Jean Carlo R. de Francisco, Jan. 2009*). The gradual decline of wood stocks, over-grazing of common

pastures and lack of proper soil management has resulted in the sharp increase of the area with degraded land.

348. Likewise, other intensive commercial and state owned irrigation schemes (agriculture and horticulture) will cause rapid pollution of surface flows and slow but persistent pollution of groundwater flows with nitrogen and pesticides; causing pollution and diseases to people residing around streams. Hence, setting appropriate PES for irrigation and domestic water supply in these commercial farms including flower farms will equally important.

3.1.3 Payments for Carbon Sequestration and Charcoal production;

349. Charcoal meets an overwhelming proportion of energy needs (80 percent of urban households' energy needs) in Ethiopia where its production and forest clearing action remain a risky and highly hazardous environmental problem. With inefficient charcoal burning/ production methods such as earth-mound kilns, only 10 percent of the wood used in charcoal production is actually converted into charcoal. The rest goes to waste. This gives rise to severe soil erosion and land degradation, general forest destruction exacerbating climatic changes.

350. Besides a 2007 proclamation on the conservation, development and utilization of forests, Ethiopia is yet to ratify its policy on charcoal. Currently, a number of ministries – MoARD, EPA, MoFED, regional and woreda administration, the police – handle controlling of charcoal production and transportation by setting a number of road side check points in an uncoordinated manner. They confiscate as a penalty and sell charcoal as PES to compensate for the ecosystem.

351. The REDD Programme is intended to support demonstration of reduction the emission activities through explicit aim of promoting market-based REDD and payment for ecosystem services. Hence, efforts have made to explore opportunities through carbon finance' companies which advocates policies to reduce deforestation using economic incentives to encourage countries to protect their carbon reservoirs in standing forests. In doing so, the needs of local and indigenous communities should be addressed when action is taken to reduce emissions from deforestation and forest degradation.

352. Therefore, strengthening the measures on carbon sequestration and charcoal production and setting more appropriate PES (charging sellers/buyers of ecosystem services and products) is an innovative form of financial resources and promoting natural resource conservation and creating markets.

3.1.4 Deforestation Duties

353. Introduction and applying a higher tax rate on illegal forest exploitation (logging activities and deforestation etc.) where disincentive activities that cause deforestation can carry on. In general, deforestation duties are unit payments applied to either number of trees or each unit of local land size or size of wood extracted. They can be partially exempted if the logging enterprises/person engages in reforestation within a certain period.

354. For instance: in Ethiopia, permissions are needed for tree cutting and are obtained from the local administration/woredas and MoARD offices at different levels. Individuals (those

who live in locality) ask for permits from the local administration/MoARd, which allow them to cut 'forest' trees. However, the costs/PES permits are negligible (sometime with out payment). Hence, setting the use of 'deforestation taxes' is preferable and considered as PES where the receipts from these proposed deforestation taxes go into forestation programs.

3.1.5 An Additional entry fee to Parks/Protected areas

355. There are lots of such areas across the country. An additional environmental levy on the entry fee to national parks/game reserves and protected areas to pay for eco-systems or exemption of some taxes of eco-tourisms are another PES which might be encouraged the implementation of SLM activities within neighboring buffer zones or to improve the environmental service provided by respective reserved areas. In such protected areas, charge schemes can include entrance fees, concession payments for tourism, and hunting and fishing fees. .

3.1.6 Appropriate PES in Economic Development such as industries, commercial and mining projects

356. Any investment projects (commercial, industrial and mining sector) have to be critically evaluated and judged by EPA and concerned public regulatory agency through Environmental Impact Assessment (EIA) or an independent and accredited third party and institutions on Climate Change, proven by a baseline study and validated by monitoring reports both before establishment and after implementation.

357. The government or concerned agency (EPA) has to apply direct regulation with the aim to cut back pollution and environmental hazards (effluents products) by reducing the current situation to an optimal level. For instance, Ethiopia's industrial sector is made up of small, scattered and a lot of obsolete enterprises providing valuable employment and production, but contributing to pollution. Hence, the government (EPA) and other independent regulatory party should regulate the environmental pollution with appropriate use of conventional regulatory mechanisms through PES (e.g., taxes).

