

**Evaluating the UNDP—GEF Small Grants Programme  
Funding in Ethiopia: Sustainable Livelihoods and  
Poverty Alleviation in Action**

By

Addisalem Benyam

A Thesis

Submitted to the Faculty of Graduate Studies of  
The University of Manitoba  
In Partial Fulfillment of the Requirements  
For the Degree of

Master of Natural Resources Management

**Natural Resources Institute**  
**Clayton H. Riddell Faculty of Environment, Earth and Resources**  
University of Manitoba  
Winnipeg, Manitoba

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## **ABSTRACT**

This research is focused on evaluating the UNDP—GEF Small Grants Programme support in Ethiopia. It involves SWOT strategic analysis of outcomes in projects addressing three of the GEF focal areas mainly biodiversity conservation, abatement of climate change and prevention of land degradation. To this end, the study evaluated how the grant presented to the beneficiary communities short-term and long-term opportunities to undertake nature-based sustainable livelihood activities, alleviate poverty as well as impact national policies pertaining to rural economies and the protection of natural resources. In general, the study highlights that the crucial factor for the success of SGP's service delivery is not only the provision of the support and the subsequent completion of the projects. Most importantly, how local communities equitably benefit from project outputs and maintain sustainability of developments after project completion were identified to be foundational to the developmental causes the grants have been provided.



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## **List of Frequently Used Terms**

ADB	African Development Bank
ADF	African Development Fund
ADLI	Agricultural-Led Development Industrialization
AFC	Areeda Farmers' Cooperative
ASDA	Association for Sustainable Development Alternative
BDC	Biodiversity Conservation
CASL	Community Adaptation and Sustainable Livelihoods
CBD	Convention on Biological Diversity
CBOs	Community Based Organizations
CIA	Central Intelligence Agency
CIDA	Canadian International Development Agency
CPMT	Central Programme Management Team
CPS	Country Program Strategy
CSA	Central Statistical Agency of Ethiopia
DA	Development Agents
DDEPA	Dire Dawa Environmental Protection Authority
DFID	Department for International Development
EBSAP	Ethiopian Biodiversity Strategy and Action Plan
EPA	Environmental Protection Authority
FAO	Food and Agriculture Organization
ESF	Ecosystems Services Framework
FDRE	Federal Democratic Republic of Ethiopia
FSCB	Food Security Coordination Bureau
GDP	Gross Domestic Product
GEF	Global Environment Facility
HFC	Harorety Farmers' Cooperative
HRW	Human Rights Watch
IBC	Institute of Biodiversity Conservation
IISD	International Institute for Sustainable Development

MA	Millennium Assessment
MEA	Millennium Ecosystems Assessment
MoFED	Ministry of Finance and Economic Development
MoI	Ministry of Information
NC	National Coordinator
NGOs	Non-Governmental Organizations
NSC	National Steering Committee
PASDEP	Plan for Accelerated and Sustained Development to End Poverty
RAF	Resource Allocation Framework
REDD	Reduced Emissions from Deforestation and Forest Degradation
RLDO	Resurrection and Life Aid through Development
SCBD	Secretariat of the Convention on Biological Diversity
SDPRP	Sustainable Development and Poverty Reduction Program
SFC	Shenany Farmers' Cooperative
SGP	Small Grants Programme
SNNPRS	Southern Nations', Nationalities' and People's Regional State
SNRM	Sustainable Natural Resource Management
SWOT	Strength Weakness Opportunity Threat
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
UNCBD	United Nations Convention on Biological Diversity
UNCCD	United Nations Convention to Combat Desertification
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environmental Programme
UNOPS	United Nations Offices for Projects Services
USAID	United States Agency for International Development
USD	United States Dollar
WB	World Bank
WCED	World Commission on Environment and Development
WFP	World Food Program
WRI	World Resources Institute

## **Chapter 1: Introduction**

### **1.1 Background: Historical Causes of Environmental Degradation and Poverty in Ethiopia**

Ethiopia is a landlocked country located in eastern Africa with a population of 88,013,491 covering a total area of 1,104,300 square kilometres. It has a tropical monsoon climate with wide topographic-induced variation, high plateaus, and central mountain ranges divided by the Great Rift Valley (Central Intelligence Agency [CIA], 2009).

Agriculture is central to the country's economy and accounts for half of the Gross Domestic Product (GDP). Due to its topography and diverse climatic conditions, Ethiopia is home to a wide variety of plant, animal, and crop species. The country has an estimated 6,000 species of flora with 10-12% endemism; cash crop species including coffee (*Coffea arabica*), *Teff* (*Eragrostis tef*), Noug (*Guizotia abyssinica*), and *Enset* (*Ensete ventricosum*); high genetic diversity in four of the world's widely grown food crops (wheat, barley, sorghum, peas); three of the world's most important industrial crops (linseed, castor, and cotton); a number of food crops of regional or local importance (*teff*, finger millet, cow peas, lentil, *enset*, etc.), and several groups of forage plants of world importance (clovers, lucernes, oats, etc.)—all of which make Ethiopia one of the twelve Vavilov centres of crop diversity (Institute of Biodiversity Conservation [IBC], 2005).

Wildlife endemic to Ethiopia include 30 mammals, 16 birds, 3 reptiles, and 17 amphibian species—and flora are protected through a combination of in-situ and ex-situ conservation methods and a network of established protected areas in different parts of the country (Environmental Protection Authority [EPA], 2007).



**Plate 1.** The Location of Ethiopia in Africa with Identified Administrative Regions

(Source: <http://www.afdb.org/en/countries/east-africa/ethiopia/>)

Most of Ethiopia's crop-growing highland regions utilize rain-fed agricultural practices that rely primarily on the intermittent and unreliable rainfall patterns. As a result, food production suffers from the adverse effects of climate variation and frequent drought, which have been affecting the nation for a number of decades. The food crisis in Ethiopia traces its origin back to the 1980s. At that time, famine led the majority of the rural population into absolute poverty. By the 1990s, poor economic policies and management (under the command economic system), prolonged civil war, and recurring drought left the economy in a deep crisis followed by a severe loss of productive capacity, increased food insecurity, and social crisis (Ministry of Finance and Economic Development [MoFED], 2002).

It is evident that when a natural resource base is not managed for the long-term, and is exploited and polluted for short-term gain, it will cease to provide the fuel for economic development to alleviate poverty (World Resources Institute [WRI], 2005). This is true in rural Ethiopian farmlands, which are exploited beyond their productive capacity to support subsistence farming. For this reason, the country continues to rely heavily on the World Food Program (WFP) lifeline (Brown, 2009). It is recognized that the continued life-sustaining function of ecosystem goods and services depends on the speed at which they can be restored. In this vein, economic growth and development are inconceivable without a conscious

understanding and choice to efficiently utilize, conserve, and manage the ecosystems and the services they provide.

Throughout history, drought has forced rural Ethiopians to move from highland areas to the lowlands where land is relatively abundant, resulting in large-scale resettlements that were planned and implemented in a state of urgency (Ministry of Information [MoI], 2001). Following the downfall of the Imperial government of Haileselassie in 1974, the military regime (commonly known as the *Derg*) proclaimed a radical land reform, nationalizing privately owned and rural lands in 1975 (Jemma, 2004). Nevertheless, the reform did not improve the local economy and livelihood of poor farmers (peasants) as their land holdings were very small with no reliable tenure securities. In addition, the era was marked by recurring drought and famine that claimed the lives of millions of rural Ethiopians.

One of the major obstacles affecting local economic growth in Ethiopia is land degradation (Plate 2). Given that agriculture is so crucial in supporting the country's economy through food production, the decline in the productivity of farmlands threatens the very livelihood of rural Ethiopia where the majority of the poor reside. As the severity of land degradation increases, desertification takes precedence, characterizing the greater proportion of agricultural lands. At present, key component problems in land degradation include loss of vegetation cover and biodiversity, escalating soil erosion, siltation, declining soil fertility, expanding salinization, and soil compaction, as well as aridity through hydrological cycle disruption (MoFED, 2006). Despite the fact that the country is endowed with diverse flora and fauna species, the rapid growth of population has also resulted in overexploitation and severe depletion of the natural resource base that the rural populations rely on for survival. In addition, inadequate economic policies of the *Derg* regime have deepened poverty, widened inequalities, and forced rural people to exploit biodiversity at rates that are no longer sustainable, bringing about serious implications on the nation's agro-ecosystems (IBC, 2005).



*Photo Credit: SGP Ethiopia*

**Plate 2.** Severity of Land Degradation

## **1.2 Financing Resource Management and Sustainable Livelihood Needs**

There has been a considerable debate on choosing between financing conservation and rural development, and/or integrating both with substantial emphasis given on factors such as a country's population and the amount of natural resources. However, the rural areas in developing countries are home to valuable environments and a large number of rural poor; hence these areas require application of the principles of sustainable natural resources management—that is, the advantages of integrating environmental conservation and poverty alleviation (Gutman, 2003). The most common defining attributes of the lives of rural people are their proximity to the surrounding natural resources and the extent to which their livelihoods depend on the extraction of those resources. In addition, the essence of livelihood has been attributed to a whole complex of factors which sustain rural families materially, emotionally, spiritually, and socially through a unique interrelationship with the ecosystems (WRI, 2005).

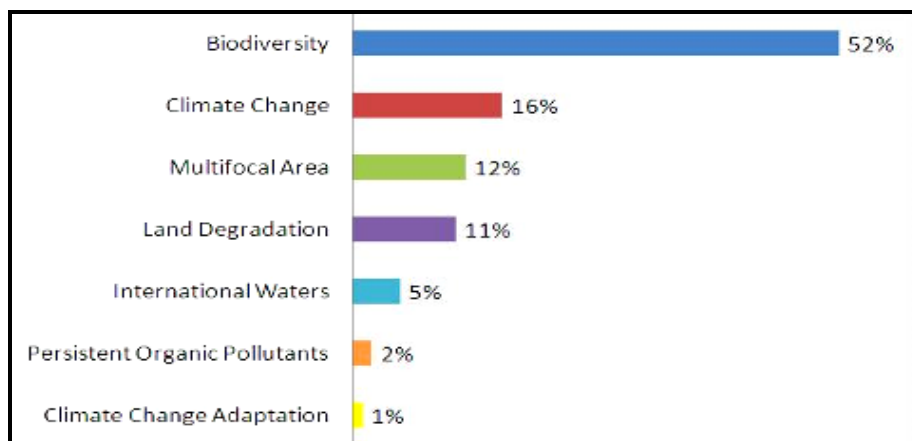
Challenges are not uncommon when resources are continually extracted without attention to their limitations and non-renewability. As a result, most developing countries have started implementing conservation initiatives to ensure the restoration of degraded resources and sustainability of local livelihood needs. One of the achievable mechanisms for such initiatives is the implementation of small-scale development projects in and around environmentally degraded and poverty-stricken areas. The success of these projects is largely



determined by the availability of and access to sufficient micro/start-up capital. Development projects require a solid financial foundation to be feasible and sustainable, thus a financial plan must be central to any conservation plan (United States Agency for International Development [USAID], 2005). The World Resources Institute (2008) has identified that the start-up capital, also known as seed money with few eligibility criteria attached, shows better results than large grants. The practice of administering country-based large financial aid imposes the need for a higher level of financial management capacity to meet many bureaucratic requirements (UNDP, 2005).

### 1.3 The GEF Small Grants Programme

The SGP was established in 1992 following the Rio Earth Summit and is funded by the GEF, implemented by the UNDP, and executed by the United Nations Offices for Projects Services (UNOPS) on behalf of the UNDP, United Nations Environmental Programme (UNEP), and the World Bank (WB). SGP initiatives provide financial, technical, and capacity-building supports to Community-Based Organizations (CBOs) and local Non-Governmental Organizations (NGOs) in more than 122 participating countries. These supports are channelled to implement project activities that will conserve and restore environmental resources while enhancing livelihoods and social well-being. The project initiatives are aimed to focus on one or more of the GEF thematic areas: biodiversity conservation, abatement of climate change, protection of international waters, prevention of land degradation, elimination of persistent organic pollutants, and climate change adaptation.

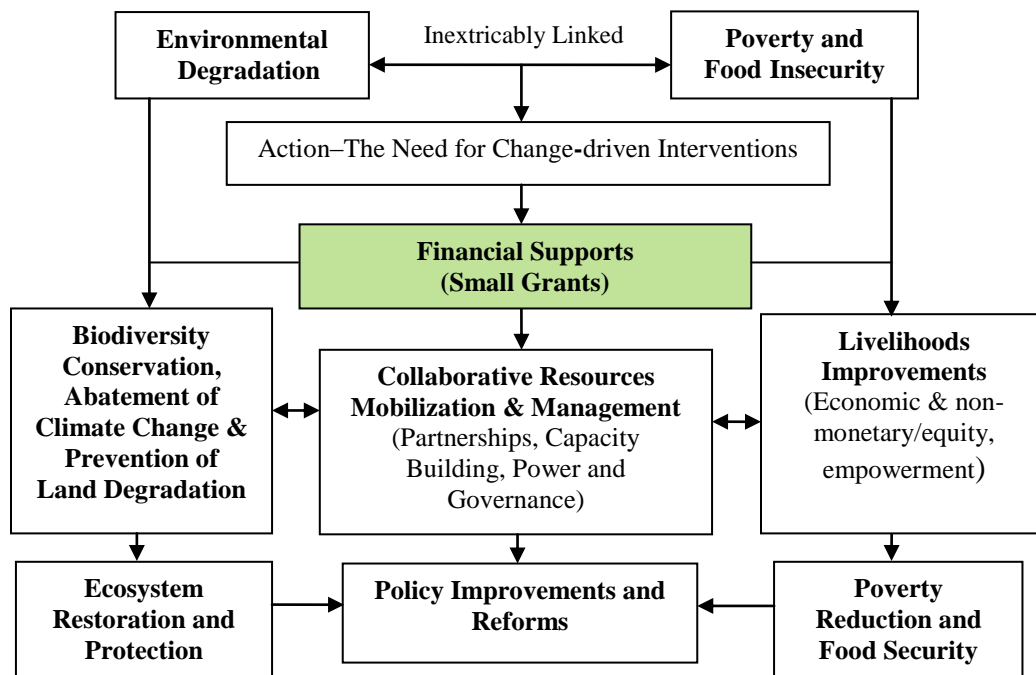


**Figure 1.** Percentage of SGP Project Portfolio by Focal Areas, GEF SGP, 2006  
 (Source: [http://sgp.undp.org/index.cfm?module=ActiveWeb&page=WebPage&s=focal\\_areas](http://sgp.undp.org/index.cfm?module=ActiveWeb&page=WebPage&s=focal_areas))

The SGP is rooted in the belief that global environmental problems can only be addressed adequately if local people are involved, and with small amounts of funding they can undertake activities that will bring significant changes in their lives and their environments (GEF SGP, 2006). Holding the same premise, the Government of Ethiopia officially initiated the GEF SGP in Ethiopia in 2004 after providing an official request to join the SGP with recognition that the programme will play a critical role in providing support to community-based activities that address the GEF focal areas of biodiversity conservation, climate change, international waters, land degradation, and persistent organic pollutants (Country Program Strategy Ethiopia [CPS], 2006).

#### 1.4 Research Approach

The researcher has employed a systematic examination of theories and practices that link donor-funded environmental protection projects aimed at improving rural community livelihoods and the influence of policy instruments to bring lasting solution to economic and social challenges. In that regard, the sustainability framework below (Figure 2) shows the underlying background based on which the purpose and the objectives of the research were developed.



**Figure 2.** Sustainability Framework of the Research

In line with this framework, a case study has been carried out on three SGP-funded projects being completed in Ethiopia that are focused on three of GEF's environmental thematic areas: biodiversity conservation, abatement of climate change, and prevention of land degradation. The research was designed to reflect the linkages between the aspects of environmental resources, sustainable livelihood, and poverty alleviation in a broad perspective. Therefore, poverty alleviation must not be an overemphasized practice but rather a collaborative effort achieved through ecological integrity, economic viability, attainment of social benefits, good governance, and capacity-building for the rural poor who rely on the exploitation of their surrounding environmental resources (i.e., biodiversities, the climate, and land)—the conservation of which will ensure continued existence and capability to generate improved and sustainable livelihood practices.

The researcher's selection of the projects as data-gathering sites was based on SGP's funding decisions to empower economically and socially marginalized rural communities so that the programme's objectives will be achieved by advocating changes on physical environments and livelihoods. In addition, the context in which the grant beneficiary communities perceive resource management, sustainable livelihoods, and poverty alleviation gave an account to the level of their participation in the entire project implementation process. The data collection procedures included interviewing 35 research participants whose lives and environment were impacted by the intervention of the projects. A focus group discussion was conducted with farmers where women beneficiaries comprised the majority of one of the project activities. Another focus group discussion was held with the GEF SGP's National Steering Committee (NSC) and Technical Review Team (TRT) members. Data from on-site observation, photographic images and secondary data sources (i.e., documentation of project activities prepared before the start-up of the projects and after completion) were used to strengthen the reliability of the primary data gathered.

#### **1.4 Research Purpose and Objectives**

The purpose of the research was to make objectives-based evaluation of how the grant from the UNDP—GEF SGP supported communities in conserving biological diversity, tackling the impacts of climate change, and preventing land degradation and to explore how these interventions present short-term and long-term opportunities to undertake nature-based

sustainable livelihood activities, alleviate poverty and impact national policies pertaining to rural economies and environmental resources. For the purpose of this research, sustainable livelihoods will refer to nature-based economic activities that serve as alternative and reliable sources of income by which community well-being is protected and continually assured, provided that there is non-exploitative use and effective management of environmental resources. In order to obtain guidance and reliable information throughout the data collection period in Ethiopia, the researcher had received primarily a formal confirmation from the UNDP—GEF SGP Ethiopia office and the UNDP-GEF Central Program Management Team (CPMT) in New York.

### **Research Objectives**

The objectives of the research were as follows:

1. To identify the linkages between grant approval standards with environmental and livelihood conditions of beneficiary projects;
2. To explore the contributions of stakeholders and other enabling conditions for target beneficiaries to undertake and benefit from resource-based income-generating activities; and
3. To evaluate the long-term implications of small grants on sustainable livelihoods, environmental policy, and poverty reduction in Ethiopia.

### **1.5 Contribution to Knowledge**

The researcher believes that the outcomes of the study will shed light on the relevance of adopting a wider perspective to integrate conservation with development activities directed towards sustainable rural livelihoods, poverty reduction, and food security. In this regard, this research provides insights for expanding and/or revising policy components, primarily for agriculture and environment sectors that are influenced by the availability, control, use, and management of natural resources. Influencing a policy process translates into an increased awareness of how the environment contributes to human well-being, pro-poor economic growth, improved collaboration among development sectors, and the integration of poverty-

environment-related goals, targets, and implementation strategies in policy instruments (De Coninck, 2009).

### **1.6 Study Limitations**

The field data collection time was scheduled during the winter season in Ethiopia and thus road accessibility to the project sites was taken into consideration prior to selecting the data collection sites. There were potentially feasible data collection and completed project sites but with the inconvenient winter road conditions, the researcher, in consultation with the National Coordinator (NC) of the SGP, was bound to select project sites where road accessibility was trouble-free and participating communities did not have to travel long distances to take part in providing information. The project activities of most of the SGP-funded project were identical from region to region; hence the researcher is assured that the findings of this study will reflect to a certain degree the circumstances of non-participating SGP-funded projects located in areas other than those considered in this case study.

### **1.7 Profile of the Study Area**

For the purpose of this study, the researcher focused on the case of two NGO-based and three clustered community-based projects (Table 1), which had been found eligible for the grant based on the GEF geographic and thematic focus. The data collection procedure for this case study was a combination of semi-structured interviews, focus group discussions, on-site observation, and review of secondary data sources.

Besides its core fund allocated by the GEF, the SGP mobilizes resources, in the form of funding and technical supports, from other development partners (i.e., government, multilateral and/or bilateral donors). Hence, two projects (facilitated by ASDA and RLDO) had their funding from the support provided by the Royal Netherlands Embassy (RNE) and the CBOs from the resource made available to Ethiopia (i.e., EPA) under the GEF 4 Resources Allocation Framework (RAF) to finance projects falling under the climate change focal area. GEF 4 was the fourth replenishment to the GEF pool of funds from donor countries to finance operations until June 30, 2010. The section below provides brief

background notes of the two NGOs and the three cluster CBOs where the data collection was undertaken.

*A. Association for Sustainable Development Alternative (ASDA)*

ASDA is a local NGO established in 2003 upon registration with the Federal Ministry of Justice. Following receipt of financial support obtained in February 2008 from the GEF SGP, ASDA started its operation in Dodota *Woreda* (a local term equivalent to district) in the Arsi Zone of the Oromia Region after organizing a community-based association entitled *Social Mobilization for Reducing Land Degradation and Enhancing Biodiversity*. The *Woreda* is located 125 km south of Ethiopia's capital, Addis Ababa, and has an altitude ranging between 2200–2400 meters above sea level. Dodota has a total area of 1,033 square kilometres and has been identified as one of the food-insecure and environmentally degraded areas from the 12 *Woredas* found in the region (ASDA, 2008). Accordingly, the major development interventions of ASDA was the protection of local environment and poverty alleviation through project activities directed towards livelihood improvement and establishment of a system for sustainable natural resources management.

*B. Areda Farmers' Cooperative (AFC), Harorety Farmers' Cooperative (HFC) and Shenany Farmers' Cooperative (SFC)*

These cluster of farmers' cooperatives, also identified as CBOs, are located in the Dire Dawa Administrative Region which is located 515 km east of the capital, Addis Ababa. The Dire Dawa Provisional Administration Environmental Protection Authority (DDEPA) was the implementing agency responsible for the collaborative execution of the project in conjunction with the three cooperatives in the communities of Areda, Harorety, and Shenany. With the legal status obtained from the Dire Dawa Cooperative Development and Promotion Office, the cooperatives were organized to mobilize the community for the abatement of climate change under a project *Community Based Sustainable Environmental Management Plan to Mitigate Climate Change*. The communities have resided in severely degraded land with a bare vegetation landscape that has made them highly prone to the adverse effects of climate change. The area is also known for recurring drought and rampant poverty in addition to other socio-economic factors such as the lack of alternative sources of income and self-

development resources. To this end, the project was designed to generate alternative income to the local farmers by engaging them in climate change abatement activities that reduce atmospheric carbon dioxide emissions and thereby improve the micro-climatic condition. Located in close proximity to each other, the three areas generally are characterized by dry and warm agro-ecological zones with mountains and valley bottoms and altitude ranging between 1500 and 2500 meters above sea level. The Areda community project covers a total area of 404 hectares of land, while the Harorety and Shenany cover 450 and 550 hectares respectively (DDEPA, 2007a, 2007b, 2007c). Following receipt of a grant from the SGP in December 2007, the communities were mobilized to undertake climate change abatement project activities mainly to improve community livelihood, especially for women, through adoption of efficient energy conservation and utilization of natural resources.

### *C. Resurrection and Life Development Organization (RLDO)*

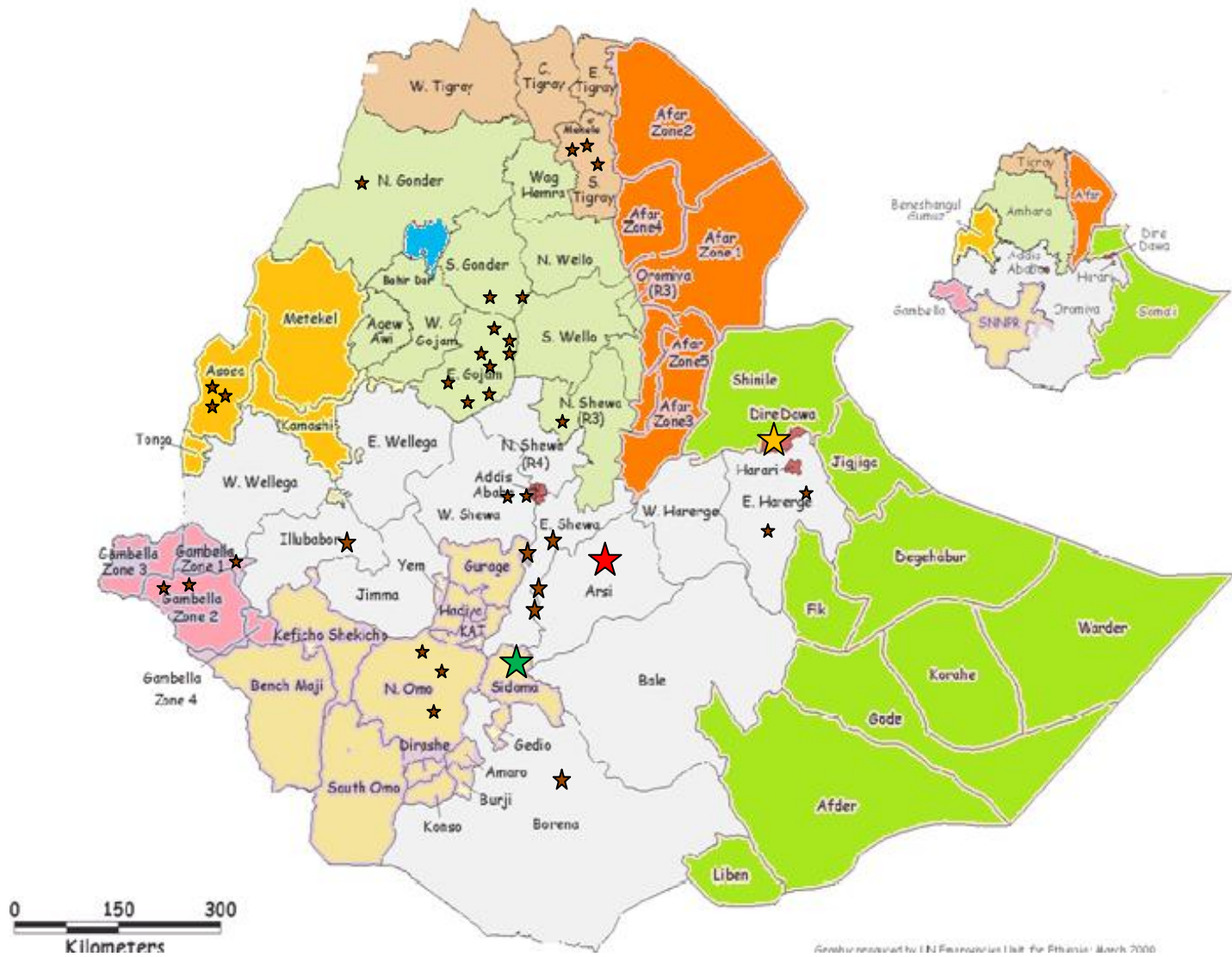
RLDO is a church-based local NGO that operates with a legal status obtained from the Federal Ministry of Justice. It is also a member of the Consortium of Christian Relief and Development Association (CCRDA), an umbrella organization for local NGOs and Civil Society Organizations (CSOs) engaged in undertaking relief, rehabilitation, and development activities in different parts of the country (RLDO, 2008). Since inception of its operation, RLDO has been working in the Sidama zone of the Southern Nations, Nationalities and People's Regional State (SNNPRS) in health, education, and infrastructure sectors. With the financial support received through the SGPs in February 2008, it has undertaken project activities in two catchment *Kebeles* (equivalent to sub-district) of the region, namely Kurda and Dulecha. These areas are located in the sub-city of Finchewa with an altitude of 1697 meters above sea level. The area has a warmer climatic condition and sloppy landscape that falls towards one of the smallest lakes in Ethiopia (i.e., Lake Awassa). The topography is highly characterized by gully formation and landslides due to inadequate vegetation cover (and subsequent soil instability and water saturation) following rapid population growth and the expansion of farmlands and deforestation. Due to social and cultural reasons, the communities in this region were marginalized and were forced to settle in other areas since they lacked the means to generate livelihoods. The catchments have a total area of 1500 hectares of land that had been used for crop production and cattle grazing. The intervention

was aimed at revitalizing the degraded land through integrated soil, watershed, and biodiversity conservation activities. In addition, it addressed livelihood enhancement through increased soil fertility and availability of surface and ground water to increase land productivity (RLDO, 2008).

**Table 1.** Summary of SGP Case Study Areas (by Project Sites) (Source: Compiled using the GEF SGP Ethiopia Projects Database, March, 2010)

<b>Grantee Local NGO/CBO</b>	<b>Projects Name and Location</b>	<b>Number of Project Beneficiaries</b>	<b>Project Cost and Source of funding (in USD)</b>	<b>Project Duration</b>
Association for Sustainable Development Alternative (ASDA-NGO)	Social Mobilization for Reducing Land Degradation and Enhancing Biodiversity in Dodota Woreda <b>Region:</b> Oromia; <b>Zone:</b> Arsi <b>Woreda:</b> Dodota <b>Kebeles:</b> Dilfekar, Awash Bisholla, Dera <i>Kebele</i> 1 and 2	Male: 152 <u>Female: 145</u> Total= <b>297</b>	49,850.00-RNE 2,547.61-ASDA 20,575.00-Community (labor) 2,367.93-Government <b>Total: <u>75,340.54</u></b>	February 2008 – December 2009
Areeda Farmers' Cooperative (AFC- CBO)	Community Based Sustainable Environmental Management Plan to Combat Climate Change <b>Region:</b> Dire Dawa Administration <b>Kebele:</b> Dujuma	Male: 33 <u>Female: 17</u> Total= <b>50</b>	25,090.10 –RAF 7,611.72-Community (labor) 29,844.80-Government <b>Total: <u>62,546.62</u></b>	December 2007- December 2009
Harorety Farmers' Cooperative (HFC-CBO)	Community Based Sustainable Environmental Management Plan to Combat Climate Change <b>Region:</b> Dire Dawa Administration <b>Kebele:</b> Ijaneni	Male: 80 <u>Female: 8</u> Total= <b>88</b>	15,810.00-RAF 40,470.40-Community (labor) 33,745.60-Government 11,373.60-Other <b>Total: <u>101,399.60</u></b>	December 2007- December 2009
Shenany Farmers' Cooperative (SFC- CBO)	Community Based Sustainable Environmental Management Plan to Mitigate Climate Change <b>Region:</b> Dire Dawa Administration <b>Kebele:</b> Dujuma	Male: 212 <u>Female: 221</u> Total= <b>433</b>	19,041.20-RAF 26,250.44-Community (labor) 34,527.43-Government <b>Total: <u>79,819.07</u></b>	December 2007- December 2009
Resurrection and Life Development Organization (RLDO)	Enhancement of Community Action for Sustainable Watershed management through Soil and Water Conservation and Biological Diversity <b>Region:</b> SNNPRS; <b>Zone:</b> Sidama <b>Woreda:</b> Awassa City Administration <b>Kebeles:</b> Finchawa- Kurda and Dulecha	Male: 50 <u>Female: 90</u> Total= <b>140</b>	46,900.00-RNE 5,326.08-RLDO 3,532.60-Community (labor) 6,739.13-Government <b>Total: <u>62,497.81</u></b>	February 2008 – December 2009





**Plate 3.** SGP Project Sites as Located in the Administrative Regions and Zones  
 (Source: Map adapted from [http://www.reliefweb.int/mapc/afr\\_ne/cnt/eth/ethiopia\\_zones.html](http://www.reliefweb.int/mapc/afr_ne/cnt/eth/ethiopia_zones.html))

<b>KEY:</b> <u>Data collection sites</u>	
★	<b>DIRE DAWA (AFC, HFC &amp; SFC)</b>
★	<b>ASDA</b>
★	<b>RLDO</b>
★ <b>Geographic distribution of other on-going and completed projects</b>	

## **1.8 Organization of the Thesis**

The research is outlined in six chapters. **Chapter Two** describes the review of theoretical concepts regarding the importance of financing environmental resource conservation that generates sustainable sources of livelihoods and alleviates chronic food shortage in areas such as those funded by the SGP. Accordingly, discussions of literature are made on development interventions; funding biodiversity conservation, abatement of climate change, and prevention of land degradation; ecosystem services; sustainable livelihoods, food security, capacity-building, partnerships, and institutional networks. In **Chapter Three**, research methods and data collection procedures are discussed in relation to the research objectives described in Chapter One. Both primary and secondary data sources are explained in the context of the participatory and advocacy research paradigm and case study strategy of inquiry. **Chapter Four** presents analysis of the data collected from the three project sites. Consequently, **Chapter Five** reveals discussions of the major findings in Chapter Four with reference to relevant literature on the research topic. **Chapter Six** points out the summary of the research work, conclusions, and recommendations.

