PARTICIPATORY FOREST MANAGEMENT

BEST PRACTICES, LESSON LEARNT AND CHALLENGES ENCOUNTERED

The Ethiopian and Tanzanian Experiences

Mulugeta Lemenih and Melaku Bekele

FARM-Africa/SOS-Sahel

March, 2008
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Cover photo: Degraded forestland rehabilitated through PFM program of FARmAfrica/SOS Sahel at Chilimo
**Acronyms**

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<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tr>
<td>a.s.l.</td>
<td>Above sea level</td>
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<tr>
<td>CSA</td>
<td>Central Statistics Authority</td>
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<td>DA</td>
<td>Development Agents</td>
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<td>DoA</td>
<td>Department of Agriculture</td>
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<td>EC</td>
<td>Ethiopian calendar</td>
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<td>EFAP</td>
<td>Ethiopian Forestry Action Programme</td>
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<td>EU</td>
<td>European Union</td>
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<td>FAO</td>
<td>Food and Agricultural Organization of the united nations</td>
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<td>FCOOPs</td>
<td>Forest Cooperatives</td>
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<td>FMI</td>
<td>Forest Management Institute</td>
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<td>FMP</td>
<td>Forest Management Planning</td>
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<td>FUGs</td>
<td>Forest User Groups</td>
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<td>FUM</td>
<td>Forest Unit Management</td>
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<td>GDP</td>
<td>Gross Domestic Production</td>
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<td>GO</td>
<td>Government</td>
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<td>GTZ</td>
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<td>IK</td>
<td>Indigenous Knowledge</td>
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<td>JICA</td>
<td>Japan International .....</td>
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<td>NGO</td>
<td>None Government organizations</td>
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<td>NRM</td>
<td>Natural Resources Management</td>
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<td>NTFPs</td>
<td>Non-Timber Forest Products</td>
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<td>PA</td>
<td>Peasant Association</td>
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<td>PFM</td>
<td>Participatory Forest Management</td>
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<td>PFMP</td>
<td>Participatory Forest Management Programme</td>
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<td>PFRA</td>
<td>Participatory Forest Resource Assessment</td>
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<td>PM&amp;E</td>
<td>Participatory Monitoring and Evaluation</td>
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<td>SFM</td>
<td>Sustainable Forest Management</td>
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<tr>
<td>SNNPRS</td>
<td>Southern Nations, Nationalities, People Regional Sate</td>
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<tr>
<td>SOS Sahel</td>
<td>Save our Soul</td>
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<tr>
<td>USD</td>
<td>United States Dollar</td>
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<td>WGCF - NRs</td>
<td>Wondo Genet College of Forestry and Natural Resources</td>
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Acknowledgement

The production of these document received assistance and information from several people, staff of FARM-Africa/SOS Sahel PFM Project, government officials at district and zonal levels, and community members. The facilitation role played by the concerned FARM-Africa head office staff was tremendous. The authors would like to extend their deep appreciation and gratitude to all.
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Executive summary

This document captures best practices and lessons learned from Participatory Forest Management (PFM) projects of FARM-Africa/SOS Sahel in Ethiopia and Tanzania. The document also highlights key elements of success as well as the challenges encountered. Both organizations (FARM-Africa/SOS Sahel) have worked together since 2002 in the EU funded Participatory Forest Management Programme (PFMP) at four sites, three in Ethiopia and one in Tanzania.

The focus of the PFMP of FARM-Africa/SOS Sahel was on improving efficiency and effectiveness of forest utilization and conservation through PFM in the respective project sites. Important characteristic of the PFMP is also its dualistic approach: (i) establishing community based forest management system, and (ii) adoption of improved livelihood systems through complementary natural resource based interventions. PFM was implemented on the ground in a stepwise process that is broken into three main stages: investigation, negotiation and implementation. At the investigation stage forest stakeholders are thoroughly analyzed, forest use information is gathered; forest users are correctly identified and organized into appropriate forest management institutes (FMIs). Supported with training, FMIs together with their respective GO forest services carryout Participatory Forest Resource Assessment (PFRA) and mapping. In the negotiation stage, the data collected in PFRA is put together into Forest Management Plan (FMP), which is then negotiated and finally endorsed by GO and FMI. Accompanying the FMP, Forest Management Agreement (FMA) is drafted, negotiated and signed between FMIs and GO. The signed FMA is a symbol of stewardship between the two parties on responsible forest management. The implementation stage involves the field implementation of FMP, continued capacity building of FMIs in forest management, and Participatory Monitoring and Evaluation (PM&E) for surveillance of the state of the forest as PFM progresses.

PFM introduction entails that access to forests is to be regulated, and in most cases this may involve banning some of or all of forest products harvest for sale at least for sometime and often up until the forests reach a state to ensure sustainable flow of goods and services. These actions of PFM will significantly affect some of the forest users mainly the poor and women. To contain this problem, PFMP smartly incorporated complementary natural resource related intervention and income diversification activities. These activities were found to have multiple positive impacts both on the livelihoods of forest dependent people and the forest. In general, after four years of experiences on the ground, PFMP of FARM-Africa/SOS Sahel realized positive changes and impacts on the conditions of the forests and livelihoods of participant communities. In so doing, PFM reconciled GOs and local communities on forest conservation related matters, while simultaneously establishing a ground for new model of forest conservation in Ethiopia and Tanzania. Summary of best practices, lessons learnt and challenges faced are presented below.

(i)Summary of best practices: - The projects have had positive impact on the conditions of the forest and on major stakeholders (the community and Government), and more importantly on developing good partnership between communities and the government to work together in PFM scheme to achieve dual purpose of conserving forests and improving livelihoods. Obviously, successes varied from site to site as affected by local and regional factors including regional policy
backing. Examination of the various stakeholders’ attitudes and field observation of progresses made so far depicted the following major achievements:

- Local communities acquired the necessary knowledge, awareness, skill and built confidence to implement PFM.
- Promoting social justice and gender equality has demonstrated encouraging achievements in empowering minorities and women;
- Local participation by granting use right and development of transparent partnership between locals and government in forest management demonstrated success through improved forest conservation outcomes including restoration of degraded areas. Indicators of forest conservation achievements include:
  - territorial integrity of forests under PFM maintained as compared to forests outside,
  - recolonization of the forest floor with abundant regeneration,
  - enrichment plantings of degraded sections of PFM forests by FMIs;
  - improved NTFPs management, production and marketing that to some extent improved total forest productivity and income opportunity for the locals,
  - increased presence of wild animals that were rarely seen in the forest mainly due to reduced human interferences,
  - significant reduction in the number of footpaths indicating reduced human intrusion,
  - rehabilitation of degraded forest sites through area enclosure,
  - significant reduction in forest encroachment, forest fire, illegal logging and unauthorized harvest of forest products, and
  - banning of charcoaling, voluntary abandoning and giving over of farmlands within the forest territory.
- Integrated approach rather than just the ‘forest’ best achieves improved livelihoods and better forest conservation. This was mainly through reduced pressure from the forest for subsistence and cash income needs. Indicators of such achievements include:
  - New skill gained and capacity built on complementary activities including NTFPs technology;
  - Livelihood improved (subsistence and cash income);
  - Pressure on forests reduced;
- PFM is getting the attention of federal and regional policy makers.

(ii) Major lessons learnt: - From the way PFMPs have been practiced on the ground, the following major lessons can be drawn:

- Granting legal right is a strong incentive for forest dependent communities' to win their commitment for sustainable forest management. The legal right issuance is a motivation to local communities to be engaged in conserving forests even when they are degraded forestlands with no ready-to- harvest products (e.g. in Liban - Borana; Dano FCOOPs - Chilimo);
- The successes observed in the four pilot sites demonstrate that PFM can be exercised under varying biophysical and socio-economic settings, including in a pastoral community and multi-ethnic setting;
- The variations of PFM field exercises at the four project sites imply that PFM implementation has no blue prints. It all depends on local conditions, existing traditions, prevailing people -forest interactions and socio-political environments. Therefore, success in PFM establishment
needs to be flexible, adaptive to local conditions, and follow primarily learning by doing approach following certain procedures and principles;

- The past technocratic forest management system has made local communities to be fearful, suspicious and to dislike discussions with outsiders on forest related issues. Commitment of PFM 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 PFM;
- Effective and successful livelihood support from complementary natural resources related intervention constitutes good entry point and vehicle to building trust. It can also be used as an incentive to attract community members to PFM, and creates opportunities for offer frequent interaction between NGOs, GOs and locals.
- The gains in terms of cash and otherwise from the complementary livelihood strategies allows members of FMI to be less dependent on the forest and to allow forests to restore. This is particularly important as forests allocated for PFM are often degraded (e.g. Liban in Borana), and are unable to provide sufficient short-term subsistence and cash needs to the members of FMI;
- Promoting alternative livelihood strategies allows forest aggradations and encourages FMIs to continue with PFM processes, and to build their capacity and skills in becoming serious partners in SFM;
- However, maintaining the right balance between forest and non-forest based livelihood options requires careful thinking so that the right mix of support is provided to strengthen FMIs. Thus far the focus appears more on non-forest based options, with the consequence of missing or undermining forest based opportunities.
- Diversification of livelihoods also contributes to better nutrition, improved health and thus effectiveness in forest activities. It also allows the community to analyze the complex interrelationships between ecosystem components, livelihood systems and to appreciate the need for INRM. Some of the livelihood interventions are agricultural such as fattening, irrigation etc. Sustainable operations of these livelihood activities are basically supported by healthy forest ecosystem not only by inputs. For instance, unless water resources are available, which in most cases are flowing from the forest ecosystem, sustainable irrigation is unthinkable. Intensification of agricultural production through the complementary intervention on already owned land would curb the horizontal expansion, which has been the case for centuries in the forested landscapes of Ethiopia;
- The classical thinking in Ethiopia is that forestry and other livelihood systems are rivals and competitive. These projects have demonstrated otherwise. It can be learned that agricultural or other livelihood systems can be integrated with SFM interventions and that they are complimentary rather than competitive. This is also a good lesson to be drawn for the present extension system in the country, which is biased towards one corner of livelihood abandoning the forestry corner;
- By and large the transitory advantage from other livelihood sources will give time for resistant professionals and politicians alike who do not have confidence in community’s ability to manage natural resources to wait, see and believe while forests are being well managed by locals;
- Practical field based demonstration of community's capacity to handling successful PFM, and working in close collaboration with concerned GO offices makes strong argument for PFM;
Complementary interventions that are inline with GO development policies are also contributors to winning positive attitudes from policy makers.