3.1.7 Improving PES on Managing Adverse Impacts of Municipal Waste

358. Municipalities have collected various levies and service charges in the form of taxes and penalties within their jurisdictions and possess relatively full independence over management of their funds for approval of allocations or expenditure. Even though, a detailed assessment of the municipalities budgets was not carried out during this study, municipal budgets could contribute sizeable funding as innovative financial sources for environmental/SLM activities through collection of various PES in the form of taxes and penalties within and around urban areas. Municipal budgets may therefore be considered as an entry point for mobilizing funds for environmental rehabilitation and SLM activities.

359. Waste management is an integral part of environmental protection. Although complete information on the status of waste management and payment for services in different cities and towns is not available at the moment, a recent report by the Addis Ababa City Administration has clearly indicated that PES has been done on municipal waste disposal through both privately organized waste handler and municipal services which can

transport, reprocess, handle and manage prevailing waste. Most of the municipal green wastes which are mixed with wastes such as plastics, rubber and metals could be sorted and collected separately and used for composting.

360. Among others also, imposing vehicle and fuel taxes as PES on a large numbers of various types of vehicles is good entry point for PES. Especially, vehicles with obsolete and old standards are contributing to high carbon emission. Hence, the municipalities and other relevant government institutions has to design more inclusive and appropriate vehicle import and fuel taxes in future so as to raise additional funds and revenues for the PES. This could be another potential financial sources raised as taxes for environmental measures.

3.1.8 Market facilitation for PES

361. Markets for SLM related products are not well developed in Ethiopia. Provision of ecosystem services involves tradeoffs that need to be carefully considered before sellers decide to enter into the PES market. For example, planting trees for eco-tourism will take land area that could be used for producing agricultural products. Hence, a systematic analysis of opportunity costs and priority of the geographic areas should be made where PES would be the best option. Producers are reluctant to invest in SLM where it implies higher production costs where access to markets for specific SLM products is limited. In general marketing of SLM related products is affected negatively by the overall low capacity that traders have in marketing agricultural inputs and outputs, there may be scope for policymakers to identify appropriate interventions to facilitate market development. Increase the capacity of local buyers, intermediaries and sellers of ecosystem services to participate in markets is an area to consider for sustainability of resource mobilization.

362. Reasonable transaction costs. The costs that ecosystem service buyers and sellers incur to find each other, negotiate contracts and monitor agreed measurements of quantity and quality are usually quite high. The transaction costs are especially high for smallholder suppliers of ecosystem services (Waage, et al., 2006). Strategies of reducing the high transaction costs include organizing farmers in groups of ecosystem service providers. Collective provision of ecosystem services realizes economies of scale by reducing the transaction costs and also increases the bargaining power of small producers (Swallow, et al., 2005).

363. Local benefits of PES: The ecosystem services should have local benefits in order to increase their local ownership. Some of the global ecosystem services like carbon sequestration and biodiversity may not have significant direct benefits locally. Hence if the forest is under a PES market, an arrangement could be made to allow local residents to collect firewood from dead trees. Such local benefits could help to foster local ownership of the forest. Natural resources providing ecosystem services with no local benefits are likely to be sabotaged and/or encroached and enforcement of their conservation could be hard.

3.2 Policy Recommendations

364. *Enforcement of Regulations and laws pertaining to taxes and Royalties:* Apart from the above mentioned innovative sources of financing, it would also be necessary to explore ways to encourage each woreda administration and municipality to invest part of their revenue or capital investment grant they receive from the federal/regional government in promoting SLM and environmental protection within their area. Accordingly, access to the budgets of decentralized government entities, such as woredas/district budget or municipalities, would provide useful information on alternative funding sources, since these are often involved in the provision of services to the local population. Local governments may also constitute an independent source of funding, since they have fiscal autonomy.