## **Chapter 2: Conceptual and Practical Frameworks Outlining the Research**

### **2.1 Introduction**

This chapter forms an integral part of the thesis and makes references to past and present studies on the research topic concepts. The purpose and objectives of the research are also reflected and provide the basis for comparing and contrasting the findings of the case study (Creswell, 2009). The researcher's attempt to compare, contrast, and critically evaluate previous and current research/studies allows readers to evaluate the likely conditions of the research participants and their environment had there not been intervention by the UNDP—GEF SGP in the study area. Although this case study is a research-based independent evaluation made by a student researcher, the thesis has thematically structured sections and applies integrative approaches in discussing key arguments that theoretically and practically correspond with the operational principle of the GEF SGP.

### **2.2 Sustainable Development and Poverty Alleviation**

With the apparent complexity of global environmental concerns, poverty, and food security, the sector-wide international interventions by development actors have been challenged in several academic debates (Chandler, 2007). Nevertheless, the foundation of sustainable development is unequivocally placed within a considerable portfolio of experience at the international level, where technical and financial supports to developing nations emerge to tackle the vicious cycle of environmental resources degradation, poverty, and food insecurity. Being global in nature, the problem of poverty invokes international efforts in which intergovernmental relationships play key roles in mobilizing resources, facilitating environmental resource management, reducing the chronic problems of global food shortage, and ultimately achieving sustainable development goals. Sustainable development has been frequently defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development [WCED], 1987). Despite this definition of sustainability being subject to wide criticism, it stresses two key dimensions of sustainability, which are vital to access and manage natural resources by the poor: first, the ability of households to maintain their livelihood systems over time; and second, the implied sustainability (or lack thereof) of the

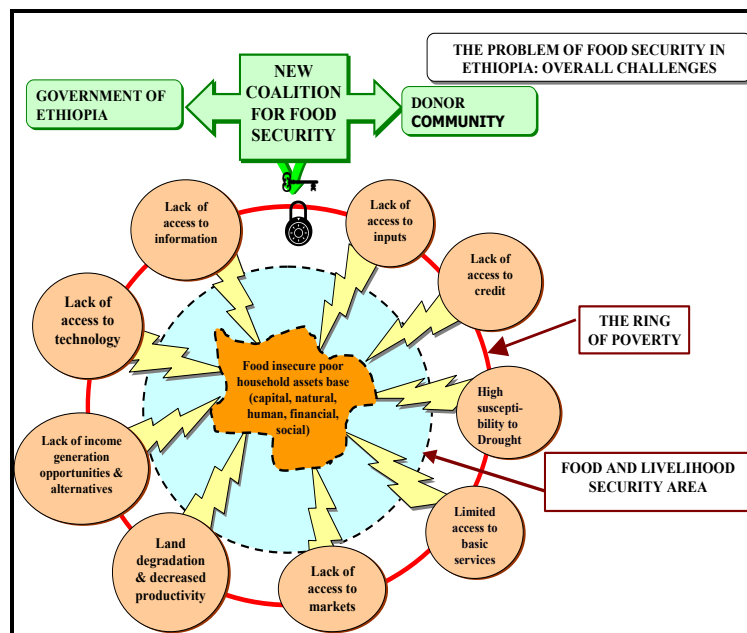
availability, rates of extraction, and consumption of the natural resources on which those livelihood systems are reliant (Lee and Neves, 2009).

Also central to the goals of sustainable development is the alleviation of challenges to global food security without risking the health of the natural environment where the poor obtain their food. To a large extent, achieving sustainable development goals depends on the successful integration of the environment with economic planning and decision-making, a process known as environmental mainstreaming. Environmental mainstreaming emphasizes the enhancement of environmental management that gives rise to improved livelihoods as well as income generation for the poor and disadvantaged populations (De Coninck, 2009). When environmental resources are not managed for the long-term but are exploited and polluted for short-term gains, they fail to provide the fuel for economic development on the scale demanded to relieve poverty (WRI, 2005). The Ethiopian highlands, which are the centre of food production for the country, have undergone severe degradation of the natural resource base that is foundational to sustainable agriculture and rural development, thus failing to produce food and sustain livelihoods when overcultivation, overgrazing, deforestation, soil erosion, and shortage of livestock feed continues undetected (Dejene and Zeleke, 2004). Furthermore, deforestation and soil degradation are central to food insecurity and poverty in Ethiopia and these perils arise from human and livestock pressures on the land, leading to environmental degradation (MoFED, 2006). These calamities have left the rural farming communities trapped in the net of food insecurity and poverty thereby becoming disproportionately dependent on external resources (i.e., food aid, the transparent distribution of which is often under considerable debate).

Beyond what are known to be human- and nature-induced factors, the lack of access to information, resources, financial supports, markets, and so on, have also been major reasons contributing to the challenges of mitigating poverty and natural resource degradation in Ethiopia. Taking into account the severity of poverty, food insecurity, and the decline in the values and functions of environmental resources, the Government of the Federal Democratic Republic of Ethiopia (FDRE) has been designing and implementing strategic policies and sustainable development plans which are aimed at: (1) poverty reduction; (2) empowerment of rural livelihoods; and (3) restoration, protection, effective utilization, and

management of the natural resource base of the country. This policy instrument, known as Sustainable Development and Poverty Reduction Program (SDPRP), has an overarching objective to reduce poverty while simultaneously maintaining macroeconomic stability. Food security programs are a subset of poverty reduction interventions and an integral part of the fulfillment of its objectives, leading to an increased awareness and a series of consultative processes which aim to strengthen the partnership between the Government and development partners (Food Security Coordination Bureau [FSCB], 2003).

Food security is defined as “a situation that exists when all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life” (Food and Agriculture Organization of the United Nations [FAO], 1996). This statement is at the heart of every grassroots poverty reduction effort in particular to those who struggle to gain access to natural resources to produce food and derive sustainable means of livelihood. Hence, since 2003, the FDRE has entered into a commitment for a new “Coalition for Food Security in Ethiopia”, with the objective of achieving a major turnaround for food insecurity challenges, including new partnership among government, development partners, civil society, and the private sector, with utmost social mobilization of human resources (FSCB, 2003).



**Figure 3.** The New Coalition for Food Security in Ethiopia, 2003 (Source: FSCB, 2003)

### **2.3 Food Security and Agricultural Productivity**

In most developing nations, there is a challenge in bridging the gap between meeting the increasing demand for food and that of undertaking development initiatives aimed at achieving sustainable agricultural productivity. A formal definition of sustainable agriculture is often characterized by five major attributes: (1) conserves resources (land, water, plant, and genetic resources); (2) environmentally non-degrading; (3) technically appropriate; (4) economically viable; and (5) socially acceptable (FAO, 1989). It is argued that the solution lies almost exclusively in improving the physical performance of agriculture through a range of measures that often focus on new technologies, while others stress that the causes of hunger and food insecurity are more complex, signifying that improving agricultural performance is less imperative than tackling the underlying poverty that remains as the fundamental cause of hunger and food insecurity (Department for International Development [DFID], 2004). Despite the collaboration of national policy makers and donors in most developing nations to reduce food insecurity, international food aid strategies have undergone a series of controversy in light of the role sustainable agricultural development efforts are expected to play in achieving the millennium development goal of eradicating extreme poverty and hunger.

There is an increase in the promotion of research to fill important knowledge gaps relating to food security policy (Gill, *et al.*, 2003) as governments and donors become increasingly aware that food aid often represents unfair competition to farmers in the recipient countries, thus acting as a disincentive to agricultural development. Moreover, it has become evident that heavy reliance on external assistance prevents rural farming communities from taking their own initiatives towards poverty alleviation, provided that these communities could have taken part not only in producing their own food but also in defining problems and devising sustainable solutions that would affect the very means of their livelihoods. As a practical matter, increased food production will not necessarily alleviate hunger, so understanding how agriculture can most effectively contribute to food security remains a critical question, particularly for policy makers reviewing their approach to agricultural development within the wider framework of economic growth and poverty reduction (DFID, 2004).

## **2.4 Underlining Principles for Environmental Conventions: think globally, act locally**

The phrase ‘Think Globally, Act Locally’, coined by Rene Dubos (1972), an advisor to the United Nations Conference on the Human Environment, refers to the argument that “solutions to global environmental problems are activated through consideration of ecological, economic, and cultural differences within local surroundings and that issues involving the environment must be dealt with in their unique physical, climatic, and cultural contexts” (Eblen & Eblen, 1994). The complexities and instabilities in global environmental, economic, and social spheres summon the role all nations are expected to play within the scope and context of their capacities and resource availability (i.e., financial and technical). Dubos’s initiative is also the theme held by the GEF SGP, which stresses that with technical and financial support, local communities can pursue activities that have the potential to not only make a real difference in their own environment, but also for making a positive global impact—bringing true meaning to the phrase ‘Think Globally, Act Locally’ (GEF SGP, 2006). An understanding of, and consent to, this idea initiated the formation of global agreements and conventions, which all participating countries agreed to pursue and implement.

The United Nations Convention on Biological Diversity (UNCBD) is one of the instrumental principles established to protect, restore, and conserve the global environment and allow signatory countries to benefit from the outcomes resulting from the fulfillment of the obligations. The convention, founded on December 29, 1993, accentuates the vital relationship between earth's biological resources and humanity's economic and social development, as well as a growing realization that biological diversity is a global asset of tremendous value to pass on to future generations (United Nations Conference on Environment and Development [UNCED], 1992). Ethiopia recognized the importance of these measures in becoming a signatory as well, in 1992, sanctioning the Convention on Biological Diversity (CBD) in 1994, and preparing the Conservation Strategy of Ethiopia (1997) with the understanding that the involvement of local people and the support provided by competent institutions for the conservation and sustainable use of biodiversity also holds the key to protecting the biological heritage of Ethiopia (IBC, 2005).

As the adverse effect of climate change continues to expand with increasing industrialization, pollution, and carbon dioxide emissions in the northern hemisphere, most developing nations in the south—the rural poor in particular—face the pain of potentially losing the very means of their livelihoods (GEF SGP, 2003). In recognition of this reality, the United Nations Framework Convention on Climate Change (UNFCCC) has been a fundamental policy tool that promotes intergovernmental efforts to reduce the rise in global temperature and devise practical coping mechanisms to the benefit of those nations and the global ecosystems that are directly or indirectly affected (United Nations [UN], 1998). Climate change, as defined according to the UNFCCC, is a condition of climatic variability observed over a given period of time and that alters the composition of the global atmosphere directly or indirectly ascribed to human activity (UN, 1998). Similarly, the Intergovernmental Panel on Climate Change (IPCC) has been established by the World Meteorological Organization (WMO) and the UNEP in 1988—bearing in mind the environmental, economic, and social impacts of climate change—and thus devised strategies to respond to the challenges in the degradation of ecosystem goods and services and human well-being (WMO & UNEP, 1996). The UNFCCC has further proposed mainstreaming the protection of ecosystem goods and services in policy domains through its program called Reduced Emissions from Deforestation and Forest Degradation (REDD)—offering a market-based approach that recognizes the economic value of standing forest resources as opposed to the value of alternative forest land uses such as clear cutting for agricultural expansion and other industrial development activities (Kok *et al.*, 2010).

The continued existence and protection of biological diversity greatly relies on the health and protection of the ecosystem where landscapes, water bodies, and the atmosphere provide shelter for the diverse fauna and flora resources. In addition, biodiversity supports the production of an ecosystem's goods and services essential for life as well as for many cultural values (Canadian International Development Agency [CIDA], 2003). Throughout the past few decades, rapid population growth, lack of sustainable management systems, and overexploitation of land and land-based resources (i.e., soil, minerals, forests) have resulted in extensive land degradation, loss of biodiversity (Plate 4), and desertification. The United Nations Convention to Combat Desertification (UNCCD) defined desertification as “land degradation in arid, semi-arid, and dry, sub-humid areas resulting from various factors,



including climatic variation and human activities", where arid, semi-arid, and dry, sub-humid refers to areas in which the ratio of annual precipitation to potential evapotranspiration falls within the 0.05–0.65 range (UN, 1994). In Ethiopia, about 70 percent of the total land mass falls within this category (EPA, 2007).



*Photo Credit: SGP Ethiopia*

**Plate 4.** The Loss of Vegetation Cover

The loss of vegetation cover, rapid population growth, and overexploitation of lands beyond production and carrying capacity are the significant indicators of land degradation in the highland, lowland, and semi-arid regions of Ethiopia. The FDRE, representing one of the countries affected by desertification, signed and ratified the UNCCD in 1994 and 1997 respectively and has undertaken the obligation to establish strategies and priorities within the framework of sustainable development policies in order to combat desertification and the effects of drought (EPA, 2007).

## **2.5 Financing Restoration and Conservation of Environmental Resources**

The word biodiversity was first coined by E.O. Wilson (1988) to describe “the number and variety of living organisms, at all scales; from individual parts of communities to ecosystems, regions, and the entire biosphere, i.e., the genetic diversity of an individual species, the subpopulations of an individual species, the total number of species in a region, the number of endemic species in an area, and the distribution of different ecosystems.” In Article 2 of the

CBD, the UNCED (1992) rendered a scientific definition that biodiversity refers to “the variability among living organisms from all sources including, inter-alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.” These claims imply the inevitability of practicing biodiversity conservation on the basis that biodiversities are natural resources, either renewable or non-renewable, that require conservation and protection to retain the fundamental functions of sustaining human lives and the lives of individual plant and animal species that depend on one another.

The growing concerns for the depletion of environmental resources, recurring global climatic variations, and deteriorating rural livelihoods signify the need for financial resources to implement sustainable resource management and rural development projects and/or programs in most developing countries. When the CBD was initially adopted, developing countries stressed that their ability to take national actions to restore and achieve the benefits of environmental resources would depend on financial and technical assistance (Secretariat of the Convention on Biological Diversity [SCBD], 2000). Access to the funding mechanism and related technical assistance, usually in the form of small grants, micro-credits, and capacity-building, are influenced by the eligibility criteria of fund providers. For the most part, these requirements take grassroots-level poverty-stricken communities in low-income developing countries into account. In this context, poverty is attributed to those who lack the basic needs and facilities to sustain their day-to-day lives and the major sources of their livelihoods (i.e., the ecosystem). According to Gutman (2003), surveys on financing options for sustainable natural resource management (SNRM) in developing countries revealed that in most human settlements, production takes place in areas with natural resources of low biodiversity value, farmlands, ranching, forest plantations, and secondary forests, thus conforming the focus of SNRM on offering productive ways to generate income from natural resources, while maintaining the long-term productivity of land, water, and climate as well as protecting the services they provide.

Country-wide variations such as the extent of resource depletions, severity of poverty, and the impacts of climate change invoke a decentralized system of granting mechanisms that are designed to fit the context of the fund seekers. Within the framework of such mechanisms, the convention-related activities of developing countries are eligible for support from the

financial mechanism of the CBD—the GEF—through which the SGP has provided over 4,500 grants of up to US \$50,000 per project since its inception in 1992, to local NGOs and CBOs aiming to address global environmental issues while generating local benefits (SGP, 2005). Correspondingly, in order to ensure commitments to the UNFCCC, it has been stressed that the GEF takes the leading role in enabling countries to integrate climate change adaptation programmes into their national development strategies through two funding mechanisms—the Least Developed Countries Fund and the Special Climate Change Fund (UN, 2009). The role of the GEF has also been given paramount importance in tackling the adversities of land degradation. Hence, in response to the global initiatives under the UNCCD, the GEF has made prevention of land degradation as one of the components of its thematic areas and has been providing funding to potential projects designed to restore degraded lands and bring about changes to ecosystems and community livelihoods. In a similar manner, the Ethiopian Biodiversity Strategy and Action Plan (EBSAP) is designed to address interlinked issues comprising biodiversity protection, attainment of food security, and livelihood improvements for rural populations (i.e., farmers and pastoralists) whose survival heavily relies on land, land-based natural resources, and a clean environment (IBC, 2005).

## **2.6 Sustainable Livelihoods: Exploiting and Managing Ecosystem Goods and Services**

Poverty and the environment are so inextricably linked that the world's rural poor could enhance their livelihoods by: (1) deriving greater value from ecosystems—making the ecosystem a powerful model for nature-based enterprise that delivers continuing economic and social benefits; (2) assuming greater power to manage local ecosystems and improve their natural-resource base; and (3) becoming active players in the local economy (WRI, 2005). Berkes and Davidson-Hunt (2007) argued that in order to recognize the economic value of ecosystem-derived resources and improve local livelihoods through Ecosystem-Based Enterprises (EBEs), access to a secure natural resource base such as land or water and the right to benefit from its use are necessary conditions. In addition, tapping the wealth of ecosystems, require good governance, tenure reforms, and a practical acknowledgement of the poor's rights to access resources as the major source of environmental income (WRI, 2005).

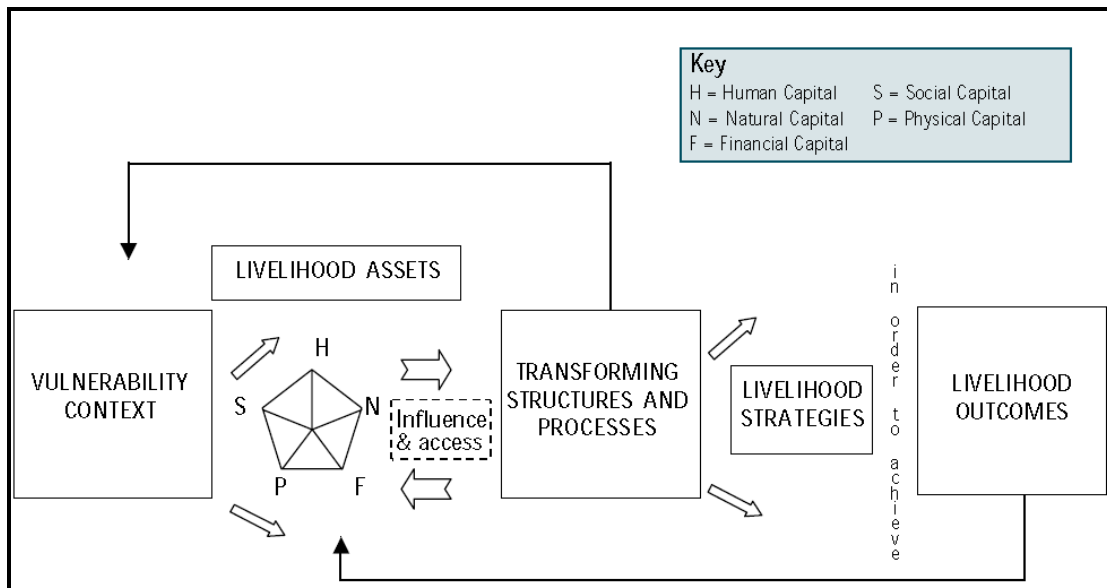


*Photo Credit: SGP Ethiopia*

**Plate 5.** Conservation and Resource-based Income Generating Activity

When the major sources of natural capital and the means by which human needs are met are continuously utilized, the ecosystem undergoes changes that require sustainable management and protection to maintain its life-supporting capacity. This effort to harmonize ecosystem management and conservation with the continuous demand to meet human needs invites approaches that can halt degradation and overutilization of the fragile natural resources involved. Grumbine (1994) reviewed themes that characterize ecosystem management and points out that they integrate scientific knowledge of ecological relationships within a complex socio-political and values framework toward the general goal of protecting native ecosystem integrity over the long-term. Voora and Venema (2008) added that along with the application of scientific knowledge, human beings, as users and managers of ecosystem goods and services, employ historical and traditional ecological knowledge of the local environment in order to provide guidance for the management of the natural world. Conversely, CIDA (2003) emphasized that a healthy ecosystem maintains itself without major human intervention and that adaptations over time provide the services that sustain human communities. However, one may argue that it is the presence of people, and their protective intervention in allowing the ecosystems to undergo a natural process of recovery, which helps ecosystems continue to function as they have been doing for centuries.

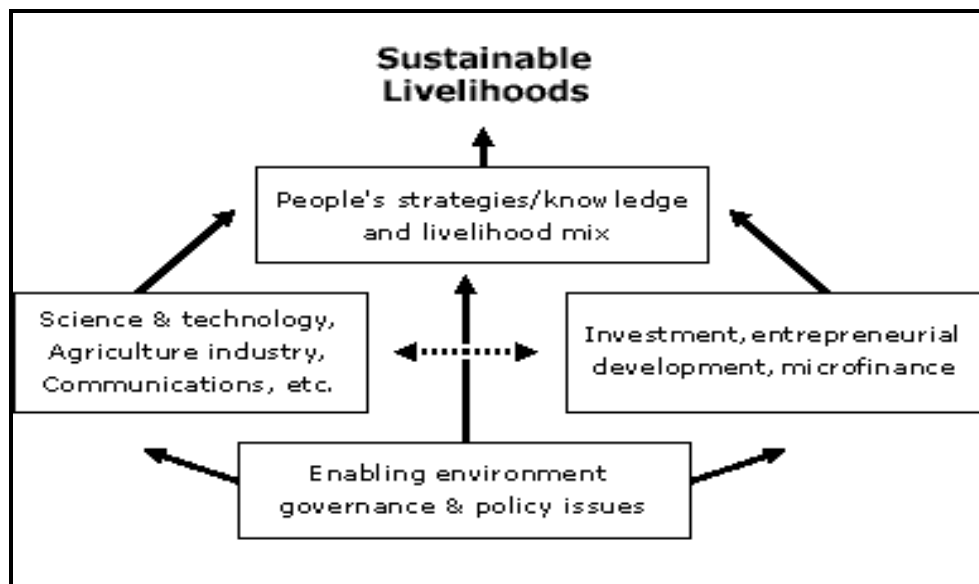
At the heart of ecosystems management is the concept of sustainable livelihoods, which promotes the underlying principles of sustainable development as a process of maintaining ecological integrity, economic viability, and social well-being. Chambers and Conway (1992) define livelihoods as “the capabilities, assets (stores, resources, claims, and access), and activities required for a means of living, meaning that a livelihood is sustainable if it can cope with and recover from stress and shocks, maintain and enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation”. DFID (1999) also has a simplified sustainable livelihood framework that captures a broader concept of livelihoods that can be understood by qualitative and participatory analysis. The framework represents the linkages between vulnerability of the poor, performances in poverty reduction, and access to environmental assets in pursuit of beneficial livelihood outcomes that meet livelihood objectives at the local level within the spheres of social, institutional, and organizational environment (Figure 4). In addition, locally-driven solutions to livelihoods improvement are unattainable in the absence of direct and localized transfer of capital (human, natural, financial, social and physical), capacity-building, empowerment, and institutional reform at higher levels (WRI, 2008).



**Figure 4.** DFID’s Sustainable Livelihood Framework (Source: DFID, 1999)

Impacting the livelihoods of rural communities while protecting the natural capital requires drawing on an integrated pool of strategies whereby the synergetic contribution of

development actors can deliver multidimensional benefits. In this context, the Internal Institute for Sustainable Development (IISD) also has developed a Community Adaptation and Sustainable Livelihoods (CASL) framework (Figure 5) to address the need for empowering communities through a sustainable livelihoods approach, which brings individual approaches together to achieve sustainable development through an assessment of community assets, adaptive strategies, and technologies contributing to livelihood systems, and the analysis of cross-sectoral policies and investments required to enhance livelihoods (IISD, 1999). This framework lends itself to the fact that sustainable development indeed embraces a fundamental concern to promote community livelihood improvements that brings forth considerable results.



**Figure 5.** Community Adaptation and Sustainable Livelihoods (CASL) Framework (Source: IISD, 1999)

## 2.7 Collaborative Resource Mobilization and Management

Given the uneven distribution of and limited access to natural resources by the poor, it is generally assumed that the availability of technical and financial supports, shared responsibilities, defined roles, cross-level partnerships, and realistic policy instruments between development actors—governments, local NGOs, international NGOs, civil society, local communities, the private sector, and research institutions—determine the capacity of developing countries to deliver the expected results concerning sustainable development goals

and poverty alleviation efforts. This argument rests on the premise that sustainable development requires an integration of environmental concerns and development aspirations at all levels of governance, which requires an overhaul of national and international institutional structures in order to provide a high degree of coordination and policy coherence (Yamin, 2001). Moreover, success in reaching project and program goals depends largely on mobilization of financial resources, which encourages the establishment of partnerships and institutional networks with, among others, local governments, civil society organizations, the private sector, and the scientific community (UNDP, 2006). An apparent consistency with this argument emphasizes that bilateral and multilateral support for increasing capacity and investing in projects/programs is essential for enabling developing countries to meet the CBD objectives (SCBD, 2000). Conversely, it could be argued that collaboration on the common goal of global environmental conservation and poverty alleviation is a challenge in countries where economic, social, and cultural differences are extremely inherent. Nonetheless, there is shared evidence to support the claim that participatory processes primarily recognize the natural heterogeneity (social or class divisions, income inequality, competing interests, cultural divides, and power imbalances) typically present in most community groups (WRI, 2008); thus understanding and acknowledging these diversities eliminates competing interests (Berkes, 2009) among resource users and managers.

The willingness of local communities to assume responsibility for the effective utilization and conservation of natural resources is greatly influenced by the power distribution and political system through which resource allocations and administration policies are designed. The practical implication of this premise, contends Lindsay (1998), is that community-based institutions alone cannot define the rules by which they manage natural assets such as common-pool resources; hence, they need to secure legal status that only central governments can provide. Likewise, the complexity of environmental degradation and poverty do not permit only governments, international organizations, or local institutions to single-handedly devise feasible and comprehensive solutions.

The repercussions of natural resource degradation, extreme poverty, and food insecurity heavily impact local community groups who often lack the capacity to voice their needs and define their problems from their own perspectives. One positive way to tackle this challenge

is by granting them the right to manage their surrounding natural capital in a manner that enhances their awareness and sense of responsibility towards global thinking. Indisputably, the dynamic impact of designating administrative power and autonomy to local people results in the establishment of rules-in-use (Berkes, 2009) that serve as problem-solving instruments for resource management. On this ground, it makes sense to substantiate GEF SGP's claim (2006) that the idea of development projects and efforts will be most successful when they come from and are owned by communities. The Government of Ethiopia has incorporated good governance as part of its poverty reduction program although the country continues to face major governance challenges, particularly with respect to voice and accountability and rule of law, thus ranking its performance low in comparison with the rest of Sub-Saharan Africa countries (African Development Bank – African Development Fund [ADB-ADF], 2006).

## **2.8 Conclusions**

As an integral part of the thesis, the researcher has revealed in this chapter insights into how the case study identified with previously done work similar to the research topic. During the course of reviewing, evaluating, critically analyzing, comparing and contrasting literatures, the researcher has realized the diverse ways in which interdisciplinary approaches are pursued by a significant number of development actors, researchers, and professionals. To that end, the researcher has attempted to show the basic grounds as to how the research study contributes to the growing body of knowledge in the areas of small grants, sustainable development, environmental resources management, poverty alleviation, food security, and related policy impacts.



## **Chapter 3: Research Approach and Methods**

### **3.1 Introduction**

This chapter describes the methods the research adopted in order to facilitate the data-gathering process pertaining to the study. Research methods can be considered as benchmarks which determine the quality of a scientific inquiry and the significance of the related results that a researcher ultimately desires to transmit to knowledge seekers. According to Kothari (2004), research methods refer to the behaviour and instruments used in selecting and constructing research techniques, while research techniques refer to the behaviour and instruments one uses in performing research operations such as making observations, recording data, techniques of processing data, and the like. The research employed an evaluative approach by using thematically structured questions and applying critical thinking towards the development processes and results of utilizing SGP's financial and technical support. Such a research approach of developmental evaluation reflects the major premises held in the works of Michael Quinn Patton. According to Patton (2009), developmental research involves asking evaluative questions and applying evaluation logic based on the evaluator's assessment processes anchored in worldviews aimed at producing context-specific and result-focused knowledge and feedback. For the purpose of this study, the research had drawn the participatory and advocacy research worldview/paradigm, a qualitative research approach, and a case study strategy of inquiry. Both primary and secondary data sources were used, which included semi-structured interviews, focus group discussions, direct observation, and photographic images.

### **3.2 Qualitative Research Approach**

The technique of conducting most scientific studies is influenced by the subjective or objective nature of the data-gathering process and the subsequent analysis of the data. Since the informants in this research study are community members benefiting from the support of the SGP, the gathering of data and the analysis process were sifted through the researcher's subjective measures, a fundamental attribute of a qualitative research approach. As Kothari (2004) argued, a qualitative approach to research is concerned with subjective evaluation of

attitudes, opinions, behaviours, and circumstances involving attributes which considerably relates to the researcher's insights and impressions.