(iii) Key issues: - Inclusiveness of FMIs and working with local institutions remain key issues. Becoming inclusive is important. But this needs to be seen from managerial as well as conflict management point of view. Groups should not neither too small nor too large. While doing so, building on existing local institutions and norms may help in ensuring stability of FMIs. Local institutions are means to ensure coherence among the members of FMIs, effectiveness in FMP implementation, in managing conflicts among members and with outsiders, thus on sustainability and success of PFM projects. Working with local institutions like Gada system significantly contributes to the establishment and working efficiency of PFM. Besides, their power to mobilize local people is high. These local institutions have also good recognition and respect by politicians at decision making levels. Consequently, the traditional local institutes have the advantages of better community representation at negotiation with GOs (vis-à-vis FMA) on the rights and responsibilities of the FMI, in conflict management from within FMI and/or between outsiders and FMI, and in effective implementation and monitoring of the FMA. Indeed, wherever strong local institutes are available working with and through them is likely to facilitate successful implementation PFM practices.

(iv) Challenges encountered: - FARM-Africa/SOS Sahel has faced a number of challenges in the process of implanting PFM that can be grouped as external and internal. The externalities include: a) Weak collaboration, sluggish work procedures, long chains of bureaucracy, and sometimes even resistance for PFM by the GO staff, particularly at the beginning; b) Skepticism and shying away of locals from collaboration with outsiders due to past bad experiences with GO, c) Lack of capacity in GO offices for planning and implementing PFM; d) Lack of commitment in institutionalization of PFM in the GO system. e) Lack of legal clarifications regarding the legal status of local institutes (FMIs vs FCOOPs); f) The high illiteracy and innumeracy rate among the locals delayed the progress of PFM; g) Climatic anomalies in some areas (e.g. in Borana) and high staff turnover in some project areas affects project progress.

(v) The way forward for sustaining the momentum: - The best practices, lessons learnt and challenges faced in implementing PFM have been presented. The challenge is then how to tackle the challenges and expand opportunities for PFM as one means to promote SFM in Ethiopia. To this effect, the experiences need to be grounded and consolidated, and the government should be ready to scale up and out PFM in other forested areas of the country. As it stands however, that readiness is not firmly in place. It is therefore important to institutionalize PFM in the government structure, and thus as an integral part of the duties of the concerned staff. Unless PFM becomes streamlined as a forest management options, success so far achieved could not be sustained. This in turn may downplay the role that PFM could play in the development of Ethiopian forestry in general and that of the pilot project sites in particular.
1. Background

1.1. Introduction

Forest resource degradation continues to be a major challenge to the environment and economic development in Ethiopia and Tanzania alike. The conventional forest management that perceives local communities as 'enemies' of the forest, and thus ought to be controlled through hired forest guards largely failed to achieve the forest conservation objectives of the Governments. It only resulted in augmenting conflict and forest resource depletion. In recognition of the serious institutional limitations of the forests in the two countries, FARM-Africa and SOS Sahel jointly launched and implemented Participatory Forest Management Programme* (PFMP) in partnership with the concerned government agencies in Ethiopia and Tanzania and forest adjacent communities. The major objective of the PFMP was to contribute to sustainable forest management through the development of partnership between GOs and forest dependent local communities by introducing Participatory Forest Management (PFM) scheme. PFM is designed to form a component of the broader rural development strategy that aims at improving rural livelihoods, promoting gender-equality and reduce poverty whilst protecting the environment from degradation.

After four years of activities on the ground, it is essential that the best practices of and lessons learnt from the PFMP including the challenges faced be systematically captured, synthesized and properly documented in order to maximize learning and facilitate scaling up and out. Consequently, in this document we described best practices and lessons learnt including challenges encountered while implementing PFMP by FARM-Africa/SOS Sahel in both countries. The documentation was based on reviews of relevant project documents and literature, information gathered from field visits and interviews of staff members of the project and of partner organizations and local community members. The review of documents involved looking into project proposals, guidelines, field reports, thesis or other studies, project briefs and workshop proceedings. This was supplemented with examining other literature such as forest status of the respective countries, and past and present management systems in order to see improvements within the context of the national environment affecting the forestry sector. During field visits to Chilimo, Bonga and Borana, information was collected using semi-structured interviews and group discussions coupled with field observations. Field level documentations were reviewed, project staff and key partners, notably government staff were consulted. The interviews with project staff and staff of line ministries focused, besides project strengths and successes, on the challenges encountered in implementing PFM as well as on sustainability of project activities after the withdrawal of the NGOs. The assessment of the perception of major stakeholders, notably the communities was sought on the overall situation, notably on changes in forest status and on livelihoods. As much as possible key informant interviews were conducted while transects walking through the forest where changes in forest cover/regeneration status can be observed. Group discussions were held at each site with emphasis on the overall processes, achievements, challenges and opportunities that they observed during the implementation of PFM in the respective areas. The views of marginalized groups such as women and minorities were sought to look for issues related to social justice and to look for options and challenges for scaling up best practices.

* The PFMP of FARM-Africa/SOS Sahel is funded by EU
1.2. The Forestry Sectors in Ethiopia and Tanzania

Ethiopia covers 1,127,127 km$^2$ with 1,119,683 km$^2$ of land whereas Tanzania covers an area of about 945,000 km$^2$ out of which 888,600 km$^2$ (94 %) is land. Regardless of the high rate of deforestation, Ethiopia still owns 4.5% of high forests (FAO, 2006) and 61% of woodlands and savannas (Earth Trends, 2003). The annual incremental yield is estimated to range from 30 - 120 m$^3$/ha for the high forests and between 5 and 50 m$^3$/ha for the open forests and woodlands (Million Bekele, 2001). The total removal of wood products from forests and woodlands rose from 85.8 million m$^3$ in 1990 to 111.9 m$^3$ in 2005 (FAO, 2006). Man-made forests of Ethiopia include industrial, peri-urban and catchments protection plantations, which were established and managed by the State as well as community woodlots. During hundred years of “casual” and “planned” tree planting, the total areas of plantations in the country have not reached more than 200,000 ha. This is approximately at the rate of 2,000 ha per annum of planting, which is only about 1% of the estimated 150,000–200,000 annual rate of deforestation in the country (Meleku Bekele, 2003). Individual or community level tree plantings remained low because of different reasons: insecurity of tenure, shortage of land, infrastructural limitation for accessing the markets, etc.

According to the report by Forestry and Beekeeping Department (FBD) (1999) of Tanzania, the vegetation cover types of Tanzania are generally categorized into forest cover (2.9 %), woodland (39.6 %), bush land (18.3 %), grassland (20.6 %), open land (0.2 %), cultivated land (10.7 %) and others (0.1 %). Covering 37.8% of the total landmass, which is about 33.5 million hectares, the country’s forests contain such a high level of biologically diverse resources that Tanzania is one of the richest countries in terms of biodiversity in the world and among the 12 most diverse countries. In addition, the forests provide over 92% of the energy resources, support the development of other important sectors (such as agriculture and tourism) through provision of water resources and catchments, maintain hydrological balance and soil protection, recycle atmospheric gases, provide construction materials, employment sources and others. Employment is provided through forest industries, forest plantations, government forest administration and self employment in forest-related activities. The exceptionally high richness in the indigenous biodiversity gives the two countries the potential to deliver diverse forest products in the form of timber and non-timber for domestic and external markets (FBD, 1999; URT, 2000).

1.2.1. Forests’ contributions to local and national economies

The contributions of the forest sector to total gross domestic product (GDP) of both countries are general low. According to MEDAC, the contribution of forestry to agricultural sector in Ethiopia during the decades between 1980/81 and 2000/2001 was in the range of 10-16 %, while its contribution to the national GDP is between 6-7%. However, many suggest that if the direct consumption of wood products in the forms of fuelwood and charcoal and the indirect contributions of forests to watershed management, soil and water conservation and forest products utilized in other economic sectors such as health, food, and manufacturing and construction activities are considered in the calculation, the contribution of forestry to the total GDP could have been much higher amounting to about 10% and more according to some unpublished sources. For instance, the supply of energy from biomass saved the country from importing nearly 10-15 million tons of oil-equivalent per year. Income from export of forest products is dominated by natural gum. This is quite considerable from economic point of view.

Forestry’s contribution to employment generation in Ethiopia is not properly documented. Nonetheless, the number of people making life out of forest engagement is very high especially through fuelwood (fire wood and charcoal) gathering, transport and sale. Fuel wood production
is by far the largest employment generator accounting for nearly 50% of the total forestry employment, followed by afforestation contributing for about 34% (Million Bekele, 2001). At the national scale the use of fuelwood as energy source covers over 70% of the national energy demand. This supply of energy from biomass saved the country from importing nearly 10-15 millions tons of oil equivalent per year. Income from export of forest products is dominated by natural gum. Between 1996 and 2003, Ethiopia exported 16, 019 tons of natural gums (gum arabic, frankincense, myrrh and opoponax), which worth 176, 682,488 Birr (20, 473, 058 USD) (Mulugeta Lemenih, 2005). Although large quantity of coffee exported from Ethiopia originates from the forest (wild coffee), unfortunately the total coffee production and export are accounted for agriculture and not for forestry. Statistically this has a tremendous distorted representation of the contributions of forestry to the GDP. The indirect contribution of forestry through environmental protection and support to agricultural productivity is also tremendous in Ethiopia, and remain largely unaccounted for.