365. *Integrate emerging issues of Climate change adaptation and mitigation*, bio-fuels and food prices, as well as opportunities for PES, ecosystem and landscape approaches, sustainable agriculture intensification, sustainable resilient agro-pastoral systems, agro-biodiversity, and relations of all these to food security.

366. *Explore options for subsidies or taxation to promote SLM*: Some sectors or product value chains may be amenable to subsidization or taxation, particularly where there is scope to identify the extra costs of adoption of SLM practices or land degradation. The cost, economic impact, and feasibility of any such system would have to be explored in detail but could offer opportunity to further incentivize SLM adoption.

367. *Identify and implement regulatory measures which may reduce land degradation*: Increased regulation, including penalties, for industries, quarries and mining projects that are contributing significantly to land degradation and environmental pollution. The costs and feasibility (including equity considerations) of such options should be explored prior to development of any regulatory regime. Enforcement of such regulations should also be strengthened. On the other hand, the strengthening the enforcement of taxes/royalties regulations and laws pertaining to the land, forest, industries, investment projects, water and irrigation schemes and other environmental issues will provide wide range of PES in both rural and urban areas.

4. RESOURCE MOBILIZATION STRATEGY

4.1 Resource Mobilization

368. In preceding sections, various financial sources, funding modalities and approaches to mobilize internal, external and innovative sources of funding were discussed. Currently, mobilization of most of external development assistance funding requires some form of internal investments in the form of financial contributions (co-financing) or in the form of in-kind contributions to SLM programs and projects. Furthermore, many donors are shifting towards programme-based approaches and budgetary support as opposed to project-based funding, raising further the importance of mainstreaming of SLM into the appropriate national instruments. Besides, the international development financing modes shift towards the adoption of a more structured programme of financing mechanism that is aligned with priorities of the beneficiary countries. As a result, an auxiliary set of new financing mode that relies on domestic sources have to be adopted for mobilization of new sources of funding to meet long-term financing needs of ESIF-SLM on sustainable.

369. A resource mobilization strategy serves as planning framework for sustainable investment in ESIF-SLM and could be used to guide the prioritisation, selection and design of new projects and programs based on available resources. To this effect, the concepts and principles of SLM should mainstreamed into the natural resource based development plans and activities of the Federal, Regional and Woreda Governments. Strengthening of cross sectoral multi-stakeholder partnerships, operating at multiple levels (federal, regional, woreda and community) cooperating and collaborating in the promotion and scaling up of SLM is critically important.

370. The mobilization of substantial resources for SLM implementation requires concerted, coordinated efforts by governments, development partners and other key stakeholders. There is a growing potential to mobilize additional funding for SLM implementation through non-traditional sources and innovative methods. This, however, requires governments to enter into focused partnerships with actors (private, CSOs and NGOs) that have not previously been involved. Success will therefore depend largely on a demonstration of mutual benefit, trust and accountability.

371. Following are strategic objectives to implement the resource mobilization in the perspective of both internal and external resource and to ensure their long-term sustainability.

4.2 Enabling Environment for Resource Mobilization

372. The existence of an effective enabling policy, legal, regulatory, institutional and financial environment plays an important role in mobilizing resources for SLM. Ethiopia has given a higher priority on SLM/national action programme (NAP) issues in PASDEP, Ethiopia's poverty reduction strategy programme for 2006-2010. There is substantial increase in financial resources for SLM-related investments due to improved enabling environment for multilateral and bilateral partners to work with the Government of Ethiopia and to establish a national framework for scaling up investment for SLM and NAP priorities in the PRSP.

373. Resource mobilization strategy enables various stakeholders to make use of financial resources so as to resolve constraints and creating enabling environment for mobilization of more financial resources to SLM projects sustainably. It should be explicable that resource mobilization need not be restricted to increasing monetary flows only, but may also cover human resources and capacity as well as technical resources.

