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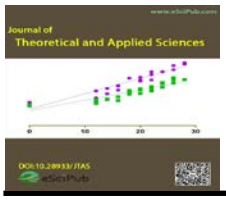

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Community Based Forest Management (CBFM) in Ethiopia: Progress and Prospects

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ABSTRACT

This paper critically reviewed the status of Participatory or Community Based Forest Management (CBFM) in the case of Ethiopia. Ethiopia is located in the Horn of Africa between 3o and 15o North latitude and 33o and 48o east longitude. The country covers 1.13 million square kilometers, with a wide altitudinal variation ranging from 110 meters below sea level (b.s.l.) in Kobar Sink (Dallol) to 4,620 meters above sea level (a.s.l.) at Ras Dashen (Ras Dejen). The Great African Rift Valley runs diagonally across the country from northeast to southwest separating the western and southeastern highlands. This physiographic feature enabled the ecosystems to host a great diversity of flora and fauna resources. The flora of Ethiopia is estimated to comprise about 6,500-7,000 plant species; 12 per cent of these plant species considered as endemic. Forests provide numerous ecosystem services, products for human consumption, and habitat for countless species. Unfortunately, deforestation has occurred at alarming scales and its effects have threatened environmental and livelihood sustainability. In Ethiopia, for the most part, forests have been managed under the support of national agencies, often with the exclusion or outright removal of local people. No sustainable forest management program has been put in place due to lack of adequate funding and stable structural set up for the forestry sector. To combat this problem Participatory or Community Based Forest Management (CBFM) is accepted throughout the world and in Ethiopia currently. This is due to the recognition that communities are the direct users of the forests and no one can care adjacent forests without the full involvement of the society. CBFM is one attempt to reverse deforestation, and, by doing so, preserves ecological services and products that provide local communities with ways to s ecure l ivelihoods.

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CBFM has also grown in practice because centralized management of natural resources has often neglected the rights of indigenous and local communities that once inhabited rural areas. Unless a strong measure is taken to develop the already dwindled forest resources, no question, the country will turn out to be a barren land in the near future, unable to support life. Therefore, efforts have to be made to create conducive environment, such as clear policy frame work and other supportive rules and regulations, efficient bureaucratic procedures to encourage the involvement of the community in the forestry conservation and development activities. The relevant law on CBFM has to be in place. If there is an effective law that has a strong mechanism to enforce it there by correcting the situation with the forestry sector of the country will change the land use/land cover of the country. Thus, various stakeholders like concerned international and national bodies especially decision makers, planners, local government bodies, higher institutions, academicians, the private sectors, professional associations, development practitioners and the communities have to tightly participate in forest conservation and management areas, in order to scale up participatory or community based forest management.

KeyWords: Community based forest management (CBFM), NGO's, Participatory forest management (PFM), Historical development of forest management, Ethiopia

Introduction

The WBISPP defines forest as “land with relatively continuous cover of trees, which are evergreen or semi deciduous, only being leafless for a short period, and then not simultaneously for all species. The canopy should preferably have more than one story” (WBISPP, 2004). It defines woodland as “a continuous stand of trees with a crown density of between 20-80%. Mature trees are usually single storied, although there may be layered under-stories of immature trees, and of bushes, shrubs and grasses/forbs. Maximum height of the canopy is generally not more than 20 meters, although emergent may exceed this”. FAO defines forest as “land spanning more than 0.5 hectares with trees higher than 5 meters and a canopy cover of more than 10 percent, or trees able to reach these thresholds *in situ*” (WBISPP, 2004).

Rates of deforestation and forest degradation are high in many countries, leading to concern about the loss of ecosystem services such as carbon storage, biodiversity conservation, and

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water and food security. Sustainable forest management (SFM) therefore aims to maintain and enhance the economic, social and environmental values of forests for the benefit of present and future generations. Thus, decentralization is expected to result in more effective forest management, conserving biodiversity while also contributing to poverty reduction and economic development.

This is the theoretical underpinning of CBFM which creates the mechanisms and incentives such that community institutions are able to conserve forests at the same time as meeting livelihood needs in most cases (Ostrom, 1990; Bromley, 1992; Baland and Platteau, 1996; Arnold, 2001). The success of CBFM in practice is largely demonstrated through case studies. Literature, however, focuses on differing aspects of what might be considered a successful CBFM program and case studies equally note instances where CBFM has led to uncertain livelihood and forest management outcomes. Case studies from Nepal, where community forestry has operated since the 1980s, indicate that forest product collection rates have increased over the course of a CBFM interventions, although livestock ownership decreased; the poor receive lower forest benefits than the rich and were less likely to participate in decision making; and benefit appropriation largely depended on wealth, education and household status (Adhikari *et al*., 2004; Adhikari and Lovett, 2006; Adhikari *et al*., 2007; Adhikari and Di Falco, 2009).

CBFM is now widely adopted across East and Southern Africa (Wily, 2010). In East Africa, experiences in Tanzania dominate where CBFM took off in the 1990's. Case studies show that CBFM can deliver improved forest outcomes in Tanzania (Blomley *et al*., 2008; Lund and Treue, 2008), but there has also been criticism of a lack of integration of CBFM into existing local institutions (Blomley and Ramadhani, 2006) and in the equity of benefit distribution (Meshack *et al*., 2006; Persha and Blomley, 2009). Experience in Ethiopia is also mixed, while studies note positive impact on forest condition (Gobeze *et al*., 2009), others point to low participation due to low returns for locals that has led to conflict (Zelalem *et al*., 2007). Wily (2010) emphasizes the strength of the CBFM approach in Africa is the recognition and empowerment of local communities as resource owner-managers, despite the uncertain forest, livelihood and governance outcomes of CBFM. Therefore, there is an international effort to move towards a more stable and sustainable state for forest condition and management (e.g. through the work of the UN Forum on Forests). At the same time, it has been increasingly recognized that many of the world's poorest people get significant resources from forests and national forest policies increasingly consider local people's needs (Campbell *et al*., 2003).

The objectives of SFM include the conservation of biological diversity; prevention, control and reversal of land degradation; mitigation of desertification; mitigation of, or adaptation to, climate change; and the production of wood and non-wood forest products and services. In

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pursuit of SFM, many developing nations have devolved full or partial forest management authority to local communities. This devolution is expected to result in more effective forest management, conserving biodiversity while also contributing to poverty reduction and economic development. Approaches to such community based forest management (CBFM) go by many names and forms: co-management, joint management, participatory forest management, indigenous reserves and the like. Despite the differences in names and emphases, they have in common the involvement of people who live in and around the forest in the management decisions that affect forest use and conservation. The argument for decentralization of forest management in developing countries is that shortage of resources and poor infrastructure have often resulted in a lack of effective state control (Bray *et al.,* 2003).

It is hoped that devolving management rights and responsibilities to local people will avoid a 'tragedy of the commons' and encourage local people to actively manage the forest resulting in both ecological and economic benefits. It has been suggested that these benefits are realized at local, national and global scales. CBFM approaches are growing in popularity at the national level and attracting increasing funding from international organizations. The effectiveness of CBFM approaches, however, is not well documented despite this being important for informing the development of evidence-based policy (FAO, 2001).