The complex sets of environmental challenges faced in the world demand that scientific inquirers draw on multidimensional and rational perspectives that lead to an in-depth investigation and understanding of the phenomena being studied. These will present a condition that the collection, analysis, interpretation of the data, and the final written report be flexibly designed and structured with a focus on individual meaning and the importance of rendering the complexity of a situation (Creswell, 2009). However, the major drawback of a qualitative method is that data is collected from a few cases or individuals, which means that generalizing findings to the larger population could pose a challenge (Mathie & Camozz, 2005). Nevertheless, Guba and Lincoln (1994) contend that, in the field of social science, the need to quantify has been questioned, thus giving credit to qualitative techniques based on the interpretation of non-numerical data that can offer insight to the meaning of human behaviour—an element missing in quantitative data.

In addition to exhibiting a set of features as an approach of scientific research inquiry, qualitative methods can also be used in conjunction with a number of worldviews or theoretical frameworks that researchers may validate to pursue. Particular theoretical frameworks or perspectives in qualitative methods include answering questions in light of ontology (what is reality), epistemology (the relationship between the inquirer and the knowledge), and methodology (how a researcher will go about the research)—with the commonly applicable paradigms to ontological questions being positivism, postpositivism, critical theory, and constructivism (Guba & Lincoln, 1994; Neuman, 2000; and Creswell, 2009). Kemmis and Wilkinson (1998) later introduced participatory and advocacy paradigm as an element of qualitative research with the assumption that postpositivism imposes structural laws and theories that do not fit marginalized individuals in a society. In addition to being ascribed to a set of worldviews, qualitative methods are also used with specific strategies of inquiry throughout the data-collection processes. The most viable strategies for conducting qualitative studies include ethnography, grounded theory, case studies, phenomenological research, and narrative research (Creswell, 2009).

In this research, the qualitative research method has employed a case study strategy of inquiry and the participatory and advocacy research worldview. The selection of these methodologies is attributed to the fundamental nature of the research topic, the researcher's personal background and worldview on the theories, and practices pertaining to the three GEF thematic focuses, sustainable livelihood, and poverty alleviation, the details of which are described in Chapter 4.

### **3.3. Sustainability Framework**

According to SGP's grant approval criteria, 70% of financial resources are allocated to support projects located in settlement areas where internally displaced people (IDPs) dwell while the remaining 30% is for innovative and exemplary project ideas coming from geographic highland and lowland areas (15% each) (CPS, 2006). These regions are predominantly inhabited by farming communities whose means of livelihoods are highly dependent on exploitation of depleted environmental resources. For this reason, there is a strong need for empowerment to bring about changes through community-based sustainable livelihood initiatives and restoration of the surrounding natural environment. This action agenda can be achieved through financial support, community participation and engagement, and stakeholders' support in activities and decisions affecting the environment, local economy, and social well-being (See Plate 4).

### **3.4 Participatory and Advocacy Research Worldview/Paradigm**

The entire research process was greatly influenced by the value systems, assumptions, and premises held by the researcher towards the sustainability framework illustrated under section 1.4. This assumption, which is also known as a worldview or paradigm, reflects basic sets of beliefs that guide action in undertaking research studies (Guba, 1990). Chalmers (1982) also defines paradigm as being made up of general theoretical assumptions, laws, and techniques that the members of a particular scientific community adopt. Guba and Lincoln (2000) drew upon the work of Heron and Reason (1997) and came up with participatory and advocacy as an inquiry paradigm. Specific issues under this inquiry paradigm include advocating for an action agenda and empowerment to help marginalized, oppressed, and alienated people,

thereby bringing about social, political, and policy reforms that may change their vulnerability and the institutions they live in (Creswell, 2009).

Heron and Reason (1997) contend that the epistemology of the participatory worldview involves the researcher participating in the known and expressing this through experience, presentation, proposition, and practice. Hence, the researcher's worldview was greatly shaped by her previous work experiences with the SGP in the capacity of a Program Assistant and the prospects of obtaining cooperation from the project beneficiary communities and the financial and technical support providers who collaborated to bring about practical and lasting changes. Through the process of adopting this worldview, therefore, the researcher was able to reflect the basic principles of participatory and advocacy research paradigm on the real world settings of the research topic and the circumstances of the participants involved.

### **3.5 Case Study Strategy of Inquiry**

Case study, as a strategy of inquiry, is used to undertake research studies that are qualitative in nature. Yin (2003) emphasized that the term 'case' refers to an event, an entity, an individual, or a unit of analysis and social scientists in particular have made much use of the qualitative research method to examine contemporary real-life situations and provide the basis for the application of ideas and extension of methods. In the social science field, this strategy of inquiry is often used to study a specific case of small community groups whose circumstances can later be up-scaled to a local or national level. In this regard, the research has considered the case of two local NGOs and a cluster of three CBOs as identified in section 1.7 and Table 1. Such an investigation requires clarification on the nature of generalization, which can take various forms, such as the single instance to the class of instances that it represents, general features of the single case to a multiplicity of classes with the same features, or generalization of single features of part of the case to the whole of that case (Coehn *et al.*, 2005).

### **3.6 Data Collection Procedures**

As the research is a case study strategy of inquiry, the researcher utilized semi-structured interviews, focus group discussions, on-site or direct observation, and secondary data sources

to gather data significant to the research topic. The contents and structure of these data collection procedures was designed in relation to the three objectives of the research.

### *3.5.1 Primary Data Sources*

#### A. Semi-structured Interviews

Semi-structured interview is one of the tools for qualitative data collection which is designed to obtain comprehensive information on issues of a research topic that matter to the perceptions of the respondents. Since this tool provides access to perceptions and opinions, it is effective for gaining insight into problems that are not immediately perceived but that nonetheless cause concern in certain areas or segments of a community being studied (Laforest, 2009). Horton *et al.* (2004) emphasized that researchers choose to use semi-structured interviews in order to allow the informants a degree of freedom to explain their thoughts, highlight areas of particular interest, enable certain responses to be questioned in greater depth, and bring out and resolve apparent contradictions. In the semi-structured interview, an interview guide or schedule is used to remind the interviewer of the general issues, key words, or concepts of the discussion topics (Hay, 2005). In addition, the identification of key concepts and themes is a preliminary part of any research project (Babbie, 1992). Thus, the semi-structured interview guide for the research was structured based on thematically categorized concepts of the research topic in order to allow the research participants to respond to open-ended questions that fall within their environmental, socio-economic, and cultural scope of knowledge. Such a systematic design of the interview schedule was chosen to facilitate the task of identifying potential informants who had benefited from SGP's funding based on environmental, economic, and social backgrounds.

The interview session comprised informants from rural communities, both male and female, whose major source of livelihoods are based on agriculture. The semi-structured interview guide was used to gather data from 35 grant beneficiary individual community members from three recently completed projects funded by the SGP (Table 1 and 2). Given the researcher's worldview for the need of empowerment and change for marginalized rural communities, the community groups chosen were identified as having limited access to resources and alternative income-generating activities, as well as being highly vulnerable to

the adverse impacts of recurring drought, chronic food insecurity, biodiversity loss, and land degradation. This system of choosing informant community groups, therefore, indicates a judgement sampling technique that reflects knowledge of the topic and of the informants whose opinions were important to the case study because of what the researcher already knows about them (Harrell & Bradley, 2009). The selection of judgement sampling strategy also involved, to a greater extent, developing a framework of variables that might influence the informant's contribution to the research study (Marshall, 1996). Thus, to further ensure the appropriateness of the sampling strategy, the researcher, at the onset of gathering data from the field, had consulted NC of the GEF SGP Ethiopia to thoroughly conceptualize the basic features and variables that characterized the community members of the projects that were eligible for SGP's grant. This process allowed the researcher to decide the number of informants to be interviewed at each project site.

The purpose of designing the semi-structured interview guide (Appendix D) in light of the above-mentioned circumstances of the informants was to purposefully address objective number two and three of the research. Accordingly, questions were structured to allow the researcher to explore the primary conditions that were present to enable project beneficiaries to undertake project activities under the three GEF thematic areas and derive nature-based alternative income-generating activities so that they could lift themselves out of the challenges of environmental resource degradation and poverty. Consequently, the researcher has discussed how the communities' involvement in resource management and resource-based livelihood generation activities in turn influenced policies in regards to the country's environmental and poverty reduction programs.

**Table 2.** Interview Sites and Participants

Ser. No.	Date	Data Collection Site	Total Number of Participants ( <i>n</i> =35)	
			Male	Female
1	July 5-9, 2010	<b>ASDA Project: Zone</b> -Arsi <i>Woreda</i> - Dodota <i>Kebele</i> - Dilfekar, Awash Bisholla, and Dera <i>Kebele</i> 1 and 2	2	10
2	July 11–16, 2010	<b>Dire Dawa Project: Zone</b> -Dire Dawa Administrative Region <i>Woreda</i> -Dire Dawa <i>Kebele</i> -Dujuma and Ijaneni	9	3
3	July 28-August 1, 2010	<b>RLDO Project: Zone</b> -Sidama <i>Woreda</i> -Finchweha <i>Kebele</i> -Kurda and Dulecha	5	6

## B. Focus Group Discussions

This approach to selecting informants relates to the concept of ‘applicability’, in which the informants are selected because of their knowledge of the study area (Burrows & Kendall, 1997). Focus groups could provide information about a range of ideas and feelings that individuals have about certain issues, as well as elucidate the differences in perspective between groups of individuals (Rabiee, 2004). Two focus group discussions were conducted. The first was with the NSC and TRT members of the UNDP—GEF SGP (Table 3), who are instrumental and voluntarily work in groups to make decisions regarding funding for prospective projects designed to achieve environmental benefits. The second focus group discussion was with one of the project beneficiary groups where women comprised the majority of the members (Table 4).

The guide for the focus group discussion with the NSC and TRT members (Appendix E) was designed to meet three objectives of the proposed research. It includes objective one, which identified how project review, selection, and approval criteria were linked with the environmental and livelihood conditions of the project proponents’ target beneficiaries who were eligible for SGP’s funding. Secondly, as the NSC and TRT was made up of individuals from diverse disciplinary orientation and institutional representation, their input will give insight to objective two, which was in part focused on examining how institutional networks and partnerships contributed to building local capacities of the grantees funded by the SGP. In addressing objective three, the relationship of SGP projects and potential influences on country policy instruments was ascribed to the working procedures of NSC and TRT members who, by principle, adhere to national policies pertaining to economy, environment, sustainable development, and poverty reduction. Correspondingly, the focus group discussion held with the target community members was in order to discuss in detail the significant concerns, which were repeatedly emerging during one-to-one interviews (Appendix F). Moreover, most of the emerging issues were also at the heart of objective two and three where critical discussions in regards to partnership, stakeholders’ collaboration, governance, local capacity building, and self-development were made.

**Table 3.** Focus Group Discussion Participating NSC and TRT Members (June 25, 2010)

Name of Organization/Institution	Responsibilities	Institutional Representation
SGP Ethiopia	National Coordinator	UNDP—GEF SGP
Private Sector	NSC Member	Private Sector
The World Bank (WB)	Land Management Specialist	International NGO
Environmental Protection Authority	Advisor to the Director General	Government
Environmental Protection Authority	Director of Finance Support Programme Directorate	Government
Environmental Protection Authority	Director of Monitoring and Evaluation	Government

**Table 4.** Focus Group Discussion Participating Community Members – ASDA Project

Ser. No.	Date	Data Collection Site	Total Number of Participants (9)	
			Male	Female
1	July 9, 2010	<b>Zone</b> - Arsi <b>Town</b> - Dera <b>Venue</b> - Abay Fana Hotel	2	7

### C. Direct Observation

The researcher used direct observation as a tool to emphasize particular questions of the interview that were strongly linked to the observed phenomenon, which as a result made probing the respondents much easier. Direct observation to the circumstances of the project site involved observing and photographing, among many, the local physical landscape, social interactions, livelihood activities, market places, living conditions, and infrastructure such as schools and service giving centres.

#### 3.5.2 *Secondary Data Sources*

The researcher utilized the UNDP—GEF SGP Ethiopia office data base, documents, and materials to strengthen the reliability and validity of the data gathered through semi-structured interviews and focus group discussions. These included investigation of:

- Program operating manual/procedures and policies documents;
- Project selection criteria, grant approval procedures;
- Grant memorandum of agreements;
- GEF SGP Ethiopia Country Programme Strategy (2006-2009); and
- Projects documents (concept notes, project proposals, reports [progress, financial, and terminal]), and photographic images (past and present).



Reviewing the selected documents and materials has backed up the research findings. Data gathered and analyzed from these primary and secondary sources denoted possible replication of development and conservation practices by other projects designed to address the issues of the three GEF focal areas, livelihood improvements, and poverty alleviation in rural Ethiopia.

### *3.5.3 Insights into the Data Collection Periods*

The SGP office in Ethiopia gave tremendous support to the researcher by communicating in advance with the contact persons whom the researcher had to work with at the aforementioned data collection sites. Communication with the participants was unperturbed as they were primarily informed of the researcher's work and of the need for their cooperation to provide information. Data from the interview process was recorded using a digital sound recording device, which was later transcribed for analysis. Before using the interview guide for data collection, a test-interview with one participating beneficiary from the first field site was conducted to ensure in advance the clarity of the questions and to estimate the average duration one interview takes. In addition, at two of the project sites (i.e., Dire Dawa and RLDO), the researcher had to work with interpreters as the community had local dialects through which they were comfortable in expressing their views. Overall, the interview sessions lasted between 30 minutes and 1 hour depending on understanding and expressions of opinions.

Before and during the gathering of the data, the researcher had considered the application of an interactive and adaptive research approach (Nelson, 1991), as amendments or alteration to the originally proposed research might have been required at any stage. Initially, the researcher had proposed to conduct data collection in one of the completed SGP-funded projects facilitated by an NGO (i.e., Ethio-wetlands and Natural Resources Association). However, the researcher had to exclude this site for two reasons: the data collection season was winter and road accessibility was difficult to travel to the EWNRA's project site; and secondly, it was crucial to ally the composition of the research participants in line with the SGP's funding priority to CBOs. Hence, the Dire Dawa CBO projects were selected as data collection sites.

### **3.6 Data Analysis**

Among the commonly used qualitative analysis software packages such as Atlas.ti, N4 Classic, N5, WinMax, etc., only NVIVO (to date) is identified as having a particular set of tools that is ideal for organizing primary data (Gregorio, 2000). Hence, upon the researcher's return from the data gathering field site, NVIVO was used to code and organize the different types of data (i.e., interview and focus group discussion transcripts, expert opinion from the field sites) that were later analyzed and compiled to discuss the research findings. In order to integrate the data and design a decision framework for the findings, the researcher had largely based the data analysis on the principal aspects of sustainable development that reflected the state of environmental, economic, and social circumstances of the research informants selected for the case study. To ease understanding about the overall research findings and related discussions, a summary was made based on a Strength, Weakness, Opportunity, and Threat (SWOT) Analysis, also known as Strategic Analysis method as described in Table 8 under section 6.1.

Upon completion of the final report, the researcher intends to send a digital version of a summary of this thesis to the National Coordinator (NC) of the GEF SGP Ethiopia office who will then disseminate it to all research participants—all of whom have greatly contributed to successful undertaking of this research work.

### **3.7 Ethics Review**

Policy #1406 (University of Manitoba Policy and Procedures Section 1400, Policy 1406), states that the Joint-Faculty Research Ethics Board (JFREB) of the University of Manitoba must approve all research under the auspices of the University of Manitoba that involves human subjects. Therefore, as per the policy statement, prior approval was obtained for the interview schedules, focus group discussions guides, and letters requiring confirmation of consent from participants. These data gathering instruments were translated into the local language and the statements on the consent letters were explained to each participant at the commencement of each data collection session. Copies of the letters were left with each participant for their records (See Appendix A).

## **Chapter 4: The State of Rural Living and Community Perspectives**

### **4.1 Introduction**

This chapter offers detailed analysis of the data collected from the three sites described in Table 1 under section 1.7. In the overall analysis work, interview data from 35 participants, two focus group discussions, on-site observations, project reports, and photographic images were utilized. Although the areas were characterized by varying altitudes of agro-ecological zones, the data organization and the analysis work stem from the analogy of the responses and perceptions held by the research participants across the sites. In addition, each section is presented in line with the underlying framework based on which the research framework (Figure 2) has been formulated; hence, fundamental dimensions pertaining to the three pillars of sustainable development (environment, economy, social dimension), institutional networks, governance, poverty alleviation, and food security provided the basis for the overall analysis.

### **4.2 Community Structure and Composition**

*ASDA Project – Project title: Social Mobilization for Reducing Land Degradation and Enhancing Biodiversity*

Of the total 12 respondents of the project support user groups (i.e., designated beneficiaries of the project activities), women accounted for 83 percent while males constituted 17 percent of the group. These respondents were from farming households with ages ranging between 22 and 55. In this community, 58 percent of the user groups were Christians (Orthodox and Pentecostal) while the Muslims accounted for 42 percent. Despite differences in their religious background, all the members seemed to work together in harmony in all the project activities. It was identified that 56 percent of the respondents have attended primary education (grade 1-6), 26 percent went to junior secondary schools (grade 7-8), and 17 percent attended senior secondary school (grade 9-12). Only one respondent had not acquired any formal education. Most of the women had expressed their ambition towards formal education; however, they were not able to complete their secondary education as they were married at an early age, giving birth to lots of children, and bearing the burdens of time-consuming household and farming responsibilities. Given the researcher's worldview on the need to

empower women and marginalized rural community groups, the second focus group discussion was conducted at the ASDA project site, which comprised user groups from seedling production, stove production, and park conservation and protection. These user groups represent most of the women in the group of 35 research participants. Moreover, it was crucial to choose ASDA project communities for the focus group discussion as no other local dialect but Amharic (i.e., the national official language) was the language that the researcher and the respondents had to communicate with. It would have otherwise been impossible to conduct a focus group discussion with any of the groups at all.

***Dire Dawa Farmers' Cooperatives Project*** – *Project title: Community-based Sustainable Environmental Management Plan to Mitigate Climate Change*

The Dire Dawa Farmers' Cooperatives Project, which also had 12 respondents, comprised farming households of both men and women who account for 75 and 25 percent of the user groups respectively. The less representation of women members was attributed to the long-standing social outlook which existed during the previous regime and that had left women oppressed and confined to stay at home looking after children and performing household responsibilities. The community is characterized by age groups that range between 24 and 63 years old, where the younger members make up the majority. This area is a predominantly Muslim community site and as such, 100 percent of the respondents were identified to be under this religious category. Of the entire user group, 42 percent had attended primary education (grade 1-6) while another 42 percent had completed junior secondary education (grade 7-8). The remaining 16 percent, two of the three female respondents, have not had any formal education. The participants speak a local dialect called *Oromigna* and thus the researcher had to rely on the assistance of an interpreter for the entire interview sessions.

***RLDO Project*** - *Project title: Enhancement of Community Action for Sustainable Watershed Management through Soil and Water Conservation and Biological Diversity*

The structure of communities in the RLDO Project was characterized by 45 percent male and 55 percent female farmers with ages ranging between 35 and 56 years. The user group comprised respondents who practiced both Christian and Muslim belief systems in equal proportion. Due to adverse social outlook which has lasted for centuries, the project

beneficiaries of the RLDO Project have been the most ostracised groups who had been deprived of their right to education. As a result, from the total 11 respondents, 70 percent had no basic education while only 30 percent have attended primary education (grade 1 to 6). *Sidamigna* was the only local language the respondents speak and as such, the researcher had to rely on the assistance of an interpreter during the course of the interviews.

### **4.3 Seasons and Agricultural Production**

In general, the use of farmlands in Ethiopia is linked with the production of crops following two farming seasons, which are identified as *Belg* and *Meher*. *Belg* season is identified as the season from February to May when short-maturing crops are planted and harvested in June or July while *Meher* season refers to the main farming season from June to September and provides ideal growing conditions for the longer maturing crops (CSA, 2010). However, given the topographic-induced climatic variation that prevails throughout the country, these two major farming seasons may vary from region to region. Therefore, for ease of understanding, the researcher has adopted the customarily recognized seasons in the country known as *Bega* (Summer) and *Keremt* (Winter). Winter is the rainy and slightly colder season with average temperatures of 5°C to 15°C and runs from June to September. Summer in Ethiopia runs from October to May and has sunny and dry weather conditions except in the western part of the country that receives biannual rainfall. The average summer temperature ranges between 20°C to 25°C. There is also what is known to be the *Bega* rainfall that occurs between the months of February and May. Farmers take advantage of the rain to sow crops that are cultivable during this season. Besides the rainfall pattern, the manner by which the farmers in each community group categorize their seasonal activities depends on the local knowledge, norms, and practices that have existed for a long time. Nevertheless, the norms of agricultural activities were very similar across the communities with the exception of a few crop varieties, which were unique to each of those regions.

On the whole, the user groups had identified March–October to be their cropping and harvesting season. The main food crops harvested include maize, wheat, barley, *teff*, sorghum, millet, soybean, beans, peas, and flux. *Teff* is a cereal grain that is native and staple to Ethiopia. It is made into flour and fermented to bake pancake-like flat bread called *Injera*. A

food crop type that is common to the region in the RLDO Project is *Enset*, which is also referred to as false banana. It is a drought resistant single-stemmed plant and a major source of food that is native to Ethiopia, particularly in the southern regions. The farmers also cultivate *Chat* during this season. *Chat* is a leafy shrub plant people chew to stay wakeful and energetic. The region where the Dire Dawa Farmers' Cooperatives were located is also known as one of the largest producers of *Chat*. The male farmers in this area consumed *Chat* during their spare time off farm where they sit together and spend time almost every day. It is also produced for export to the Middle East and has been a source of foreign exchange. In addition to food and cash crops, vegetables such as onion, sweet potato, potato, kale, bok choy, as well as fruits like mango, orange, papaya, banana, and avocado are also produced as sources of food and income. The production of vegetables, fruits, and a few seasonal crops was not limited to rain availability but the community used small stream irrigation water that will carry cultivation right through November to February. Seedling raising, weeding, and plantation of forest trees were integral parts of the seasonal project activities undertaken between the months of June and August. They utilize small irrigations to water and nurture the seedlings so as to maintain growth off the rainy season.

During off-farm seasons, when it becomes drier and less rainy, farmers were less engaged in food or crop production and instead were focused on cattle rearing and fattening (such as cows, sheep and goat)—both for domestic consumption and to sell in local markets. This time was also marked by other off-farm activities such as petty trades that involved buying supplies like grains, salt, sugar, and coffee from the local market to bring and sell in the nearby villages. Most of the women also provided daily labour to earn income by baking *Injera* and washing clothes for individual households. In addition to the seasonal and daily agricultural routines, the communities were involved in executing non-season-dependent project activities such as fuel-saving stove production, apiculture, construction and maintenance of irrigation canals, soil and stone bunds, terrace bed construction, and fencing conservation sites like the park areas and hills.

## **4.4 The Rural Ecosystems: Past and Present**

### *4.4.1 Awareness of benefits and values*

There is a notion that while natural resources are foundational for rural communities, these resource users were also the ones to be blamed for the destruction and rapid degradation of those resources. Despite such a generally held premise, the researcher did a comprehensive investigation of the essence of natural resources and their benefits to the three rural communities participating in the research. This assessment formed the basis for the discussion in Chapter 5. The communities in the three sites had expressed their awareness about environmental resources both in terms of the benefit of ecosystem goods and services as well as knowledge of the outcomes when the resources are misused and mismanaged. Given the diverse practices and perspectives held in the utilization and consumption of natural resources, the respondents put their knowledge about the values and attributes of natural resources under the following three broad categories:

*A. Life sustaining support functions:* the three communities had an in-depth understanding of the benefits of ecosystem goods and services. They emphasized the strong attachment they have with their land, water resources, air, and soil—the very foundational elements sustaining each household. As their major means of survival, they perceive land as the most crucial resource that provides economic and social security on which they can live and obtain food for their household and animals (livestock and also wildlife). For half of the total respondents, clean air is what comes first before food. The land-based resources, mainly trees and soil, were also inseparable from the benefit obtained from their lands. Despite the degraded and adverse climatic conditions that had persisted in the sites, most of the farmers, who had attended primary education only, described adequately the invaluable role forest resources play in sequestering carbon dioxide and how that regulates the atmospheric temperature and bring rain to the surrounding environment. Without water and water-based resources (i.e., lakes, rivers, springs), irrigation and crop cultivation were considered inconceivable by the entire community. The farmers believed that they cannot put ranks to ecosystem goods since one resource cannot be utilized without the contribution of other resources. In further justifying this claim:

“One can have a land to live on but life is meaningless in the absence of trees that are crucial to hold the soil together to stand erosion” (*A member from the seedling production user group in the ASDA Project*).

Most respondents substantiated that one resource is a means by which another resource can be sustained without the need to look for external inputs. Among the practical examples they raised were how they make use of animal manure and crop by-products to prepare compost and fertilize soil in order to increase crop production and land productivity. As they put it:

“When one natural resource is nurtured, it helps other natural resources to flourish and affects the rest of the surrounding environment in a positive way” (*A member of seedling production user group from the RLDO Project*).

*B. Means of livelihood:* the core premise held by all three communities was that natural resources are the primary means of livelihood on which each household relies for survival. For them, obtaining direct benefit from resources was not the end but the drive to further generate added values and benefits that can be obtained through monetary incomes from the sale of products in the market. The respondents’ perception revealed that none of them will sit idle when there are sufficient resources since they can put them to diverse uses, depending on the level of understanding and awareness they have in utilizing those natural resources.

*C. Aesthetic and cultural values:* in addition to being the means of livelihoods, the very presence of natural resources offered the communities a sense of pleasure, place, and enjoyment. With their traditionally held local knowledge, they also extract medicinal values from natural as well as cultivated plants. They consider such resources as most handy and effective remedy when a family member or livestock are hit by a common virus like cold. They also prepare handmade traditional ornaments and decorations using woods and reeds.

#### *4.4.2 Previous Trends in Resources Utilization*

The farmers in all three communities bear witness that awareness of the benefits of natural resources does not signify awareness of efficient utilization. The characterization of the recent past trends in the utilization of natural resources revealed the adverse impacts the farmers had to face for an extended period of time. Their account of the phenomenon referred specifically



to the previous states of conditions before the inception of SGP's intervention and its financial support, though smaller in scale, to revitalize the degraded rural environment and community livelihoods. Nonetheless, the states of conditions were not ascribed only to the behaviour of the communities in overexploiting their resources but also to the repercussion of global climate change and governance issues.

The farmers disclosed that the drive to create efficient utilization and maintenance of natural resources had been greatly challenged

by the absence of well-established local development initiatives. They stated that there were and still are government- and NGO-based incentives but those interventions were heavily reliant on social safety-net programs as a form of incentive, without which the community did not take the initiative to participate. As a result, the agriculture sector had suffered from a lack of practical experience that could have sustained the livelihood base and the environmental resources crucial to the farming communities.

One common malpractice stressed by all the farmers was farming downward vertically on hills and sloppy landscapes, which over time intensified soil erosion and land degradation. The other malpractice was scattering the seeds, which upon growth huddle the harvest and make weeding difficult, resulting in decomposition of a crop before it matures. Although skills training had been offered by experts from the regional agricultural offices, the farmers were not given enough support to maintain the practices in most agricultural extension programs sponsored by the local government:

*“Orders to instigate better extension farming practice often come from top level local government agricultural office administration. In fact, we are compensated with safety-net wheat at the end of the work and yet without being designated the appropriate capacity to maintain the work and assume ownership of what had been done” (A member of park conservation and protection user group in the ASDA Project).*

Despite the basic knowledge the farmers possessed that physical structures such as terracing minimizes soil erosion and land degradation, they have not paid enough attention to

**Box 1**

*“When our children get married, most invited guests come with packs of fuelwood as gifts. That trend has worsened the degradation. In addition, whenever somebody cuts trees, we did not care to hold that person responsible because he or she could be one of our neighbours.”*

**A member from the stove production user group in the ASDA Project.**

mitigate the problems. Declining land productivity, insufficient harvest, and diminishing rain due to less vegetation cover had forced them to be engaged in the overexploitation of fragile ecosystem goods as an alternative way to supplement their livelihoods. The exploitative nature of resource extraction was exacerbated by population pressure and the associated increase in fuel wood consumption, demand for farmlands, and housing construction. Women in particular were assumed to be responsible agents for the destruction of forests since they are the ones who bear household routines of fetching fuelwood to cook and feed their family. Clear cutting, large scale shrub burning, and charcoal making were also typical activities which destroyed plant species, seeds, wildlife, and habitats. After trees are cut, the locals pull out the trunk, exposing the ground for soil erosion and landslide. Both male and female farmers over the age of 40 gave an account that food insecurity was not a topic of concern in the past three decades when they were able to obtain their food from the wild/forest resources. It was surprising to them to see how fast all those resources were exploited and the resulting poverty.

The major concern raised by the park conservation and protection user group of ASDA Project was the case of Dera Delfekar Regional Park that occupies 19.42 square kilometres. Due to its close proximity to a renowned hot spring resort centre called *Sodore*, the park was once a centre for tourist attraction for its abundant plant species, mammals, and birds. Despite previous attempts made to set aside the park as a protected area, the surrounding local people did not show concern for the shared benefit the park provided, hence openly grazed their cattle and exploited the resource, thus threatening the very existence of the park's biodiversity. The main concern for the farmers in the Dire Dawa Farmers' Cooperatives Project was the health of the hills that surrounded the entire town of Dire Dawa. This town is remembered for the 2006 flood—the most severe flooding that had occurred in the history of the country. Due to an unexpected heavy rainfall that occurred upstream of the town of Dire Dawa, Dechatu River broke its bank and washed away the town, claiming hundreds of lives and thousands of dollars worth of properties. The flooding was severe because of deforestation and soil erosion, the impacts of climate change, the lack of appropriate policy instruments and an inadequate early warning system to protect the people and their surrounding environment (Cordaid, 2010). Most importantly, the hills cover a large surface area of the town and as such, most of the farming activities take place on the hills and very

close to river basins, where water runoff easily finds its way down to the lower level of the landscape. Previously, the farmers had a local by-law that kept the hills isolated from human and livestock interference so as to restore the vegetation. However, this effort was short-lived as the growing need for resource exploitation posed challenges to the maintenance of the practice.