374. As a result of the ongoing improvement in the enabling environment for development partners to work with the Government of Ethiopia, mainstreaming and partnership-building on SLM have a higher priority on National Action Programme (NAP) issues in PASDEP (the Plan for Accelerated and Sustained Development to End Poverty) – Ethiopia's poverty reduction strategy programme (PRSP) for 2006-2010. The case in point is that Federal capital budget expenditure performance during fiscal years 2001/02-08/09 had shown an increasing pattern amounting for more than US$ 4404.1 million allocated to SLM-related investments under key sectors within the plan period. Similarly, a substantial amount of financial resource has been pooled together from multilateral and bilateral sources for SLM related projects and programs amounting to about USD 2730 million in the years 2002-2015 implying big emphasis were given on mobilization of resources to implement SLM-related investments in the country.

375. Experience has demonstrated that although mainstreaming and partnership-building are lengthy processes, they are effective means of mobilizing financial resources for SLM implementation under current mechanisms for delivering development financing, particularly within the framework of poverty reduction strategies. The major pillars (enablers) facilitating resource mobilizations are described below.

4.2.1 Mainstreaming

376. Mainstreaming is a continuous effort to integrate SLM and other Environmental convention in to priorities of Government decision-making and the political culture. Experience has shown that mobilization of substantial flows of finance cannot be achieved without mainstreaming of SLM programs in national and international policy, planning and budgetary Processes and overarching national development frameworks. Government ownership of this process and support from development cooperation partners is fundamental to success.

4.2.2 Partnership-building

377. A partnership is another opportunity that must be built to enhance the mobilization of resources. Establishing a partnership among government, bilateral and multilateral development cooperation, the private sector and the civil society is crucial to achieve specified development outcomes and impact at all levels. The mobilization of substantial financing for SLM implementation requires concerted, coordinated efforts by governments, development partners and other key stakeholders. This requires governments to enter into focused partnerships with actors that have not previously been involved. Success will therefore depend largely on a demonstration of mutual benefit, trust and accountability.

378. The government of Ethiopia has made continuous efforts to improve donor partnership arrangements in order to enhance the effectiveness of partnership mechanisms, expand the timeframe to allow for greater impact and strengthen the relevance to development agendas including the SLM strategic objectives, mainstreamed strategies and national priorities.

4.2.3 Knowledge Management

379. Knowledge management is one of the pillars that enable resource mobilization and implementation of SLM activities. Results can only be achieved if all institutional activities are backstopped and substantiated by technical and non-technical knowledge. SLM constituencies need to be aware of and able to access the development financing instruments available at country levels in order to leverage investments, identify traditional and innovative sources of funding from which they could benefit, and articulate the arguments needed to influence policy reform.

4.2.4 Scaling-up of best Practices

380. The scaling up covers both geographic scaling-up, to cover a wider physical land area, and thematic scaling-up, in which activities are undertaken on specific SLM-related themes that are of wider relevance than the pilot geographic SLM interventions selected by the communities. The thematic interventions may include studies, surveys, technologies, applied or action research, training or other interventions in a specified SLM or SLM planning theme. Therefore, it is important to disseminate the good management practices and technologies in to the “high potential areas” where long-term food security is under threat from land degradation. To do this will require incentives, institutional mechanisms, capacity building, and financing to facilitate wider adoption across the country.

381. To this effect, the Ethiopian Agricultural Research Institute and MoADR have been working with development partners, particularly GTZ, SIDA, World Food Program, CIDA, and UNDP and FAO to develop best management practices for sustainable land management. These efforts have led to successful models for improving sustainable land management, focusing largely on the food insecure areas.

4.2.5 Harmonization of Policies

382. Improving the overall policy context for SLM has positively influenced budgetary reform processes and national development planning cycles. Analyzing all relevant policies have a potential impact on natural resource management and sustainable development –and proposing improvements to the overall policy context of the country and improving the enabling policy framework in support of SLM. Hence, in future Ethiopia will have undertaking harmonization of public policies with respect to creating enabling environment for SLM.