The contribution to GDP from the forestry sector in Tanzania is also low but is growing in recent decades due to trade liberalization and increased forest product export. The contribution from the sector has increased considerably during the past 10 years by about 35%, from 2.6 to 3.4 % of GDP. Trade in forest products has recently increased, and the sector’s contribution to total trade has more than doubled. In Tanzania, it is estimated that forest based activities generate employment to about 800,000 people per year; half of them women (FBD, 2000). Moreover, more than 90% of the population in Tanzania, both in urban and rural areas, uses biomass energy for cooking and heating. Hence bio-energy is the main source of fuel for country’s population and accounts for approximately 90% of the total energy consumption in the country (FBD, 2000).

1.2.2. Forest degradation in Ethiopia and Tanzania

Ethiopia’s forests are experiencing high rate of deforestation for decades. The growing need for fuelwood, agricultural lands and overgrazing by livestock coupling the improper forest and land tenure policies are believed to be the causes of forest degradation. Although reliable statistics are absent, a widely quoted estimate put the deforestation rate in Ethiopia at 150,000 -200,000 ha per year. Recent analysis on the rate of deforestation shows that Ethiopia has lost 77% of the forested area it had between 1955 and 1979 alone (Reusing, 1998). In another estimate by World Bank (2002), out of the 45,390 km² of forest that Ethiopia has an estimated 8% is being lost annually. Deforestation has already threatened a number of plant species, including the gene pool of wild populations of Coffee Arabica L. (Tadesse W/Mariam and Demel Teketay, 2001; Tadesse W/Mariam et al., 2001, 2002). A loss in biodiversity implies actual and potential economic and livelihood losses that have local, national and international implication, particularly in the faces of rapid global environmental changes.

Similarly, forests of Tanzania are under enormous pressure from expansion of agricultural activities, livestock grazing, fires, charcoal burning and other human activities. Shifting cultivation may account for more than 50% of deforestation on Tanzania mainland. Charcoal making becomes the second contributing factor. Illegal harvesting and mining activities are also reported (Iddi 2002) to contribute to deforestation in Tanzania. Data on deforestation rate in Tanzania differs from different source e.g. 91,200 hectares of forests and woodlands are lost each year (FAO, 2000). The National Forest Policy (1998) refers to a deforestation rate of between 130,000 ha to 500,000 ha per year. The situation is alarming and therefore there is need to investigate and adopt effective remedial strategies through sound forest management practices and good forest governance. VPO (1998) outlines other causes of deforestation as poverty, loss
of traditional knowledge in forest management, population dynamics, and poor agricultural practices. On the other hand, the resettlement of refugees in Western and Southern Tanzania has necessitated the clearing of large areas for human settlements and over-exploitation of forest and game resources for fuel and food. Other threats include unclear boundaries, lack of systematic management, illegal logging and insufficient revenue collections (FBD, 2000).

Forest depletion and degradation has had several impacts that affect livelihoods of Tanzanian people and their environment. Some of these impacts include erosion and loss of soil productivity; acute shortages of timber, fuelwood and other forest products and services; drying of water sources and shortage of water for various purposes; floods, sedimentation of rivers, reservoirs and irrigation systems; global warming, and species extinction due to habitat fragmentation and over-exploitation. In Tanzania, due to deforestation, many parts of the country have been experiencing serious soil erosion problem particularly in the central region where miombo* woodlands dominate (Misana 1988, Misana et al., 1996). Deforestation has also affected the potential of water catchment areas in terms of the quantity and quality of water they supply. Increased sedimentation of rivers and dams, river sands and frequent flash floods are reported in several parts of the country (e.g. recent floods in Mwanza, Shinyanga and Tabora where 60% of total forest is miombo woodlands). The resulting lack of water and poor quality of water have been, in many cases, associated with incidences of many water-borne diseases such as typhoid, diarrhoea and cholera. Addressing effectively the problem of forest depletion and degradation will mitigate/reduce or eliminate those hazards and improve rural livelihoods. This can be achieved through good forest governance and sound management practices.

1.2.3. Forestry sector’s institutional arrangements in Ethiopia and Tanzania

For long, forestry sector management and administration in Ethiopia used to be governed by highly centralized control governance. Since the 1990s, however, there is a change from centralized economy to a market economy, decentralization of decision making and regionalization. Consequently, forestry institutions have been decentralized and the responsibilities to manage and administer forest resources have been devolved to the regional governments. As per the decentralization policy, regional governments won the power to manage their natural resources as they found appropriate –within the scope of their constitutional rights & limits. Nonetheless, those regional institutions not only lack capacity for setting effective forest administration institutions at local level but also the devolution and decentralization has not changed the manner in which forests are managed as the regional governments continue to sub-centrally control the management and utilization of the forest resources. The decentralization and devolution process has in principle not empowered local communities or villagers to gain rights and responsibilities to own, manage and use the forest resources. Similarly, since the 1990s, encouraging policies and legislations have been issued that apparently encourage community based natural resource development including forestry. Nonetheless, there is no policy connection between the macro - and the micro-levels, and thus the policies are little exercised on the ground.

Likewise in Tanzania, decentralization and devolution reforms from centrally monopolized control tradition is a recent development but with commendable positive contribution on the forestry sector. The state of Tanzania has issued a Forest Policy of Tanzania (1998) and a new

* Miombo is a vernacular word that has been adopted by ecologists to describe those woodland ecosystems dominated by trees in the genera Brachystegia, Julbernardia and Isoberlinia (Leguminosae, sub-family Caesalpinioideae).
Forest Act (2002) both of which have paved the way for several changes in the way forests are managed and conserved in the state. Associated with the changes in institutional arrangements, the government of Tanzania has mainstreamed service delivery through national and local government institutions, supported by direct block grants to local governments. Likewise, the National Forest Policy (URT, 1998) provides incentives for the sustainable management of unreserved and unprotected forests by village governments. The decentralized and devolved institutional arrangements directly contributed to a favourable legal environment for advancing the way forests are managed down to local communities in various forms including PFM. The forest policy was clear and supportive, making progress immediate. Today, mainland Tanzania has one of the most advanced community forestry jurisdictions in Africa as reflected in policy, law and practice (Wily, 2000). In general, decentralization and the associated forest institutional changes in Tanzania have improved significantly the overall environment in favor of forest development.

2.0. Participatory Forest Management

2.1. Conceptual Settings

2.1.1. Forest Management under Conflict Situation

Ethiopian and Tanzanian forests are knotted with conflicts of interests among and between various claimants. The situation is created as a result of unfair distribution and/or unregulated access of resources, and top-down rural development policies and programs. In Ethiopia, for example, during the Imperial period that ruled the country between 1920s – 1960s excessive individualization of forests and unwarranted agricultural expansion alienated millions of people whose livelihood depended on the resource. Similarly, the DERG that over took the Imperial regime and ruled the country from 1970s and 1980s adopted a top-down approach in its rural development planning and resource management, and imposed absolute State ownership over the forest resources. The Imperil Government ended by allowing untenable and unregulated use of the forest resource by so called private owners, while the DERG monopolized all rights (ownership as well as use rights) and greatly discouraged individual and community forest development initiatives. In both cases, governments only succeeded to effectively alienate communities and individuals and created situations where communities grew un receptive to the forest development, and many cases hostile to it. In the absence of legal opening communities/individuals seem to have developed their own routes to circumnavigate the laws and engage themselves in unregulated access to the effect of destructive or unsustainable use of the forest resources (Melaku, 2003). Following the violent change of government in 1991 a situation was created where, as soon as the controlling hands of the State relaxed, the destructive power of individuals set in and the forests lingered under open access situation. In the last several decades, what we have been observing in Ethiopia was growing conflicts of interest between the State and communities/individuals over the forest resources that made SFM almost an impossible task.

Turning situations that change conflicts into forces of cooperation and collective action is an important approach that needs to be adopted in natural resource management. Such a positive contribution of conflict is highly dependent, however, on the capacity of society’s social or political institutions to understand their nature and manage them accordingly. PFM is exercised in many instances in the environment of accepting the existences of conflicts of interests among stakeholders but establishing mechanisms to managing their excesses.
2.1.2. PFM as a Policy tool for Conflict Management

The whole idea of participatory approach in research and development is conceptualized within a framework of ecological emergency, i.e. resource depletion, growing poverty and food insecurity. It was initiated to organize and empower communities in order to rehabilitate degraded natural resources and to use them in sustainable way. It was a response to the failure of traditional top-down, paternalistic and state-initiated development practices, which ended in only alienating communities and put them in conflict with State forest management. The whole claim is that villagers have a more concrete know-how about and a vested interested in the resources than state bureaucrats. They also have a greater concern in managing forests sustainably, because their livelihoods depend on it. The objectives of PFM establishment, thus rests on the driving principles of accommodating conflicting interests over the forest resources, and the empowerment of communities by introducing congruency between the forest capacity and community’s needs of forest products. The approach was to improve community livelihood and rehabilitate the forest resource by bringing villagers more closely to the resource with the sense of confidence and certainty, an effective policy tool to manage conflicts.

Reconsidering the role of local communities in conservation is part of a greater transition toward what theorists call ‘new conservation’. These include holistic approaches to conservation that incorporate multiple scales of ecological, social, political, and economic concerns. Participation can be both shallow (e.g., involvement of stakeholders in setting of activities such as revenue/benefit sharing) and deep, where partaking includes initiating definitions, goals and objective setting, and program evaluation. Therefore, participatory management is a process of negotiation and decision making. Whether a participation strategy is characterized as shallow or deep depends on the qualities of decision making and negotiation, particularly in their inclusiveness of multiple parties and interests (Berkes, 2004; Hulme and Murphee, 1999; Scoones 1999).