“When it rained, the eroded soil easily blocked the traditionally built irrigation canals, resulting in long time and extensive labour to clean-up” (*A respondent involved in the construction of irrigation canals in the Dire Dawa Farmers’ Cooperatives Project*).

In the case of the RLDO Project, Lake Awassa has been the most crucial natural resource sustaining the entire town:

“During the rainy seasons, we used to let the water flow over the farmland with the assumption that the flood water would bring along fertile soil from the upper catchments so that we could make use of it to grow our food. It was also a common practice to open drainage and let the water flow into the lake” (*A member of watershed management user group in the RLDO Project*).

As a result of these malpractices, the lake has suffered a high degree of siltation (Plate 6) that has gradually rifted and transgressed over the land surface. The quality and production level of the fishery has also greatly diminished.



**Plate 6.** Siltation on Lake Awassa (the effects of water runoff and soil erosion)

#### 4.4.3 The GEF SGP Focal Areas and Current Trends of Conservation

Since its inception in Ethiopia in 2005, the SGP has been operating to bring changes to the harshly degraded environmental resources and establish sustainable ways to maintain the development initiatives being executed in different parts of the country. To this end, all of the research participants have been given a comprehensive explanation about the grant provider (i.e., UNDP—GEF SGP), its purposes, and the project plans intended to address their fragile ecosystem. For the most part, the project plans emanate from the problem-driven ideas initiated by the communities themselves. Such an account given by the respondents was on the basis of awareness raising and project launching workshops as well as training sessions that had been organized and conducted before and during project start-up phases.

Of the entire group of respondents ( $n=35$ ), approximately five percent had basic and prior local knowledge of conservation works which are similar to the GEF focal areas and stated that they were involved in environmental protection activities organized by the local government:

“We have basic awareness when and how environmental problems such as soil erosion, land degradation and severe climatic conditions occur but we did not maintain the knowledge for lack of resources, capacity, sufficient follow-up and guidance” (*A farmer involved in gully re-vegetation in the RLDO Project*”).

All the project beneficiaries were pleased with the inception of SGP in Ethiopia and appreciated how it impacted the rural communities in initiating unified commitment towards rehabilitating degraded environments and deteriorated local economic conditions. Because of the financial support made available, they have developed a sense of concern to care for natural resources and lift themselves out from poverty. The sense of commitment substantially reflects understanding of the causes, subsequent effects, and sustainable solutions pertaining to biodiversity loss, land degradation, and climate changes through initial consultations, awareness creation workshops, familiarization training, and experience sharing visits they have had. The practical aspect of their knowledge-base laid the foundation for their participation in the various environmental protection, rehabilitation, and restoration efforts planned and implemented through SGP’s grant support. On this ground, the researcher has described below the major components of the project activities and the sub-activities undertaken to develop the agro-ecological systems of the project sites:

### *A. Seedling production and composting*

One of the main activity components was establishment of nursery sites through which seedlings of forest trees, animal feed, and fruits were raised and planted in selected sites with the intent to reduce the negative impact that had occurred on forest ecosystems. Trees were cut down for house construction and this had exacerbated vegetation reduction, hence by taking this into account, *neem* was among the many forest tree species raised and planted. This tree species grows faster and regenerates when cut from the stem. To prevent the land-degrading effects of overgrazing, grasslands improvement—mainly forage production—was given paramount importance. With the production of animal feed, the farmers were practicing a cut and carry system to feed their cattle as opposed to the previous practice of open grazing. In addition to being the source of animal feed, the grass was also used to construct roofing and wall for huts. The seedling plantation activity was also used to increase carbon sink and reduce the greenhouse gas emissions from rural micro-climates, which also contributes to the overall global climatic variation.

As part of the environmental protection and conservation work, added values were also created to generate alternative household incomes through the production of fruit trees, which were used for domestic consumption and for sale in the local market. In order to attain sustainable agro-ecological development practice, compost preparation was also central to enhance the fertility of soil and croplands. The farmers had awareness of compost as a natural input since they had been using animal manure as the major ingredient. What they stressed important was the new lessons they had been exposed to—the combination of ingredients such as ash, soil, water, and dry and wet leaves can also make up productive compost. They have seen that the level and quality of compost-based production was far better than the production with chemical fertilizers. To this effect:

“We used to cultivate only few kinds of crops. But now, we have gained knowledge as to how to cultivate diversified crops and fruit species so that we can get more income for the coming years” (*A member of seedling production user group in the RLDO Project*).



**Plate 7.** Seedlings Production of Commercial Crops and Forest Trees



**Plate 8.** Grafting Citrus Fruits (Orange Trees)



**Plate 9.** *Inset* Plant (a widely cultivated crop as it is the most commonly consumed staple food by the community)



**Plate 10.** *Desho* Grass (animal feed used as cut and carry system—zero grazing)

The seedlings raised in the nurseries were planted in different sites that have been identified by the community for having severely degraded vegetation cover. The selected sites included community and regional parks, school compounds, hills, the front yard of households and appropriate areas in their farmlands. Students were also part of the restoration effort as they participated in school clubs to nurture the seedlings through watering and compost preparation. Pointing at the trees that have been nurtured by each household:

“I cannot cut this tree because I have been taking care of it. This tree is my child. The same applies to the trees on the hills and farmlands. I learned that cutting down one tree is just like killing a person” (*A member of park conservation and protection user group in the ASDA Project*).

“Dulecha Kebele used to be a stony and degraded land but now, when the seedling started growing, the stony ground is being covered with soil and grass. As a result, the soil erosion we used to experience in winter is halted to a greater extent” (*A farmer from compost demonstration site in the RLDO Project*).



*Photo Credit: RLDO*

**Plate 11** Demonstration of Composting Pit Preparation and Compost Filled Ground

The major challenges the user groups faced was the chronic shortage of water during summer and dry seasons, which caused the seedlings to dry out. This has affected the percentage accomplishment of planned project activities—environmental and livelihood benefits that would have otherwise been attained. In addition, the farmers discussed the experience they had with a worm outbreak, which attacked their seedlings and reduced the level of production. In the process, they had to seek the support of the local agricultural office for pesticides and expend extra energy and resources to replace the seedlings lost. In regards to composting, the lack of livestock possession and shortage in the supply of animal manure was the major drawback which hampered the success of increased and continuous use of compost.

*B. Physical structures building: land use management, soil and water conservation*

From the practical experience gained throughout the lifetime of the projects, the respondents elaborated in detail about the concerted efforts that have been made to restore degraded environmental resources. In the effort to rehabilitate degraded lands and forest ecosystems, area closure of strategic landscapes formed an integral part of the project activities. In this regard, the research participants were actively involved in building and maintenance of the physical structures. Areas enclosed included the Dera Delfekar Regional Park in the ASDA project site, selected hills surrounding the Dire Dawa Farmers' Cooperatives Project site, and a 2-hectare watershed area in Kurda and Dulecha *Kebeles* in the RLDO Project site. The



participants stressed that their sense of ownership and commitment grew over time with the short-term changes they observed within their surroundings.



**Plate 12** Area Closure and Wildlife in the Dera Dilfekar Regional Park



**Plate 13.** Topographic Map of Area Closure of the Dera Dilfekar Regional Park

The following major physical structural works were accomplished within the areas enclosed (severely degraded landscapes and farmlands where crops were cultivated):

- Construction and development of irrigation canals on hillsides and farmlands;
- Construction of hand-dug wells to supplement irrigation water schemes;
- Terrace bed building from soil and stone bunds, construction of water trenches, check dams and cut-off drains to divert rain water to the nearby agricultural lands;
- Water harvesting and spring water development both for agroforestry and animal trough; and
- Gulley re-vegetation, hillsides, farmland, grazing land and homestead areas rehabilitation through afforestation and soil and water conservation works.

Some of the changes observed and witnessed by the community as a result of the area closure include:

“Dera Dilfekar Park has never been fenced before but overexploitation resulted in various kinds of fruit trees to vanish. We had suffered the consequences of overexploiting the park and its resources. Now we are seeing wild animals coming back and roaming in the park. Their habitat is gradually being restored because of the activities accomplished with the supports obtained” (*A member of park conservation and protection user group in the ASDA Project*).

During the course of project implementation, ASDA mobilized resources (i.e., other than the financial support from SGP) and had undertaken a wildlife census of the park with the help of its other stakeholders, with the objective of identifying the park’s potential to support diverse wildlife species and to recommend the results for future developments of the park as a reserve. The census task involved identifying populations of common mammals and bird species and assessing factors that threaten their continued existence within the park.

The results the respondents had observed in the short-run were proof that they had not laboured in vain. They have confidence that the physical structural works on which they had participated will greatly contribute to restore what has been lost. With the growth of vegetation cover, changes were experienced in terms of increased water retention capacity of the soil and in the local climate as well, which has become cooler than before. These changes have allowed the community to lessen the risk of losing crop harvest and animal feed, which had been the most challenging peril previously. They pointed out:

“The local environment has been undergoing changes because of the physical structural works done on major landscapes. Trees have grown and open grazing is not allowed anymore. Because trees are growing nowadays, the cloud passes over our neighbouring towns but rains when it reaches here. This is one practical experience” (*A member of park conservation and protection user group in the ASDA Project*).

The beneficiaries repeatedly expressed their short-term experience of how the irrigation canals, cut-off drains, and spring water development activities enhanced, though in a smaller-scale, the level of productivity due to the improved capacity and increased water flow speed of the streams that used to take a long time to reach the croplands before. In regards to previous challenges of uncontrolled flooding:

“We used to clash with each other when a farmer’s water diversion flooded the crop field of another farmer. However, the physical structural works done through the intervention of SGP’s projects had generated safe and shared benefits for all of us” (*A farmer involved in hillside rehabilitation in the Dire Dawa Farmers’ Cooperatives Project*).



*Photo Credit: RLDO*



*Photo Credit: DDEPA*

**Plate 14.** Stone Faced Soil Bund (constructed on a degraded sloppy land before rainy season)

**Plate 15.** Soil Retained due to Stone Faced Soil Bunds



*Photo Credit: DDEPA*

**Plate 16.** Small-scale Irrigation Canal (during construction and after)



**Plate 17.** Crop Cultivation on Re-vegetated Lands and Hill-sides



*Photo Credit: RLDO*

**Plate 18.** Water Trenches for Soil and Water Conservation

*C. Ecosystems protection through energy-saving schemes*

In the rural towns where the research was conducted (and elsewhere), the traditional stove called “*gulich*a” is the customary space to cook food and bake *Injera*. The stove consumes a large stack of fuelwood and produces enormous amounts of smoke when used, signifying one of the causes for the rapid destruction of forest resources and the micro-climates’ contribution to greenhouse gas emissions. Hence, one of the project activities under the SGP’s support involved production and distribution of fuel-saving stoves to promote efficient rural energy utilization and reduce the pressure on forest resources.



*Photo Credit: Mike Bess*

**Plate 19.** *Injera* Baking Using Traditional Fuelwood Stove (Gulecha)



**Plate 20.** Energy-saving Stove (dried tree branches are used to bake *Injera* while cooking food)



*Photo Credit: RLDO*

**Plate 21.** Different Designs of Energy-saving Stoves (produced based on local needs)

Women in particular have always been the primary victims of problems arising from fuelwood usage; with the traditional means, they had sustained burns and their children had suffered suffocation from indoor pollution. Consequently, the introduction of the stove had minimized their fuel wood consumption and the health risk they bear:

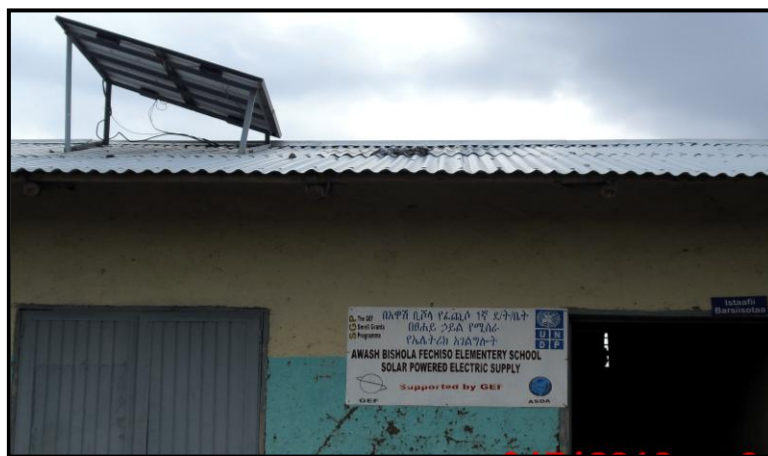
“I am assured that that this initiative has taken me one step forward towards improvement of my living standard” (*A member of stove production user group in the RLDO Project*”).

In addition, most of the respondents were participating in more than one project activity and it was evident that the energy efficient stoves and seedling production complemented park, hillside, and gully rehabilitation through reduction of deforestation and increased vegetation cover.

The other energy-saving activity was installation of solar-powered electrification in three rural *Kebele* public schools of the ASDA project site. In rural Ethiopia, the absence of renewable energy has greatly contributed to aggravated fuelwood consumption and other foregone benefits that would have otherwise been realized. Hence, the introduction of the solar panels was intended to support mini media and school environmental clubs; enhance evening time adult literacy classes to the surrounding community during off-farm times; and facilitate community dialogues on various socio-economic issues. With the help of audio-visual equipment through which environmental education was broadcasted, students and community members gained awareness on environmental protection and maintenance of healthy ecosystems. The communities pointed out that SGP’s support in this regard has

provided their children (who are also the future generation) a practical learning platform in addition to the environmental knowledge gained based on theoretical grounds.

In elaborating the benefits realized from the solar powered energy, a school principal in one of the rural *Kebeles* witnessed that with the improvements in the education system, school dropout rates have declined and the absence of a lighting system that has made school compound protection a difficult task was solved. The school did not have to incur recurring costs anymore in order to replace batteries to operate teaching equipment such as radios. In addition, responsible individuals from each school had been given the appropriate repair and maintenance skills training by the equipment supplier company to allow them to keep up the effective operation of the power supply systems. Children attending the school would have suffered from the lack of basic education but the solar powered electricity has saved that small rural community from the social burden of bringing up illiterate children. It also has saved parents the extra cost they would have incurred to send their children to schools in the nearby towns or far away. However, one challenge experienced by the users revealed that the power generated by the system was sometimes high, which may damage the power supply equipment any time. The other concern anticipated was how to run the teaching system uninterrupted if and when faced with replacements and/or repair costs that may require high financial commitment beyond the capacity of the community. To that end, the school principal stressed on the need to secure additional support until the schools and the surrounding community become self-sufficient.



**Plate 22.** Solar Panel Installed at a Rural Elementary School (Awash Bishola Fechiso Elementary School, Dera, Dodota)



## **4.5 Short-term and Long-term Impacts on Livelihoods**

### *4.5.1 Background of Economic and Livelihood Conditions*

Of the 35 respondents, 87 percent expressed that their individual income from the production of agricultural outputs did not support their household. Only 13 percent responded that they had relatively balanced livelihood conditions as they were able to sell agricultural outputs in the local markets and supplement their income through other non-farm related activities. The activities included petty-trade of supplies (mainly coffee, sugar, spices, and soap) as well as labour-intensive work such as house construction, stone and minerals excavation, and involvement in locally organized income-saving schemes commonly known as “*iqub*” as means of generating financial security. According to the respondents, the following grounds justify the reasons for the households’ insufficient income:

- Erratic rainfall pattern and the impacts of climate change disorder the regular duration of farming seasons and the level of production, thus limiting farmers’ capacity to sell grains in the market to earn income;
- The long-standing degraded nature of the agro-ecological zones and shortage of water resources hindered grains, forage, and livestock production as sources of income;
- Very small plots of land sub-divided and shared by parents and their farming children resulted in the decline of land productivity;
- Having large family sizes compelled households to use the largest proportion of their harvest for direct consumption, suppressing their financial income to generate diversified livelihood activities;
- Extra burdens of farm-related expenses such as land renting fees, land use tax to the Government, purchase of fertilizers and improved seeds, and payment for seeds acquired on credit;
- Limited financial capacity to acquire livestock (i.e., oxen) to plough crop fields and other farm equipment such as water pumps to boost crop and livestock production; and
- The absence of non-agricultural economic sectors limited the availability of jobs and supplementary income sources needed to educate children and improve living standards.

In further explaining the challenges related to livelihood:

“The problems of overpopulation and small landholding had repeatedly forced us to sell our livestock and use the money to produce our food” (*Fruit trees producer in the RLDO Project*”).

For the most part, there was a local norm of categorizing the standard of living in all three communities (i.e., rich, medium or poor classes) based on the size of farmland one owns, number and type of livestock, additional livelihood means, and crop

varieties a farmer is capable of producing. It was also discovered that individual households who produce and sell vegetables outnumbered those who sell grains as vegetable production requires relatively less investment on resources such as land, fertilizers, and livestock.

The lack of alternative livelihood had forced local people in the RLDO Project site to engage in non-farm sectors such as stone excavation and carving on a hilly landscape where extensive labour force comprising children, the youth, as well as farmers took part. The research participants in this community approached this situation as a threat and stated that the hill has already become a potential origin for soil erosion, land slide, and siltation as more and more stones continued to be excavated.

**Box 2.**

*“There were farmers who have abandoned their farming activities and got involved in the stone excavation activities. Not only the local community, there are also people who come all the way from Awassa city, reside here and work on this hill. Most of the elder farmers are not involved but the younger ones are working here.”*

**A farmer from composting demonstration site in the RLDO Project.**



**Plate 23.** Stone Excavation as an Alternative Source of Income

#### *4.5.2 Coordination between Livelihood and Project Activities*

When asked about the coordination between SGP-funded project and day-to-day livelihood activities, the respondents complimented that the design of the project activities had principally taken into consideration the benefits that can be derived based on the scope of farmers' knowledge, time, and local economic needs. They witnessed that the project activities never conflicted or jeopardized their means of livelihood (i.e., agricultural practices) but rather gave them the opportunity to add further practical experiences that go hand-in-hand. Project activities were scheduled by considering farming seasons that greatly influenced the availability of labour force and as such, every beneficiary group executed their tasks by taking turns. Such a trend has allowed them to get time for their household responsibilities. At

times when farm work limits a beneficiary's full participation in the designated project activities, family members (i.e., younger children and close relatives) participated on behalf of that person. In this regard:

“A person cannot divide himself into two places. If I am involved in protecting the park, somebody else will look after my farm. Likewise, the cattle need attention. When it is my shift at the project site, my wife or children will take care of the farm and the cattle. If not, other important things will go overlooked” (*A farmer from the ASDA project-chairperson of the park conservation and protection user group*).

Another respondent gave similar account:

“These activities have significant advantages and are transferable to the coming generation. I would be happy if I can totally commit myself to the project activities” (*A female household head from stove production user group in the Dire Dawa Farmers Cooperatives Project*).

Nevertheless, these statements do not imply that the beneficiary groups have not faced any task management challenges:

“When we produced the first batch of 150 stoves, all of us had to work day and night because we had to fill the quantity planned for the period. Over time, we noticed that we are neglecting our household duties and then we called a meeting, discussed and re-organized ourselves in smaller sub-groups. If one sub-group works today, the other sub-group will work tomorrow. That way, we managed our work without interruptions” (*A members of the stove production user group in the RLDO Project*).

The beneficiaries have understood the link between protecting environmental recourses and their means of livelihood since the health of their ecosystem was indisputably crucial for the success of the farming and other livelihood activities they undertake.

#### *4.5.3 Project Budget Utilization and Other Small Incentives*

The SGP promotes a sustainability approach to reduce the vulnerability of different social groups while maintaining stability between resource conservation and local economic needs. To that end, the budget utilization by the grantees included spending on project activities and other small economic incentives to the beneficiary groups. Such use of the budget is not to directly finance livelihood activities but to supplement environmental protection activities that essentially impact the desired livelihood benefits at a later stage. The supports ranged from procurement of different materials to implement project activities to direct cheque payments to project beneficiaries in order to allow them pay for conservation activity expenses. The

various ways through which the support took into consideration the communities' needs are listed below:

*Seedling production and soil and water conservation works:*

- Provision of trees, fruits, and forage seeds; supplies for seedlings bed and shed;
- Conservation tools such as axel, digging hoe, fork, wheel barrow, rope, and area closure fencing wood and wires;
- Construction materials for nursery store and mini office such as corrugated iron sheet, woods, cement, sand, office furniture; and
- Financing transpiration costs of stone and construction materials.

The irrigation scheme helped the beneficiaries to use water resources in a productive way compared to previous days where it used to flow over the farmland and be wasted in vain. When drought occurred, they had to buy and feed their cattle *frushka*, but currently, because structures were built and the hills were being protected, forage is grown and it reduced their expenditures on *frushka*. The livestock have started coping well with drought seasons as a result. They also reported that the material provisions and the skills obtained in compost preparation have reduced, to a certain level, expenditures on synthetic fertilizers.



**Plate 24.** Seedling Production Group Receiving a Cheque (the last grant instalment)

*Supports for Fuel-Saving Stove Production:*

- Stove making moulds and initial capital in the form of raw materials such as cement, sand, red ash;
- Construction of stove production shade and mini office ;
- Financing transportation cost of construction materials; and
- Free distribution of stoves for needy community members.

The stoves made of cement took only 7 days to get dry and set for use or sale in the market compared to the mud-produced ones that took one month; hence, the cement-made stoves had higher demand by community members. The stove has saved the women a lot of energy, which they had expended before in cutting, carrying on their back, and fetching fuelwood:

“SGP has invested on us, trained us and played a great role in the development endeavour. We have clearly seen that it is the desire of SGP to change our environment for better and lift us out of poverty. The gradual progresses we are making are proofs of good hope to where we, especially the poor women, can reach tomorrow” (A member of stove production user group from the RLDO Project).

At the RLDO project site, the stove distribution was still going on to selected households during the course of the research and it was observed that young men and women who were about to get married were also included in the stove distribution list.



*Photo Credit: RLDO*

**Plate 25.** Economic Incentives for User Groups (energy-saving stove making moulds, small offices and stores)

*Beehives and Small Ruminants:*

As a means of creating livelihood opportunities, the less fortunate and low-income earning farmers in the Dire Dawa Farmers' Cooperatives Project and the RLDO Project were given beehives. In addition to the skills training, beehive recipients were provided with the full material (i.e., clothing, shoes, smoke holder, etc.) needed to harvest honey. Small ruminants like sheep and goats were distributed to the neediest households in the RLDO Project:

“When my sheep reproduce, I will sell them and buy a heifer. I will fatten the heifer and make use of the milk for consumption and sell in the market” (*Small ruminant recipient from the RLDO Project*).



*Photos Credit: RLDO*

**Plate 26.** Beekeeping Training, Honey Harvesting Demonstration and Beehive Distribution



*Photo Credit: RLDO*

**Plate 27.** Traditional and Modern Beehives (in a beneficiary's backyard)



*Photo Credit: RLDO*

**Plate 28.** Distribution of Small Ruminants

*Subsistence Allowances:*

Allowances paid during project familiarization workshops and skills training days and wage fees for physical structural works had motivated community participation and commitment towards the achievement of project objectives and goals:

“More important than the training allowances we have been paid was the education. It was priceless because it formed the foundation for the economic benefits we hope to obtain from the environmental protection activities at a later stage” (A beneficiary involved in the physical structure building work in the Dire Dawa Farmers’ Cooperatives Project).

*4.5.4 Income Generation and Access to Markets*

The recognition of local needs have led the grantee NGOs and CBOs to devise practical ways to generate incomes from the project activities, both in the short and long-run (Table 5 below). Most of the income generation and benefit distribution systems were carried out based on locally formed by-laws to which all user groups adhere.

**Table 5.** Income Generation and Small-scale Business Schemes

<b>Description of Income-Generating Activities</b>	<b>Mechanisms of Generating Income</b>
Seedling Production	- Sell seedlings for plantation on conservation sites (park, hills, watersheds*, and enclosed areas), schools, and households’ front and backyards at prevailing market prices. Seedling production user groups in the ASDA project site were at the early stage of investing their incomes on an interest-based credit service scheme accessible by all group members.
Fuel-Saving Stoves	- Production and supply of stoves to individual buyers, the local market, and for distribution to needy community members by the NGOs. - Stove-producing user groups in the ASDA Project site have started saving the returns at a local bank and dividing the profit among themselves after allocating budgets to keep the production running. On the other hand, the RLDO Project stove production groups have been legally organized into a cooperative but not yet divided the returns among themselves as they needed to raise income to cover the costs of production. Given the existing social norm, the members will take their share and leave the group if returns are divided at this stage. Instead, saving the returns until it reaches a given amount (an amount to be agreed among themselves) was believed to retain members in the group and develop a



Description of Income-Generating Activities	Mechanisms of Generating Income
	sense of ownership to the activity and the benefits to be earned in the long-run.
Apiculture	<ul style="list-style-type: none"> <li>- Beehive recipients in the RLDO Project were organized in groups and have planned to combine individual harvests and supply to the market to earn maximized benefits rather than selling individually.</li> </ul>
Forage Production and Livestock Rearing	<ul style="list-style-type: none"> <li>- Production of animal feed has encouraged livestock rearing by individual households. Those who have received small ruminants have been reproducing the animals and some have replaced the sheep with heifer, cows, and oxen to maximize economic benefits.</li> <li>- Forage grass species being cultivated were sold to the local community with affordable prices. The different forage species usually dry out in summer but will disperse their seeds and therefore the beneficiaries hoped to have expansion of forage growth, which in turn will enhance the level of their income.</li> </ul>
Park Conservation**	<ul style="list-style-type: none"> <li>- Park conservation and protection user groups in the ASDA project site have not yet started generating income. A community by-law has been formed, with the help of ASDA, which stipulated income generation schemes through small-scale community-based business of eco-tourism.</li> <li>- Other short-term income-generating ways included selling shrivelled trees, barks and fallen branches for use by fuel-saving stove users and intensified growth of “<i>Senbelet</i>” (a grass species similar to reed) to sell in the market for housing/hut roof construction.</li> </ul>
<p>* The Watershed Management user group in the RLDO Project had apprehensions from the delay of recognition by the Regional Cooperative Development Office, which was responsible for establishing practical rules and procedures to allow the operation of local community associations in the areas of watershed management. Although a formal letter has been sent by the RLDO, the office has not yet responded to the status inquiry.</p>	
<p>**All the interviewees from the park conservation and protection user group have expressed their frustrations with the delay of decisions by the Oromia Region head office in Addis Ababa in issuing them the legal license and entitlement to operate and benefit from the park. ASDA was relentlessly in the process of making the follow-up during the research data collection period. In regards to income generation, the bylaw stipulated that both the regional government and the community will equally share the income to be generated from the planned tourism business.</p>	



**Plate 29.** Fruit Trees and Commercial Crops for Marketing (papaya, coffee and chilli)



**Plate 30.** Seedlings Selling at Production Sites

The majority of the interview participants expressed that with the help of the physical structures built, their income was boosted through increased yields from the production of crops for market as well as personal consumption, hence saving in expenditures of food. From the activities where short-term benefits were reaped, the farmers were further investing their small earnings in local “*iqub*” group which upon withdrawal they can buy grains and/or crops of commercial value. The benefits being realized were not limited to improving agricultural productivity but also the deteriorated social well-being most rural communities were and are still faced with. A lot of the respondents indicated that from the short-term income-driven benefits, they have started stocking grains for consumption in drought times and were putting

their earnings toward educating their children. They were also working hard to improve their housing conditions:

“Our houses used to have mud and straw roofing and when it rained, it leaked water and we were not able to sleep all night but now, we are replacing them with corrugated tin roofing. In addition, we were able to build a two-room school for small children so that they do not have to walk long distances to towns to go to school” (*Fruit trees producer from the Dire Dawa Farmers’ Cooperatives Project*).

“During the harvesting season, I used to find it a bit challenging to manage my cropland all by myself especially when I became busy working on my field while participating in the project works. But with the additional small income I got from selling vegetables and *Chat*, I hired an individual to work with me during the harvesting season” (*A beneficiary involved in physical structure building work from the Dire Dawa Farmers’ Cooperatives Project*).



**Plate 31.** Income-based Improvement of Housing Conditions

Before supplying the products to the market, the farmers inquire about the prevailing price of similar products in the local market. On market days, small groups of organized farmers gather their products to directly supply to local wholesalers and distributors who

come from the cities. The farmers were not inclined to supply to intermediary retailers, who often understate the price of the products upon collection but supply to the local market at higher prices. The future business prospect for the farmers was to work in close collaboration with well organized local farmers cooperative associations through which they can channel products directly to the market without intermediary sellers. The NGOs facilitating the execution of project activities have also been assisting the beneficiaries in searching potential buyers of stoves and seedling:

“We had the opportunity to advertise our products in the local market and that opened the door for demands from the local community and neighbouring towns” (*A member from stove production user group in RLDO Project*).

The city administration had promised to designate them a space in the market. In addition, products were sold to individual buyers on a credit basis. Formal template of agreements and credit transaction forms were readily available for credit buyers to sign on and make full payments in two months time.

## **4.6 Insights into the Social Dimensions of SGP Funding**

### *4.6.1 User Groups Organization and Participation*

The representatives from the two NGOs (i.e., ASDA and RLDO) and the EPA office in Dire Dawa Provisional Administration mentioned that if communities had not been initially organized in groups, teaching, motivating and involving each household in the project activities would have been impossible. Organized and trained groups were believed to influence others or act as a group to ease the pressure imposed on resource exploitation practices by other non-group members of the community. In addition, organizing communities into different user groups was found to be one of the best strategies to mobilize the labour force needed to execute the project activities and minimize high expenditures that would have otherwise been paid out to outsourced labour and services. The NGOs had the opportunity to approach and consult first small associations of women and of farmers that pre-existed before the commencement of SGP—funded projects. These groups were formed at lower levels (i.e., commonly at *Kebele*) for various development activities, mainly in agricultural extension programs or women’s empowerment associations:

The NGO did not impose any force that we should accept what it say but rather, our rights to speak up were respected and everyone had the opportunity to participate in the generation of project ideas. All the planned project activities were also within the scope of our knowledge and consent” (A member of stove production user group from the ASDA Project).

The group formation process had recognized community-based appointment and designation of duties and responsibilities to individuals within each group. Under each user group formation, the following major functional roles and related basic responsibilities were identified:

*Chairperson:* manage planned activity executions; lead regular meetings, motivate the community and follow-up the practical adherence to by-laws and rules-in use, resolving conflicts when they arise, promote the involvement and continuous participation of women, consult leadership committee members and the responsible local government counterparts in matters pertaining to all activities planned and being implemented, follow-up the practical implementation of decisions made with members, and sign legal papers.