4.2.6 Participatory Decision Making

383. Including representatives of farmer organizations and community members in decision making that set priorities for SLM activities, technologies, research and extension programs. For example, a committee of farmers, research, extension service providers at woreda/district or kebele (smallest admin unite) level could be formed to provide coordination and guidance on the SLM research and extension activities in local areas. This could create higher motivation and on-farm research to actively involve community and extension service providers and increase the focus on SLM. This could in turn create an enabling environment for SLM to have local resources as budget and enhance scale up of SLM activities.

4.2.7 Market facilitation and Payment for Ecosystem Services

384. There is a large potential for PES involving both public and private buyers and sellers in Ethiopia, however PES markets have not been well established in many countries due to a number of constraints. These include lack of capacity, high transactions costs, lack of data on the potential of PES, weak collective action of smallholder suppliers and sellers of PES, among others.

4.3 Plan for Implementing the Strategy

385. Resource mobilization strategy will be put into full operation by bringing together development partners, federal, regional, woreda and local/community level stakeholders within a multi-level cooperative partnership. Implementation of resource mobilization strategy has to be focused on the country-level interventions and the facilitation of donors and country agreements to finance SLM projects. In addition to the available current resources, the implementation of resources mobilization strategy will broaden the funding bases through identification of the most promising sources of financing to complement flows of official development assistance to SLM.

386. The plan for implementation of resource mobilization strategies has to be aligned with ESIF which is planned to last 15 years and serves as planning framework for sustainable investment in ESIF-SLM. During the implementation period the following major area will also been focused on simultaneously.
    - Promoting and scaling up (improve availability of appropriate SLM technologies, research and adaptation) SLM through the planning and implementation of area based SLM investment projects on priority areas;
    - Developing the SLM knowledge base (raising public awareness and information on SLM and environmental convention) creating the necessary enabling policy, legal, institutional and financial environment, and building the capacity of the advisory and other support service providers. It would also initiate the process of planning and implementing area based investment projects for the promotion and scaling up of SLM within those areas identified as in immediate need of priority attention.
    - Building on the experience gained from previous resource mobilization performance to review, and further improve, the enabling environment and institutional capacity. Expanding the area managed according to the concepts and principles of SLM through the planning and implementation of additional area based SLM investment projects will enhance mobilization of substantial finance for SLM implementation

- Consolidating the achievements and success made during different phases of implementation while addressing the remaining knowledge, policy, legal, institutional and financial barriers and bottlenecks would also improve financial flow to wards SLM.
- Build a broad based alliance for resource mobilization and implementation of the SLM through: Strengthening the coordination structure of national, regional, woreda and community SLM Platforms including sharing experiences of the ESIF-SLM with other countries and international partners.

9. REVIEW OF KEY POLICY RECOMMENDATION

387. Strengthening the Existing Coordinating Mechanisms and Structures of National and Regional SLM Platform:

- Efforts should be made to take advantage of existing capacity -- government structures, Donors, NGOs, CBOs and other institutions at all level that have a stake in land management and environmental protection -- in planning and implementing the CSIF-SLM strategies and projects designed to implement or enforce the obligations and the provisions of the international conventions.
- This will help avoid unnecessary overlap and duplication of effort, as well as ensure continuity in determining coordinated priorities and follow-up action in an integrated manner.
- This will also help mobilization and avoid misallocation of resources where a non-integrated approach may result in the creation of redundant institutions that will not necessarily enhance existing capacity.

388. ***Mainstreaming and Scaling up SLM Policies***: Mainstreamed the SLM issues within and across national strategies and sectoral policies, laws/regulations on agriculture (livestock, forestry, inland fisheries, wildlife/protected area management), tourism, energy, and rural infrastructure, trade, market, research, and land tenure, public expenditure frame-works, and across development agencies for successful development strategies and programmes.

389. Building demand for SLM at the grass-roots level

- Greater awareness of the benefits of SLM among land users, ultimately leading to increased adoption of SLM technologies or practices.
- Promote essential SLM practices to improve demand and create greater understanding of root causes of land degradation. This can create better informed demand for SLM practices or technologies. This is a long-term process that needs to be implemented through practical training involving a wide range of stakeholders including farmer organizations and community leaders.
- Create incentives to build SLM demand through education and training community members may still to adopt some SLM technologies. There may be a need to use regulations or incentive based approaches to promote adoption of essential SLM practices.