2.1.3. The Interface between Conservation and Livelihood

Forests are one of the most important natural assets for millions of rural communities in Ethiopia and Tanzania whose livelihoods are inextricably linked to the forests. Nonetheless, governments in most developing countries like Ethiopia ignored the significance of this linkage and installed forest management systems that are exclusionist, protectionist and authoritative (top-down) by nature. The unwarranted denial of access or right of resource use has instigated locals to utilize the forests in an unsustainable manner, which in turn is resulting in significant reductions of subsistence and cash income options particularly to the most poor and disadvantaged groups. The conventional management approach undermines, not only community’s long-standing economic, social and cultural interests in the forest, but also local knowledge and traditional institutions for forest management, which otherwise could have been revitalized to contribute for sustainable use of the forest resources.

Given the failure of the state controlled forest management system, the need arose to develop, a new alternative approach, the PFM, not as a substitute to the conventional management system, but as alternative approach to address particularly conservation principles by addressing community’s interests to access and support their livelihoods from forest products and services. As Anders (2000) noted the foundation of PFM is that local community can and will conserve forests if rendered legal right to access and use the resource to generate tangible benefits - a benefit that confers the retaining of the forests rather than removing them. Indeed, PFM is dualistic in purpose - it is about the economic and social benefits of forest dependent community from the forests, as it is about the conservation of the forest resources. In so doing PFM
establishes an interface where conservation concerns of the State and the livelihood needs of local communities can be served equitably. PFM is not only about benefit sharing, but also about empowerment and decision making on issues that immediately and vitally concern communities. PFM deals with community participation as they are gaining a new role as forest managers and legal users, and need to be organized, establish appropriate institutions, define their needs, develop plans and implement the plans to achieve a successful forest management and meet their needs. PFM also deals about the forest because it needs to be conserved for various reasons, economic as well as environmental. The State rightly demands the forest to be conserved, provide goods and services, and ensure sustainable livelihood for the present and the generations to come. The two elements, therefore, deserve appropriate balance as they are not essentially contradictory. PFM, thus, stands to disprove the conventional technocratic attitude where management is for the forest, and against the people.

2.1.4. PFM and the Question of Property Rights
Although high population growth and resource scarcity are often suggested as causes for the conflicts in the sector, the core reasons, however, rest with the failure of the institution of property rights and unqualified denial of access rights to communities. By allowing communities to share benefits as well as responsibilities, the State, in effect, is sharing its monopoly over property rights over the forest resources. By limiting or restricting access to a resource property rights institutions govern individual or community dealings with the physical environment (North, 1990, Bromely, 1997). These arrangement, not only determine who owns what and how, but also decide the relationship individuals shall assume among themselves with regard to property. Because property relations strongly influence the structural and legal relations in society, they are central to the understanding of vital issues that affect communities and the resources upon which they depend, including environmental problems (Melaku, 2003).

The PFM schemes essentially refer to a bundle of rights communities gained from the State through negotiated settlement, and aims at avoiding or minimizing conflicts of interests between the two to use the resource in sustainable way. In brief, the PFM approach is targeting SFM and avoid open access situation, a non-property condition over forest. It essentially answers such questions as to who owns what, how, and even why.

2.1.5. PFM as a Sub-set of Decentralization for Resource administration
Given the opportunity, communities whose livelihood depends on forests are better positioned to manage the resource as well as resolve conflict over the same. One of the empowering tools is decentralization. A highly centralized system suffocates local initiatives, knowledge and institutions. In most cases the centralized system works, on uninformed or poorly informed ground and runs the risk of being inefficient and even corrupt. Decentralization of resource administration is about returning to local communities’ and local authorities resource management rights that they lost at different times.

Decentralization provides authority in which local government bodies and communities exercise power over key resources. It is also about accountability where the same bodies assume new roles and responsibilities. Decentralized resource administration (in its real term) is more than providing livelihood. It is about giving communities and individuals authority together with accountability. It is building community/individual self-stem and confidence, and the process helps them to sense their collective power to bring positive change and encourage them to claim
some rights as is the case with the Menjas\(^1\) of Bonga. Decentralization of natural resource management is crucial as national governments rarely possess enough personnel or money to enforce their laws adequately and/or as those external personnel entrusted to protect the natural resources themselves get corrupt as they are not culturally associated to the resources.

Since the mid 1980s, decentralization has become a global issue affecting most developing countries. Governments have decentralized for political, economic, social and ideological reasons. At least 60 countries claim to be decentralizing with some aspects of natural resource management, according to Agrawal (2001). Although, constitutional attestation of rights such as decentralized resource administration is critical, but not sufficient by itself. Decentralization and PFM (the latter being the sub-set of the former) to be effective should come with technical as well as legal (institutional) capacity at all levels of the power hierarchy. Communities' need competence as they need to make rules, plan and implement programs, monitor and evaluate activities. Such capacity enables communities to run their local affairs independently in an uninterrupted manner. It is for this reason that institutional capacity building of communities and partners becomes an essential component of PFM establishment.

2.1.6. PFM and Local Institutions

State monopoly of property ownership did not only degrade forest access right of locals but also their age-old traditional systems of forest resource management, including local knowledge and institutions. The action of local people is often governed by the apparently informal but customary/traditional rules regarding use of natural resources. And before traditional systems were displaced, they remained important actors in sustainable forest management (e.g. the Gada\(^2\) system of the Borana Oromo). Gibson et al. (2000) also argue that local institutions can help mitigate the some factors responsible for deforestation.

It is becoming clear also that local institutions filter or ignore the rules of central governments when these overrun their traditional systems of resource use. Too often locals create their own new institutes or use their age-old traditional institutes and patterns of activities in natural resource utilization that diverge widely from government rules and expectations. Since these local institutions guide the daily consumption of natural resources, it is essential to recognize and keep them at the centre of new strategies designed for sustainable forest management. Therefore, if traditional institutions exist that previously fulfilled a sustainable natural resource management roles, it is an advantage to revitalize these roles.

However, traditional institutes have their strengths and weaknesses. Therefore, working with traditional institutes does not always mean that they are perfect cells to start with. But new systems of forest management can be built out of traditional systems by adapting them to fit to today’s context of increasing resource demand, social justice and land use competition. In other words, the traditional institutes can be seen as the foundation on which to build new systems of forest management. Forest management systems set up in this way can become rooted in the traditional cultural system of NRM, and are in tune with modern-day realities (Irwin and Mitiku, 2004).

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\(^1\) Menjas are ostracized minority ethnic group living in Bonga area.

\(^2\) The Gada is a traditional governance system common among Oromo people, a generational class that assumes ritual, political and religious responsibilities for an eight year term of office.
2.2. The Ethiopian and Tanzanian Experiences

2.2.1 Ethiopia

In the Ethiopian case excepting for agricultural lands, property relations over such resources like forests, water bodies, aquatic resources (fish), wildlife, etc., remained loosely defined and undecidedly enforced throughout our modern history. The Imperial government is remembered for its notorious scheme of agricultural expansion at the expense of forests to increase its tax revenue through indiscriminate individualization of the forest resource. The Socialist government nationalized all forest resources of the country making itself, not only the exclusive owner, but also the sole forest developer. From 1991, in sharp contrast to the previous years, the State retreated from its huge obligations it assumed in the previous years as forest custodian and developer without putting appropriate institutions in place (Melaku Bekele, 2003). Many of the country’s forests remained in a state of open-access and rapid deforestation continued uninterrupted for several years. At certain point, it is this situation that seems to have created a favourable environment to initiate PFM aiming at taking the forest resource out of a non-property situation, give communities rights and help rehabilitate the forest resource.

Nevertheless, the phrase of public ‘participation’ has been widely used in Ethiopia starting from the DERG period. Key manifestations of public participation during that time were the concept of Hizbawi Tesatfo (mass participation) and Yelimat Zemetcha (Mass mobilization for development). However, both Tesatfo and Limat were being exercised by coercing people to take part in centrally-planned conservation activities and enforced by political cadres during the socialist period. Contrary to the current global principle of participatory management, the practice was founded on the forceful mobilization of people under the threat of penalization.

Cooperation in resource management is better practiced among Ethiopian villagers than in government policies and programs. It is a key part of indigenous cultures like that of the traditional Gada systems of the Oromo, the Gedeo, and other people. In these systems decisions concerning natural resource use are based on the principle of fair distribution. The advantage of such culture is that it is all-inclusive and management is based on knowledge (accumulated through time from personal experience) about the resource. At certain point in time, however, traditional institutions and their effectiveness were undermined when they were super-imposed by alien modern State structure that replaced the ways resources were owned and managed.

Most of the participatory forest management exercises in Ethiopia are those introduced by international NGOs. Since the mid 1990s a number of pilot activities were started in central, southern and southwestern forested regions of Ethiopia, which for the first time attempted to transfer forest management responsibility from central government to forest adjacent communities. Among the pilot interventions, the prominent are the PFM in Chilimo, Borana, Bonga run by Farm-Africa/SOS Sahel, and the IFMP at Adaba Dodolla run by GTZ. Although the experiences from these pilot projects have demonstrated good achievements, PFM is not well established in Ethiopian forest management system.

2.2.1. Tanzania

Formal forest management in Tanzania dates back to the German period, which also continued through the British rule (1920–1961). Based on these earlier experiences, independent governments of Tanzania also continued to strengthen the forest protection of the nation. Some of the forest management activities taken after independence included re-surveying and demarcating of old reserves, demarcation and creation of new reserves and some degazetted. By
1996, Tanzania had about 540 forest reserves ranging from 3 ha to 870,000 ha in size and covering a total of 13 million ha of gazetted forest reserves. Like in Ethiopia, most forests in Tanzania were managed under state ownership regime that has faced lack of popular support and thus enormous pressure leading to degradation.