*Deputy Chairperson:* responsible for all the activities in the absence of the chairperson, supervise members’ participation, investigate community inquiries before decisions are passed.

*Secretary:* take minutes of meetings, follow-up on activities that had been approved for execution, assume responsibilities in the absence of the deputy chairperson.

*Finance head:* preparing statement of income and expenses, sign cheques and hand over to the cashier upon completion of activities, get accounts audited by Cooperatives Association, investigate pro forma documents before the procurement of goods, report to members on the status of budget.

*Cashier:* bookkeeping (i.e., account logbooks, cash and payment receipts), withdraw funds and make payment for work done, balancing budget and expenses, deposit in bank income from the sale of products (i.e., stoves, seedlings, vegetables).

The individuals assuming the above-mentioned functional roles made equal contributions of their labour as the rest of the members who collectively act and participate towards the realization of the common goals and benefits.



**Plate 32.** Minutes of Meetings, Receipts and User Group Members' Logbook

#### 4.6.2 Women as Prominent Community Members

SGP's support required that project proponents must practically demonstrate 30 percent women's participation in each project implementation. Correspondingly, focus on the most socially marginalized communities was deemed essential to address the diverse socio-economic challenges, which is also an underlining problem for exacerbating rural poverty.

The social system in rural Ethiopia, in which women have been oppressed and looked down on for decades, has been forcing households to solely depend on what the men only can provide from their farm-based means of livelihood. With the increasing attention to women's involvement in the current development endeavours, SGP's project funding support has proved the inevitability of women's participation in bringing added values to project ideas and workforce. A case frequently raised by the respondents was that women have been responsible for cutting trees for fuelwood consumption and were more prone to health and economic problems associated with burning fuelwoods. In that regard, they justified why the fuel-saving stove production groups have the largest number of women's representation. Moreover, the groups were identified to show the highest potential of generating income in the short-run and improve livelihoods. The women have earned respect from their male counterparts for demonstrating recognizable potentials as change effectors:

“I do not sell anymore assets such as cattle, without first consulting my wife” (*A member of park conservation and protection user group from the ASDA Project*).

Also taking into account the day-to-day duties women have to carry out at home, especially those female-headed households, considerations were given to have ample time to finish their domestic work early in the morning so that they can show up at the project sites afterwards:

“My husband has health problems and I am the bread winner, struggling all by myself. But thanks to God, if I work hard, God will count my effort. What one could do is to be persistent so that God will bring you to your destination. I have managed to improve my house from a straw hut to corrugated tin-covered roofing” (*A member of stove-production user group from the ASDA Project*).

Having seen the women’s dedication and commitment, the men have realized how combined efforts can bring significant results. When the men were faced with various tasks in a typical farm activity, they delegated the less heavy ones (i.e., in terms of labour) to their wives. That way, they learned how to maximize efficiency and outputs on a particular farm routine. In giving an account of women’s participation:

“Women are dependable. The amount of time they spend working exceeds from that of the men. They do not spend more time sitting down and chewing “*Chat*” like we men always do” (*A member involved in physical structure work from the Dire Dawa Farmers’ Cooperatives Project*).

Through their active participation, the women have also learned that any improvement and change in the degraded environment and livelihoods would not have been realized if men alone were involved without the training and participation of women. Emphasizing on this:

“These natural resources are not only men’s but we also have ownership. We have considerable inputs in all of the activities that have been implemented so far” (*Beekeeping trainee from the RLDO Project*).

#### *4.6.3 Empowerment and Self-development*

The respondents have appreciated the SGP funding mechanism for being the first of its kind to channel financial support directly to the NGOs or CBOs. This approach made SGP different compared to other donor-funded projects, which often channel supports through local government agencies:

“Disbursing grants directly to beneficiary communities by itself is empowerment, which encouraged their commitment and motivation to develop a sense of ownership to value and protect the resources in the best possible manner” (*NSC member in the focus group discussions*).

The findings showed that the underlying character that defined the beneficiaries’ perception of empowerment was, but is not limited to, the designation of autonomy they needed to be granted in order to utilize and manage the support from the SGP. Great values were also placed on the knowledge-base acquired through the project implementation process, which they believed was crucial to bring forth realistic solutions to problems in the present environmental, economic, and social systems. They viewed empowerment as a stepping-stone to enter into a self-sustained socio-economic status. Their perception of empowerment included the social right to access ecosystem goods such as water and land (as shown in Plate 38), which are instrumental to minimize dependence on social safety-net programs; the project-driven small-scale irrigable water has encouraged the production of cash crops both as sources of food and income, a practical proof that vulnerable communities can take their own initiatives in devising realistic solutions to alleviate poverty. Having entitlement to utilize and manage ecosystem goods and services saves them from selling personal holdings (i.e., livestock and houses), hence an upward progress in living standards. Most of them declared that with regular capacity building supports, the knowledge gained through the project intervention can be further advanced and transferred to the next generation. They strongly affirmed that the short-term achievements were practical demonstrations of how little differences can be made with small supports, thus other neighbouring rural communities can follow through. Further findings on what the respondents identified as empowerment challenges that hindered their potential and commitment to attain self-development were explored under section 4.7.

#### *4.6.4 Barriers to Food Security*

All 35 respondents had more than one experience with famine or drought. Famine had forced individual rural households, their extended families and/or relatives to migrate to the cities or resettle to other places in search of better living conditions, hence abandoning the ecological, economic, social, and cultural backgrounds on which they had instituted their ways of lives.



The SGP's intervention had taken these into consideration when geographic focus (i.e., projects proposals coming from environmentally degraded settlement areas occupied by internally displaced people) was made central to the grant approval conditions. The apparent past and existing problems of drought and food insecurity potentially challenge the planned goals, objectives and results SGP-funded projects intended to achieve both in the short-run and long-run. Per the interview sessions and the two focus group discussions made with the research participants, the following points signify the fundamental barriers to food insecurity: *Shortage of water resources, rain and its irregular pattern* – given the rural farmers' dependence on rain-fed agriculture, food production in the project sites recurrently suffered from the erratic rainfall patterns. Not only rainfall shortage but untimely and heavy rainfall had also destroyed crops at the early stage of growth, leaving the farmers with bleak expectation of harvest. There were several occasions where farmers had to sell their livestock to survive challenges and were not able to produce sufficient food for subsistence consumption and the local market:

“It was not easy to have the motivation to go out and expend one's energy in conservation activity without first having the physical energy gained through sufficient nutrition. Moreover, if there is no rain, how can the community have food security? Not only human life, our livestock will also suffer from shortage of forage. Malnourished cattle are not marketable and this is a barrier to generate income from raising livestock” *(A member of park conservation and protection user group from ASDA Project).*

The effect of climate change was also experienced through excessive increase in food commodity price. For instance, one quintal of *Teff* that used to be purchased in the cities for Birr 600.00 (equivalent to USD 75.00) was being purchased for 1000.00 Birr (equivalent to USD 125.00), a price change observed in one year.

The apparent repercussion of food insecurity was that with sufficient and timely rainfall, the farmers used to produce what they can consume for about six or seven months in one cropping season but given the prevailing environmental degradation, the level of production for domestic consumption sustained several households only for three months to the maximum. Moreover, when farmers had insufficient seeds for the succeeding farming season, they seek the local government's support for seeds and fertilizers on credit (having crop harvests taken as collateral and sometimes without collateral depending on economic and social ranks); but most of them fail to repay the loans, hence forfeiting their chances of getting

other loans. As a result, they suffered distress and displacement and out-migrated to cities in search of other livelihoods.



**Plate 33.** Large-scale Sugarcane Farm (supported by irrigated water sprinkle system—owned by a foreign agribusiness firm)



**Plate 34.** Seasonal Rain Water Diverted to Cultivate Small-scale Subsistence Farming (in the same town of Plate 33 above. The sandy soil absorbs the water and crops wilt as the water cannot flow longer distance from the source)

*Land scarcity and fragmentation* – declining productivity and carrying capacity of farmlands to support and feed the ever-increasing rural populations had greatly intensified poverty. Crop production and harvest had suffered from infertile soil, shallow grounds, and fragmented landscapes, which have resulted from long-standing deforestation and land degradation. Further to the detrimental impacts of irregular rainfall patterns, climate change, and land scarcity on food production, the focus group discussion revealed apprehensions farmers have on future food production due to the absence of secured land holding rights.

From 1990 onwards, an economic growth approach—namely Agricultural Development-Led Industrialization (ADLI)—was designed and is being implemented in response to the challenges of agricultural productivity, which has been marked by labour-intensive and traditional system of farming, hence the need to promote economic growth and alleviate poverty. One of these economic policy reforms of ADLI comprised the recent industrial transformation of the agricultural sector whereby vast and fertile arable farm and woodlands throughout the country are being leased to foreign-owned agri-business industries. Countries interested in leasing the farmlands include foreign investors from India, Saudi Arabia, China, South Korea, the United Kingdom, Germany, and other import-dependent states in the Middle East and Asia. Some of the major crops grown include rice, sugarcane, oilseeds, and cotton. Though a noble approach, which might potentially generate economic growth if fairly implemented, it poses unavoidable trade-offs between environmental protection and economic growth and social well-being as more farmland is cleared and local people are relocated. The local people, who were hired to work on those farmlands with a wage as low as USD 0.70 per day, received brutal treatment by foreign supervisors and eviction without compensation due to the weak contractual obligations in the lease agreements—one form of human rights violation (The Washington Post, 2009). The anxiety the research-participating farmers felt stems from this ongoing land leasing practice:

“The farm lands we are currently using to produce our food are not immune from being taken away any time when land lease deals are concluded only between the Government and interested foreign agribusiness company” (*A participant of the focus group discussion in the ASDA Project*).

*Inequity in support delivery* – the country’s ethnic-based political system has a part in exacerbating poverty according to the majority of the respondents who stated that differences held in political outlooks were the reasons for some forms of inequities. A few households were unfairly treated in the distribution of seeds and fertilizers (i.e., productive safety-net aids) while others were favoured in government-sponsored capacity building and training programs for supporting the Government’s political ideology.

#### *4.6.5 Poverty - as defined by the disadvantaged/“poor”*

The definitions below identify with the respondents’ key characterizations of poverty:

“For me, the absence of good governance by itself is poverty.”

“Poverty is conflict of interest due to divergent political outlooks because having consensus on one idea is a great resource.”

“Poverty is not only about food insecurity because one is poor when things like land to live on and farm, natural resources, shelter, cows, clothing, health and money, are not present”.

“As to my knowledge, a person is poor if he does not have the determination to work and the hope to see himself in a better place in the future. Whoever works can be lifted out of poverty by asking Allah. Poverty comes from laziness and doing nothing. If we work, I do not see why we should be poor and labelled as poverty-stricken”.

“Poverty is caused from ignorance and the lack of education because educated and uneducated people do not use what they have in a similar manner. If people are mentally poor, that causes poverty. Our ignorance caused us to cut down trees and we suffered climate changes and that worsened poverty”.

“Unless people destroy themselves with their own poor mental outlook, no one is poor. One is poor when he has so many children and when he runs out of land for having it divided among all his children”.

“There is poverty when people cannot use their brain to work and become self-reliant. The poor is the one who always expects what he needs from others”.

“Poverty is the detachment from all the means to generate income”.

“Somebody who has nothing and who is below everyone; somebody who is out of reach from the benefits to be gained from natural resources”.

“In my culture, one is poor if that person has a very short family tree”.

“Poverty is when someone is unable to produce and feed himself and his family because he has to buy food from the market and that makes him poor”.

The above-mentioned varied perspectives to the concept of poverty were based on the diverse range of socio-economic background and current statuses inherent among the research participants.

#### **4.7 Collaborative Resources Management: Partnership, Capacity Building and Institutional Networks**

The SGP’s operation was notably integrated with establishing partnership with development actors such as the local government, multilateral or bilateral donors, local and international

NGOs, academic institutes, research centers and the private sector. These partners provide assistance mainly in the form of capacity building, co-financing of program components, advocacy, and resource mobilization. The GEF requires the SGP to mobilize financial resources (i.e., cash) that matches with the core fund it provides to the program and as such, the SGP Ethiopia, through the Federal EPA, had secured in 2006 USD 1 million (i.e., USD 600,000 from the biodiversity focal area and USD 400,000.00 from the climate change focal area) of the GEF core funding that was made available to Ethiopia under the GEF 4 Resources Allocation Framework. Since then, this co-financed fund has been disbursed to grantees, which have been implementing projects aligned with the GEF's thematic and geographic focus in Ethiopia. The co-financing arrangement integrated in particular the financing of sustainable livelihoods activity components that were not eligible under the GEF core funding.

Since its inception in 2005 to date, there have been seventy-five projects approved for grant. Out of this, seventy-two comprised those successfully completed and currently on-going projects, whereas three were terminated due to non-compliance to project rules and procedures. Through the deployment of a wealth of skills and experiences, the steering committee members adhered to a set of terms of reference based on which potential grantees were screened and evaluated for grant approval. A broader view of the tasks carried out by the NSC and TRT in the overall project selection process are listed below:

- Emphasize on GEF focal areas as one of the major criteria in order to finance projects that contribute to meeting the objectives of those focal areas at a local level;
- Experience of the proponent NGO or CBO in environmental resource management work and collaboration and partnership with other local or international development partners;

**Box 3.**

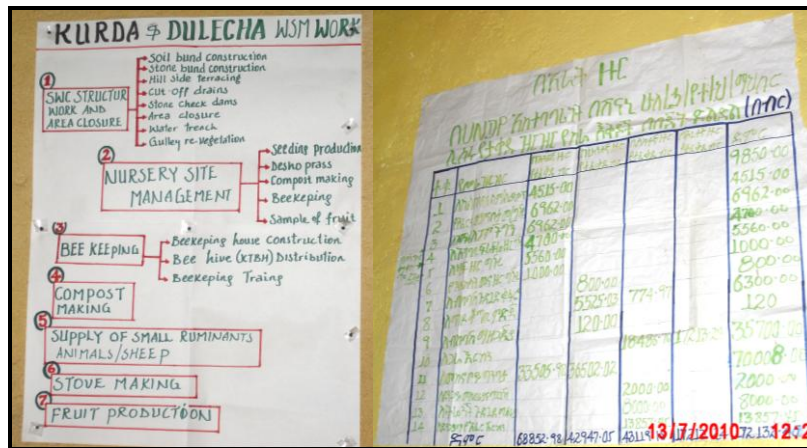
*“As of January 2009, the program office had received 112 concept notes. During the evaluation process, 48 concept notes were accepted to qualify for project proposal preparation. Consequently, only 25 CBO projects were approved for grant. This was because of the working criteria of the steering committee that gives priority to CBOs over NGOs.”*

**NSC member serving in the GEF SGP Project evaluation and selection process.**

- Ensure that project ideas initially came from the community or if it was demand-driven or problem-initiated, and that the projects incorporate the surrounding critical environmental conditions and socio-economic problems;
- Employ country-based approaches in evaluation and selection of project ideas coming from the civil society (i.e., often local NGOs) both in rural and urban areas;
- Investigate proof of community participation from problem identification to project preparation up until approval stage. Commitment is also checked from the local government's end because government support was deemed crucial in terms of giving technical back-up to the communities;
- Explore if emphasis is given to women participation and the benefits they could reap given the inherent weak involvement of women in development activities and the related marginalization they had to face for centuries;
- Examine if the proposed budget is within the limits of SGP's provisions and if the project period goes in line with the proposed budget;
- Ensure that the grants will be directly channelled to the CBOs or local NGOs and that the proponent has legal status (i.e., operating license, bank account, office space, etc.) and experience in one of the focal areas for at least two years. Through this process, the beneficiary communities take ownership of utilizing the fund and the project activities;
- Evaluate the feasibility of the proposed ideas on the ground and whether there are conducive environments to transfer the ideas into practice;
- Explore the cumulative effect of the grant in bringing environmental, economic, and social benefits and its potential to instigate project scaling-up and replication in other places;
- Provide technical support to potential grantees in the areas of project proposal preparation, project intervention strategies; and
- Conduct regular supervision and evaluation of project implementations with the NC of the SGP Ethiopia office.

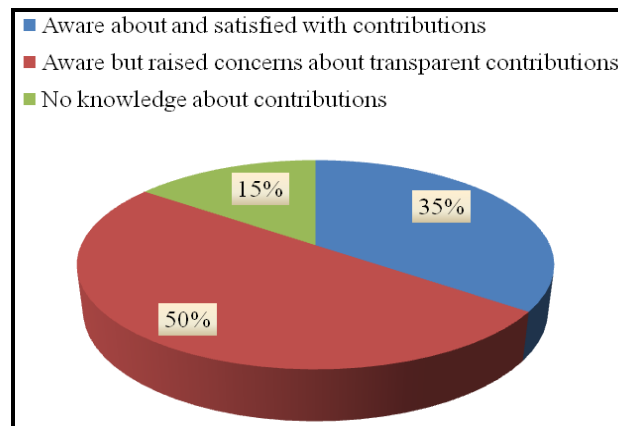
During the course of the project periods, it was observed that the CBOs and local NGOs had demonstrated transparency and accountability among the user groups in matters pertaining to the management and implementation of project activities. Members had the right to have their opinions heard, and these were often discussed through consultations and regular

meetings. Information on project action plans, accomplishments, and budget utilizations were openly made available to inquirers and visitors (Plate 40).



**Plate 35.** Description of Work Plans and Activities (posted on walls of the communities’ project offices)

In regard to collaborations between stakeholders, 35 percent of the total number of respondents (n=35) stated that that they were satisfied with the local government’s contribution; 50 percent had concerns in the areas of transparency and collaboration while the remaining 15 percent were not aware at all about how the local government contributes to the overall project implementation process (Figure 6).



**Figure 6.** Community’s Perception of the Local Government’s Contribution in Project Implementation

The federal Government has indeed proved to be collaboratively engaged in SGP’s operations and achievement of project goals. One of the areas the respondents identified as an element of government support was the technical support rendered by local government

development agents (DAs) who closely work with the beneficiary community groups. Nevertheless, in the effort the researcher made to further investigate the communities' perspective of the level of local governments' contribution, they were not able to describe how supports have materialized in any other way. They emphasized that they have not observed transactions of the in-cash contributions their local government was expected to make as stipulated on the project proposals. On the other hand, a local government representative who has been working closely with the community expressed that the office has documentation of all expenditures and it can be made available to the community if they inquire. Respondents who also represented the community organizations reported that although they inquired why the budget was not released, the feedback they got was not clear and they have never been given explanations as to how and where the local government utilized the budget.

Continuous reshuffling of local officials upon the command of the Government body at the regional or central level was reported to be a major drawback that hampered the efficient flow of project activities and realization of benefits:

“When one NGO comes, one official will be responsible to follow-up our matters but when that official is relocated, the file will be buried under the table. Nobody knows about that issue afterward. Whoever replaces that person was new for everything and we had to explain things all over again and yet, we were told that they know nothing and it was very difficult to reinstate the follow-up.”(*A focus group discussions participant from the ASDA Project*)

As a result, the discussion participants had expressed their frustrations about their rights in benefiting from the project activities. According to the park conservation and protection user group of the ASDA project:

“Corrective measures were not seen taken by the local collaborating offices against illegal poachers who were caught misusing the forest resources. As a result, some community members did not care to value what has been done by our group. They illegally entered and released their cattle in the enclosed areas during night time.”

What the discussions group identified as the reason for the persistence of this problem was the delay of recognition and issuance of operating licenses for the user group to secure legal status—they had to wait for approval that only the regional government could provide. Another concern raised was:



“Several NGOs come to the *Woreda*, but they leave shortly after handing over the ongoing activities into the management of the *Woreda*. With the recurrence of such trends, the *Woreda* offices have not gained adequate and long-standing experience working with local groups like us or any other international NGOs. For the local government, seeing grassroots communities directly receiving grants and taking ownership of development interventions was a whole new experience” (*A focus group discussions participant from the ASDA Project*).

Similarly, participants from the RLDO Project watershed management user group had expressed concerns. They were still waiting for the practical rules and procedures (i.e., designed by Cooperatives Development office) to allow the operation of local cooperatives/associations in the areas of watershed management.

In response to the nature of the capacity building process in the entire project implementation process, the respondents noted in particular the need for continuous refreshment and advanced training in the areas of environmental protection and small business and financial management. They were optimistic to advance their current commitment in resource management and livelihood improvements to a larger scale, hence emphasizing their desire to keep up with the ever-changing circumstances surrounding their localities. Respondents at the community leadership level stressed on the need for awareness in policy reforms or formation of new ones affecting their livelihoods so that they can be able to line up their development endeavours accordingly and be able to respond to policy-related issues raised by their respective user group members. In this regard:

“Policies formed at federal level were not often timely communicated down to the community at local/grassroots level and we often find it confusing when we are told to comply with a list of rules and procedures which they have not been aware of in advance. Policies change every now and then and that has weakened our level of performance” (*Area closure and dam building participant from the Dire Dawa Farmers’ Cooperatives Project*).

All the beneficiaries had appreciated the remarkable move made by SGP throughout the two-year project support, and yet they felt that they were not strong enough and self-sustained enough to stand on their feet—not looking forward to having continuing dependence on aid handouts. The remark they gave at the end was that it will be a challenging journey if they are left all by themselves until sustainable benefit from the project outputs (i.e., vibrant ecosystem goods and services, empowerment, self-development) were secured.

The voluntarily serving NSC and TRT members have also applauded the modality through which SGP directly channels its support to target beneficiaries as an exemplary best practice:

“Community utilization of the fund, community-drive project ideas, community-driven work plans and community-based decision were what the members pointed out exceptional to SGP and that the federal and regional authorities can emulate the same to government-sponsored environmental conservation and livelihood improvement projects” (*TRT member of the focus group discussions*).

“The federal EPA has taken some directions to harmonize this approach to the environment related issues contained in the country’s five-year development and growth plan (2010/11-2014/15)” (*NSC member in the focus group discussions*).

#### **4.8 Conclusions**

The analysis of this research revealed that the project areas exhibited degraded environmental surroundings, high prevalence of poverty, and poor socio-economic conditions with apparent need for development intervention. The research participants were both men and women farming households whose means of livelihood were principally founded on the use of natural resources but with limited capacity of access and benefits. In this regard, SGP’s project-based interventions, which comprised both financial and technical supports, were carried out in line with GEF thematic areas and geographic focus. The interventions gave emphasis to stakeholders’ collaboration, women’s participation, empowerment, capacity building, user groups organization, and self-development components, all of which in turn rendered effects on the issues of food security as well. Cognizant to the apparent similarity of circumstances in the data collection sites, detailed evaluative discussions, comparative arguments, and recommendations are given in the succeeding chapters.

The manner in which all grantees utilized the financial support showed that environmental activities comprised the bulk of overall budget use within which income generation schemes were rooted (Table 6). These activities were also meant to positively impact the existing social structures and norms of the local communities which were targeted and organized to benefit from the project interventions. The approved financial support, which was released to each grantee in four instalments in the two-year project’s lifetime, was intended to bring short-term and long-term environmental, economic, and social gains.

**Table 6. Summary of Budget Utilization (SGP's Portion) in USD**

Name of CBO or NGO	Approved Budget	Ending total expense	Category of Main Activities			
			Conservation, restoration and income generation	Capacity building	Documentation and knowledge management (in cash and in kind)	Administrative expenditures (approximately 10% of total budget) (in cash and in kind)
ASDA	49,850.00	*50,784.52	33,190.25 (65%)	12,141.18 (24%)	543.48 (1%)	4,909.61 (10%)
AFC	25,090.10	25,090.10	24,000.50 (96%)	1,089.60 (4%)	Responsibility of the CBO	Co-financed by the local government
SFC	19,041.20	19,041.20	17,951.60 (94%)	1,089.60 (6%)	Responsibility of the CBO	Co-financed by the local government
HFC	15,810.00	15,810.00	14,720.40 (93%)	1,089.60 (7%)	Responsibility of the CBO	Co-financed by the local government
RLDO	46,900.00	48,151.09	**39,934.78 (83%)	3,521.74 (7%)	543.48 (1%)	4,151.09 (9%)
*Includes exchange rate gain of \$934.52 (USD 1.00 was changed for Ethiopian Birr 9.20 at the time of grant approval). The gain was applied to offset project activities with negative ending balances.						
**Includes exchange rate gain of \$1,251.09 (USD 1.00 was changed for Ethiopian Birr 9.20). The gain was applied to subsidize activity costs incurred in environmental and income generation schemes.						

## **Chapter 5: Discussions of Findings and Results**

### **5.1 Introduction**

The apparent link between natural resources and humans' exploitative dependence has gradually brought forward the need to investigate the root causes for resource depletions. This has initiated interventions to devise sustainable mechanisms of mitigating the resulting adverse impacts on the socio-economic conditions of the resources users. The foundational history agriculture has in Ethiopia signifies that degraded natural resources (i.e., land, land-based resources, water, climatic conditions) in most parts of rural towns make up the livelihood base for more than 85 percent of the people. Taking this into account, a decentralized financial support mechanism—as in the case of SGP's support in Ethiopia—is largely being integrated in the restoration and conservation efforts of degraded resources, which in turn generate socio-economic benefits through increased sustainability of agricultural productivity. To this end, the discussions made in this chapter are central to the research findings in the preceding chapter, the outcome of an evaluation on SGP's approach in tackling environmental challenges in rural Ethiopia while presenting opportunities to achieve sustainable livelihoods and alleviate poverty.

### **5.2 Drivers of Sustainable Natural Resources Management**

Allocating financial aid or grants to restore and conserve degraded natural resources indicates values (monetary or non-monetary) in the wide range of functions accessible from ecosystem goods and services. Nonetheless, markets have been missing for ecosystem services that would have substantially contributed to poverty alleviation programs and policies, which provide equal access to low-income producers (Kumar, 2005). Indisputably, the worth of ecosystem services should not be undervalued until concerns are raised from high financial cost of replacing severely damaged and degraded conditions of a freely exploited ecosystem (Anielski & Wilson, 2009). Responding in a similar manner, environmental policy makers stressed “market failures with regard to the pricing of natural, human-made and cultural resources, and failures in regulatory measures shall be corrected through the assessment and establishment of user fees, taxes, tax reductions or incentives” (EPA, 1997). In a country of limited resources, immense needs, increasing population, difficult terrain, and insufficient

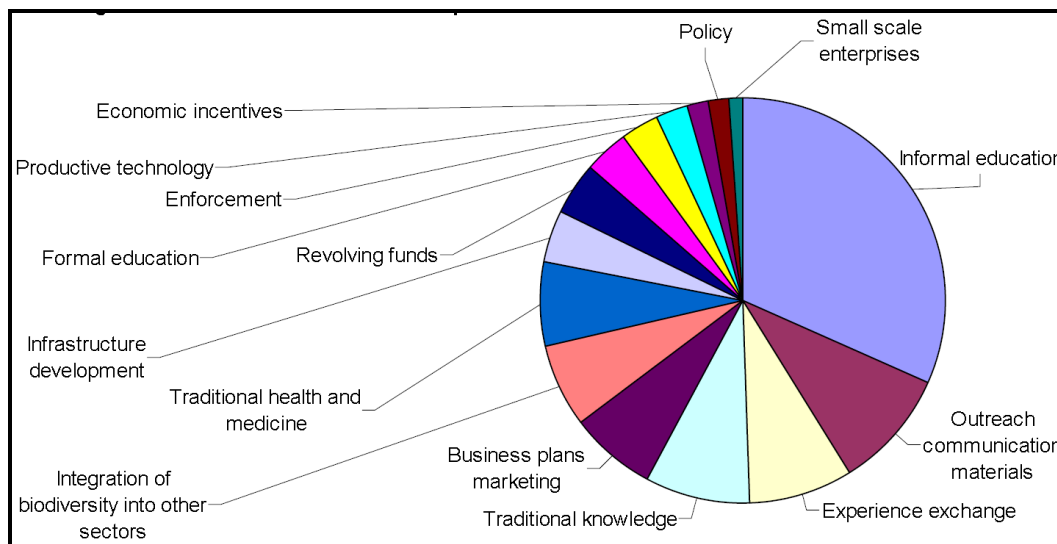
information communication, introducing a the SGP's decentralized small-scale support to implement project-based resource management intervention was a fundamental achievement in bringing attitudinal changes in the low-income project beneficiaries.

The weight of repercussions from resource degradation and environmental externalities are evidently increasing in all countries, industrialized and developing alike (Lee & Neves, 2009). Despite the severity of environmental degradation in all the project sites, SPG has considerably brought tangible impacts in that the small financial supports rendered the means to sustainable ends. It is evidenced that in most SNRM projects and program initiatives, there is greater potential to reduce the costs of conservation and increase the accessibility of financial means at smaller scales that will save local resources (Gutman, 2003).

There is a strong link between the indisputable dependence of the poor on direct exploitation of natural resources and the rising trend of ecological scarcity, which has manifested itself in the degradation of diverse ecosystem services vital to the poor (Barbier, 2009). Even so, it was a remarkable lesson that SGP-funded conservation works were diversified, complimentary and harmonized (e.g., seedling production, parks conservation and protection, area enclosure). The beneficiaries were familiarized with the practical display of the complex and interlinked features of the ecosystems within which they live, and how the diverse ecosystem functions uncovered the range of features that also needed to be restored and conserved. When local peoples' involvement is desirable in the maintenance of a sustainable natural resource base, the entry point to conservation should not be limited to raising awareness of biodiversity loss, land degradation, and climate change alone. Financial and technical support to environmental resource management must primarily consider how vulnerable local communities perceive and express the adverse effects of resource degradation on their livelihoods. Hence emphasis on community-expressed problems offers ways to identify the root causes of the problems and to devise sustainable solutions. It could, therefore, be argued that linking the benefits of environmental conservation to livelihoods is the paramount factor to building resilient communities capable of coping with the challenges of biodiversity loss, land degradation, and adverse climate changes.

### 5.3 Environmental Concerns Precede Livelihood Benefits

The economic welfare of communities suffer as natural resources, which provides the means to sustain livelihoods become degraded through human production and consumption behaviours (Emerton, 2000). Large economic benefit often does not happen, but when it does it is commonly from donor-funded projects or programmes, which then collapse once the project and its funding come to an end (WB, 2004). Nevertheless, GEF’s funding through the SGP has remarkably demonstrated that primary focuses on environmental concerns is the means by which desirable economic benefit could be generated. SGP’s biodiversity portfolio review (2005) also indicated that financing conservation activities has been the pathway to generate economic alternatives and the income generated through conservation activities could help communities provide choices for consumption and trade, which offer a replacement for incomes derived from unsustainable sources (e.g., clear-cut timber harvesting). In this regard, Figure 7 below shows the diverse enabling project components that create marketing opportunities within a portfolio of 95 SGP-financed projects in Latin America, Africa, Asia Pacific region, and the European Commonwealth.