Local participation in forest management and related institutional and strategic changes are being very widely entrenched in law, an important support in light of the contention that changing power relations over resources may be expected to generate. As elsewhere around the world, forest legislation is under a great deal of amendment in Africa with an astounding 41 states among 56 mainland and island states having enacted or at least drafted new forest laws since 1990. In practice, progress towards community participation is impressive given that almost no activity was underway a mere decade past; today more than 30 countries have launched at least one significant ground initiative towards community participation in local forest management and over half of these have a number of projects underway (Alden, 2003).

Since the mid-1970s, the management of forest resources in Ethiopia was mainly carried out as state and community forestry programs. Past forest management efforts are characterized by unstable institutional arrangements with frequent restructuring and changes in emphasis stemming, in part, from the ideological and political history of the country. These non-participatory approaches failed to reduce tree felling and clearing, especially in Protected National Forest Priority Areas (FARM-Africa, 2000). Further, this problem was beyond the control of the state; therefore, the ultimate solution for this severe problem will be encouraging of local people to manage and conserve their resources since they live with forests, and they are primary users of forest products (FAO, 2010).

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According to Tesfaye (2011), in Ethiopia there is a growing understanding that deforestation and land degradation will further exacerbate poverty, which brings natural resource conservation to the forefront of rural development initiatives. CBFM is a new paradigm system of forest management which is adopted and implemented in order to fulfill the interest, respecting of traditional users, and bottom-up approach which encourage a sense of belongingness to the rural people in general and landless rural youth in particular (Winberg, 2010). This new paradigm shift was mainly introduced as a complementary mechanism which safeguards forests.

According to FARM Africa (2000) and UNDP (2012), the government of Ethiopia also created spaces for NGOs' engagement in sustainable forest management, through participatory forest management (PFM) practices and a number of NGOs and bilateral programs were launched PFM in the mid-1990. PFM is well adopted recently by regional governments and at every woreda offices (Winberg, 2010). It was first introduced to Ethiopia few years ago but the approach is expanding to cover more and more hectares of forest across the country (UNDP, 2012). In this review, the researchers attempted to see the state of CBFM in Ethiopia with special emphasis to its historical development and management efforts.

Objectives

The general objective of this review is to assess the status and challenges of CBFM (Community Based Forest Management) in Ethiopia. In its specific objectives the review attempted to:

- Assess historical development of forest management system in Ethiopia
- Investigate comparative advantage of CBFM with centralized approaches of forest management options
- Evaluate implementations of pilot CBFM projects
- Identify the opportunity cost of CBFM in Ethiopian context

Methodology

In undertaking this literature review the first step was identification of a topic of interest. Hence Community Based Forest Management (CBFM) is found to be convenient topic area. Systematic searches of books, journals, and official documents that are specifically related to the topic of interest or those that are likely to cover the topic are performed. Thereafter in exclusion and inclusion approach, selecting and retrieving the appropriate and recent literatures was done. Then the final report (findings) are analyzed and synthesized.

Forest Types and current Status of forest cover in Ethiopia

Descriptions of forest types are closely related to the definition of forest used and the classification scheme applied. However, two or more definitions and classification schemes are often present and applied by different users to the same context. These are FAO's forest resource assessment (2010) and the Woody Biomass Inventory and Strategic Planning

Project (WBISPP) (2004), which are the two most commonly used and influential sources of information for describing Ethiopia's forest resources.

The WBISPP produced a comprehensive and reliable assessment of the country's forest resources in the 1990's and a detailed description of Ethiopia's forest types (Figure 1). FAO later attempted to build on and update the WBISPP assessment by applying its own definitions. The WBISPP distinguishes between high forests and woodlands using the number of storey in the canopy layer and the maximum height of trees. In contrast, FAO's main criterion is crown cover. High woodland and low woodland are further distinguished by the WBISPP using a tree height threshold of 5 m, whereas trees higher than 5 m are reclassified as forests in FAO's definition. The WBISPP forest definition was used as the national forest definition in Ethiopia. In terms of major natural forest formations in Ethiopia, the WBISPP identifies a bamboo forest and five types of high forests: (i) upland dry evergreen (*Juniperus procera*), (ii) mixed Juniper**-** *Podocarpus* upland evergreen, (iii) humid upland broadleaved with *Podocarpus*, (iv) humid upland broadleaved with *Aningeria* dominant and (v) riverine forests. Four types of woodlands are also identified: (i) broadleaved deciduous woodlands, (ii) *Acacia* woodlands, (iii) lower semi- arid *Boswellia Commiphora***-***Acacia* woodland**-**shrubland and (iv) lower semi**-**arid to arid *Acacia Commiphora* woodland**-**shrubland (FDRE, 2011a). These forest classifications mainly reflect the larger physiographic divisions of highland and lowland forests, which are also associated with differences in important agroecological variables such as elevation, temperature and rainfall. As a result, they indicate useful biophysical and socioeconomic descriptors of each forest type that can help determine the drivers and dynamics of forest cover changes (World Bank, 2004).

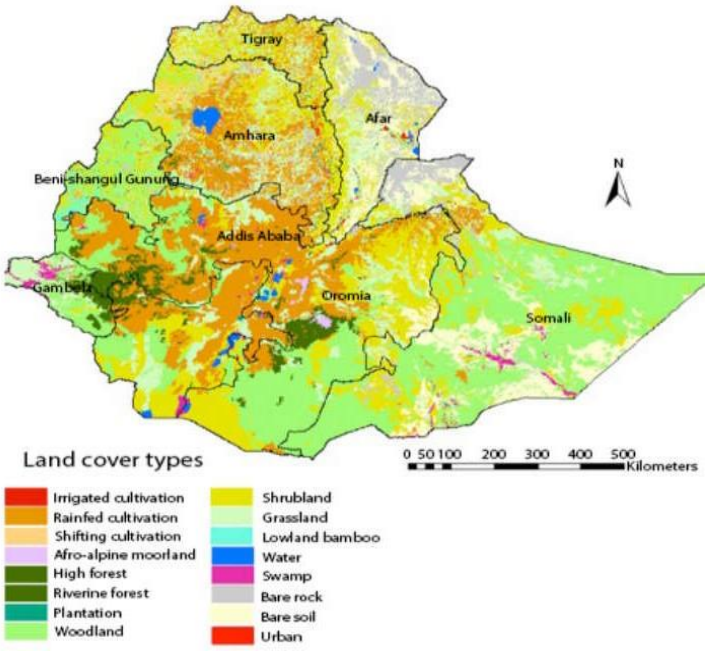

Figure 1Land cover Types of Ethiopia (WBISPP, 2005)

Access to reliable information on the status of a country's forests is one of the prerequisites for formulating effective strategies because information supports efforts towards sustainable forest management. However, in Ethiopia, like most developing countries, reliable information on the vegetation resources such as their spatial coverage, distribution, changes over time (deforestation or re-growth), growing stock in the standing vegetation, regeneration and recruitment status and other essential information are lacking or difficult to get because it is scattered. There is no national database, regular resource inventory and monitoring to provide reasonably good and up to date information. Consequently, conflicting statistics are often found in different reports (Teketay *et al*., 2010).