Realizing the many shortcomings of state monopolized forest management activities, ‘community forestry’ and ‘participatory forest management’ activities have been tried and tested in different parts of Tanzania during the past two decades. In the mid 1990s a number of pilot activities were started in northern and western Tanzania, which for the first time allowed the transfer of forest ownership and management responsibility from central to village government. These activities have been almost exclusively donor-supported projects in discrete areas. However, the experiences gained from these pilot activities have caused Participatory Forest Management (PFM) introduction and acceptance into Tanzania’s forest management policy in 1998 and into law with the passing of the Forest Act of 2002, which provides a clear legal basis for communities, groups or individuals across mainland Tanzania to own, manage or co-manage forests under a wide range of conditions. Since 1998 the Tanzanian Government has changed forest policy from central government oriented to participatory management were communities around were given mandate to manage the forests on behalf or under joint management. Today, mainland Tanzania has one of the most advanced community forestry jurisdictions in Africa as reflected in policy, law and practice (Wily, 2000).

Two main approaches for implementing PFM are being promoted in Tanzania: Joint Forest Management and Community Based Forest Management:

**Joint Forest Management (JFM)** is a collaborative management approach which divides forest management responsibility and returns between the forest owner (usually central or local government but occasionally the private sector) and forest adjacent communities. It takes place on land reserved for forest management such as National Forest Reserves (NFRs) (for catchment, mangrove or production purposes) and Local Government Forest Reserves (LGFRs) or Private Forest Reserves (PFRs). It is formalized through the signing of a Joint Management Agreement (JMA) between village representatives and government bodies either the District Council or Ministry of Natural Resources and Tourism.

**Community Based Forest Management (CBFM)** takes place in forests on “village land” (land which has been surveyed and registered under the provisions of the Village Land Act (1999) and managed by the village council). Under CBFM, villagers take full ownership and management responsibility for an area of forest within their jurisdiction and it is “declared” by village and district government as a Village Land Forest Reserve. Following this legal transfer of rights and responsibilities to village government, villagers can harvest timber and forest products, collect and retain forest royalties and undertake patrols including arresting and fining offenders. They are also exempt from regulations for harvesting “reserved tree” species, and are not obliged to share their royalties with either central or local government. The underlying policy goal for CBFM is to progressively bring large areas of unprotected woodlands and forests under village management and protection.

A recent assessment by the FBD found that PFM was operating or being established in over 1,800 villages and on over 3.6 million hectares of forest land, equivalent to approximately 11% of the total forest cover and 18% of all villages on mainland Tanzania. However, both CBFM and JFM in Tanzania are still in experimental stage. Despite the large area of forest being
covered by Joint Forest Management and the high number of participating villages—only a small number (149) of agreements have ever been signed.

2.3. FARM Africa/SOS Sahel PFM projects

The PFM projects of FARM Africa/SOS Sahel have been running since 2001. The purpose of these PFM projects was to deliver improved efficiency and effectiveness of forest conservation and utilization through participatory forest management at Bonga, Chilimo and Borana forests in Ethiopia and Nou forest in Tanzania. Farm-Africa/SOS Sahel are essentially devoted to innovate, develop, test and entrench a participatory forest management process, with the ultimate aim of ‘handing’ the process over to the appropriate government agencies to pursue over a greater area.

The project sets the following key and complementary objectives:

- To contribute to the long term conservation of forest ecosystems in the two countries through the development and establishment of new systems of forest management;
- To build the capacity of government staffs and rural communities to manage natural resources in a sustainable way, in management partnership;
- To sustain and/or increase income opportunities from improved natural resource management and diversified livelihood;
- To catalyze the adoption of PFM within Ethiopia’s forest policy and practice;

The project also put forward the following key outputs:

- Forest conservation through SFM system established;
- Complimentary natural Resource Management and NTFP technologies adopted;
- Capacity of partners and organizations built;
- Networking, dissemination of experience and forest policy development;

The project outlined several activities to be implemented for the fulfillment of these anticipated outputs, and the main ones are the development and implementation of PFM agreements and plans, securing of rights, revenues and responsibilities of communities, to have legal access to forest products, legal recognition as forest managers, ensure SFM (sustainability will ensure that forest area coverage and quality is maintained over the long term), dissemination of field experiences and networking targeted on national forest policy, legislation development and amendments. In addition the projects carried out activities aimed at diversifying and improving livelihoods.

As regards to the project implementation, the four PFM projects were designed to be managed jointly with government forestry department while in Bonga led by Government Team Leader and supported by a deputy Team leader employed by FARM-Africa. All project sites (Bonga, Chilimo, Borana and Nou) are coordinated and technically supported by the Participatory Forest Management Unit (PFMU) of FARM-Africa/SOS Sahel. It is worth noting that, in the projects forest dependent communities at the project sites were the key actors and concerned government officials at Kebele, Woreda, Zone, Regional and National levels were also key partners. To achieve sustainability and as an exit strategy, the projects set to work very closely with concerned government institutions, local traditional institutions and the community to develop and transfer the skills, knowledge, practices of implementing PFM post projects. The four sites (Bonga, Chilimo, Borana and Nou) vary in their biophysical, forest status and socio-economic attributes, as described below.
2.3.1. Bonga

Bonga forest is located in Kafa administrative zone. The population of Kafa was estimated at over 700,000, while the population of Kebeles bordering Bonga forests were about 71,282 according to CSA (1996) assessment. The Bonga PFM project works in ten Kebeles with a population of over 44,000 (ZOPED, 1997). The population is largely dependant on small-scale agriculture, and some benefit from income of wild coffee and other non-timber forest products.

Bonga forest is one of the two biggest broadleaved high forests of Ethiopia, and is rich in biodiversity. It comprises some of the most important forest resources of regional, national and international significances such as wild coffee and spices species. However, the forest is degrading at alarming rate of 12,000 ha/year. During the Imperial regime the Bonga forest remained under State control as it did during the Military government. The State, nevertheless, was unable to implement a management system that would have permitted resource sustainability. The DERG Regime introduced some form of centralized management resulting in the alienation of some communities like Menjas, one of the minorities in the zone, who are exclusively dependent on the forest resource for their livelihoods. Between the time when the Military government was changed in 1991 and the start of PFM by FARM Africa in 2001, the Bonga forest fell under unsustainable exploitation both by the surrounding communities and those coming from the nearby towns.

2.3.2. Borana

The Borana Forests are located in the Guji and Borana Zones of Oromia Regional Sate. The forests comprise forests described as Negelle-Dawa and Yabello-Arero Forest Priority Areas. The forest areas lay within the altitudinal ranges from 900-2200 m a.s.l. The Borana forests belongs to the Dry Afromontane forest and Semi-evergreen bushland, where the typical dominant species in the upper storey of the forest is Juniperus procera with Olea europaea and a number of other species forming the lower storey. The forests are found to comprise about 355 species belonging to 78 families. Although wood harvest for several purposes including timber and fuelwood, the most prominent purpose for which the forests is valued by the local people is for pasture.

2.3.3. Chilimo

Chilimo forest is located in Dendi woreda of Western Shewa Zone, about 97 km west of the capital Addis Ababa along the road to Ambo. It is one of the few remnant montane forests of Ethiopia. The forest is found between the altitudinal range of 1700 and 3200m a.s.l. The principal species are: Podocarpus falcatus, Prunus africana, Olea europea, Hagenia abyssinica, Apodytis dimidiata, and Ficus spp. The Chilimo forest covers 4944 hectares where 415 hectares is plantation forest (FMAs, 2006) and is surrounded by seven Kebeles with 3563 households and a total population of 17,792 (CSA, 1996). The land is occupied predominantly by the Mecha Oromo, although there are some Gurage, Amhara and Kambatta people most of whom are descendants of saw-mill workers from nearly a century ago. The forest is also located close to the main Addis-Ambo road and adjacent to the town Ginchi, which is one of the contributors to its extensive exploitation.

Agriculture remains the main occupation for most communities in the area. The forest is also a good contributor to the livelihood of the locals living in and around the forest. Major forest products exploited were firewood, charcoal and timber. The pressure on the Chilimo forest from the surrounding agricultural population was high. Land shortage, decline in (land) productivity and growing poverty have put stress on the forest. Furthermore, the prolonged saw milling operation in the past coupled with extensive illegal logging has suffered Chilimo forest
tremendous degradation and decline in size. Chilimo forest, like most other forests in the
country, was designated as a priority area for conservation by the Government of Ethiopia.
Consequently, it was heavily guarded. Nonetheless, heavy guarding was not effective enough to
preserve the forest against illegal exploitation for timber and clearance for agriculture. According to a study by FARM-Africa (1999), 35% and 65% of the Chilimo forest was
described as heavily and slightly disturbed respectively.

2.3.4. Nou Tanzania

Nou catchment forest reserve lies in the southern part of Babati and Mbulu Districts of
Manyara Region, Northern Tanzania. The size of the forest is 28,936 ha and is surrounded by 18
villages. The catchment forest is environmentally important, as it is the source of 28 permanent
rivers. It is also important for soil and biodiversity conservation. It also affects the livelihoods
of more than 200,000 people, making its conservation vital.