390. Explore Economic Incentives and Market Facilitation to adopt SLM

- Identify various payments (subsidies, taxation) for ecosystem services (PES) as a means of both recognizing the services provided by ecosystems and encouraging more sustainable use of natural resources. The attention has mainly be given in protection of biodiversity, carbon sequestration and watershed protection services. There is substantial potential for increasing SLM through PES activities.

- A number of PES programmes could be designed around biodiversity conservation with joint agreements between government owned forest reserves or game parks and communities in the proximity of the protected area offers a large potential for ecosystem service market involving local buyers and sellers. These arrangements are likely to strengthen the enforcement of the poorly enforced conservation regulations in public natural resources involving both public and private buyers and sellers.
- Carbon sequestration ecosystem services could have also direct positive impacts on SLM investment.

391. Strengthen farmer-extension-research linkages to generate appropriate SLM technologies

- Increased supply of appropriate SLM technologies and practices for dissemination and greater responsiveness of research and extension systems to SLM needs as identified by land users.
- Formulate policies requiring all researchers conducting on-farm research to actively involve extension service providers and farmers and increase the focus on SLM. Provide extension services and farmers a specific role and budget to be involved in or contract on-farm SLM research activities.
- Include representatives of farmer organizations in decision making forums that set priorities for agricultural and SLM research and extension programmes. For example, a committee of farmers, research, extension service providers at zonal or woreda level could be formed to provide coordination and guidance on the SLM research and extension activities in local areas.
- Strengthen exchange of experience among best practicing and performing regions, woredas or localities with regard to SLM activities using local technologies that could be easily adopted.

392. Promotion of Land Certification and women's land rights in land registration

- Strengthening the existing process of providing landholding certificates in all regions of the country including targeting provision of Stage 1 certificates and permanent certificates of land administration.
- Increasing women's land right helps to improve land management and increase productivity.
- Establish a process that supports greater dialogue and negotiation among civil society representatives of women farmers, government elected leaders and land administrators, and customary authorities to build political support for increased land rights for women.
- Registration of land rights has to take into account women's rights to land ownership. One approach to address this problem is to stipulate that married men should only receive land titles that also include the names of their wives. Even though this may be hard to implement due to the influence of the customary institutions among government officials, the governments need to enact regulations to enforce their stated policies of gender equality.

393. Promotion of tenure security

- Land tenure policies that reinforce the security of tenure give land users greater assurance that they will benefit from long term investments in SLM.
- Avoid land redistribution and other policies that undermine the security of landholders and the functioning of land rental markets. Since land rental markets generally help improve access of land-poor households to land and increase productivity and efficiency, policies that do not support this should be avoided.

- Explore options for subsidies or taxation to promote SLM: Some sectors or product value chains may be amenable to subsidization or taxation, particularly where there is scope to identify the extra costs of adoption of SLM practices or land degradation. The cost, economic impact, and feasibility of any such system would have to be explored in detail but could offer opportunity to further incentivize SLM adoption.
- Support development of new markets for SLM friendly products: Support for development of new markets or the linkage or development of producers' organizations to penetrate new markets for SLM friendly products. Public sector purchasing of such products – where economically feasible – may also help strengthen such markets.

10. MONITORING IMPLEMENTATION OF THE STRATEGY

394. Development of effective SLM monitoring system is critical to enable stakeholders (government, donors, CSOs and communities) to identify priority problems, undertake effective responses, and assess the impacts of those responses for implementing the ESIF – SLM as well as monitor and evaluate the results and update/revise the ESIF as needed in the light of experience gained from its implementation. The initial purpose of monitoring ESIF– resource mobilization strategy is to provide a comprehensive and nation-wide assessment, on the result of ESIF, of the present nature, extent and severity of the different land degradation processes affecting SLM within Ethiopia. This would serve as the base line against which to monitor and assess changes in land degradation as a result of implementing the ESIF. Furthermore, decentralization policies are giving local governments and communities in Ethiopia more authority and control over protection and use of local natural resources.