More importantly, most of the documents reporting on Ethiopian forest resources lack clarity on how, when and who collected them. The work of the Woody Biomass Inventory and Strategic Planning Project was the first national inventory that provided reasonably reliable statistics on the forest resources. According to WBISPP (2004), Ethiopia owns a total of 59.7 million hectares covered by woody vegetation among which 6.8 percent are forest, 49 percent woodland and 44.2 percent shrubland or bushland. Regarding regional distribution, Oromiya (62.5%), Southern Nations, Nationalities and Peoples Regional State(SNNPRS) (19%) and Gambela (9%) are the three largest natural high forest owners, while Somali (33%), Oromiya (32%) and Amhara (10%) regions share the largest area of woodlands and shrublands/bushlands (WBISPP, 2004).

An Overview of Deforestation rate in Ethiopia

Diverse physiographic, altitudinal, climatic and edaphic resources enabled Ethiopia to have various types of vegetation ranging from alpine to desert plant communities (Sahle, 1984). In relation to resource depletion, EPA (1998), Reusing (2000), Bishaw (2001), Tarekegn (2001), FAO (2003), Moges *et al*. (2012), Alemu and Abebe (2011) and Million (2011) argued that Ethiopians are facing rapid deforestation and land degradation that has been fueled by increase of population which in turn resulted in extensive forest clearing for agricultural use, overgrazing, exploitation of existing forests for fuel wood, fodder and construction materials, setting of fire to create pasture land and expansion of settlements. As a result, there has been a rapid decreasing percentage of the forest cover of the country from 40% in 1900 to 16% in 1954, 8% in 1961, 4% in 1975, 3.2% in 1980 and now it is estimated to be less than 3%. Most scholars agreed that current rate of deforestation is estimated to be 160,000-200,000 hectares per year (EPAE, 2002) which is extremely high. Ministry of agriculture and rural development confirms that the forest coverage of Ethiopia has increased from 3% in 2000 to 15% in 2015 due to the afforestation campaign launched all over the country in the last ten years (but this data could not be validated with published government sources).

Table1 Deforestation estimates in Ethiopia by forest type (in hectare) 2002-2010

Type	2002	2003	2004	2005	2006	2007	2008	2009	2009	2010
High forest	270, 897	118, 355	99, 601	73, 025	57, 182	48, 235	66, 036	76, 412	73, 875	76, 723
Woodland	83, 720	77, 929	75, 460	79, 195	83, 379	85,365	86, 611	91, 038	95, 633	96, 323
Shrub land	44, 678	51, 432	56, 752	59, 377	77, 242	70, 164	68, 051	65, 542	61, 854	58, 685
Total	**399, 295**	**247, 716**	**231, 813**	**211, 597**	**217, 803**	**203, 764**	**220, 698**	**232, 998**	**231, 362**	**231, 731**

Source: EPA, 2012

Historical Development of Forest Management Systems in Ethiopia

Forest resource management systems in the pre-Derg period (before 1974)

In the past, large forests were managed as crown property by emperors and kings basically as sources of fuel wood and timber for the royal households. Such forests were protected and encroachment was forbidden (perhaps it may be for the peasants) (Rahmeto,, 2001). According to Nune (2008), the first elaborate and modern legislation on forest resources came during emperor Haile Selassie I (1930-1974) in 1965 which gave recognition for three forms of forests (namely state forest, private forest and protected forest). The main objective of the forest legislation during the 1960's was not so much to promote resource conservation but rather to enlarge the sources of state revenue (Rahmeto,, 2001). This shows that the forest resource management paradigm during that time was environmental protection type because the forests were preserved and protected for their economic value mainly as a source of fuelwood and construction material. In addition, little attempt was made for new plantation. The Ethiopian forestry association (EFA), which was set up in 1960, launched a farm woodland campaign to encourage peasants to plant trees on their plots as an economic and conservation measure is one indicator for this. In the mid-1960's, an extensive deforestation took place following the promulgation of a series of forest legislation because the legislation placed all large forests under state ownership, and put severe restrictions on the use and management of private forests (Rahmeto,, 2001).

Another scenario during the imperial regime regarding forest resource was the expansion of large-scale, commercial agriculture, which was actively encouraged by the state, at the expense of the forests with an objective of increasing agricultural production (Rahmeto,, 2001). This is rather a typical example of frontier economics type of resource management paradigm. Rahmeto, (2001) argued that there was a limited attempt by the imperial government to promote forestry in the country and to protect state forests in the early

1960s. During the second half of the 1960's, the government began to show greater concern for environmental problems and undertook several initiatives to promote afforestation and soil and water conservation. In response to pressures from different corners, several national parks and game reserves were set up in various parts of the country in the second half of the 1960's and the early 1970s with the support of UNESCO and expatriate staffs. The schemes were restrictive and had a damaging impact on the livelihood of the people who lived in and around them (Rahmeto, 2001).

This seems to be environmental protection paradigm type because the measures were taken in response to massive forest destruction due to state farm expansion. In environmental protection paradigm, remedial actions are taken after a certain intervention arises with negative externalities. They are not responsible for planning development activities in ways that do not pollute or impair necessary ecological functions. As a remedial solution, relatively small parcels of common property resources are converted to state property to be set aside for preservation or conservation as national parks and wilderness reserves (Colby, 1991).

Forest resource management system during Derg regime (1974-1991)

In 1980, *Derg* proclaimed a new law called forest and wildlife conservation and development proclamation No. 192/1980 by accusing the previous government of its improper and unplanned exploitation of the country's forest resources and stated that the forest cover was depleted because of the selfish interest of the aristocracy and the nobility (Nune, 2008). Paradoxically, according to Yeraswork (2001), natural forests were used as spring boards for plantations that outwardly expanded at the expense of peasant holdings during the *Derg* regime in the course of time, which turned community members against the resources. Rahmeto (2001) described the situation as "many of the state forests managed by the ministry of agriculture during the *Derg* regime were enlarged by expropriating farms or grazing land. Afforestation thus posed a threat to many peasants because it encroached on farmland, evicted households living in or near it, and

took away land that was common property and had economic, social or cultural value". Later on, *Derg* applied mass mobilization and forced labor campaigns to rehabilitate degraded lands with vegetation and area closure scheme was designed. Such areas were frequently employed for grazing by the community because alternative sources of pasture were not provided (Rahmeto, 2001).