**Figure 7.** Distribution of Interventions Supporting the Enabling Environments within SGP Projects with a Significant Economic Alternatives Component (Source: SGP, p.17, 2005)

Likewise, devoting resources towards conservation and restoration activities in the three rural project sites discussed in Chapter Four has been one of the notable enabling conditions

to create nature-based income-generating opportunities and benefits. In the meantime, priority concerns for the environmental resources were accompanied by economic incentives as invigorating tools to motivate communities as partakers in the resource conservation undertakings. Evidently, rural communities are likely not willing or able to conserve nature in the course of their livelihood activities unless it makes tangible economic sense for them, hence programmes or projects with nature conservation as their primary goals must set in place conditions for economic gains (Emerton, 2000).

More often than not, poor households living on fragile lands generate insufficient savings and suffer chronic indebtedness as they are forced to rely on informal credit schemes with high short-term interest rates (Barbier, 2009). Likewise, extreme poverty has forced many agrarian households in rural Ethiopia to out-migrate to urban cities and abandon their agricultural livelihood practices due to failure to pay for fertilizers and seeds acquired on credit. For instance, since the 1960s decline in the performance of the agricultural sector in India, landless poor farmers have suffered indebtedness and distress as they were unable to repay the loans obtained from local money lenders and banks and, as a result, approximately 82% of farmers in the district of Karnataka alone had committed suicide (Deshpande, 2002; Talule & Rasal, 2008). Comparatively, the on-going SGP's financial support, which is purely a grant-based investment in natural and human capital, has given the beneficiaries the mental freedom and commitment to execute project activities—although continuous local capacity building supports are still required to build self-sustained local economies. In addition, in a recently publicized development strategy by the UNDP, the SGP has been identified as a significant role player in delivering strategic priorities for scaling-up local capacity with its emergent support modalities, which thus far has exhibited the highest levels of international fiduciary accountability—a determining factor for the success of scaling local solutions as one of the most dependable avenues to achieving greater aid effectiveness (UNDP, 2010). Indeed, this research has highlighted SGP's commitment towards conservation and restoration as being one of the driving forces that motivated user groups to commit towards ownership of self-sustained local economies. Such motivation can be scaled into the development of ecosystem-based micro-enterprises provided that tangible enabling conditions and success factors are in place. Lawrence (2000) defines micro-enterprises in a broader context as “typically labour-intensive business units that are not part of larger business units. They

usually operate in the local market, are financed by their owners and, as a result, are often undercapitalized.” According to WRI (2008), scaling ecosystem enterprises, as instruments of local development, require the existence of the following enabling conditions as described in Table 7 below:

**Table 7.** Scaling-up Community-driven Ecosystem Enterprises (Source: Table adapted from WRI’s Success Factors for Community-Driven Natural Resources Management, p.7, 2008.)

<b>CAPACITY:</b> <i>Skills (social, technical, and business) required for resource management and enterprises formation</i>
<ul style="list-style-type: none"> <li>- Social capacity for shared goals of resource management and consultation of action plans to attain it</li> <li>- Technical capacity for sustainable co-management of natural resources and the ability to monitor resources and enforce rules</li> <li>- Business capacity to organize an ecosystem-based enterprise and marketing of resulting outputs</li> <li>- Local resource management institutions with the capacity to equitably distribute costs and benefits of ecosystems management</li> <li>- Vibrant community leadership to catalyze demand and mediate disputes</li> <li>- Liaison/intermediary support organizations to facilitate capacity building</li> </ul>
<b>OWNERSHIP:</b> <i>A local stake in development and enterprise</i>
<ul style="list-style-type: none"> <li>- Recognition of community resource rights and demand for natural resources management</li> <li>- Community investment of time, money, or other key inputs</li> <li>- Community involvement and influence in decision-making processes</li> </ul>
<b>NETWORKING:</b> <i>Links to knowledge building sectors, supports, commercial outlets and associations</i>
<ul style="list-style-type: none"> <li>- Horizontal links to other rural producers’ cooperatives to access information, improve efficiency, and connect to markets</li> <li>- Vertical links to government and the private sectors to boost political support, tackle bureaucratic obstacles, and link to technical and financial supports</li> </ul>
<b>SCALABILITY</b>
<ul style="list-style-type: none"> <li>- Supportive development plans and policy instruments</li> <li>- Non-discriminatory tax and regulatory requirements</li> <li>- Commitment of government line agencies</li> <li>- Technical, research, and marketing supports</li> <li>- Availability of financial services and public funding</li> </ul>

#### **5.4 Development Actor’s Interactions towards Accountability, Transparency, Good Governance, and Empowerment**

One of the qualifying criteria for SGP grant approval was the presence of recognizable support by the local government in the proposed project area. It has been identified in this research that the federal Government of Ethiopia has played a pivotal role through the allocation of financial resources in the amount of USD 1 million and the exertion of experts’



knowledge through the voluntary representation of Government officials from the federal EPA. In addition, the technical assistance from local DAs to the beneficiary communities in all project sites and strong involvements in the formation of the three CBOs, especially for the Dire Dawa Farmers' Cooperatives Project, were central to the local governments' strong involvement. This form of collaboration finds its origin in one of the provisions of the Plan for Accelerated and Sustained Development to End Poverty (PASDEP) which stated "devolution of power to regional states and then to the *Woreda* is a centrepiece of Ethiopia's strategy for ending poverty by improving accountability, responsibility, and flexibility in service delivery and increasing local participation in democratic decision-making on factors affecting the livelihood of the grassroots population" (MoFED, 2006).

On the contrary, the research findings identified a gap between the declared statement of government's collaboration and the communities' perception of local governance in that the communities were unable to express their level of understanding of how contributions from the local government were accounted for. One reason for this gap could point to the lack of transparency in actively engaging the community in the administrative matters of project implementation that involves the local government. It should be understood that the commitment of the local government to share information and involve communities in an open dialogue narrows such information gaps, thus making local authorities responsive and accountable to the community (Yvonne, 2010). The apparent drawbacks in holding development partners accountable could be minimized when community leaders work in close collaboration with their local government counterparts, donors, and other development agents and are allowed to freely communicate measures and results to the groups they represent.

One of the services the regional government bodies render includes granting of legal status and operating permit to potential business groups or cooperatives that are formed to generate income. Despite PASDEP's provisions that the devolution of power to regional states will enhance accountability and flexibility in service delivery, the bureaucratic and unreasonably lengthy procedures of approving communities' income generation rights (e.g., as in the case of the ASDA project park conservation and protection user group) has prolonged the timely realization of project benefits. The Government's impractical commitment to parts of its own development strategy creates inconsistencies in the level of support offered by the local authorities to the SGP-funded project beneficiary communities.

Inequity in service delivery goes counter to Ethiopia's commitment to its vulnerable rural population and the donor communities who are supporting those people (Human Rights Watch [HRW], 2010).

Although Ethiopia is constitutionally a federal state, what is currently apparent is a dual dynamic state structure—a formally decentralized state structure with nominal devolution of power to local levels but, simultaneously, the local entities are controlled by the strongly centralized governance that predetermines decisions from the prime minister's office in the capital down to the remote rural *Kebeles* (International Crisis Group, 2009). It is not uncommon to notice that regional, zonal, and *Woreda* administrators are being appointed without possessing the skill sets to efficiently govern local matters and this very nature of the EPRDF makes it difficult to reform itself (Hirbe, 2010). Moreover, the lack of good governance is one of the characteristic features of the federal Government, which exacerbates poverty and food-aid dependence in Ethiopia. Hence, with the inherent challenges in the existing governance structures, government-sponsored projects may find it difficult to adopt decentralized financing mechanisms, as in the SGP, and anticipate measurable results from the prospective projects.

Despite the promising development outcomes for which stakeholders collaborate to achieve, challenges confronting the efforts are not uncommon. When local NGOs work in close collaboration with grassroots communities, significant development progresses are its expected results. Consequently, communities tend to become motivated for self-development/self-determination and further raise social welfare concerns the Government might have failed to give due heed. Under these circumstances, the NGOs are often indicted of being involved in illegal activities (e.g. lobbying for human rights) and for enticing the communities to bring up basic human rights concerns—as opposed to the charity works which the Government determine the local NGOs to perform. Where there are concerns in the degree of collaboration or rivalry between local NGOs and the Government, community-based development activities are carried out by parastatal NGOs which are closely integrated with regional governments (Belshaw and Coyle, 2001). With the intent to regulate the role of civil society organizations, the FDRE has released a Charities and Societies Proclamation law (CSO) (2009). The provision in Article 14 reads as:

‘Ethiopian Charities’ or ‘Ethiopian Societies’ shall mean those Charities or Societies that are formed under the laws of Ethiopia, all of whose members are Ethiopians, generate income from Ethiopia and wholly controlled by Ethiopians. However, they may be deemed as Ethiopian Charities or Ethiopian Societies if they use not more than ten percent of their funds which is received from foreign country sources”.

The proclamation has been debated for stipulating repressive provisions over the operation of local NGOs and for going far beyond the necessary standard to legalize CSOs—an attempt by the Ethiopian Government to cover-up human rights violations and suppress potential critics (Amnesty International, 2009). Following the passing of the CSO proclamation, various international communities in Ethiopia—namely the Development Assistance Group (DAG)—released a statement of concern:

“This law could restrict our support for programs in areas of mutual interest, such as promoting democracy and good governance, human rights, conflict resolution, and advocacy for women, children and other vulnerable groups”. (The Royal Norwegian Embassy in Ethiopia, 2009).

It seems evident that the contested working relationship existing between CSOs and the Government could essentially bring a chain of adverse impacts on environmental NGOs in the country that work towards building resilient communities and self-sustained local economies. Despite the prevailing challenges stated above, it is quiet a significant observation that the architecture of multilateral environmental agreement—GEF being an important instrument—has given the environmental local NGOs (i.e., ASDA and RLDO) the leverage influence to maintain favourable working relationships with the Government by having empowerment of women and marginalized community groups as one of the targeted project goals.

### **5.5 Policy Instruments to Sustainable Resource Management and Poverty Reduction**

The FDRE takes the dominant position in regulating all provisions pertaining to the use, allocation, management, and ownership of natural resources. On the basis of this premise, the researcher indentified some of the key guiding principles appealing to the environmental property rights and access to resource for local people as stipulated in the Constitutionally-driven Environmental Policy of Ethiopia (1997):

“Recognize and protect wherever possible the customary rights of access to and use of land and natural resource which are constitutionally acceptable, socially equitable and are preferred by local communities”;

“Sustainable environmental conditions and economic production systems are impossible in the absence of peace and personal security. This shall be assured through the acquisition of power by communities to make their own decisions on matters that affect their life and environment”;

“When a compromise between short-term economic growth and long-term environmental protection is necessary, then development activities shall minimize degrading and polluting impacts on ecological and life support systems. When working out a compromise, it is better to err on the side of caution to the extent possible as rehabilitating a degraded environment is very expensive, and bringing back a species that has gone extinct is impossible”;

“The existence of a system which ensures uninterrupted continuing access to the same piece(s) of land and resource creates conducive conditions for sustainable natural resources management”;

“Promote off-farm and on-farm income-generating programmes which aim at the alleviation of poverty, especially, among women whether they have access to land or not and among men who have no access to land”.

The research respondents identified scarcity of water resources and inaccessibility to productive and sizable land area as significant resources constraints. These signify increasing prevalence of poverty and a potential threat to prospects of sustainability, replication and scaling-up of interventions made through the SGP’s support. Maintaining a trajectory of rural developments towards integrated poverty alleviation and natural resources conservation indisputably requires ingenuity of governments as SNRM practitioners, especially when financing arrangements with good chances of being sustainable and accessible to the rural poor are readily available (Gutman, 2003). The FDRE’s PASDEP on its part advocates alleviation of challenges to poverty and food insecurity without risking the health of the natural environment where the poor obtain their food and maintain their livelihoods (MoFED, 2002).

In further evaluating the national policy influence of SGP project goals, it was crucial to look through potential opportunities or threats ingrained in the existing economic development approaches pursued by the Government in power. Recent studies indicate that private agribusiness deals account for about 90% of the aggregate land area acquired in Ethiopia with foreign investors paying land rent from USD 1 to 5 per hectare per year and being exempted from land rent fees for the first five years (Cotula *et al.*, 2009). The irony of this agricultural industrialization approach is that the country has been one of the largest

recipients of humanitarian assistance, and yet fertile lands (including forest and grazing) of vital environmental, economic, and cultural values are being cleared and leased for unreasonably low prices. The provisions of the Environmental Policy of Ethiopia and the current agricultural industrialization process carry paradoxical perspectives in that important future development options are being overlooked by making quick deals. When such strategies dominate the economic development approach, it is inconceivable to realize how landless poor farmers can obtain uninterrupted access to land and land-based natural resources. As more interest grows and resources are committed towards capital-intensive agro-industries, low-income local producers could become disempowered by the controlled access to natural resources and will be driven out from the production and agricultural commodity exchange market.

Furthermore, the foreign-owned agro-industries are inherently reliant on fossil fuel and they may potentially grow genetically modified crops and apply external inputs on those vast farmlands—this could significantly intensify environmental degradation and the loss of livelihood bases. As the current land deal continues to threaten the ecological integrity of most rural towns in Ethiopia, it becomes detrimental to the prospective impacts of SGP's support as it tries to reach out for the increasingly degraded, poverty-stricken geographic locations, and deteriorating livelihoods of communities who strongly need life-changing support intervention. A more insightful way for SGP support orientation prior to concluding grant agreements would be to ensure that the prospective project sites and target communities would gain equitable livelihood benefit from increased agricultural productivity and that the surrounding project site and communities will not suffer from potential degradation of ecosystem services when large-scale agribusiness undertakings are unavoidable. The Government could also take the initiative to empower local farmers and Ethiopian agribusiness operators to preserve the farmlands, harvest chemical-free foods, consume the products first and foremost, and export the surplus to the very countries currently leasing Ethiopia's farmlands to produce food and exporting to the rest of the world (Tolossa, 2011).

## **5.6 Assessing Environmental Benefits, Sustainable Livelihoods and Poverty Alleviation in light of the Ecosystem Services Framework (ESF)**

A more insightful way to conceptualize the data analysis made in this research would be to construct illustrative linkages between the cases of the three SGP projects with the Ecosystem Services Framework (ESF), which has been popularized by the Millennium Ecosystems Assessment (MEA). The underlying concept of ESF highlights the long-term role healthy ecosystems play in providing global sustainability in human well-being, economic development, and poverty reduction (Turner & Daily, 2008). The Millennium Assessment (MA) (2005) formulated the framework by linking the functions of ecosystems services and human well-being using four categories: provisioning services—supply of natural resources (food and water); regulating services—preserving ecological processes and life support functions (flood regulation, drought reduction); cultural functions—experiencing cognitive development through attachments to the natural systems (recreational, sacred groves); and supporting functions—indirectly linked with human well-being (habitat for biodiversities at local and regional scales, soil formation). Despite the myriad of functions ecosystems provide for human well-being, approximately 60 percent of the world's ecosystems are being degraded and used unsustainably (MA, 2005).

On one hand, the apparent inextricable link between human economic development needs and ecosystem services, the manner people manage ecosystems and the level of resource exploitation from any natural system could result in win-win, win-lose, lose-lose, or trade-off outcomes (Tallis *et al.*, 2008). Furthermore, the absence of rigorous evaluation for the performance of policy instruments also renders global degradation of ecosystem services—often manifested through disfunctioning institutions and gaps in scientific knowledge (Carpenter *et al.*, 2009). On the other hand, consistent policies across scale and policy practices harmonised to local conditions minimize the trade-offs and prevent possible lose-lose results (Kok, *et al.*, 2010). Unequivocally, the consequences of imbalance or trade-offs between development projects and conservation are not perceived the same across resource consumers (as it impacts most directly rural poor people whose access to natural resources is limited). In addition, the prospect of progresses in the maintenance of ecosystems services, conservation, and poverty alleviation will be deterred unless effective monitoring

tools are in place to learn from the success or failure of ongoing projects (Tallis *et al.*, 2008). To this end, mainstreaming ecosystem goods and services (EGS) into various forms of international policy domains and conventions is believed to offer considerable opportunities to reducing poverty while improving EGS delivery at the local level (Kok, *et al.*, 2010). Further to the four categories of services ecosystem services provide to human well-being, sustainable livelihood base is a subject of considerable concern where benefits are generated through direct or indirect marketing of ecosystem services.

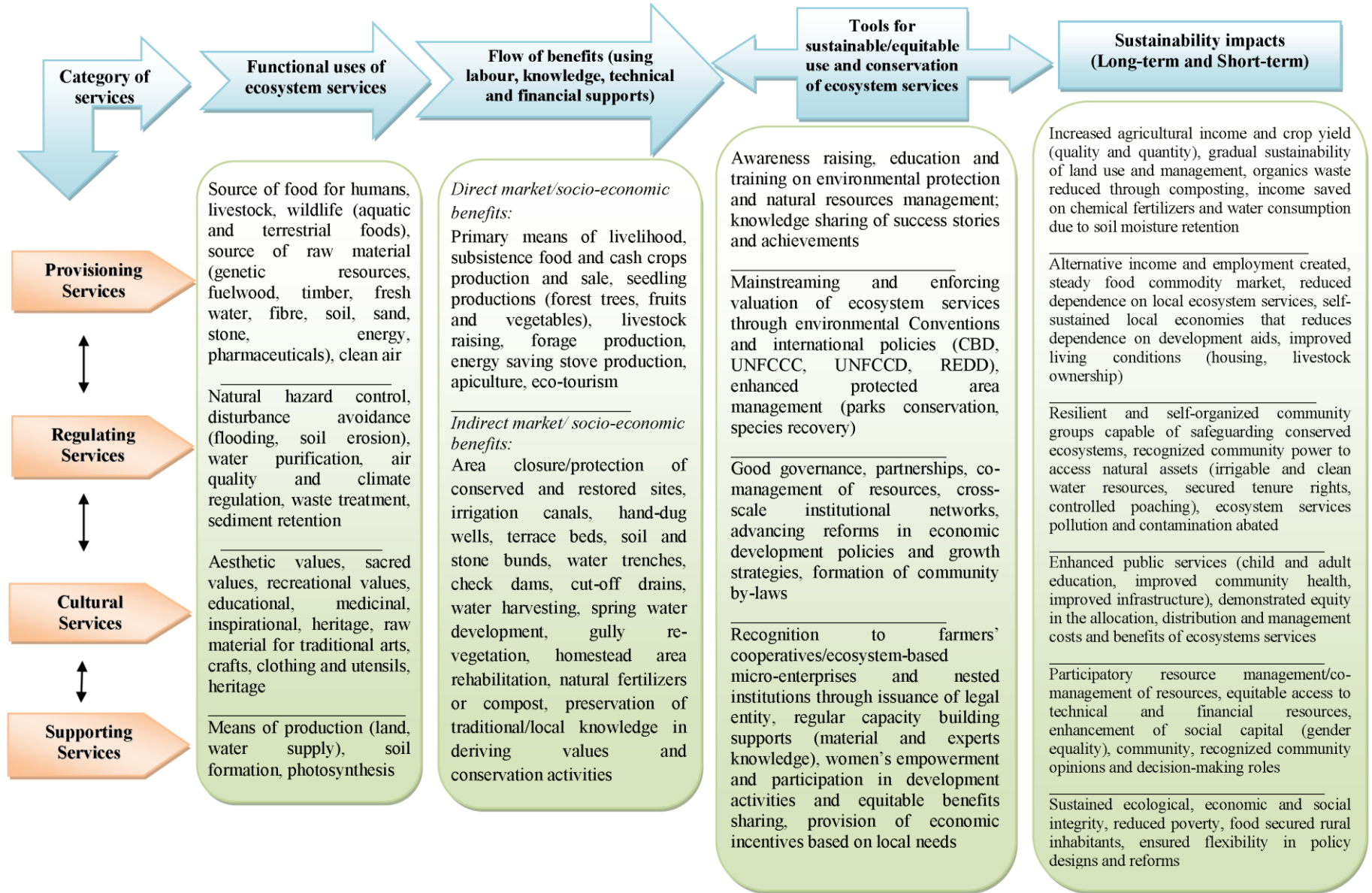
Despite the diverse services ecosystems provide, the depletion of ecosystem services in general are overlooked by measures of economic progress like the gross domestic product (GDP). (Anielski & Wilson, 2009). Nevertheless, concerns are growing to give explicit recognition to a business-case scenario, that is full-cost accounting and payment for ecosystem good and services (Kok *et al.*, 2010) to measure the cost and benefits associated with ecosystem services. Any form of generating benefits (healthy environment, income/markets) from the use or sale of natural resources is anticipated to consider how much ecosystems and the services obtained are worth. A practical indicator of this scenario is when resource users are impacted by the loss of naturally accessible resources (both renewable and non-renewable), which in turn renders various forms of cost to the economic system. Such costs are incurred when resources (i.e., financial, technical, experts' knowledge) are committed for conservation and restoration efforts to reinstate the degraded ecosystems goods and services.

As discussed in the previous chapters, the SGP environmental protection project intervention was started due to identified adverse impacts the project sites and communities suffered. Past unsustainable resource consumption patterns, subsequent degradation of ecosystem goods and services, and natural disasters (drought) had major parts to play. The environmental, economic, social, and policy impacts of SGP projects, in light of the MA's ESF, are illustrated in Figure 8 below. It corresponds to the communities' account of the benefits from ecosystem services and the support the small grant has offered as described throughout Chapter 4. Although the grant has paved the way to initiate reinstatement of the degraded environmental and socio-economic conditions of the beneficiary groups, a financial grant cannot be always considered as the single most dependable resource to start-up environmental conservation initiatives. A recent survey by OECD indicates that international

donor communities will continue providing development aid over the coming three years but with a sharply declining pace (UN, 2011a). This is partly attributable to the fragile recovery from the 2008 global economic and financial recession and to donors falling short of their commitments to deliver support, signifying reduced future volume of official development aid flows (UN, 2011b).



**Figure 8. Modeling Ecosystems Services Framework (ESF) in the SGP's Support Delivery**



## **5.7 Conclusions**

In a fragile and gradually recovering ecosystem, emphases on reaping economic benefit immediately after restoration will discourage environmental and social benefits from materializing, thus overstating economic benefits at the expense of ecological integrity. There should be a learning stage of ecosystem restoration during which communities will discover that sustainable natural resources management requires allowing sufficient time and steady commitment. Although extreme poverty raises pressing needs to address deteriorating livelihoods, sustainable results are unlikely without hard work. The learning stage will, therefore, allow communities to accumulate reliable knowledge and develop sustainable strategies to make informed decisions in utilizing and managing conserved and restored ecosystems. Likewise, stakeholders' collaboration is one of the desirable conditions for implementing and scaling-up successful practices to secure increased ecological, economic, and social benefits in the short- and long-run. It should be noted that locally suited policy instruments offer diverse opportunities to empower rural communities and alleviate food insecurity and poverty if sufficient attention is given to follow non-exploitative economic development and growth approaches.

## **Chapter 6: Research Summary, Conclusions and Recommendations**

### **6.1 Summary**

For several centuries, Ethiopia has been highly regarded as a historical landmark of abundant natural resources and favourable topographic variations, which supported its populations adequately. However, from the 1980s onwards, the combination of both human- and nature-induced events exposed the country to formidable challenges of environmental resource degradation and socioeconomic tensions which have manifested mainly in the forms of climate changes, poverty, food insecurity, political instability, and ineffective governance systems. Consequently, the declining natural resource base, deteriorating livelihoods, drought-related mortality, and migration and resettlement—largely all in rural areas—have called for short- and long-term international aids. One of the aid interventions involved the UNDP—GEF SGP’s financial supports to community-driven local projects focused in biodiversity conservation, prevention of land degradation, and abatement of climate changes. This support has been formulated to bring about short-run and long-run environmentally sustainable, economically viable, and socially equitable solutions to vulnerable grassroots communities residing in environmentally degraded and poverty-stricken regions of Ethiopia.

On the basis of these scenarios, the purpose of this research was to evaluate how funding from the UNDP—GEF SGP assisted communities in conserving biological diversity, tackling the impacts of climate change, and preventing land degradation—and to explore how these interventions present opportunities to achieve sustainable livelihoods and poverty alleviation. With this purpose in mind, the study was conducted based on the following research objectives: to identify the linkages between grant approval standards with environmental and livelihood conditions of beneficiary projects; to explore the contributions of stakeholders and other relevant conditions to enable target beneficiaries to undertake and benefit from resource-based income-generating activities; and to evaluate the long-term implications of small grants on sustainable livelihoods, environmental policy, and poverty reduction. The data collection procedure was composed of semi-structured interviews with 35 men and women farming households, and one focus group discussion with seedling production and park protection user-groups in which women comprised the majority. Another focus group discussion was held with the GEF SGP’s National Steering Committee (NSC)

and Technical Review Team (TRT) members. The data analysis and discussions made were also strengthened by direct site observations, photographic images, and review of secondary data sources.

To ease the evaluation process of SGP's funding, the data analysis process was designed by critically examining the potential strengths, weaknesses, opportunities, and threats identified in the research findings. For this purpose, the stated research objectives and the related major findings were summarized using a SWOT analysis in Table 8 below, which also provides a simplified understanding of the research work.

The project sites where the data were collected had varying agro-ecological features to a certain extent. Nevertheless, the discussions in the preceding chapter and the conclusions and recommendations were formed with reference to the identical grant eligibility criteria and similarities in project activities, socio-economic conditions, and the research participants' perceived understanding of the research questions. The concluding section reflects the fundamentals of the research theme (i.e., title), the stated objectives, and perspectives drawn from other literature on the research theme, based on which recommendations were finally drawn.

**Table 8 Summary of Findings and Impact Evaluation Matrix Using SWOT Analysis**

Objectives	Data Collection Procedures	Relevant Theoretical Concepts	Major Findings	SWOT Analysis
<p><b>Objective One:</b> To identify the linkages between grant approval standards with environmental and livelihood conditions of beneficiary projects</p>	<p><b>Focus Group Discussions</b> with 6 SGP National Steering Committee (NSC) and Technical Review Team (TRT) members.</p> <p><b>Direct Observation</b> and <b>Photographic Images</b> of the project areas as identified by the NSC and TRT as needing intervention (living conditions [housing, infrastructure], ecological aspects, livelihood activities).</p> <p><b>Secondary Data Sources</b> to analyze the procedural context in which project proposals and grants were approved.</p>	<ul style="list-style-type: none"> <li>- Sustainable development</li> <li>- Sustainable livelihood approach</li> <li>- Sustainable natural resources management</li> <li>- Poverty reduction</li> <li>- Food security</li> <li>- Environmental financing (small/micro grants)</li> <li>- Environmental protection policies (UN's Conventions on biodiversity conservation, land degradation, climate change, and the Millennium Assessment)</li> <li>- Development aid</li> <li>- Ecosystem Services Framework</li> <li>- Valuation of ecosystem goods and services</li> </ul>	<ul style="list-style-type: none"> <li>- Emphasis of grant approvals on community-expressed and problem-driven projects proposals pointed to the root causes for place-specific environmental resources degradation and devising sustainable solutions based on local livelihood needs.</li> <li>- The inherent dependence of rural livelihoods primarily on natural resources formed the basis to the type of project activities needed to build resilient communities capable of coping with biodiversity loss, land degradation, and climate</li> </ul>	<p><b>Strength:</b></p> <ul style="list-style-type: none"> <li>- The use of country-based approaches and feasibility assessment of proposed projects offered great prospects for the adaptability, replication and scaling-up of successful projects.</li> <li>- Direct channelling of the grant to CBOs and NGOs motivated communities' full participation, efficient utilization of project funds, and enhanced present and future commitment in development activities.</li> <li>- Proof of women's and socially marginalized communities' participation as mandatory project entry criteria promotes gender equality and reduced vulnerabilities in socio-economic status.</li> </ul>

Objectives	Data Collection Procedures	Relevant Theoretical Concepts	Major Findings	SWOT Analysis
		<ul style="list-style-type: none"> <li>- Resilience and self-development</li> <li>- Agricultural productivity</li> <li>- Community empowerment and capacity building</li> <li>- Resource ownership and access rights</li> <li>- Equity building (natural assets, economic and social)</li> <li>- Ecosystem-based enterprises (income generation/alternative livelihoods)</li> <li>- Knowledge building and networking</li> <li>- Stakeholders partnership and co-management of natural resources</li> <li>- Governance and institutional networks.</li> </ul>	<p>changes.</p> <ul style="list-style-type: none"> <li>- Concern for environmental health was the indisputable prerequisite for attaining economic growth and social well-being.</li> </ul>	<p><b>Weaknesses:</b></p> <ul style="list-style-type: none"> <li>- The grant eligibility criteria that require project implementation experience in environmental resources management, for at least two years, may limit newly formed NGOs' chances of demonstrating potential success.</li> <li>- Emphasis on financing primarily GEF's focal areas may overlook livelihood improvement project entry points, which may later bring considerable environmental protection results. It may cause a win-lose outcome which may create difficulty of balancing conservation and development priorities.</li> <li>- The grant approval criteria to project approvals cannot exhaustively point out continually emerging complex and unpredictable trends of environmental degradation, livelihood challenges, and poverty.</li> </ul> <p><b>Opportunities:</b></p> <ul style="list-style-type: none"> <li>- The technical supports by the steering committee to project proponents in the areas of project proposal preparation offers opportunities for the formation of more CBOs capable of implanting feasible and well-performing projects on the ground.</li> <li>- Proof of past collaboration with other local or international development partners as grant eligibility criteria provides opportunities for future sustainability of completed project as</li> </ul>