Three forest types are found within the Nou forest reserve: Dry afro montane forest on the
western side; Montane forest on the eastern slope and Upper montane forest dominating the
higher parts of catchment. The forest reserve has other natural vegetation types too. It has a
marked feature of open glades covered by grass and ferns with occupy waterlogged valley
bottoms and ridges on shallow soils. Though the flora of the forest is not well investigated some
of the most important timber tree species of the Nou forest include: 
\textit{Ocotea usambarensis}, 
\textit{Afrocarpus falcatus}, 
\textit{Entadograhamma spp.}, 
\textit{Fargaropsis angolensis}, 
\textit{Olea Africana}, 
\textit{Podocarpus latifolius} and 
\textit{Khaya spp.} The Nou forest has faced intensive exploitation for timber production
since the 1954, and the exploitation was mostly by people from outside the community of the
catchment until it was officially closed for all use in 1989 due to extreme deterioration.
However, despite the official closure of the forest, the intensity of use has increased significantly
reducing the capacity of the forest to support production.

The entire Nou forest is sub-divided into two zones: production forest and protection forest. The
production forest zone covers about 14,404 ha. This zone also consists of 12 experimental plots
of various exotic species such as \textit{Pinus}, \textit{Cupressus}, \textit{Eucalyptus} and \textit{Gravellia robusta}. The
protection forest zone covers an area of 15,930 ha and is important source of water to lake
Manyara and villages around. This part of the forest also supports a reasonable number of flora
and fauna.

3.0. PFM in Practice: Lessons from PFMP of FARM Africa/SOS Sahel

3.1. PFM processes

One of the core elements in successful PFM exercising is the processes followed and steps
attended in the preparation and implementation system. Lessons from PFMP prompt that
realization of successful PFM involves three major stages known as investigation, negotiation
and implementation stages (Fig. 1).

3.1.1. The Investigation Stage

This stage marked the beginning of PFM field practical exercises. The stage involved various
activities that include forest site selection on topographic map, field identification of the sites,
gathering information on forest resources, past and present management practices and prevailing
forest management problems, understanding about the forest uses, forest stakeholders (forest
users), works on establishment of appropriate forest management institutes (FMI) and their
governance, and development of procedure for and field practice of Participatory Forest
Resources Assessment (PFRA) and resource mapping. Use of diverse PRA tools and techniques and numerous community meetings characterize the investigation stage, and these were employed to collect the right, relevant and sufficient information needed to appropriately setup PFM. Some of the major activities in this stage are described in the following sections.

Fig. 1. The steps to establish Participatory Forest Management (Slightly modified from Anonymous, 2007).
a) Establishment and administration of Forest Management Institutes (FMI): PFM is run by and through community based appropriate forest management institute (FMI). Establishment of appropriate FMI is, therefore, one of the prerequisite for successful PFM practices. A good FMI ought to comprise the right community groups, which are primarily all forest users. Formulation of sound FMI requires comprehensive and proactive stakeholder analyses plus understanding of the traditional/customary rules governing the forest uses. It did not end with asking who is using what, but required field based observations and mapping of who is using what, when and where in the forest. Membership screening also involves development and endorsement of criteria against which candidates will be evaluated to qualify as members. By this rigorous system all genuine forest dependent individuals are ascertained for FMI membership. Names or terms ascribed to institutes formed in this way may vary from site to site mainly as the reflection of how forest users are traditionally structured and governed. Accordingly, names such as Forest User Groups (FUGs) in the case of Bonga and Chilimo or Forest Management Units (FMUs) in the case of Borana.

Once forest users appropriately identified, FMI establishment continues through the development of rules governing its administration. FMI is governed by its own constituted bylaws enacted by its entire members (general assembly). Representatives (committees) are selected from within the FMI on the general assembly meetings, using the communities own criteria, often related to recognized positions in the community, personal characters, and talents and capability of members as perceived by the community. Various committees are formed, to work on the rules of the FMIs, manage conflicts, impose fines on rule breakers, administer finance, assist members in saving and credit schemes and workout schedules for forest protection. The general assembly composed of all members, conducts regular meeting, often once in a month, to discuss matters of concern about the forest and the new responsibilities they assumed. It is also a platform for assessing transparency of the various committees in decision-making, and when necessary to take actions against those with shortcomings. The FMIs are responsible for forest management as per the agreed Forest Management Plan (FMP) and within the framework of their rights and responsibilities as stated in the Forest Management Agreement (FMA).

b) FMIs, traditional institutions and customary rules: FMI recognizes traditional systems and customary rules governing natural resource use and management. For instance, in Borana forestland is recognized as communal pastureland. In this culture, clans or families living in a Madda* own customary rights of ownership to forestlands found in or near their Madda, regardless of whether a person has been observed while using the forest or not during the forest user analyses, as in Chilimo. In Borana, all members of the clan(s) or families inhabiting the Madda have equal right to the forest despite how frequent they use the forest, and thus qualify for membership of a newly formed FMI, called Forest Management Groups (FMGs). In fact any Borana possesses a potential user right. And this right is practiced particularly during bad times in consultation with the FMU of a Madda and Gada leaders.

Conversely, in areas like Bonga and Chilimo, FMI members are those people who actually use a particular area of the forest (forest users), regardless of their settlement configuration, clan and/or ethnic belongingness. Membership in the latter case was decided collectively based on existing forest - people relationship (forest users settlement and forest use area, capacity, ease of protection) as approved by the entire community based on criteria developed, negotiated and endorsed. Qualified members are then organized as Forest User Groups (FUGs). In case various

*Madda is a traditional land unit that is more or less equivalent to a Kebele or PA*
forest user groups are recognized due to their frequent use of the forest, customary rights or other reasons, the groups may be sub-divided into categories as primary and secondary users, for instance. Primary users are those who use the forest more frequently, permanently or directly, while secondary users are those with less frequent use and are far from forest boundary. This division is then used to facilitate negotiation among the forest user groups for rights and responsibilities as being members of FMI, a negotiation that may end-up with differential rights, or even dropouts of secondary users. This has been observed in Bonga where some potential members dropped-out for fear of legal accountability/responsibility for forest development and sustainable management.

However, the ambiguity in the law made the recognition of the FMIs as legal entity very difficult, thus forcing them to transform into Forest Cooperatives (FCOOPs). The transformation, however, is not without problem. FUGs/FMUs and FCOOPs can sometimes be synonymous when they have same members (e.g. in Chilimo 8 of the FUGs are converted into FCOOPs where all FUG members have became FCOOP members. The criteria to be member of FUGs/FMUs (being forest user) are different from the general requirement to be FCOOPs (free to all above certain age limit and able to pay membership fee). This general requirement, in the case of PFM project sites, is modified that all FUG members are entitled to be members where non FUG members are not entitled to be FCOOP members. While there exist no membership fee for FUGs/FMUs, there is always a membership fee to pay being member of FCOOPs which is agreed by all FUG members to strengthen their financial position. This in some cases seems a discouraging criterion for the poor and women forest users who could not afford to pay the membership fee, although the fee is marginal, and a period of up to six months is given for poor members of the community to pay their membership fee. The absence of legal channel to give recognition to community based institutes such as FMIs, was one of the main challenge forced the FMI to take the form of Cooperatives. This has several of its own challenges particularly ensuring their financial sustainability has affected the speed of forming and legitimizing them.

The transformation of FMIs into FCOOPs did not seem to have solved all legal constraints. This is because of the inherent variations in the approaches used to form FMIs and Cooperatives as well as due to the regulation governing cooperatives in the country. The challenge of establishing COOPs is 1) financial sustainability, 2) Auditing and financial management requirements 3) High management cost of FCOOPs compared to FUGs/FMIs, 4) awareness level of communities due to bad reputation of COOPs in Ethiopia. These factors make it a challenge for under resourced FUGs/FMIs to establish COOPs even if they want to establish FCOOPs. First, cooperatives, as per the country’s regulation, are free to all while FMI is not free to all regardless of their settlement with in the kebele. Membership to FMI is restricted to those forest dependent individuals only. It is legally unacceptable to forbid membership for any interested from cooperative setup provided that he/she satisfies the age limit stated in the national regulation. In fact, in the process, this is also changed with FUGs that those who are very young during the establishment of FUG are now able to be FCOOP members if they wish to be a member. Second, the major issue of economic feasibility still remains that Cooperatives are business model institutes and should be financially sustainable and have to have their property registered, in which case state owned forest can not be registered as cooperative property. This situation, whether legally right or not and as in the case of FCOOPs, is considered as special case as they have secured use right on the forest resources.

c) Resources of the FMIs. The most significant possession of the FMIs is the legal recognition of right of access to their forests, an important issue that created confidence to responsibly manage the resource. Moreover, members of the FMI are also entitled to harvest a number of products from the forest for own use (subsistence) as well as for sale. The type of product and
quantity obtained from the forest depends on the nature of the forest (its resource endowment) and the rules developed by the FMI. Although varied from site to site, the different products and services extracted from the forests include: grazing, firewood, construction material, NTFPs such as (apiculture, forest coffee and spices) and farm implement. Access to most of these products is regulated in such away that harvest is allowed when individuals make formal requests and permissions are granted from the concerned committee of the FMI. Major income generating products (e.g. pools from plantations and forest coffee harvest) are collectively sold, and the money generated saved in the FMIs (FCOOPs) account. Some of the revenue after annual audit between 30% - 40% is divided as dividend, while some percent 30% as reserve, and the remaining for saving and credit services and forest development, a small percentage for social development.

Despite the legitimacy confusions, essential features of good FMIs establishment include the following key elements:

- **Inclusiveness (equitability):** one of the best PFM practices is inclusiveness of all forest users as members of FMI. Inclusiveness herein refers to accommodating all or nearly all forest users or interest groups as potential FMI members. The goal of inclusiveness is two-fold: first it is a system of insuring 'justice' or 'equitability' to all forest users; second it is a strategy for conflict dodging as exclusion of any interest group is likely to cause discord. Inclusiveness does not imply that there is no 'exclusion' what so ever, rather it is a principle for guarantying non-exclusion of genuine forest users on unjustified grounds. Exclusion was/is possible provided that a person does not fulfill the endorsed criteria. These criteria, for instance, may include (but not necessarily) issues like proximity (e.g. Chilimo), history of settlement, forest dependence for livelihood during the past years, forests’ productive capacity, etc.