Plantation forests during that time were mainly for commercial timber for sawn wood and poles as well as non-industrial plantations like fuelwood and construction timber. State environmentalism during the *Derg* era, as argued by Rahmeto (2001), had placed high emphasis on government control of environmental assets on one hand, and the protection of such assets by restricting or prohibiting their utilization by the surrounding

community on the other hand. From this, one can conclude that the forest management system during the *Derg* period was again the environment protection type. Forests were protected mainly for their economic value. Area closure, construction of check dams, establishment of national parks, gully control and reforestation schemes undertaken were some instances that show how the strategies were corrective in practice rather than being preventive. The majority of these 'community forests' were destroyed during the conflict and transition after the downfall of the *Derg* (1991) because they were undertaken without the consent of the locals with the exception of the few cases where such forests were preserved by local communities often with support of Christian or Muslim religious leaders and institutions (Pankhurst, 2001).

After the fall of the regime there was widespread deforestation of forest areas, which were seen by the local population as state forests". Tenure insecurity and memories of coercive government for over two decades have made the local population suspicious of government controls in land and natural resource management. Afforestation schemes, national parks and areas designated for rehabilitation were closed to peasants and pastoralists who were not allowed to gain any benefits from them (Rahmeto, 2001). According to EPA (1998), the most negative environmental impact during the *Derg* regime came from policy and regulatory interventions that increasingly and cumulatively eroded the rights of individuals and communities to use and manage their own resources. "Protected areas and national parks in the dry lands suffered greatly as trees were cut and vast areas were set on fire. People perceived that they had no secure land and tree tenure and the state was not able to enforce its own regulations of forest protection and environmental conservation". Other events which led to massive degradation of forest resources during the *Derg* regime were program of mass resettlement and villagization following the 1984/5 famine that was done with the intention of transforming rural life with radical land reform, the establishment of rural co- operatives and state farms. But much of these were done with extreme coercion (Harrison, 2001).

Forest resource management system (since 1991)

In 1994, a new proclamation came into picture, namely, "forest conservation, development and utilization" proclamation no. 94/1994 and another great endeavor was the establishment of Ethiopian Forestry Action Program (EFAP), which is a working document that has direct relation with forest development and conservation. EFAP set forth as objectives of forestry development, to sustainably increase production of forestry products, to increase agricultural production by reducing land degradation and increasing soil fertility, to conserve forest ecosystems and to improve the welfare of rural communities. The policy put general direction wherein, among others, expansion of forests and agro-forestry is

needed to accelerate economic development of the country (Nune, 2008). Additionally, EIA proclamation with an emphasis on the utilization of forests should be only with their regenerative capacity, which was amended in 2002 by Proclamation No. 29/2002. That means forest management that accounts for the sustainable supply without affecting environmental and social amenities derived from the forests is needed. Since free grazing affects natural regeneration of valuable indigenous trees, the policy restricts free grazing in protected forest areas (Nune, 2008).

In 2007, the council of ministers adopted a forest policy which gives due attention to forest development and conservation considering its significance to the national economy, food security and sustainable development of the nation (Nune, 2008). The overall objective of the policy is “to conserve and develop forest resources properly so that there could be sustainable supply of forest products to the society (hence satisfying the demand) and contribute to the development of the national economy.” As stated in forest development, conservation and utilization proclamation No. 542/2007 (FDRE, 2007), in order to properly conserve, develop and utilize the forest resources of the country, major forestlands should be designated as state forests, their boundaries should be demarcated with the participation of the local community and they should be registered as protected and productive forests (article 8:1); forests shall be protected from forest fire, unauthorized settlement, deforestation, undertaking of mining activities and other similar dangers (article 9:7). It also stressed that the local community may reap grasses, collect fallen woods and utilize herbs from a state forest in conformity with the management plan developed for the forest by the appropriate regional body.

The objectives mentioned here (both in EFAP, forest development, conservation and utilization Proclamation and EIA proclamation), have both economic as well as environmental out comes. From this, one can say the objectives have been designed based on resource management type of paradigm because most of the strategies (like agroforestry, increasing fertility of soil, increasing the productivity of the existing land, expansion of off-farm economic activity on forests like apiculture and tourism) focus on preventive rather than corrective actions. More emphasis has been given to strategies which minimize the demand of forest resources like agroforestry that reduces the pressure on the remaining forests for need of fuelwood and incrassating the fertility of soil as well as livelihood diversification so as to decrease the need for additional land for cultivation at the expense of forests. The role of environmental conservation for sustainable development has been boldly articulated in the Growth and Transformation Plan (GTP) of the country. The main objectives for the environment and climate change initiatives in the GTP are to formulate and effectively implement policies, strategies, laws and standards which will foster social and green economy development so as to enhance the welfare of citizens and environment

sustainability (MoFED, 2010).

In addition, one of the four pillars of the green economy plan of Ethiopia (FRDE, 2011) focuses on protecting and re-establishing forests for their economic and ecosystem services, including carbon stocks. A plan for Accelerated and Sustained Development to End Poverty (PASDEP) document of the country has also gave especial emphasis on natural resource conservation and management and stressed that integrated development and utilization of the resource bases enables the transition to improved livelihoods, and to protect these resources for future generations. It was planned to rehabilitate about 4.7 million hectares of degraded areas so as to increase the forest coverage of the country (MoFED, 2006).

Even though, this plan is a kind of resource management paradigm because it focuses on protecting and reestablishing forests for their economic and ecosystem services, the current deforestation in southwestern part of the country due to foreign investment and resettlement programs (Alemu *et al*., 2011; Rahmeto, 2011) makes the strategy rather a frontiers type of paradigm and it seems a paradox. The GTP document highly underlined that deforestation and forest degradation must be reversed to support the continued provision of economic and ecosystem services and growth in GDP. Despite their economic and environmental value, Ethiopian forest resources are under threat and unless action is taken to change the traditional development path, an area of 9 million hectare will be deforested between 2010 and 2030. Over the same period, annual fuelwood consumption will rise by 65%, leading to forest degradation of more than 22 million tones of woody biomass (FDRE, 2011).

In order to overcome the problem, strategies like dissemination and usage of fuel-efficient stoves, increasing afforestation/reforestation schemes and promoting area closure via rehabilitation of degraded land, that could help to develop sustainable forestry and reduce fuelwood demand, have been articulated. In addition to the aforementioned strategies, the document proposed agriculture intensification on existing land so as to reduce pressure from agriculture on remaining forests (FDRE, 2011).

The Climate Resilience Green Economy (CRGE) document acknowledges both the economical as well as ecological contributions of forests and most of the strategies designed regarding the forest resource management of the country decrease the demand of forest resources. Strategies designed to realize these objectives includes dissemination of fuel efficient stoves, agricultural intensification and diversification, area closure, irrigation on non-forest areas, agro-forestry programs and planting trees outside forests. The target is to minimize the pressure of development endeavors over the remaining forests of the country and enhancing the productivity of the existing land (FDRE, 2011). The strategies are more of preventive than corrective which is peculiar characteristic of resource management paradigm.

In addition, an extensive watershed management program which incorporates afforestation scheme has been designed. Though the CRGE has planned a resource management type of paradigm and there is rehabilitation through massive watershed program (more of environmental protection paradigm), what is actually happening in northwest, southwest, central, and southern part of the country is frontiers economic type of resource management.