Objectives	Data Collection Procedures	Relevant Theoretical Concepts	Major Findings	SWOT Analysis
				<p>well as encourages joint efforts towards environmental protection and poverty alleviation.</p> <p><b>Threats:</b></p> <ul style="list-style-type: none"> <li>- SGP's being understaffed may pose challenge in thoroughly scrutinizing country-wide crucial environmental financing needs while keeping pace with ever-changing and complex issues in the ecological, economic, and social fronts.</li> </ul>
<p><b>Objective two:</b></p> <p>To explore the contributions of stakeholders and other relevant conditions to enable target beneficiaries to undertake and benefit from resource-based income-generating activities</p>	<p><b>Semi-structured Interviews</b> with 35 grant beneficiary community members from three completed projects.</p> <p><b>Focus Group Discussions</b> with twelve user group members to discuss in detail significant concerns that emerged during one-to-one interview sessions.</p> <p><b>Informal discussions</b> with the NGOs, CBOs and DDEPA focal representatives.</p>		<ul style="list-style-type: none"> <li>- Awareness-raising education, training and practical display of the complex and interlinked features of the ecosystems goods and services, offered by resource management experts, formed the knowledge base to generate sustainable livelihood benefits/increased agricultural productivity. It also introduced beneficiaries to the concepts of conservation and restoration of the diverse aspects of environmental resources.</li> <li>- Practical demonstration of transparency and accountability were seen among the user groups in the CBOs and local</li> </ul>	<p><b>Strength:</b></p> <ul style="list-style-type: none"> <li>- The range of project activities was the means for creating diversified livelihood activities and income generations unique to local conditions.</li> <li>- The national Government provided the crucial ground within which the SGP was launched in Ethiopia. Collaborative working relationship exists between the local government counterparts and the grantee NGOs. Furthermore, the local government's collaboration (e.g., organizing CBOs in Dire Dawa) facilitated the communities' access to local markets to sell project outputs.</li> <li>- The types of the project activities were easily harmonized with the day-to-day farming routines of the beneficiary communities and were complementary practical experiences to</li> </ul>

Objectives	Data Collection Procedures	Relevant Theoretical Concepts	Major Findings	SWOT Analysis
			<p>NGOs in matters pertaining to the management and progresses of activities.</p> <ul style="list-style-type: none"> <li>- Small economic incentives served as invigorating tools to motivate participation in the resource conservation undertakings.</li> <li>- Incomes generated produced extended benefits to improving housing conditions, children's education, health, nutritional status, and natural assets (livestock, farmlands).</li> </ul>	<p>enhance regular livelihood activities.</p> <p><b>Weakness:</b></p> <ul style="list-style-type: none"> <li>- The smallness of the grant necessarily requires co-financing of project activities by other stakeholders and development actors. The lack of such funding may limit the level of conservation activities and related income generation opportunities. Having development partners may not guarantee co-financing possibilities as the support could be non-monetary.</li> </ul> <p><b>Opportunities:</b></p> <ul style="list-style-type: none"> <li>- User groups' formation and participation in project implementation process is a stepping stone towards self-organization, self-development and strong social interactions among local communities.</li> <li>- The Government as a stakeholder could play a great role in facilitating regulatory requirements in wealth generation endeavours in large-scale agricultural production or ecosystem-based enterprises so that local community members are fully involved in equitable benefits sharing.</li> </ul> <p><b>Threats:</b></p> <ul style="list-style-type: none"> <li>- Erratic rainfall patterns, the impacts of climate change, and limited capacity to access natural assets (land, water resources, farm equipments such as water pumps) reduce the level of income-generating opportunities from the seedlings production, forage production, and</li> </ul>



Objectives	Data Collection Procedures	Relevant Theoretical Concepts	Major Findings	SWOT Analysis
				<p>apiculture.</p> <ul style="list-style-type: none"> <li>- The unstable inflation rate in the country and global price fluctuation of food and other commodities undervalues the future value of the grants in local currencies and eventually affects desired results in conservation and livelihood improvement (if the grant remains \$50,000 per project all the time)</li> <li>- Prolonged income generation and benefit realization opportunities were present due to delays in approving legal operating licenses and entitlement/ recognition to user-group members (eco-tourism, watershed management association). This encourages communities to get involved in unsustainable livelihood activities that further deteriorate the environment (e.g., stone excavation).</li> </ul>
<p><b>Objective three:</b> To evaluate the long-term implications of small grants on sustainable livelihoods, environmental policy, and poverty reduction</p>	<p><b>Focus Group Discussions</b> with 6 SGP National Steering Committee (NSC) and Technical Review Team (TRT) members</p> <p><b>Direct Observation</b> and <b>Secondary Data Sources</b> to compare implementation of proposed project and program goals with actual short-term results on the ground and future prospects</p>		<ul style="list-style-type: none"> <li>- Introducing a decentralized small-scale support to implement a two-year project-based resource management intervention was a fundamental achievement that brings long-lasting attitudinal changes to the low-income project beneficiaries.</li> <li>- The amount of financial expenditures and technical inputs utilized at a smaller-scale</li> </ul>	<p><b>Strength</b></p> <ul style="list-style-type: none"> <li>- SGP was the first of its kind to channel financial support directly to target beneficiary communities and bring tangible impacts on environmental, economic, and social dimensions.</li> <li>- Working with the national steering committee provides the platform to easily communicate policy recommendations to government and civil society counterparts serving in the steering committee.</li> </ul> <p><b>Weakness</b></p>

Objectives	Data Collection Procedures	Relevant Theoretical Concepts	Major Findings	SWOT Analysis
			<p>were indicators for the rising prospects of high cost and negative repercussions associated with biodiversity loss, land degradation, climate changes, poverty, and food insecurity. This necessitates giving due heed to the protection and wise use of ecosystem goods and services.</p> <p>The provision of small grants financial support cannot alone impact sustainable livelihoods, environmental policies and poverty reduction efforts. The absence of good governance, the lack of recognition to differences in political outlooks held by target beneficiaries, continuous dependence on food aids, capacity constraints to access natural resources, and the lack of education and awareness raising in resource management may evidently hamper the desired results.</p>	<p>SGP's short project duration (two years) may not be long enough to see beneficiaries attain considerable livelihood improvements due to lengthy local processes of issuing legal power/operating permit for emerging small-business enterprises/cooperatives.</p> <p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>The modalities used in the utilization of small grants and the demonstrated successes in project accomplishments could be adapted to implement projects/programs of large-size funding for biodiversity conservation, climate change adaptation/mitigation, sustainable land use and management, and poverty alleviation.</li> <li>Skills obtained in compost preparation have reduced the level of external inputs/synthetic fertilizers, and household and farm organic waste. The knowledge base could support future expansion of organic food production.</li> </ul> <p><b>Threats</b></p> <ul style="list-style-type: none"> <li>The long hierarchy of the Government's administrative structure and related rules may pose challenges in bringing the desired results in the short or long run if SGP's grant provision modality is emulated to government-sponsored environmental protection and poverty alleviation projects.</li> </ul>

## 6.2 Conclusions

Overall, based on the evaluations made on the performance of SGP's funding, it can be concluded that SGP's support delivery was a successful endeavour that could bring tangible results. Although the grant was small in size, the program undertakings were exemplary and suitable demonstrations of potentially replicable and scalable impacts community-targeted small size financial and technical supports could bring on environmentally degraded and poverty-stricken regions of the country.

The specific concluding remarks in this research are summed up into five major points. First, the UNDP—GEF SGP's grant eligibility criteria were indeed fundamental tools for the project selection process, but the existing and potentially emerging complex socio-economic trends call for the NSC's and TRT's extra effort to meticulously address the fragile livelihood and environmental states of the project areas. Secondly, sustainable livelihoods are achievable when project entry points follow market-oriented approaches that provide communities with realistic opportunities to self-develop and advance their local economy and conservation efforts. Third, effective collaboration towards project development goals require stakeholders' unwavering responsiveness to pressing empowerment, livelihood development, and resource management needs of the project beneficiary communities. Fourth, due heed must be given not only to the level of environmental and livelihood changes being observed or aspired in the short- and long-run but also to the project implementation strategies and the attitudinal transformations observed in the target communities; subsequently all these changes can form the basis to share project lessons and replicate or scale-up similar interventions. Last but not least, SGP's intervention can positively influence the existing environmental protection and poverty reduction policies only when there are favourable economic development approaches and environmental policy statements for which the policy makers primarily demonstrate impartial, consistent, and practical commitment.

Detailed elaborations for the concluding remarks are identified below:

### *6.2.1 The Links between Grant Approval Criteria and Local Environments and Livelihoods*

The research identified that the experts' knowledge employed by the NSC and TRT were invaluable inputs in vigilantly pointing out if project proponents were capable of identifying

the root cause for environmental resource degradation that leads to deteriorating livelihoods and poverty—a major issue that needed to be addressed. It also has been discovered that the grant approval conditions focus on establishing grounds for community-initiated and problem-driven projects proposals, which integrate developmental needs that match local contexts. Hence, SGP-supported environmental conservation and restoration project activities were indeed inclusive of livelihood conditions, thus priority concern for environmental health was the indisputable prerequisite for attaining local economic growth and social well-being.

It seemed evident that poverty was not necessarily ascribed to food insecurity and the insufficiency of financial income only. Most critically, the lack of alternatives to livelihood means, the absence of good governance, conflict of interests in political outlooks, continuous dependence on external aids, capacity constraints to access natural resources (especially land and water), and the lack of education markedly comprised what the community perceived and experienced as poverty. Apparently, the level of deteriorating livelihoods and environmental degradation that are actually prevailing on the ground are more severe than what the project proponents stated on paper. Therefore, the research concludes that the grant eligibility criteria, though a profoundly integral component of SGP's support interventions, was not the only sufficient condition that can exhaustively point out the myriad of continually emerging complex socio-economic trends of environmental degradation, livelihood challenges, and poverty. These may necessitate the NSCs and TRTs to put extra efforts and make unconventional assessments in the overall project evaluation and selection process.

### *6.2.2 Economic Sustainability*

A one-sided emphasis on global environmental benefits will encourage a win-lose outcome between conservation and economic development especially when livelihood activities are not directly fundable through grant supports. Given the prevailing resource degradation and poverty inherent in all the project sites, it has been revealed that the entry point to a sustainable resource use and management strategy was the need to give a balanced weight on conservation and restoration efforts that bring immediate impacts on households' income and food security. Yet, resource-based income-generating activities are not the end but the means to support livelihoods enhancement and poverty alleviation. The small economic incentives provided through SGP's support and the subsequent generation of income and other non-

monetary benefits had motivated the communities to develop a sense of responsibility to conserve the resources, without which subsistence consumptions and livelihoods cannot be sustained.

The research findings also revealed that project beneficiaries had the inclination to produce and sell cash crops provided that enabling environments such as natural assets, financial and technical capacity are present. It can be concluded that such business-mindedness of local communities is a more likely potential that could be transformed and scaled-up into the formation of community-driven ecosystem-based micro-enterprises. At the heart of ecosystem-based micro-enterprises lies the emphasis to market-oriented approaches to resource use and management in order to help grassroots communities generate sustainable socio-economies benefits. The grant beneficiaries' perceptiveness to the inextricable link between the natural resources and the generation of resource-based income encourages in the long-run development of local financing mechanisms to protect the health of the local ecosystems. As Gutman (2003) contends, keeping the rural development focus on integrating rural poverty alleviation and natural resource conservation will surely require SNRM practitioners to design resource management projects that balance short-term sustainable livelihood needs with long-term sustainability of natural resources. Barreiro *et al.* (2009) also optimistically argued that long-term solutions to vulnerability could materialize when the international development community strongly recognizes that localized and market-based approaches to poverty alleviation and sustainable development can work in harmony to achieve high leverage for the aid money invested. Even though SGP's support was limited to two years of project duration, the intervention has developed ripple effects when observing the communities' keenness for self-development—a foreseeable community-driven sustainable livelihood approach to tackle the impacts of environmental resource degradation, poverty and food insecurity.

### *6.2.3 Stakeholders Collaboration to Local Capacity Building and Development Goals*

The research has identified that mostly NGOs, rather than CBOs, applied for SGP's grant. This is true because most local communities lack a well-established capacity to self-organize and implement projects. Taking these limitations into account, the NSC and TRT have been flexible to the CBOs in the project evaluation and selection processes. In the place of CBOs

that could have directly applied for the grants, the two local NGOs (i.e., ASDA and RLDO) and the EPA office in the Provisional Administration of Dire Dawa have played significant roles in identifying environmentally vulnerable and socio-economically disadvantaged local people and further organizing them into the category of user groups identified in Chapter 4. In addition, one of the notable stakeholders' collaboration the research discovered was the financial support offered by the federal EPA in co-financing SGP project components. This was indeed a dynamic aspect of the Government's partnership in reinforcing the sustainable operation of the SGP in Ethiopia.

The resource management educations, focus on women's empowerment and participation, and capacity-building training offered especially by the local NGOs has certainly initiated the communities' commitment to preserve what has been accomplished throughout the project period. These supports are local drivers of significant relevance to form local institution based on which low-income producers can self-organize and develop fragile ecosystems, economies, and social statuses. Nonetheless, according to the research respondents, the lack of accountability and transparency from some Government officials at the lower level of the administrative hierarchy has created apprehensions about the future direction of the current endeavours. Development processes leading to improved productivity and income are not limited to resource availability or supply of outside capital but have more to do with the way in which communities organize themselves, how they initiate motivation, how they develop or sanction the breach of agreed rules, and how they exercise accountability among themselves and their stakeholders (Brüntrup & Peltzer, 2007). The research concludes that the strict control exerted by the central Government in policy-driven allocation and control of local natural resources, and the inherent bureaucratic delays created by the regional authorities in facilitating project development goals, leave project beneficiary communities powerless to hold their development partners accountable. Such a predicament protracts poverty reduction efforts, self-developments and livelihood benefits that would have materialized in the short-run. In effect, realistic and steadfast stakeholders' collaboration is central to empower vulnerable local community groups.

#### *6.2.4 Scaling-up and Replicating Project Lessons and Results*

It was discussed in Chapter 5 that SGP's small scale support was remarkably adaptable into a local context by the economically disadvantaged communities in the three environmentally degraded project sites. Notwithstanding the size of the grant and short project duration, the lessons (i.e., both challenges and successes) from SGP's intervention at the grassroots level present an adaptive learning platform to carry out larger-scale financial support mechanisms. The kind of strategies employed and resources mobilized at a smaller scale aid in designing a conceptual framework to scale-up and replicate more widely similar initiatives at local or regional levels and bring tangible and measurable results. A forward-looking process to sharing project lessons must begin with a due regard to the progressive improvements in the physical environments and the level of behavioural changes project beneficiaries sustain as a result of participatory involvements in project-initiated natural resource management and sustainable livelihood practices.

#### *6.2.5 Policy Implications on Sustainable Livelihoods and Poverty Reduction*

One of the conditions required to successfully implement grant-based projects like the SGP are the presence of practical policy instruments (and of reforms whenever necessary) that recognize the environmental, economic, and social needs of marginalized and drought-prone grassroots communities. Likewise, the country's policy perspectives in environmental protection and poverty reduction stressed on empowering low-income producers with improved livelihoods, decision-making power, personal security as well as uninterrupted access to resources, environmental sustainability, food security, and economic development without degrading and polluting their ecosystem (EPA, 1997; MoFED, 2006). While these action plans seem credible, progress in practical implementation has been considerably low.

Unfortunately, the research participants have noted that the absence of secured land holding rights is one of the barriers to food security. The majority of Ethiopian rural poor, who also happen to reside within the geographic focus of GEF SGP, are still not entitled to sufficient personal security (mainly land) to support their subsistence agriculture. In this regard, the current economic approach, which is being pursued through ADLI's promotion of large-scale foreign investment, cannot be a one-size-fits-all for policy making as it lacks practical responsiveness to most of the local circumstances. Access rights to natural resources

are being taken away from the local poor, thus the emergence of social externalities like deprivation of self-development rights, worsening food insecurity, and increasing prevalence in the vicious cycle of poverty. Hence, the research concludes that the apparent inconsistencies between ambitious policy statements and the actual implementation on the ground render a bottle-neck to bring real changes in environmental protection, livelihood improvement, and poverty reduction efforts as well as to the beneficial policy impact SGP's intervention can produce in the long-run. One must note that a more resilient economic growth pattern, advancement in sustainable livelihoods, human development, and effective management of natural resources requires dynamic balance between policies and actions (DFID, 1997). Although SGP's decentralized financial support mechanism is an exemplary sustainable approach, its practical implementation to government-sponsored environmental projects does not seem viable without locally adaptable policy instruments, favourable economic development approaches and policy reforms when deemed essential.

### **6.3 Recommendations**

The following recommendations stem from the research findings and subsequent conclusions made in the preceding sections and chapters:

- Significant resource constraints have been exacerbated by longer dry and shorter rainy seasons as well as the scarcity of land in most of the project sites, hence threatening conservation efforts and agricultural productivity. Indeed, SGP's small financial support cannot cover all conservation costs. Therefore, the Government can make a great contribution if priority to local level development is given—allow local people to tap unused arable lands and water resources so that the degraded natural environments can be restored and protected, more food is produced by locals, livelihoods are diversified and, ultimately, vulnerable communities can lift themselves out from the bondage of poverty. Establishing equitable distribution and legal access rights regimes over natural resources can offer opportunities for the less disadvantaged rural people to lessen present and future pressure on ecosystems goods and services. Grant recipients who initially have been actively involved in the restoration and conservation could benefit while making conditions that others (prospective project proponent communities) may follow through on conditions



of equal contribution towards a common goal of sustainable development. In addition, the Government must show strong commitment to the practical implementation of the well-articulated policies in environmental protection and poverty reduction.

- The poor people in rural Ethiopia did not willingly sign up for disparity and as such they should not be expected to tolerate the weight of environmental resource degradation, poverty, and unproductiveness through recurring productive social safety-net programs. In the effort to alleviate poverty, wealth creation through large-scale agribusiness expansion does not necessarily guarantee economic growth without first protecting natural resources and ensuring equitable allocation of resources to the most needy, marginalized, and poverty-stricken groups of society. Commitment of natural resources towards large-scale and capital intensive agri-business ventures potentially result in rapid degradation of ecosystem services especially when extremely water-intensive crops (i.e., rice and sugarcane) are the commercial crops of production interest. In this regard, GEF's future grant supports may consider attaching stringent requirements that SGP's commitment to support rural communities is conditional on the grounds that deterioration of ecosystem services, confiscation of arable lands, and eviction or relocation of local people (such as in the case of the land grab) are not likely to be the potential threats that an economic growth process creates. While local people are being supported with such small financial aids to protect the environment, continuous empowerment with the necessary access rights to resources, basic education, and capacity-building training are all essential in offering realistic opportunities to self-develop and control their own future.
- There is a need for awareness-raising programs to give considerable attention to minimizing farmers' spending on expensive fertilizers that drains their household income, pollutes water resources, and destroys the natural components of soil. Emphasis must be given to enhance the capacity of innovative farmers and demonstration sites where the use of natural fertilizers (i.e., composting) and organic farming can be carried out as major components of project intervention. Such initiatives offer greater opportunity to maintain the health of the local ecosystem and generate incomes in a more sustainable way.

- The need for appropriate incentives to local officials working with the SGP must not be an option but a requirement to allow efficient execution of task responsibilities. In addition to partaking in co-financing SGP's interventions, the Government should make every effort to capacitate the local officials with the necessary skill sets and commensurate compensations to retain skilled-labour at the local levels. The practical implementations of such an arrangement will allow the regional, *Woreda* and *Kebele* officials to assume a sense of accountability in facilitating the political and socio-economic role they are institutionalized to play. The arrangements, if implemented, may further strengthen the communities' partnership with their local government counterparts; hence, bureaucratic delays in the attainment of environmental and livelihood benefits at local levels could ultimately be halted.
- Given the size of the grant, short project duration, and the vastness of resource degradation and poverty, SGP must work towards integrating its operation with bilateral and multilateral donors and also the civil sector, which often have livelihood improvement programs as a major part of their development intervention (such as village-level business development and micro-finance schemes). Although SGP does not directly fund livelihood activities, it can influence alternative livelihood generation or diversification by specifying a business case approach to conservation such as valuation of, or payment to, ecosystem goods and services as an integral part of project proposals by potential project proponents.
- Success in SGP's support is also achieved with the Government being an important stakeholder. As a result, it would be an added value if SGP program implementation incorporates close working collaboration with private sector developers especially in areas of ecosystem-based income or market generation schemes where local government counterparts could facilitate fulfillment of regulatory requirements. Such a forward-looking movement may enhance program effectiveness because the partnering agencies could create an entry point to SGP intervention through financing or technically supporting part of the resource or non-resource-based livelihood activities that are not eligible under the GEF focal areas. Collaborative investment on human and natural capital produces synergetic effects to reduce rural people's continuous dependence on exploiting natural resources.

- As SGP strives to render utmost program supports, performance improvement at the programme office level is an integral part achievement that must be given paramount importance. Being a two-person office, SGP Ethiopia office must secure a regular professional and technical back-up. This would allow the program to meet crucial environmental financing needs while keeping pace with ever-changing, challenging, and complex issues in the ecological, economic, and social fronts. The success of this grant program is not only the provision of the support and the subsequent completion of the projects. Most importantly, having a set of regular program monitoring and evaluation criteria is essential to inspect how grant beneficiary communities and their natural environment are performing after the end of the support and how capable communities are in maintaining the achievements and project outputs in a more sustainable manner.

#### **6.4 Future Research Options**

With the long-standing reputation the UNDP has in Ethiopia in humanitarian assistance, a holistic economic analysis of the SGP benefits could be done where a sustainable livelihood approach and the level of improvements in agricultural productivity at the grassroots level could be a topic of interest. In this regard, the current land leasing economic growth approach in the country could be a case in point where the UNDP may do analysis of what the economic benefits would be if the SGP programme is brought to scale, what impact the scaled-up programs would have on environmental, economic, and social well-being and then compare the result to the conditions of local communities impacted by the land grab scenario. Impact evaluations could be made between local/grassroots communities' land tenure entitlement as opposed to the land lease deals, which entitles potential agribusiness firms certainty of land tenures for a maximum of 99 years. Given arable land and water resources are two of the major building blocks of agricultural economic activity, the land tenure system of the country could be evaluated in terms of its provisions to practically accommodate the allocation of these resources to the most needy rural people and the potential impacts on poverty reaction and food security. Apparently, the lack of land and ownership entitlement undermines rural people's ability to lessen the weights of poverty—as certainty of land tenure is the basis for wealth creation in any agricultural production system.

## References

- ADB-ADF (African Development Bank-African Development Fund). (2006). *Ethiopia 2006-2009 Country Strategy Paper*. Addis Ababa, Ethiopia.
- Amnesty International. (2009). Ethiopian parliament adopts repressive new NGO law. Accessed online August 10, 2011 at <http://www.amnesty.org/en/news-and-updates/news/ethiopian-parliament-adopts-repressive-new-ngo-law-20090108>.
- Anielski, M. & Wilson, S. (2009). *Counting Canada's natural capital: assessing the real value of Canada's boreal ecosystems*. The Pembina Institute. Drayton Valley, Alberta.
- Association for Sustainable Development Alternative (ASDA). (2008). *A Proposal on Social Mobilization for Reducing Land Degradation and Enhancing Biodiversity*. Addis Ababa.
- Babbie, E. (1992). *The Practice of Social Research*. Belmont, California: Wadsworth Publishing Company.
- Barbier, E.B. (2009). *A global green new deal*. Department of Economics & Finance, University of Wyoming, Laramie.
- Barreiro, V., Hussels, M. & Richards, B. (2009). *On the frontiers of finance. Scaling up investment in sustainable small and medium enterprises in developing countries*. World Resources Institute (WRI), Washington, DC.
- Belshaw, D. & Coyle, E. (2001). *Poverty reduction in Ethiopia and the role of NGOs: qualitative studies of selected projects*. Addis Ababa, Ethiopia.
- Berkes, F. (2009). Revising the Commons Paradigm. *Journal of Natural Resources Policy Research* 1:261–264.
- Berkes, F. & Davidson-Hunt, I. (2007). Communities and Social Enterprises in the Age of Globalization. *Journal of Enterprising Communities* 1:209–221.

- Brown, L. R. (2009). Plan B 4.0: *Mobilizing to Save Civilization (Sustainability Revised): A blueprint for combating climate change*. Washington, DC: Earth Policy Institute.
- Brüntrup, M. & Peltzer, R. (2007). *Outgrowers – a key to the development of rural areas in Sub-Saharan Africa and to poverty reduction*. Workshop report of the German Development Institute (GDI), August 18, 2006, Bonn, Germany.
- Burrows, D. & Kendall, S. (1997). Focus Groups: What are they and how can they be used in Nursing and Health Care Research? *Social Sciences in Health* 3:244–253.
- Carpentera, S.R., Mooney, H.A., Agard, J., Capistrano, D., DeFries, R.S., Díaz, S., Dietz, T., Duraiappah, A.K., Oteng-Yeboah, A., Pereira, H.M., Perrings, C., Reid, W.V., Sarukhan, J., Scholes, R.J., & Whyte, A. (2009). Science for managing ecosystem services: Beyond the Millennium Ecosystem Assessment. *Proceedings of the National Academy of Science* 106:1305-1312.
- CBD (Convention on Biological Diversity). (1992). History of the convention. Accessed online March 12, 2010 at <http://www.cbd.int/history/>.
- Chalmers, A. F. (1982). *What is this Thing called Science? : An assessment of the nature and status of science and its methods* (2nd ed.). Queensland, Australia: University of Queensland.
- Chambers, R. & Conway, G. (1992). *Sustainable Rural Livelihoods: Practical Concepts for the 21<sup>st</sup> century*. IDS Discussion Paper 296. Brighton: IDS.
- Chandler, David. (2007). The security—development nexus and the rise of ‘anti-foreign policy’. *Journal of International Relations and Development* 10:362-386.
- CIA (Central Intelligence Agency). (2009). The World Factbook. Accessed online November 18, 2009 at <https://www.cia.gov/library/publications/the-world-factbook/geos/et.html>.

- CIDA (Canadian International Development Agency). (2003). *Promoting Sustainable Rural Development through Agriculture: Canada Making a Difference in the World*. Minister of Public Works and Government Services Canada.
- Coehn L., Manion, L. & Morrison, K. (2005). *Research methods in education* (5<sup>th</sup> ed.). London: Routledge Falmer.
- Cordaid. (2010). *Reducing Disaster in Dire Dawa, Ethiopia: Community Managed Disaster Risk Reduction (CMDRR) in a river basin community*. Dire Dawa, Ethiopia.
- Cotula, L., Vermeulen, S., Leonard, R. & Keeley, J. (2009). *Land grab or development opportunity? Agricultural investment and international land deals in Africa*. Food and Agriculture Organization of the United Nations (FAO), Rome and International Institute for Environment and Development (IIED), London.
- CPS (Country Program Strategy Ethiopia) 2006–2009. (2006). *Small Grants Programme*. Addis Ababa, Ethiopia.
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approach* (3<sup>rd</sup> ed.). California: Sage Publications, Inc.
- CSA (Central Statistical Agency of Ethiopia). (2008). *Summary and statistical report of the 2007 population and housing census, Federal Democratic Republic of Ethiopia (FDRE) Population Census Commission*. Addis Ababa, Ethiopia.
- CSA (Central Statistical Agency of Ethiopia). (2010). *Report on area and production of Belg season crops for private peasant holdings*. Volume 5. Agricultural Sample Survey 2009/10 (2002 E.C). Addis Ababa, Ethiopia.
- CSO (Charities and Societies Proclamation). (2009). The Government of the Federal Democratic Republic of Ethiopia (FDRE), Addis Ababa, Ethiopia.
- De Coninck, S. (2009). *Mainstreaming poverty-environment linkages into development planning: A handbook for practitioners*. UNDP-UNEP Poverty-Environment Facility.

- Dejene, A. & Zeleke, G. (2004). *Towards sustainable agriculture and rural development in the Ethiopian highlands*. Food and Agriculture Organization of the United Nations (FAO). Accessed online February 18, 2010 at <http://www.fao.org/docrep/006/y5359e/y5359e00.htm>.
- Deshpande, R.S. (2002). Suicide by farmers in Karnataka: Agrarian distress and possible alleviatory steps. *Economic and Political Weekly* 37: 2601–2610.
- DFID (Department for International Development). (1997). *Eliminating world poverty: a challenge for the 21<sup>st</sup> Century*. White paper on international development. London, United Kingdom.
- DFID (Department for International Development). (1999). *Sustainable livelihoods guidance sheets*. Accessed online May 14, 2010 at <http://www.nssd.net/pdf/sectiont.pdf>.
- DFID (Department for International Development) in collaboration with Steve Wiggins of the Overseas Development Institute. (2004). *Agriculture, Hunger and Food Security*. London, United Kingdom.
- Dire Dawa Provisional Administration Environmental Protection Authority (DDEPA). (2007a). *A proposal on community-based sustainable environmental management plan for Areda community*. Dire Dawa, Ethiopia.
- Dire Dawa Provisional Administration Environmental Protection Authority (DDEPA). (2007b). *A proposal on community-based sustainable environmental management plan for Harorety Community*. Dire Dawa, Ethiopia.
- Dire Dawa Provisional Administration Environmental Protection Authority (DDEPA). (2007c). *A proposal on community-based sustainable environmental management plan for Shenany Community*. Dire Dawa, Ethiopia.
- Eblen, R.A. & Eblen, W. (1994). *The Encyclopaedia of the environment*. Boston: Houghton Mifflin Company.
- Emerton, L. (2000). *Community-based incentives for nature conservation*. International Union for Conservation of Nature (IUCN). Eastern Africa regional office and economics unit.

- EPA (Environmental Protection Authority). (2007). National Action Programme to Combat Desertification (NAPCD): *The state of the environment in arid, semi-arid and dry sub-humid areas*. Vol. I. The Federal Democratic Republic of Ethiopia (FDRE), Addis Ababa, Ethiopia.
- EPA (Environmental Protection Authority) in collaboration with Ministry of Economic Development and Cooperation (MoFED). (1997). *Environmental policy*. Addis Ababa, Ethiopia.
- FAO (Food and Agricultural Organization of the United Nations). (1989). *Sustainable development and natural resources management*. The 25<sup>th</sup> conference, paper C 89/2 - Supplement 2, Rome, Italy.
- FAO (Food and Agricultural Organization of the United Nations). (1996). Accessed online February 18, 2010 at [ftp://ftp.fao.org/es/ESA/policybriefs/pb\\_02.pdf](ftp://ftp.fao.org/es/ESA/policybriefs/pb_02.pdf).
- FSCB (Food Security Coordination Bureau). (2003). The new coalition for food security in Ethiopia, Vol. I. *Food security program of the Federal Democratic Republic of Ethiopia (FSPFDRE)*, Addis Ababa, Ethiopia.
- GEF SGP (Global Environmental Facility Small Grants Programme). (2003). *Responding to climate change, generating community benefits. A review of community initiatives supported by the Global Environment Facility's Small Grants Programme 1992-2003*, New York, USA.
- GEF SGP (Global Environmental Facility Small Grants Programme). (2006). *How does SGP work?* New York. Accessed online October 17, 2009 at <http://sgp.undp.org/index.cfm?module=ActiveWeb&page=WebPage&s>AboutSGP>.
- Gill, G., Farrington, J., Anderson, E., Luttrell, C., Conway, T., Saxena, N.C. & Salter, R. (2003). *Food security and the millennium development goal on hunger in Asia*. London: Overseas Development Institute.
- Gregorio, S. (2000). *Using NVIVO for your literature review*. London and Boston: SdG Associates.