- **Different forms of FMI for different settings (e.g. FMGs vs FUGs):** Nature of forest stakeholders may vary from site to site. In some cases stakeholders are homogeneous (in religion, ethnicity, history of settlement, culture/custom of property access, collaboration, etc.) and in others it may be contrastingly heterogeneous illustrating the fact that prevailing local conditions dictate what form of FMI will be established. For instance, in Borana forest users are often homogenous in ethnicity, settlement history, and have well-structured and strong cultural coherence (e.g. Madda, clan, etc.) in natural resource use and management. Therefore, FMIs is established following such community structures. These institutes are called Forest Management Groups (FMUs). Conversely, the case in Bonga shows that forest users are diverse in ethnicity, settlement pattern and history, and customary right to forest resource access. In this case FMI establishment was done by conducting a thorough analysis of forest use patterns of the people living in or around the forest. This information was obtained through careful analysis of 'who takes what from where, when and how much from the forests' (Anders, 2000), and not necessarily settlement pattern. This is because sometimes there are more forest dependent individuals coming from far away than those living close to the forest for reasons such as wealth, customs and the like. In fact, not only the formulation of new FMI differs from site to site but also their organizational structure up to zonal and regional levels depending on regional political will and commitment. For example, the structure of PFM in Oromia and SNNPR states varies. In the former, there exist PFM structures that start with FMI and go on up to zonal level while this is not the case in SNNPRS.

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* Forest users are those individuals who extract any kind of forest good(s) be it wood or non-wood for either subsistence or cash income generation and living nearby the forested landscape.
• **Gender equality**: Another good feature of appropriate FMI establishment is the way gender issues are addressed. In establishing FMIs, women and men had equal involvement and roles in decision making, on the benefit accrued from being FMI member either as a household (e.g. Chilimo) or individually (e.g. in Bonga).

• **Building on traditions**: FMI are established differently for different settings according to prevailing traditional systems of forest-people interactions (see section on negotiation). In some areas forest users have age-old traditional rules and rights that are well recognized by the entire forest users. Such rules, although not formally written, are in force for long, and are respected by communities. For instance, in Bonga there are customary rights and there are forest users with such rights leading to disproportionate extraction of certain forest products from over a relatively large forest area than other members who did not possess customary rights. Establishment of new FMI required thorough negotiation on such issues among the FMI members to accommodate and live with it since the breakage of such traditions could result in conflict.

• **Working with local natural resource management institutes**: FMIs are new institutes introduced to a community that has had its own several institutes at work for centuries. Experiences from PFMP show that for the new forest institutes to quickly incorporate into the culture of the people organizing with and suiting them to existing local institutions has higher chances of being successful. In other words, failure to fit newly established institutes to locally operating strong institutes are less sustainable or at least would remain less popular. Working with local institutes also provided the advantage of tapping the age-old indigenous knowledge about the community, its working culture and way of life, its traditional organization, and conflict management. For instance, in Borana working with the Gada system provided several advantages in facilitating the establishment of FMI such as the proper identification and demarcation of forest boundary, quick and genuine forest user group identification, effective dispute/conflict management on issue of boundaries or users, and thus establishment of stable and strong FMIs.

d) **Participatory Forest Resource Assessment (PFRA) and Mapping**: PFRA is a procedure for gathering information and data on forest and related natural resources. PFRA has dual purposes. First it is used to collect data for the preparation of forest management plan (FMP), one of the key documents that guide communities to implement managerial operations of a specific forest area. Effective FMP preparation requires sufficient quantity and 'quality' data. It is very difficult to manage a forest effectively unless detailed and sufficient information about the resource base is obtained, information from which appropriate forest management prescriptions can be identified and put together into effective management plan. Second, PFRA is a formal forest status determination method required by the GOs before handing over of the forest to the FMIs as well as a system of progress monitoring to checkout changes in the forest resource over time as the FMIs take their managerial position. Consequently, PFRA is conducted at the beginning and at specific time intervals (e.g. five years), the former to establish the starting forest condition, and the subsequent PFRA for monitoring forest conditions. Thus, carrying out PFRA is a core part of PFM. It involves mapping of forest blocks/territories and then the physical assessment of the forest resources within the identified boundaries. As the data generated from PFRA have legal dimensions, and used for purposes of preparing FMP and monitoring and evaluation of the state of the forest for which both FMIs and government bodies have equal concern, it was conducted jointly by the community and GO.
Important features of PFRA in PFM context is the high diversity of forest parameters* collected that makes the task of PFRA very daunting. Often new and unfamiliar resources, besides timber, are quantified, such as grass, climber and several NTFPs as these are also essential components of forest products managed and utilized by FMIs. Moreover, forest resource assessment in PFM context deviates from the conventional forest inventory, as the assessment method, tools and procedures involved should be modified. This is because, first there exist no standard formula for some or most of the parameters, and second whenever methods and tools exist, these should be tailored to the capacity of the community, which are major stakeholder in the assessment.

Furthermore, the forest management plan works with forest maps, and thus mapping of forest area is indispensable part of FMP. Mapping is often too technical, but participatory mapping methods are already advanced, which were successfully adopted in PFM for production of relatively good maps. These kinds of maps are often sketches drawn with local materials at larger scales. Practices from PFMP shows that mapping can be handled with greater simplicity when forest boundaries follow traditional resource use systems, which are mostly aligned along natural boundaries such as streams, mountain ranges, ridges etc (E.g. as in the case of Madna in Borana). Essential about mapping is also the need for production of large-scale maps to assist comprehension of the map contents by the locals. The experiences from PFMP also show that two different maps are produced: one of high accuracy prepared by foresters, and the second by the community. At the end, both maps are overlaid to produce a blended map with information from both sources and to be understood by both groups alike.

Given that PFRA should be run jointly by FMIs and GO, the community should be supported with appropriate skills of conducting PFRA and mapping. Experiences from PFMPs revealed that good PFRA is characterized by:

- **Use of methods developed with community (incorporation of indigenous knowledge):** Local communities have their own indigenous knowledge of forest state and product estimation techniques, which are often expressed in local units. This knowledge when properly amalgamated with simplified technical knowledge it may suffice collection of good quantity and quality data, while making communities remain comfortable and confident about the process;

- **Simplification of assessment methods:** In most cases, it might be obligatory to use technical approaches to quantify forest parameters. Capacity building through appropriate training and field practices are therefore inevitable. Capacity to run PFRA was built when easy to measure parameters were selected and simple and easy to understand field procedures and instruments (technologies) were employed (i.e., by avoiding too technical jargons). For instance, in quantifying forest-standing stock, basal area was used, which was then measured using relascope, which local communities quickly learnt how to handle? Other data sets such as regeneration counts, fire incidences, soil exposures, and density of important tree species, were among the data sets prudently selected, which locals also found simple to confidently work with forestry experts;

**Lessons learnt from the investigation stage:**

- **PFM can be practiced under various biophysical and cultural settings.** There is no blueprint for organizing and mobilizing local communities for PFM nor does it require

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*Information sought from the forest assessment did not focus only on the timber resources, which is even less relevant in some cases, but also on non-timber forest products (NWFPs) including grasses, climbers, etc.*
specific sets of biophysical and/or socio-economic preconditions. The experiences from the four pilot sites that represent different biophysical, forest type and socioeconomic settings reveal PFM can successfully be implemented under various settings, provided that local conditions, existing traditions and prevailing people-forest interactions are comprehensively analyzed and taken into consideration. Indeed, successful PFM establishment rests on detailed pre-project analyses and considerations of customs, influential local institutions and existing people - forest relationships;

- **Adequate time in the field is needed.** PFM promoters should allocate sufficient time as plenty of time is needed for the identification of forest stakeholders and for screening and understanding genuine forest users. At this stage paying attention to women and other disadvantaged groups is very crucial. In other words, hastily and carelessly designed PFM implementing institutions will not be conflict free and sustainable;

- **Inclusiveness is key but has to be managed carefully.** Besides granting equitable participation in forest management exercise, inclusiveness is fundamental for stability, to minimize conflicts and ensure sustainability of PFM implementation. Furthermore, inclusiveness leads to large membership size for the FMIs. This is with numerous advantages in community based forest management system that include:
  - the forest remained intact (indivisible) and thus maintains ecosystem integrity and ecosystem functioning of the forest as large block;
  - Enabled FMIs to effectively mobilize enough labor for forest management, which would have been impossible with small groups given the full engagements of the members in agricultural activity that competes for workforce with forest management;
  - Organization of larger forest users into one FMI also internalizes some externalities such as boundary conflicts, which were inevitable had the forest been sub-divided into small blocks.

However, there are also some actual and potential disadvantages with large FMIs. These disadvantages may include:

- extra large FMIs are difficult to manage and administration becomes difficult particularly when the members are heterogeneous (E.g. the Gaji FCOOPs of Chilimo site);
- makes forest generated income (at the current level) less significant when distributed to many more households or individuals;
- extra big sizes take time to negotiate on needs, roles, benefits and responsibilities of individuals and to adhere to agreements. It is more difficult to make decisions and plans, and supervisions if the group is too large;
- when members are many, often leaders take decision by themselves, which opens room for corruption, misunderstanding and conflict. PFM as a process is more feasible and effective if FMI members are kept at relatively manageable medium sizes;
- Homogeneity of members: Stability and sustainability of FMIs being small or big is high when members are homogeneous in interest and background, and the reverse is true when members exhibit substantial heterogeneities of interest.