An overview of implementations of pilot CBFM projects in **Ethiopia**

Ethiopia has been engaged extensively in natural resources management, particularly following the 1970's and 1980's famines that hit the country. A number of developmental projects and programs have been initiated and implemented by the Ethiopian governments and/or in collaboration with donor (bi-lateral and multi-lateral) communities and NGOs. Most of the early works focused on soil-water conservation, soil/land management for improved agricultural productivity and reforestation/afforestation practices. These early works are also recognized for their use of an approach commonly called Food-for-Work (FfW) relief assistance. The FfW approach focused mainly to mitigate soil erosion through the construction of physical structures such as construction of terraces, check dams, cut-off drains and micro-basins, and to a limited extent afforestation and revegetation of degraded and fragile hillside areas (Meskelu, 2002).

SOS Sahel and FARM-Africa are the NGOs that pioneered the current participatory natural resource and forest management initiatives in Ethiopia. Participatory forest management (PFM) was used as an umbrella term to refer to the various systems that have been developed in different countries including community forest management, collaborative forest management, and joint forest management (Anders, 2000). Initiatives were also supported by other development agencies and NGOs including German Society for Technical Cooperation (GTZ) and Japan International Cooperation Agency (JICA). PFM projects have the overall objective of promoting sustainable management and conservation of forest ecosystems and improving the livelihoods of people living in or around these resources (IFMP, 1999, IFMP, 2002).

The guideline developed by FARM-Africa describes the main principle of PFM as partnership based on shared goals and beliefs and a common understanding between the local community (user groups) and the government concerning the need for sustainable use, joint management and the requirements of the participatory arrangement (Anders, 2000). The PFM projects invariably share the idea of forest-dependent rural households and recognize the conflict between livelihood activities and the objectives of conservation. They also accept the moral and practical need to reconcile the two by integrating development and conservation activities (Anders, 2000; IFMP, 1999, 2002). There was a strong optimism about the projects as promising initiatives to promote community

participation in the management of forest resources in line with the conservation strategy of the country (EPA, 2003).

One of the early and long running development programs in Ethiopia is called MERET (Managing Environmental Resources to Enable Transitions). MERET has been running for about

three-decades by the joint efforts between the World Food Program (WFP) and the government of Ethiopia. Over time the MERET program has evolved into what is called MERET PLUS ("MERET through Partnerships and Land Users Solidarity"). Earlier MERET program focused much on Soil and Water Conservation (SWC), however, the lessons gained from it has made it clear that the main objective of Integrated Natural Resources Management (INRM) should not be reducing soil loss but rather enhancement of rural livelihoods through development oriented sustainable land management (Desta *et al*., 2005).

Consequently, MERET PLUS (2007-2011) was formulated with expanded packages rather than confined to physical and biological SWC technologies. It also targeted soil fertility management, agro-forestry and forestry development and rehabilitation, income generating activities, homestead gardens and crop diversification, rain water harvesting (RWH) in the form of small household ponds, shallow wells, spring regeneration, and several other development oriented activities and strategies. Particularly PASDEP prioritized sustainable land management and sector specific strategies to address the problem of land degradation and desertification comprehensively (Desta *et al*., 2005).

In 2008, another long term national program called Sustainable Land Management Program (SLMP) was launched. The objective of SLMP is to provide assistance to smallholder farmers to adopt sustainable land management practices on a wider scale to that will ultimately result in reversing land degradation in agricultural landscapes, increase agricultural productivity and income growth and protect ecosystem integrity and functions. SLMP is taking a more systematic implementation approach by targeting small watersheds, but in a larger watershed planning context. Important feature of the SLMP is the explicit and clear focus on enhancing farmers' incomes and food security, for example, through support for small scale RWH (Rain Water Harvesting), micro-irrigation, agro-forestry and other income generation activities (MoARD, 2011).

Unlike the MERET program that focused mostly on low potential areas, SLMP shifted focus to high potential areas. The SLMP is a holistic framework under which government, civil society, and development partners can work together to promote and scale up SLM. It targets to guide prioritization, planning, and implementation of SLM to more effectively address poverty, vulnerability, and land degradation, and seeks to scale up SLM practices with proven potential to restore, sustain, and enhance land productivity. The

program is highly focused on sustainability (institutional, financial); emphasizes active community participation and leadership, offering a choice of technologies; and seeks quick and tangible benefits for people while avoiding perverse incentives (MoARD, 2011).

Another important national program is the Productive Safety Net Program (PSNP). The objectives of PSNP are to provide transfers to chronically food insecure people in chronically food insecure woredas. It provides support or grants for the creation of productive and sustainable household and community assets and incomes; and contributes to large-scale rehabilitation of severely degraded areas. It does this through public works on public or community lands using FfW and cash for work (for SWC, feeder roads, water supply, etc.) and farmer training. The SWC technologies and implementation strategy are based on those developed under MERET. The project provides grants to households whose adults participate in labor-intensive public works (mostly watershed and communal land management related work) and to households that are labor-poor and cannot undertake public works. PSNP already shows significant reductions in soil erosion and sedimentation, increased vegetation cover, increased forage for livestock, enhanced yields and base flows of springs, and increased access to safe water – all with a high benefit-cost ratio (MoARD, 2011).

The evaluation recommends inclusion of work on private lands, arguing the lack of attention to adjacent private lands is undermining the sustainability of improved land management on public lands, and reduced soil erosion on private lands is also a public as well as private good.

Economic incapability forces farmers to usually apply less quantity than recommended rate. Side by side, there have been many smaller programs and projects implemented at Regional levels, especially in Amhara and Tigray. Some of these type of programs include the SIDA/Amhara National Regional State (ANRS) Rural Development Project (SARDP), implemented in several phases from 1998 to 2010 in Amhara region; the USAID-supported Amhara Microenterprise Development, Agricultural Research, Extension and Watershed Management project (AMAREW, 2002-2007); the Water Harvesting and Institutional Strengthening in Tigray Project (WHIST) supported by CIDA from 2001-2010; the BoA/GTZ Integrated Food Security Program, South Gondar (1996-2004); Norway Development Fund-supported programs with REST in Tigray (1997-2000), and the European Commission support for Rain Water Harvesting in Tigray through a multi-sector program of “Comprehensive Community and Asset Building Approach,” part of the 1998 and 2000 Integrated Food Security Programs (MoARD, 2011).

SARDP was a long running participatory rural development program in two zones of Amhara Regional State. Its aim was the reduction of rural poverty through local-level capacity building; and improved natural resources

management was a central thrust. AMAREW was an applied research project which, among other goals, sought to strengthen linkages among research, extension and farmers, promote new small-scale water management technologies, and develop innovative approaches to Integrated Water Management in a small number of woredas in Amhara. For example it tested the creation and empowerment of "Community Watershed Management Organizations" (CWMOs). WHIST was more focused on improving capacity for Small Scale Irrigation (SSI), but was affected severely by the Tigray government's policy shift from SSI to household rain water ponds (Pohjonen and Pukkala, 1990).