395. A participatory and cost-effective SLM monitoring system is therefore an important input to SLM policymaking so as to create all inclusive and bottom up community land management decisions. The fact that communities and community organizations have crucial roles to play in influencing land management, controlling environmental externalities, organize labour groups to involve in conservation measures and other management decisions related to local SLM implementation will be a logical ground to give due emphasis to adopt a participatory monitoring strategy.

396. The implementation strategy of the full range of SLM related activities would require integration of community-based natural resource management (NRM) and community-driven development programmes. Such a system could also combine a scientific approach based on appropriate technologies and practices as well as development of a full land degradation monitoring and evaluation system, which would likely require extensive work and may be a long term process but it nonetheless forms an important element of the SLM (M&E) system.

11. References

19. Appraisal of Payment for Environmental Services related to water management in the Central Rift Valley, Ethiopia, Strategy & Policy Brief #4, November – 2008.
20. Environmental Policy of Ethiopia. Environmental Protection Authority, EPA (2003), Addis Ababa.
21. Federal Democratic Republic of Ethiopia Ministry of Agriculture and Rural Development (MoARD), Ethiopian Strategic Investment Framework (CSIF), SLM Secretariat, August, 2008.
22. Federal Democratic Republic of Ethiopia Ministry of Finance and Economic Development (MoFED), Budget Proclamations, Directives and Documents, Last Modified January 26, 2008.
23. Federal Democratic Republic of Ethiopia, Central Statistical Agency (CSA), 2007 Statistical Abstract, Addis Ababa, 2008.
    GEF Strategic Investment Program for Sustainable Land Management in Sub-Saharan Africa (SIP), Country SLM Investment Framework Guidelines, Draft 13 July 2006.
24. Guidelines, Developing Integrated Financing Strategies for Sustainable Land Management. An Introduction for Least Developed Countries and Small Islands Developing States, UNDP-GEF, March 2008.
25. Integrated Financing Strategy for combating Desertification in Lebanon, (GM – UNCCD), and in partnership with UNDP,
26. Integrated Financing Strategy for Sustainable Land Management, Global Mechanism for the UNCCD 2008.
27. Pan-Tropical Scoping Study of Compensation for Ecosystem Services: Conceptual Foundations,
28. Policies for Scaling up Sustainable Land Management: A Resource Guide for Policymakers Final draft, June 6, 2008.
29. Preconditions for a Payment for Environmental Services establishment at Central Rift Valley Ethiopia, Jean Carlo Rodriguez de Francisco, 29 January 2009.
30. Progress report on the Global Mechanism of the United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, IFAD, Rome, 13-14 February 2008.
31. Regional initiative on financial resource mobilization for strengthening the implementation of the UNCCD in the regional implementation annex V for Central and Eastern Europe (CEE), GM & UNCCD, June 2008.
32. Searching for Tenure Security, The Land System and New Policy Initiatives in Ethiopia. Forum for Social Studies Discussion Paper, No. 12, Dessalegn Rahmato (2004).
33. Sustainable Land and Natural Resources Management - Supporting GoK in developing a Strategic Investment Framework. FAO brief for Meeting of EDCG Group on December 8, 2008.
34. TerrAfrica, Guidelines series, Policies for Scaling up Sustainable Land Management: A Resource Guide for Policymakers. Prepared by FAO in cooperation with IFPRI, November 26, 2007.
35. What is driving the Charcoal Industry into a Dead End? Lesson from East Africa's Sustainable Charcoal Business, World Agro-forestry Centre – (ICRAF 2004).
36. Why Past Environmental Rehabilitation Programs Have Had Limited Results. FSS, Civil Society and Environmental Policy Dialogue. Government and Environmental Policy. Consultation Papers on Environment, 5: 13-19, Ababu Anage (2004).

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