- Grumbine, E. R. (1994). What is ecosystem management? *Conservation Biology* 8:27–38.
- Guba, E. G. (1990). *The Paradigm dialog*. Newbury Park, California: Sage Publications, Inc.
- Guba, E.G. & Lincoln, Y.S. (1994). *Competing paradigms in qualitative research. Handbook of qualitative research*. Thousand Oaks, California: Sage Publications, Inc.
- Guba, E.G. & Lincoln, Y.S. (2000). Paradigmatic controversies, contradictions, and emerging confluences. In Denzin, N.K. and Lincoln, Y.S. (Eds.), *Handbook of qualitative research* (2<sup>nd</sup> ed). Thousand Oaks, CA: Sage Publications, Inc.
- Gutman, P. (2003). *From Goodwill to payments for environmental services: A Survey of financing options for sustainable natural resource management in developing countries*. Macroeconomics for sustainable development program, World Wildlife Fund (WWF).
- Harrell, M. & Bradley, M. (2009). *Data collection methods: Semi-structured interviews and focus groups*. Santa Monica, California: RAND Corporation.
- Hay, I. (2005). *Qualitative research methods in human geography* (2<sup>nd</sup> ed.). Oxford University Press.
- Heron, J. & Reason, P. (1997). A participatory inquiry paradigm. *Qualitative inquiry* 3:274–294.
- Hirbe, T. (2010). *Ethiopian major problems and possible remedies*. Accessed online March 8, 2011 at <http://www.ethiomed.com/absolute/3578.html>.
- Horton, J., Macve, R. & Struyven, G. (2004). Qualitative Research: Experience in using semi-structured Interviews. In Humphrey, Christopher and Lee, Bill H. K., (eds.). *The Real Life guide to accounting research: a behind-the-scenes view of using qualitative research methods* Amsterdam, The Netherlands: Elsevier Science, pp.339–358
- HRW (Human Rights Watch). (2010). *Development without freedom: How aid underwrites repression in Ethiopia*. New York, USA.

- IBC (Institute of Biodiversity Conservation). (2005). *National biodiversity strategy and action plan*. The government of the Federal Democratic Republic of Ethiopia (FDRE). Addis Ababa, Ethiopia.
- ICG (International Crisis Group). (2009). *Ethiopia: Ethnic federalism and its discontents*. Africa Report 153.
- IISD (International Institute for Sustainable Development). (1999). *Community Adaptation and Sustainable Livelihoods (CASL): Empowering communities for sustainable livelihoods*. Accessed online March 14, 2010 at <http://www.iisd.org/casl/>.
- Jemma, H. (2004). *The Politics of land tenure in Ethiopian history: Experience from the South*. Accessed online January 19, 2010 at <http://www.irsa-world.org/prior/XI/papers/4-6.pdf>.
- Kemmis, S. & Wilkinson, M. (1998). Participatory action research and the study of practice. In Atweh, B., Kemmis, S. and Weeks, P. (eds.). *Action research in practice: Partnerships for Social Justice in Education*. New York: Routledge.
- Kok, M.T.J., Tyler, S.R., Prins, A.G., Pintér, L., Baumüller, H., Bernstein, J., Tsioumani, E., Venema, H.D. & Grosshans, R. (2010). *Prospects for mainstreaming ecosystem goods and services in international policies*. Netherlands Environmental Assessment Agency (PBL) and International Institute for Sustainable Development (IISD). Netherlands, The Hague.
- Kothari, C. (2004). *Research methodology: Methods and techniques* (2<sup>nd</sup> ed.). New Age International Limited.
- Kumar, P. (2005). *Market for ecosystem services*. International Institute for Sustainable Development (IISD). Winnipeg, Canada.
- Laforest, J. (2009). *Guide to organizing semi-structured interviews with key informant: safety diagnosis tool kit for local communities*, Vol. II., Institut national de santé publique du Québec. Gouvernement du Québec.

- Lawrence, C. (2000). *Equitable development? Good governance, women and microenterprise initiatives in the Cook Islands*. A master of philosophy thesis, Massey University, New Zealand.
- Lee, D & Neves, B. (2009). *Rural poverty and natural resources: Improving access and sustainable management*. Food and Agriculture Organization of the United Nations (FAO), Rome, Italy.
- Lindsay, J. (1998). *Creating a legal framework for community-based management: principles and dilemmas*. International workshop on community-based natural resource management, The World Bank. Washington, DC. Accessed online March 15, 2010 at [www.fao.org/docrep/x3030E/x3030e09.htm#TopOfPage](http://www.fao.org/docrep/x3030E/x3030e09.htm#TopOfPage).
- Marshall, M. (1996). Sampling for qualitative research. *Journal of Family Practice* 13:522-525.
- Mathie A. & Camozz, A. (2005). *Qualitative Research for tobacco control: A how-to introductory manual for researchers and development practitioners*. Accessed online March 2, 2010 at [http://www.idrc.ca/en/ev-106468-201-1-DO\\_TOPIC.html](http://www.idrc.ca/en/ev-106468-201-1-DO_TOPIC.html).
- MA (Millennium Ecosystem Assessment). (2005). *Ecosystems and human well-being; a framework for assessment*. Island Press, Washington, DC.
- MoFED (Ministry of Finance and Economic Development). (2002). *Ethiopia: Sustainable Development and Poverty Reduction Program (SDPRP)*. The Government of the Federal Democratic Republic of Ethiopia (FDRE), Addis Ababa, Ethiopia.
- MoFED (Ministry of Finance and Economic Development). (2006). *A Plan for Accelerated and Sustained Development to End Poverty (PASDEP) - 2005/06-2009/10*. The Government of the Federal Democratic Republic of Ethiopia (FDRE), Addis Ababa, Ethiopia.

- MoI (Ministry of Information). (2001). *Rural development policies, strategies and instruments*. The Government of the Federal Democratic Republic of Ethiopia (FDRE), Addis Ababa, Ethiopia.
- Nelson, J.G. (1991). Research in human ecology and planning: An iterative and adaptive approach. *The Canadian Geographer* 35:114–127.
- Neuman, W.L. (2000). *Social research methods: qualitative and quantitative approaches*. Boston: Allyn & Bacon.
- Rabiee, F. (2004). Focus-group interview and data analysis. *Proceedings of the Nutrition Society* 63:655–660.
- Patton, M.Q. (2009). *Developmental Evaluation*. Accessed April 5, 2011 online at [http://www.evaluationcanada.ca/distribution/20090601\\_quinn\\_patton\\_michael\\_a.pdf](http://www.evaluationcanada.ca/distribution/20090601_quinn_patton_michael_a.pdf).
- RLDO (Resurrection and Life Development Organization). (2008). *A project proposal on the establishment of sustainable land management including land degradation and conservation of biological diversity*. Awassa, Ethiopia.
- SGP (Small Grants Programme). (2005). *Biodiversity portfolio review of the United Nations Development Programme (UNDP) Small Grants Programme (SGP)*.
- Tallis H., Kareiva, P., Marvier, M. & Chang, A. (2008). An ecosystem services framework to support both practical conservation and economic development. *Proceedings of the National Academy of Science* 105:9457–9464.
- Talule, D. & Rasal, O. (2008). *How can post reforms neglect of agriculture and farmers suicides assure rural economic sustainability in India?* IGNOU International Conference, India.
- The Royal Norwegian Embassy in Ethiopia. (2009). The new CSO-law. Statement from the EPG and DAG. Accessed online August 10, 2011 at [http://www.norway.org.et/News\\_and\\_events/press\\_releases/CSO/](http://www.norway.org.et/News_and_events/press_releases/CSO/).

- The Washington Post. (2009). *The ultimate crop rotation*. Accessed October 8, 2010 online at <http://www.washingtonpost.com/wp-dyn/content/article/2009/11/22/AR2009112201478.html>.
- Tolossa, F. (2011). *Land grab in Africa: the case of Ethiopia*. Food crisis and the global land grab. Accessed online July 15, 2011 at <http://farmlandgrab.org/post/view/18255>.
- Turner, R.K. & Daily, G.C. (2008). The Ecosystem services framework and natural capital conservation. *Environ Resource Econ* 39:25–35.
- UN (United Nations). (1994). *The United Nations Convention to Combat Desertification (UNCCD)*. Accessed online December 4, 2009 at <http://www.unccd.int/convention/text/pdf/conv-eng.pdf>.
- UN (United Nations). (1998). *Koyoto protocol to the United Nations Framework Convention on Climate Change (UNFCCC)*. New York, USA.
- UN (United Nations). (2009a). *Financial mechanism of the United Nations Framework Convention on Climate Change (UNFCCC): fourth review of the financial mechanism*. New York, USA.
- UN (United Nations). (2009b). *United Nations Framework Convention on Climate Change (UNFCCC), Report of the Conference of the Parties on its fifteenth session 7 to 19 December 2009*. Copenhagen, Denmark.
- UNCED (United Nations Conference on Environment and Development). (1992). *Convention on Biological Diversity (CBD)*. Earth Summit, Rio de Janeiro, Brazil.
- UNDP (United Nations Development Programme). (2005). *Learning from success: scaling-up community-based enterprises for biodiversity and the MDGs—A synthesis of community case studies from Latin America and the Caribbean*. New York, USA.
- UNDP (United Nations Development Programme). (2006). *Global Environment Facility—Small Grants Programme Resources Mobilization Strategy*. New York, USA.

- UNDP (United Nations Development Programme). (2010). *The local capacity strategy: enabling action for the environment and sustainable development*. New York, USA.
- USAID (United States Agency for International Development). (2005). *Biodiversity conservation: A guide for USAID Staff and Partners*. Washington, DC.
- Voora, V. & Venema, H. (2008). *The natural capital approach: A concept paper*. International Institute for Sustainable Development (IISD), Winnipeg, Canada.
- WB (The World Bank). (2004). *How much is an ecosystem worth? Assessing the economic value of conservation*. Washington, DC.
- WCED (World Commission on Environment and Development). (1987). *Our common future: From one earth to one world*. Oxford: Oxford University Press.
- Wilson, E.O. (1988). *Biodiversity*. Washington DC: National Academy Press.
- WMO & UNEP (World Meteorological Organization and the United Nations Environmental Programme). (1996). *Climate change 1995. Economic and social dimensions of climate change*. New York: Cambridge University Press.
- WRI (World Resources Institute). (2005). *The wealth of the poor—managing ecosystems to fight poverty*. WRI in collaboration with UNDP, UNEP, and World Bank. Washington, DC.
- WRI (World Resources Institute). (2008). *Roots of Resilience—growing the wealth of the poor*. WRI in collaboration with UNDP, UNEP, and World Bank. Washington, DC.
- Yamin, F. (2001). NGOs and international environmental law: A Critical evaluation of their roles and responsibilities. *Review of European Community and International Environmental Law (RECIEL)*, 10 (2): 149-162. Blackwell Publishers Ltd.
- Yin, R. (2003). *Case study research* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage Publications, Inc.

Yvonne, M. (2010). *Public participation for sustainable development in local cities*, 46<sup>th</sup>  
ISOCARP Congress, Kenya.

# APPENDIX A

## Ethics Approval Certificate



UNIVERSITY OF MANITOBA | **Ethics**  
Office of the Vice-President (Research)

CTC Building  
208 - 194 Dafoe Road  
Winnipeg, MB R3T 2N2  
Fax (204) 269-7173  
[www.umanitoba.ca/research](http://www.umanitoba.ca/research)

### APPROVAL CERTIFICATE

July 10, 2010

(Henley)

**TO:** Addisalem Benyam Bulbula  
Principal Investigator

**FROM:** Wayne Taylor, Chair  
Joint-Faculty Research Ethics Board (JFREB)

**Re:** Protocol #J2010:071  
"An Evaluation of the UNDP-GEF Small Grants Programme Funding in Ethiopia in addressing the GEF Thematic Areas, Sustainable Livelihoods and Poverty Alleviation"

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Please be advised that your above-referenced protocol has received human ethics approval by the **Joint-Faculty Research Ethics Board**, which is organized and operates according to the Tri-Council Policy Statement. This approval is valid for one year only.

Any significant changes of the protocol and/or informed consent form should be reported to the Human Ethics Secretariat in advance of implementation of such changes.

**Please note:**

- if you have funds pending human ethics approval, the auditor requires that you submit a copy of this Approval Certificate to Eveline Saurette in the Office of Research Services, (e-mail [eveline\\_saurette@umanitoba.ca](mailto:eveline_saurette@umanitoba.ca), or fax 261-0325), including the Sponsor name, before your account can be opened.

- if you have received multi-year funding for this research, responsibility lies with you to apply for and obtain Renewal Approval at the expiry of the initial one-year approval; otherwise the account will be locked.

The Research Ethics Board requests a final report for your study (available at: [http://umanitoba.ca/research/ors/ethics/ors\\_ethics\\_human\\_REB\\_forms\\_guidelines.html](http://umanitoba.ca/research/ors/ethics/ors_ethics_human_REB_forms_guidelines.html)) in order to be in compliance with Tri-Council Guidelines.



## APPENDIX B

### Consent Letter to Semi-structured Interview Participants



UNIVERSITY  
OF MANITOBA

#### Natural Resources Institute

70 Dysart Rd,  
Winnipeg, Manitoba  
Canada R3T 2N2  
General Office (204) 474-7170  
Fax: (204) 261-0038  
[http://www.umanitoba.ca/academic/institutes/natural\\_resources](http://www.umanitoba.ca/academic/institutes/natural_resources)

**Research Project Title:** An Evaluation of the UNDP-GEF Small Grants Programme Funding in Ethiopia in addressing the GEF Thematic Areas, Sustainable Livelihoods and Poverty Alleviation.

**Principal Researcher:** Addisalem Benyam Bulbula  
Natural Resources Institute  
70 Dysart Rd,  
Winnipeg, Manitoba,  
Canada R3T 2N2  
Tel: (204) 474-7170  
E-mail: [abenyam@yahoo.com](mailto:abenyam@yahoo.com)

**Supervisor:** Prof. Thomas Henley  
Associate Professor and Head,  
Natural Resources Institute,  
70 Dysart Road,  
Winnipeg, Manitoba,  
Canada R3T 2N2  
Tel.: (204) 474-6169  
E-mail: [henley@ms.umanitoba.ca](mailto:henley@ms.umanitoba.ca)

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**This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.**

-----

#### 1. A brief Description of the Research

The purpose of this research study is to evaluate how the funding from the UNDP—GEF SGP supports communities in addressing the GEF thematic areas (biodiversity conservation, abatement of climate change and prevention of land degradation) and explore how these interventions, in turn, present opportunities to undertake nature-based sustainable livelihood activities and alleviate poverty for rural communities living in environmentally degraded regions of Ethiopia.

#### 2. A description of the procedures involving the subjects, including their nature, frequency and duration.

I am planning to conduct interviews with you and other similar farmers in your village/“Kebele”. You will be required to **voluntarily** participate only in one interview session and will be asked a series of questions which may last for 60 minutes (1 hour). The questions will involve issues about the support you received from the SGP, your surrounding environmental conditions, local economy, social issues, food security, and poverty alleviation.

**3. A description of risk (i.e., potential harm greater than that which one might experience in the normal conduct of one's everyday life).**

**Risk:** There will be no risk to you in this research study and no information will be disclosed to the public in a manner that will risk your safety and security as a research participant. In addition, you will not be compelled to answer questions that will make you uncomfortable to answer.

**Benefits:** The outcomes of the research will shed light on the tangible relationship between poverty and environment and also the degree of rural communities' dependence on the exploitation of natural resources as the main sources of well-being. Hence, the research will provide insights for expanding policy issues on the agricultural sector which are often influenced by the availability of financial supports and the control, utilization, and management of natural resources by local communities.

**4. A Description of any recording devices to be used**

The researcher will use a sound recording device and a note book to record interviews. Photographic images may also be taken wherever appropriate with the authorization of the SGP office and your prior consent.

**5. A description of the degree of confidentiality that will be maintained. Explain who will have access to information collected and to the identity of the subject, including a description of how confidentiality will be protected. If confidentiality or anonymity cannot be guaranteed, participants should be made aware of possible consequences.**

Prior to, during and after the data collection periods, the researcher will protect your identity by using codes that will serve to easily identify and separate your identity from other similar research participants/farmers. The data collected will not be disclosed for public use without your prior consent. At the time of analysis, the data will be stored in a secure and locked place where access will be limited to the researcher and her advisory only. It will be destroyed upon completion of the research thesis.

**6. Feedback to subjects is desirable. Include a statement of how the findings or other study-related feedback will be made available to the subjects.**

Upon completion of the interview sessions, an informal wrap-up meeting will be made with all the participants to discuss about concerns and emerging issues from the interview sessions that will be integrated with the data analysis work. When the NC for the SGP regularly travels to conduct supervision, monitoring and evaluation to this project site, the researcher, through the NC, will send a copy of the final research report and make sure that it is delivered to and discussed with you and the rest of the farmers who will be partaking in the research study.

**7. Details of any form of credit or remuneration.**

As I am not affiliated with any government or non-governmental organization, there will be no payment to gather information from you or any members of your community. Similarly, there will be no cost to you for providing the information for the research work.

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does

this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

**This research has been approved by the Joint-Faculty Research Ethics Board (JFREB). If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Secretariat at 474-7122, or e-mail [margaret\\_bowman@umanitoba.ca](mailto:margaret_bowman@umanitoba.ca). A copy of this consent form has been given to you to keep for your records and reference.**

-----

**Statement of Consent:**

I have read and understood the information presented in this letter about the research study by Addisalem Benyam Bulbula of the University of Manitoba. I have been given a copy of this letter along with the opportunity to ask any further questions about the research and my participation in this study. I also understand that I may withdraw from the study at any time, and /or refrain from answering any questions I prefer to omit. With my signature below, I confirm my consent to participate in this study.

\_\_\_\_\_  
Participant's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Researcher and/or Delegate's Signature

\_\_\_\_\_  
Date

## APPENDIX C

### Consent Letter to Focus Group Discussion Participants (NSC and TRT)



**Natural Resources Institute**  
70 Dysart Rd,  
Winnipeg, Manitoba  
Canada R3T 2N2  
General Office (204) 474-7170  
Fax: (204) 261-0038  
[http://www.umanitoba.ca/academic/institutes/  
natural\\_resources](http://www.umanitoba.ca/academic/institutes/natural_resources)

**Research Project Title:** An Evaluation of the UNDP-GEF Small Grants Programme Funding in Ethiopia in addressing the GEF Thematic Areas, Sustainable Livelihoods and Poverty Alleviation.

**Principal Researcher:** Addisalem Benyam Bulbula  
Natural Resources Institute  
70 Dysart Rd,  
Winnipeg, Manitoba,  
Canada R3T 2N2  
Tel: (204) 474-7170  
E-mail: [abenyam@yahoo.com](mailto:abenyam@yahoo.com)

**Supervisor:** Prof. Thomas Henley  
Associate Professor and Head,  
Natural Resources Institute,  
70 Dysart Road,  
Winnipeg, Manitoba,  
Canada R3T 2N2  
Tel.: (204) 474-6169  
E-mail: [henley@ms.umanitoba.ca](mailto:henley@ms.umanitoba.ca)

**This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more detail about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.**

-----

#### **1. A brief Description of the Research**

The purpose of this research study is to evaluate how the funding from the UNDP—GEF SGP supports communities in addressing the GEF thematic areas (biodiversity conservation, abatement of climate change and prevention of land degradation) and explore how these interventions, in turn, present opportunities to undertake nature-based sustainable livelihood activities and alleviate poverty for rural communities living in environmentally degraded regions of Ethiopia.

#### **2. A description of the procedures involving the subjects, including their nature, frequency and duration.**

I am planning to conduct a one-time focus group discussion which may take from two to three hours with all the National Steering Committee (NSC members) and Technical Review Team (TRT) whose the voluntary participation will greatly contribute to the research study. The focus group discussions will primarily address how project review, selection, and approval criteria link with the environmental and livelihood conditions of the project proponents' target beneficiaries that make them eligible or

ineligible for SGP's funding. Secondly, your inputs will give insight to examine how institutional networks and partnerships will contribute to building local capacities and project goals of the SGP and of the grantees funded by the SGP. Thirdly, your voluntary professional contribution will deal with policy issues and therefore, will allow the researcher to investigate the long-term implications of small grants on sustainable livelihoods, environmental policy, food security, and poverty reduction in Ethiopia.

**3. A description of risk (i.e., potential harm greater than that which one might experience in the normal conduct of one's everyday life).**

**Risk:** There will be no risk to you in this research study and no information will be disclosed to the public in a manner that will risk your safety and security as a research participant. In addition, you will not be compelled to answer questions that will make you uncomfortable to answer.

**Benefits:** The outcomes of the research will shed light on the tangible relationship between poverty and environment and also the degree of rural communities' dependence on the exploitation of natural resources as the main sources of well-being. Hence, the research will provide insights for expanding policy issues on the agricultural sector which are often influenced by the availability of financial supports and the control, utilization, and management of natural resources by local communities.

**4. A Description of any recording devices to be used.**

The researcher will use a sound recording device and a note book to record the focus group discussions. Photographic images may also be taken wherever appropriate with the authorization of the SGP office and all the NSC member's prior consent.

**5. A description of the degree of confidentiality that will be maintained. Explain who will have access to information collected and to the identity of the subject, including a description of how confidentiality will be protected. If confidentiality or anonymity cannot be guaranteed, participants should be made aware of possible consequences.**

Prior to, during and after the data collection periods, the researcher will protect your identity by using codes that will serve to easily identify and separate your identity from other individual NSC members. The data collected will not be disclosed for public use without your prior consent. It is also essential to note that while the researcher can maintain confidentiality, all the NSC members of the focus group discussion will be required to understand that the researcher cannot entirely guarantee that other NSC members in the discussion group will not make disclosure of the data collected. At the time of analysis, the data will be stored in a secure and locked place where access will be limited to the researcher and her advisory only. It will be destroyed upon completion of the research thesis.

**6. Feedback to subjects is desirable. Include a statement of how the findings or other study-related feedback will be made available to the subjects.**

Upon completion of the focus group discussions session, a wrap-up session will be held to discuss about concerns and emerging issues from the discussion that will be integrated with the data analysis work. After the researcher finalizes the data analysis, a final hard copy of the study will be sent to all the NSC members through the National Coordinator of the SGP.

**7. Details of any form of credit or remuneration.**

As I am not affiliated with any government or non-governmental organization, there will be no payment to gather information from you or any members of the NSC. Similarly, there will be no cost to you for providing the information. However, you will be reimbursed should there be any cost you may incur in connection with the research – costs such as local transport fare (taxi and bus).

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.

**This research has been approved by the Joint-Faculty Research Ethics Board (JFREB). If you have any concerns or complaints about this project you may contact any of the above-named persons or the Human Ethics Secretariat at 474-7122, or e-mail margaret\_bowman@umanitoba.ca. A copy of this consent form has been given to you to keep for your records and reference.**

-----  
**Statement of Consent:**

I have read and understood the information presented in this letter about the research study by Addisalem Benyam Bulbula of the University of Manitoba. I have been given a copy of this letter along with the opportunity to ask any further questions about the research and my participation in this study. I also understand that I may withdraw from the study at any time, and /or refrain from answering any questions I prefer to omit. With my signature below, I confirm my consent to participate in this study.

\_\_\_\_\_  
Participant's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Researcher and/or Delegate's Signature

\_\_\_\_\_  
Date

## APPENDIX D

### Semi-Structured Interview Guide for Project Beneficiary Groups

#### ***Respondents' Demographic and Project Related Information***

Project Location:           Region \_\_\_\_\_ Zone \_\_\_\_\_  
  Woreda \_\_\_\_\_ Kebele \_\_\_\_\_

Name:

Gender:

Age:

Marital status:

Family size:

Source of Income/Livelihood:

Educational Level:

Project activities involved in:

#### ***Grand tour questions (general and specific):***

- 1 How long have you been living in this community/“Kebele”?
- 2 What are the major activities you undertake during the two major seasons in a year?
- 3 How do you think farmers contribute to development projects?

#### **Ecological/Environmental:**

- 1 Describe the major functions of environmental resources for farming households.
- 2 What type of crop, grain, trees, or livestock do you grow/produce?
- 3 What was your understanding about GEF’s thematic areas i.e., abatement of climate change, biodiversity conservation and prevention of land degradation, before the intervention of SGP support?
- 4 Can you list the kind of livelihood, agricultural and resource exploitation practices contributing to climate change, biodiversity loss and land degradation?

- 5 Describe the fundamental initiatives a farmer can take following participation in awareness creation workshops about SGP's project intervention and the efforts to combat the challenges in the GEF thematic areas planned to be addressed.
- 6 SGP is rooted in the belief that the support it provides to beneficiary community members brings changes in the productivity of the land and the diversity of crops, trees and regulates climatic conditions.
  - a. Strongly agree
  - b. Agree
  - c. No opinion
  - d. Disagree

If you **agree**, list your observations of the major changes which impacted the environment in the short-run.

If you **disagree**, what is your explanation for that?

**Economic/Livelihood:**

- 1 Describe the nature of the agricultural practice(s) you are currently engaged in and state how much it has been contributing to support you and your family members.
- 2 In addition to personal consumption, a farmer's capacity and level of production must allow him/her to sell products in the local market.
  - a. Strongly agree
  - b. Agree
  - c. No opinion
  - d. Disagree

Please give a brief explanation for your response.

- 3 How do you manage your time and task distribution of what you do for living (e.g., farming or livestock raising/production) with your involvement/participation in SGP-funded project activities?
- 4 What incentive mechanisms have been made available for the community group to encourage participation in SGP-funded community-based resource management/conservation?
- 5 Has there been any alternative income-generating activity and cost reductions that you benefit from as a result of SGP's support?

If there are/were, what specific local economic needs and practices were taken into account in designing those alternative income-generating activities?

If you have benefited from those activities, list the benefit that have had positive impact on your livelihood base and other basic needs (agriculture, education, health, electricity, etc...).



- 6 Do you have access to local markets where you can sell products and/or services obtained as a result of benefits from project outcomes?

Or as a result of your participation and accomplishments in the user group so far, can you name anything that has minimized problems that you used to come across before?

**Sociological and Socio-cultural:**

- 1 At the start of the project, to what extent were you aware of GEF SGP and its purposes?
- 2 Have you and any members of your family participated in the generation of project ideas?
- 3 As a project beneficiary community member, what was your role/contribution in project activities?
- 4 Most development interventions require that the full participation of women is fundamental for the success of project activities.
- a. Strongly agree                      b. Agree                      c. No opinion                      d. Disagree

If you **agree**, what is your perspective on the level of women's participation in project activities and contributions to overall project goals?

- 5 In your opinion, what are the benefits of local people's ownership, direct control and management of natural resources (land, forest, and water resources)?
- 6 Can you describe the level of community involvement and participation in decision-making processes on issues pertaining to project activities, monitoring and supervisions?
- 7 Is there any local/traditional knowledge of mitigating climate change problems, biodiversity conservation and solving the problems of land degradation? If so, explain if and how the SGP-funded project activities integrated that knowledge within your own social/cultural setting.
- 8 Throughout the project period, to what extent were you knowledgeable about the status/progress of activities, effective utilization and transparency in SGP'S financial and technical supports?

**Food Security:**

- 1 Have you experienced famine or drought while living in this village?

If so, how do you see the contribution of SGP's intervention in terms of addressing similar challenges at present or that could be faced in the future?

Or what are the direct and indirect benefits from SGP support which might enable you to attain food security and/or improve your and your family's nutritional status?

- 2 How do you describe the implications of climate change, biodiversity loss, and land degradation on food security issues?
- 3 What do you think are the linkages between farmers' ownership of natural resources, such as land and water resources, with that of food production (human and animal feed), livestock-raising and food security?

### **Sustainability**

- 1 Brief description on communities' capacity and drive/commitment to ensure the continued existence, management of and benefit from natural resources and livelihood means after project completion.
- 2 What is your perspective regarding SGP's project intervention and the overall project activities in maintaining balance between ecological integrity, economic issues and social well-being in your area?
- 3 What is your perspective of the technical and capacity building supports from partner stakeholders?
- 4 Define poverty from your own perspective.

## **APPENDIX E**

### **Guide for Focus Group Discussions with the National Steering Committee (NSC) and Technical Review Team (TRT) of the UNDP—GEF SGP**

#### ***I. Linkages between project screening/evaluation and grants approval criteria/standards with that of project proponents'/communities' environmental and livelihood conditions***

1. Fundamental grounds indicating proponent's project implementation capacities in light of environmental, economic and social benefits as well as contributions to global environmental concerns.
2. Indicators of the complete participation of target community groups, including women and youth group, from project start-up to completion.

#### ***II. Contributions to institutional networks and partnerships to local capacities and project goals at local and national level***

1. Indicators for the integration of the skill sets and professional composition of the NSC in building partnerships, local capacities and institutional stances towards achievement of project goals.
2. Institutional attributes reflecting the NSC's and TRT's role in mobilizing resources and promoting partnerships at local and national levels.

#### ***III. Direct and indirect policy implications of SGP funding on sustainable livelihoods, environmental policy and poverty reduction in rural Ethiopia***

1. The type, relevance and adaptability of specific policy instruments/documents referred by the NSC and TRT.
2. Benchmarks of assessment if proposed project activities comply with Plan for Accelerated and Sustained Development to End Poverty (PASDEP) of the country.
3. Throughout its terms of office, any specific initiation made by the NSC/TRT to influence/effect/recommend changes or reforms in existing national policies pertaining to , resource allocation, environment, agriculture, sustainable development and food security/poverty reduction.

## **APPENDIX F**

### **Guide for Focus Group Discussions with Project Beneficiary Groups on Issues that Emerged During Semi-structured Interview Sessions**

1. Major challenges in project activities and livelihood undertaking (besides constraints to access natural resources).
2. Things user groups aspire to change in order to overcome current challenges.
3. Trends in user groups interactions with stakeholders and support providers.
4. User groups participation to motivate others who have not yet become members/partakers in the development user groups.
5. Formation, approval and implementation of community by-laws.