The forest resources continue to suffer intense human pressure including encroachment and settlement within parks. Consequently, assisted by several NGOs, new approaches to forest management began to emerge and the most important of these being community based forest management. These regional and national programs and projects also contributed to forest development of the country after 1990. Some of the prominent forestry related programs and plans were the planning of increasing the forest cover of the country from 3.6% to 9 % during the PASDEP period (2005-2010), and the establishment of large area enclosures in different parts of the country mainly in Tigray and Amhara since the early 1990's. In Tigray alone about 700,000 ha of area exclosures have been established, most of these being established during the past 20 years (Teketay, 1999).

In 2009, the Strengthening Sustainable Livelihoods and Forest Management Program was commenced in four regional states of Ethiopia with a vision to see government authorities incorporating CBFM in annual plans, budgets and management structures (SSLFM, 2010). In 2001, FARM-Africa worked to implement CBFM in Bonga Priority State Forest of the Kafa Zone of the SNNPRS. A moist tropical forest, implementation of CBFM appears to have positive impacts on the state of the forest and living conditions within the project lifetime, but continuation of CBFM appears threatened by weak government support for the scheme after the NGO support was terminated (Gobeze *et al*., 2009).

In Oromia, three CBFM areas exist in the forests of Chilimo, Borena and Adaba Dodola. Chilimo, in the West Shewa zone of Oromia, is a highland montane forest where FARM-Africa initiated a pilot CBFM project in 1996, although it was not until 2004 that the first forest user group was established. It is believed that CBFM has improved people-forest relationships with reduced deforestation, increased regeneration and the empowerment of locals. However, in a largely qualitative exploration of the intervention, Habtemariam *et al.* (2009) suggest that the technical, managerial and administrative capacity of the CBOs need to be strengthened and efforts to diversify livelihood options are still needed to reduce human pressures on the forest).

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The Integrated Forest Management Project in Adaba-Dodola, a project of both the

government of Ethiopia and GIZ, was implemented by the Oromia Rural Land and Natural Resources Administration Authority in June 1995. Located within the Bale Mountain Eco Region (BMER), plans to scale up CBFM across the region will build on the lessons learnt in Adaba-Dodola. The goal of the project was to establish Forest Dwellers Associations, or *Waldaa Jiraatotaa Bosonaa* (WAJIB) in Oromo, where members protect the forest and carry out management activities and restrict their expansion of farm plots in return for rights to live in the forest and generate forest- based benefits. Forest blocks constituted 300 to 500 ha and not more than 30 households, based on a forest carrying capacity of 12 ha per household established from previous CBFM experience (SUN-Dodola, 2005).

A functioning WAJIB consists of a general assembly, an executive committee and various other committees elected by members. Each WAJIB group has its own bylaws (internal regulations), that govern use, protection, rights and responsibilities of each household within the forest block. The forest administration is providing mostly technical advice on the development and sustainable utilization of forests. Positive impacts of this CBFM effort, to date, have been the improved forest condition and management. Rural livelihoods and social welfare are also reported to have improved, although not quantitatively (Lemma *et al*., 2011).

Comparative advantage of CBFM with centralized approaches

Community based forest management (CBFM) is one of the more prolific Community Based Natural Resources Management (BNRM) strategies throughout the world (Agrawal & Redford, 2006). In Ethiopia, the involvement of local people in natural resource management activities can be traced back to the countrywide massive programs for natural resource conservation and rehabilitation that were initiated as a reaction to the 1972/73 famine (Yeraswork, 2000).

According to, communities' involvement in these programs, sometimes also referred as participation, is understood to be a contribution of labor and resources that often is arranged together with food for work payments. Particularly, the involvement of people in soil and water conservation and afforestation programs was a top-down and coercive process. Thus the efforts were not complemented with the necessary commitment and enthusiasm from the local people and were even met with resistance that ended with little outcome to show for the enormous investments made. Both the lack of appropriate local level institutions and the ineffective mode of the participation process that failed to implement successful community based natural resource management (Yeraswork, 2000).

Management of natural forests has been the task of the state, particularly following their designation as state forests by the 1975 proclamation that nationalized rural lands and forest resources. Following this nationalization, local people were legally prohibited from

access to the traditional benefits they used to get from state forests. However, the enforcement of the state ownership was weak and inefficient (Melaku, 2003). The 1980 forest and wildlife conservation and development proclamation defined most of the natural forests as state forests. A government order further identified all forest areas above 80 hectare as state forests, although this was not recognized by local administrations as it was not issued as a legal regulation (Bendz, 1988). This has created uncertainty about ownership in most forest areas (Proclamation no. 192/1980). The traditional or customary rights to forest use by local people therefore still loom large in real practice, creating a de facto legal pluralism and strengthening an open access situation with no or limited incentives for the sustainable use and management of forest resources (Bendz, 1988, Stellmacher, 2007).

Participatory management of natural resources has become a major subject of policy debates in Ethiopia in the recent past on a same level with food security and rehabilitation of natural resources. The participatory agenda was revived following the extensive destruction of conservation structures and deforestation activities during the change of government in the early 1990's. These incidents were conceived as manifestations of public discontent and the failure of the heavy-handed, top-down, and campaign style approaches to natural resources management. As a result, discourses on the need to understand rural livelihoods, local contexts, and the need for consensual involvement of the community in development and conservation activities began to gain ground in the policy debate (Keeley and Scoones, 2000).

Concurrently, the National Conservation Strategy (NCS, 1994) of Ethiopia widely acknowledged the need to integrate development with environmental protection and the importance of the participation of local population. The conservation strategy adopted a decentralized approach in developing the strategies that facilitated the consideration of ecological diversity and the integration of institutional and stakeholders" conflicts in the use and management of natural resources (Wood, 1993). As stated in the NCS, “If a conservation project is to be really participatory, the community has to feel, at least as much as the planning expert, that it has decided that conservation is its priority problem, and that it wants to undertake specified conservation measures, e.g. planting trees.” In addition, two important aspects of participation are emphasized in the NCS: 1) it stresses an equal share of power in decision-making between local people and the government (experts) and, 2) the need to define the participating stakeholders based on their perception or view of forests as resources. Further, the decentralization processes started by the current government and the increasing emphasis on participation in the international development also have their impact in strengthening the participatory agenda (Keeley and Scoones, 2000).

As a result, participatory approaches

proliferated in many development activities in the country in land use planning, agricultural extension and training (Participatory Agricultural Demonstration and Extension Training System) and in conservation and sustainable management of natural resources (Harrison, 2001). Hence, comparative advantage of participatory approach is becoming accepted by various sectors.

Although issues of property and user rights of land and forests remain, there is strong support for CBFM across Ethiopia. CBFM involves the legal transfer of forest use rights from the government to community-based organizations (CBOs), the small groups of households that sign forest use agreements enabled by and dependent upon a negotiated Forest Management Agreement outlining forest management plans and the implementation of sustainable forest management practices.

The policy and legal framework of CBFM in Ethiopia is driven predominantly by the 2007 proclamation for Forest Development, Conservation and Utilization (542/2007), the Environment Policy of Ethiopia and the Conservation Strategies of Ethiopia also play a role. Of course, CBFM is not the only forest conservation measure that Ethiopia is pursuing. The protected area system is still in existence and the Ministry of Agriculture and Rural Development is currently implementing a national level Protected Area System Plan (PASP). The CBFM approach in Ethiopia has been employed for more than a decade in both Oromia and the Southern Nations Nationalities and Peoples Regional State. Efforts have been largely driven and supported by NGOs: FARM Africa with SOS Sahel, and the German Technical Cooperation (GIZ). CBFM is now supported at the national level and a country-wide CBFM program is being scaled-up. This requires substantial finance, some of which is being provided by the European Development Fund (R-PP, 2011).

The introduction of CBFM in Ethiopia was officially founded on three complementary beliefs held by forest authorities and donors: (i) centralized and expert-led forest management practices have been unsuccessful so far and will not succeed in the future; (ii) participation of local communities, which hold the major stake in forest resources around them, is the most effective strategy to achieve sustainable forest management, and (iii) forests offer multiple social, economic and ecological roles to local communities, and are capable of generating sufficient and sustainable livelihoods to take them out of poverty (Kubsa *et al*., 2003; Temesgen *et al*., 2007).

Due to its comparative advantages, in two regions of Ethiopia, Oromia and Southern Nations Nationalities and People Regional State (SNNPRS), state owned forest areas (natural and planted) were handed over to local communities organized into forest user groups (FUGs). Members of FUGs are typically from the same Kebele (lowest administration unit) and they live in or close to the forest designated for PFM. Before a forest area was formally handed over, the requirements were the

development of a management plan and contract signature between the relevant government authorities and the FUGs (MoARD, 2010).

FUGs have to form and register as cooperatives to be legally recognized; cooperatives may form district-level Unions. In the Oromia region all forestry activities used to be handled by the Regional Bureau of Agriculture and its district line offices prior to 2007, and succeed first by Oromia Forest Enterprises Supervising Agency (OFESA) between 2007 and 2008, and since then by Oromia Forest and Wildlife Enterprise (OFWE), a public forest enterprise established in 2009. OFWE is directly answerable to the Oromia region government executive council and PFM is organized under its district branch offices. In SNNPRS forestry activities are implemented under the authority of the Regional Bureau of Agriculture and its district line offices. These offices with the support from NGOs established FUGs and are supposed to continue assisting them in technical and legal matters, particularly in post project phases (MoARD, 2010). In practice, the Kebele administration is the empowered local level government body to assist FUGs. Thus, the local communities enabled to manage their own forest resources without direct involvement of central government.

The local communities expressed different motivations for engaging in PFM, and none of them shared the motivation of the local governments that mainly saw PFM as an opportunity to reduce the on-going deforestation and save the costs of forest guarding at the same time. In forests with wild coffee (Bonga) PFM was perceived to serve to prevent the government from allocating the forest land to private investors. In Mankubsa and Yabello CBFM was perceived as a defense against the allocation of land to settlers from other parts of the country, while in Adaba-Dodola and Chilimo rights to commercial forest product harvest and grazing in the forest, coupled with benefits from related on-going forest-related development projects and forest plantations, provided sufficient incentives for participating in CBFM (MoARD, 2010).

The opportunity costs of CBFM in Ethiopian context

The opportunity costs of CBFM in Ethiopia will be achieved by Implementing REDD$^+$ via CBFM. Efforts to establish REDD$^+$ projects and activities have often focused on countries where forest areas are more substantial and the carbon contained within the forests is very high. This includes Brazil, Indonesia and the Democratic Republic of the Congo where the majority of international finance to support REDD$^+$ development has been channeled. Establishing REDD$^+$ in Ethiopia, therefore, may not contribute significantly to reducing emissions from deforestation assessed at an international scale. Ethiopia may not receive as substantial financial transfers as other tropical forested nations under an international REDD$^+$ mechanism established by climate change negotiations. REDD$^+$ does, however, contribute

to internalizing the externality of climate regulation. It could provide a source of finance that changes the economic incentives to make forest conservation more economically viable and it necessitates the discussion and review of property rights regimes in forested areas. Signatory to the United Nations Framework Convention on Climate Change (UNFCCC), and the Kyoto Protocol, political and public awareness of climate change issues is increasing rapidly in Ethiopia (Climate Funds Update, 2012).

Ethiopia's growing interest in REDD$^+$ also stems from a number of organizations, NGOs in particular, which have begun to explore the potential for such forest carbon projects. The Humbo Community-Based Natural Regeneration Project, developed by World Vision Ethiopia and Australia, was the first forest carbon project in Ethiopia. An afforestation/reforestation project covering 2,728 ha in the southwest of Ethiopia, the project aim was to restore indigenous forest species to the land. In 2009, the Humbo project was registered under the CDM (Clean Development Mechanism) of the Kyoto Protocol and the World Bank Bio Carbon Fund has purchased the emission reductions generated by the project (FCPF, 2011).

Following the success of this project, four further CDM projects are under development (FCPF, 2011). The development of avoided deforestation and degradation activities in Ethiopia has also taken off, although no REDD$^+$ projects are yet certified and generating emission reductions for sale. NGOs instrumental in driving REDD$^+$ in Ethiopia include Farm-Africa, SOS-Sahel, World Vision Australia, and Save the Children US. Ethiopia is also a member country of the World Bank's Forest Carbon Partnership Facility (FCPF). A multilateral REDD$^+$ initiative, the FCPF builds capacity for REDD$^+$ and tests a program of incentive based payments through grants to its 37 member countries (FCPF, 2011).

In 2011, a revised Readiness Preparation Proposal (R-PP) outlining a national REDD$^+$ strategy for Ethiopia was formulated. Financing to implement the R-PP was estimated at US$12,495,000 with a timeline of completion in 2014. During the R-PP preparation a number of workshops and consultations were carried out. In-country capacity is building for REDD$^+$ and activities of the R- PP are already in progress. In November 2012, US$ 3,400,000 was approved for the R-PP. The Environmental Protection Authority of Ethiopia is currently chairing the REDD$^+$ process in Ethiopia with a REDD$^+$ steering committee and REDD$^+$ technical working group also established. The Environmental Protection Authority will hand over to a federal agency dedicated to forestry once it is created. Plans exist to develop regional steering committees and technical at REDD$^+$ sites. More on the legal and institutional setting of REDD$^+$ in Ethiopia is expected as the R-PP grant progresses through its three phases, with the preparatory phases spanning the next four years. Ethiopia can stand to learn from other countries in the region and their experiences with REDD$^+$. The drivers of

deforestation in Ethiopia are similar to those in other East African countries such as Kenya, Tanzania and Uganda. In all of these countries efforts are underway to build national REDD$^+$ capacity and REDD$^+$ projects. Tanzania in particular, with 40% forest cover, has commanded a lot of attention and US$ 131 million has been approved for REDD$^+$ activities through dedicated public climate funds (Climate Funds Update, 2012).

In Ethiopia's national REDD$^+$ strategy, it is acknowledged that substantial work is to be done. In particular, a national forest inventory with a view to determine carbon stocks and a deforestation baseline is required. With 100% publically owned forest, REDD$^+$ in Ethiopia will require clarification of forest use and carbon rights and substantial engagement and participation of the 84% of the population that resides in rural areas (Climate Funds Update, 2012).

Ethiopia is at the early stages of developing a policy for addressing social and environmental safeguards for REDD$^+$. In line with the World Bank safeguards and standard operating procedures a Strategic Environmental and Social Assessment (SESA) will be carried out and an Environmental and Social Management Framework (ESMF) will be developed.

In addition to these new developments, lessons will also be drawn from other on-the-ground initiatives as well as existing frameworks for implementing Environmental Impact Assessments (EIAs). For example, in northern Ethiopia community led area closures (land rehabilitation areas

e.g. protecting eroded watersheds from human and livestock use) have been implemented with special attention to environmental co-benefits, which have been duly integrated into community by laws (FDRE, 2011b). Furthermore, lessons can be drawn from other projects such as the Bale Mountains Eco-Region REDD$^+$ project and the Humbo Natural Regeneration project (CDM project). The Ministry of Environment, Forest and Climate Change, which is the main ministry for monitoring and verifying compliance with social and environmental safeguards, including EIAs, is expected to take a leading role in the monitoring of REDD$^+$ safeguards.

Earning carbon credits through avoided deforestation (REDD) could be particularly relevant for Ethiopia. Hence the opportunity cost of CBFM through REDD$^+$ benefits will encourage this participatory forest management.

Concluding Remarks and The way forward

Community Based Forest Management (CBFM) is considered a tool for socially responsible forest governance. The quality of the forest resources handed over for CBFM is important in affecting impacts and goal achievements. Local forest users may not be able to invest in the conservation of a highly degraded resource that will yield benefits only after considerable time. Therefore, it is important to consider whether the area and state of the forest handed over will allow forest users to expect a profit within an acceptable time frame, given

alternative options. Another element affecting the success of CBFM is the formal institutional arrangements put in place. These provide the framework within which CBFM is implemented and are therefore critical to the performance.

The objective of CBFM is to assist peasant to integrate forestry in to their farming systems in the form of intercropping using multi-purpose tree species to create a suitable and balanced farming ecosystem while, at the same time being able to obtain food, fodder etc. It is also to assist communities to keep protected forests in their surroundings, to create awareness among the local people about the need and importance of forestry, and to enlist their support for the implementation of country's forest policy.

The institutions in CBFM represent legal entities for the transfer of responsibilities. On the one hand, the legalization, the level of power for decision making (i.e. the extent of power vested on the institutions), and the support from higher level authorities determine how successful these institutions are. On the other hand, internal factors such as homogeneity or heterogeneity of members, the number of households included (indicating the level of pressure on the forest resources), as well as the skills and integrity of local administrators of the institution also affect outcomes.

A crucial point in the design of CBFM schemes is the access to benefits from the forest. This may be determined by central authorities and by the local authorities, for example through the rules for decision-making, forest management and forest product appropriation and distribution.

The Ethiopian government, both in the past and at present, tried to implement different interventions to rehabilitate the degraded areas and to maintain the remaining forests (though most of the economic policies rather aggravated and still are aggravating the rate of forest destruction). The strategies selected can be categorized broadly as frontiers economics, environmental protection and resource management paradigms.

The introduction of CBFM in Ethiopia was officially founded on three complementary beliefs held by forest authorities and donors: (i) centralized and expert-led forest management practices have been unsuccessful so far and will not succeed in the future; (ii) participation of local communities, which hold the major stake in forest resources around them, is the most effective strategy to achieve sustainable forest management, and (iii) forests offer multiple social, economic and ecological roles to local communities, and are capable of generating sufficient and sustainable livelihoods to take them out of poverty.

In Ethiopia, since the last two decades, the involvement of civil society Organizations (CSOs and NGOs) in forest management is increasing with commendable multidimensional successes such as lobbying for improved policy and introducing and testing new CBFM schemes. Past and present management measures and interventions are directed at

preventing further degradation; for example, through area exclosures/enclosures, use of protected area and plantation forests as buffers, or at regulating access to forests and harvesting of products through participatory forest management and traditional institutions for forest management, or both.

CBFM in Ethiopia include community woodlots, agro-forestry practices, catchment protection, participatory forest management, wind shelterbelts, and road side shade and ornament in villages and towns. This program has received most of its external support from international organizations, like the World Food Program (WFP), Food and Agriculture Organization (FAO) and non-governmental organizations like SIDA, FARM Africa, SOS Sahel, and the German Technical Cooperation (GIZ).

Unless CBFM becomes streamlined as a forest management options, success so far achieved could not be sustained. This in turn may downplay the role that CBFM could play in the development of Ethiopian forestry in general and that of the pilot project sites in particular. The experiences from participatory forest management have shown that CBFM significantly contributed to successful forest conservation. The good works done in community mobilization, organization and sufficient capacity building coupled with the granting of legal forest use right have realized forest rehabilitation and conservation successes. In other scenario Ethiopia's growing interest in $REDD^{+}$ will be initiated by the transformation of such CBFM in to forest carbon projects.

Because of the economic, socio-cultural and ecological significances of forests, due attention should be given to CBFM. In doing so, priority should be given to resource management and eco-development type of paradigms. The following strategies, if implemented properly, would have a win-win outcome:

- The past centralized forest management system has made local communities to be fearful, suspicious and to dislike discussions with outsiders on forest related issues. Commitment of participatory forest management staff, respect to locals and their traditions, living among them and with them, and creation of friendly working environment coupled with multiple strategies of awareness creation are critical in building trust and winning communities' interest for CBFM;
- Achieving SFM through local community management system, the capacity of communities and their institutions must be strengthened;
- Granting legal right is a strong incentive for forest dependent communities' to win their commitment for sustainable forest management;
- The gains in terms of cash and otherwise from the complementary livelihood strategies allows members of forest management groups to be less dependent on the forest and to allow forests to restore;
- Professional foresters have the important

role to play in providing training and helping the community gain practical skills and field practices in forest management;

- Provision of alternative source of energy is important for cooking, baking and lightening to minimizes the demand for fuel food and in order to keep environmental sustainability;
- Forest tenure security to encourages peoples to have their wood lots for fuel wood and construction so that it is possible to minimize the pressure on the remaining natural forests;
- Rather than converting forest and wood lands into agricultural land (be it investment or small holder agriculture), it is better to enhance the productivity of the existing cultivated land in one hand and develope ecofriendly economic activity;
- Allocating large number of peoples to adjacent forest areas in resettlement program should be discouraged and settled to non-forest open areas.

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