- **Building on local knowledge and institutions.** Recognition and building of FMIs on the basis of existing traditions on the one hand and working with local institutions like Gada on the other hand significantly contribute to the formation of cohesive and sustainable FMIs, and thus SFM. In the case of Borana traditional institutes are used as support. However, building on existing tradition as the case in Bonga could be seen as a disadvantage too. The
system ended up in ‘**equal responsibility for unequal right**’, which could be a cause for dissatisfaction for some. This may lead to internal conflicts. It should also be understood that existing local institutions can not be substitute for FMIs, and thus could not be transformed into FMI, but need modernization to incorporate today’s reality of NRM requirements such as gender equality and social justice for marginalized groups;

- **Social justice is crucial.** Balanced development initiatives, where women and the marginalized will be empowered to have equal right as others in NRM is possible and will have significant impact. This can be done, among others by helping them to decide for their own;

- **NTFPS are important.** Valuation of diverse forest products such as grasses, climbers, etc. which ordinary forest management planning do not consider is an important lesson from PFM practices. These valuations also reflect how diverse forest products and forest interest groups/user groups are, and thus how important the real values and roles of forests are.

### 3.1.2. The Negotiation Stage

This is the stage where different stakeholders are assisted to come closer and take decisions on various issues related to SFM based on consensus. It is, therefore, a decision making stage. Important features of the negotiation stage are:

- **Bringing various stakeholders together:** Farmers, traditional community leaders, agricultural officers and other concerned government bodies such as the defense (in the case of Borana), the court, and the police to legitimize the process and help ensure implementation of agreements reached over rights and responsibilities of FMIs, and the role of partners to run successful PFM. This was seen as one of the achievements of PFM by the local communities. For instance, one FMU in Borana applauded it by saying "**PFM has brought together various groups of stakeholders who have or would have never been together on a single forum for a particular purpose—the forest**";

- **Use of local institutions in negotiation:** Wherever and whenever strong local institutions exist, such as the Gada system in Borana, their incorporation in negotiation is shown to enhance effective negotiation and setup of PFM.

- **Challenges and constraints faced during this stage:** there are multiple interest groups and conflicting interests on the forest resources from various perspectives such as traditional management and use system, unclear forest boundary, customary rights, extent of livelihood links with the forests and different interests on the forest resources; therefore it has been the challenging issues to bring all these stakeholders together for negotiation and come to the compromise solutions which contributes for slow process of the PFM establishment and implementation.

Major outcomes of the negotiation stage are the preparation of FMP and signing of FMA.

**a) Forest Management Plan (FMP):** Forest management plan is a document that consists of what to do on the forest, where and when. It also consists of what to harvest and how much. FMP is construction based on data acquired through PFRA, needs of the community and that of government. FMP is a document used by the Forest User Groups, who are the forest managers, as a guide to implement various managerial activities on the forest. The FMP template has seven basic sections that include: (i) introduction, (II) description of the forest, (iii) objectives of the
forest management plan, (iv) forest management prescriptions, (v) monitoring and evaluation, (vi) revision of the plan, and (vii) approval of the plan. It also contains key information under four main management themes: a) forest protection; b) forest utilization, c) forest development, and d) forest monitoring (Annex I). Forest management activities were developed under each theme using the PFRA information by the FMI committee and latter refined and endorsed by the general assembly.

- Community subsidiary bylaws and internal rules and regulations have been developed and implemented by the community which enables the community to exercise the regulation on a number of matters like illegal forest cutting, community participation, rights and responsibility, penalties and sanctions, sabotages and other crimes which affect PFM implantation.

Key elements of good FMP and its preparation as learnt from the FARM-Africa/SOS Sahel experiences are:

- **Simplicity**: FMP should be prepared in a simple format, with simplified languages (often local language) and quantifications be expressed in local units and all to the capacity of the forest user groups to comprehend what is done where and when. However, by building on these experiences and through continued training, gradual progression towards modern forest management planning is needed. This has been suggested by some of the FMIIs (E.g. Chilimo FCOOPs);

- **Clarity**: FMP should be written clearly using words understandable to members, preferably in local language. Technical terminologies used by foresters should be minimized, if possible avoided. For improving clarity, FMP document should be prepared in a common language spoken by all FMIIs. In a homogeneous FUG, the preferred language is the local one. FMP should be clear to all not only to some of the members;

- **Completeness**: though simple, FMP should comprise all the necessary managerial activities needed for sustainable forest management. This includes: tending, protection and harvest with proper schedule of activities (when), in which part of the forest a given activity is to be implemented (where), responsible parties (who), quantity of each activity (how much) and the like;

- **Made by and with FMIIs**: Simple, clear and effective FMP is prepared only when FMIIs are fully participating along the whole process of the planning process. As the plan contains the needs of different interest groups, participation of all or representatives of all interest groups in the planning process is crucial. Although the draft were prepared by respective committee representing each FMI, the draft plans were presented, discussed and amended if necessary by the general assembly before endorsement;

- **Pre-testing**: The various management activities stated in the FMP should be checked if they are properly understood by all members. To this end, pre-testing is often done;

- **Continuous capacity building**: Skills and knowledge needed for plan preparation, implementation and revision were built through field based trainings and experience from practical operations of the management plan, and learning by doing. Constant inspection of plan implementation, and listening to the capacity needs of the community was fundamental to help them develop the required skill and confidence for PFM; formal and informal trainings have
been provided to the community to enable them acquire participatory planning skills and develop their own forest management plan; Moreover technical supports and experience sharing visits have been arranged and conducted for the community to similar PFM project areas to improve community skills and knowledge

- **Revisions and refinements over time**: it might be difficult to produce perfect plan in just one go. Management activities were carried out as per the plan document and their effectiveness and impact tested. Based on the impacts and feedbacks from the implementation process plans were reviewed, improved and built upon over time.

**b) Forest Management Agreement**: Once the FMP is prepared and negotiated within FMI and between FMI and the Government, then Forest Management Agreement is formulated and signed before the forest is handed over to the FMI. This FMA is a document that states the terms under which use rights are granted to FMIs, their roles and responsibilities. It is a document which upon signature grants FMIs a formal custodian of SFM. The signed FMA is the legally binding contract between Government and FMIs. The legal recognition is also essential for the FMIs to own legal entity to present cases in court. The core part of the FMA is the clear specification of the rights, roles and responsibilities of the two parties (Annex II). The rights, roles and responsibilities are linked to the various management actions, rules and regulations developed in the management plan.

In addition to the FMA, before the development of the FMA, the community is also developing internal bylaws that would help the day to day management of the FMI. This includes individual household benefits, rights, and penalties if not involved in community actions and failure to respect agreed rules and etc.

Key elements of properly produced FMA document include:

- **Participatory approval**: the FMA formulation is done in a series of participatory and transparent discussions, amendments and consensus of FMI and the GO representatives where with PFMP was playing a facilitation role;

- **Legal professionals’ scrutiny of the document**: It is important that the contents of the FMA be without ambiguity and/or not open to different interpretation as it is a legal document, which can be presented to a court when the need arises. Consulting and allowing legal professional to review the draft FMA agreement is thus crucial;

- **Simplicity of presentation**: The contents of the FMA must be kept simple and clear and written in plain words and local language. Simple and clear statements allow all parties to have a shared and possibly similar understanding of the document. This is particularly important as most members of the FMI are illiterate and need to clearly know their rights and responsibilities.

**Lessons learnt from the negotiation stage:**
1. Local institutions (e.g. Gada) are strong in representing communities to negotiate with governmental offices on the rights and responsibilities of the newly set FMI. Indeed, whenever strong local institutes as the case of Gada in Borana are available working with and through them makes efforts more effective;
2. If supported with proper training and field practices (learning by doing), local communities are able to quickly learn some of the formal procedures for assessing forest stand parameters
provided that the parameters are prudently selected and presented in a simplified version, i.e., by avoiding too technical jargons;

3. Local communities become active participants in FMP as they have a fuller picture of the state of the forest and what needs to be done. Indeed, they know what to do (the various managerial activities), where and when for the betterment of the forest and sustain flow of forest products;

4. Well prepared FMP (simplified, clear and participatory) can easily be implemented by FMIs;

5. Local people are well articulate and own strong analytical knowledge in drafting and negotiating rights and responsibilities to be included in the FMA. This is particularly so when local institutions are involved.

6. The participation and negotiation of concerned stakeholders on PFM planning process plays significant roles in ensuring sustainable forest management and clarify rights and responsibilities among various stakeholders and it also defines the changing trends & approach on the forest management system from existing and traditional forest management regimes. Moreover, it has built confidence and recognition for the forest management communities on the forest management.

3.1.3. The Implementation Stage

Once the forest management agreement is signed, the management plan is implemented. When implementing FMP, it is essential that the community who takes the forest managerial task understand the field implementation of the different activities outlined in the FMP. In other words, the local community begin to take up roles used to be played by professional foresters. This changing role requires acquisition of new silvicultural skills by local communities. Skill development in turn requires joint field implementation of the FMP between professional foresters and the community. As forest management venture for local communities is their first time, they should not be left alone.

Furthermore, as PM&E is part of the forest management practice that, characterizes the implementation stage of PFM, enabling the community to carry out monitoring and evaluation of their forests is an essential aspect of capacity building. Monitoring requires continuous collection of data and inspection of management activities in order to measure progress. Evaluation on the other hand is a periodic review of all the data and information generated from monitoring system. However, for the locals to do these jobs, tailored training is essential.

The following are key elements characterizing the implementation stage of PFM:

Management skills and practices need to be developed: Locals are engaged in a new role as forest managers when they take-up the forest management responsibility. The skill and practices of forest management, which is absent in most cases, are therefore needed to be built;

Working in partnership between professional foresters and community: professional foresters have the important role to play in providing training and helping the community gain practical skills and field practice FMP implementing;

Simple, practical and relevant data identification for PM & E: critical to monitoring and evaluation is the need for systematic collection of data, analysis and reporting. To better adopt these, otherwise advanced procedure, data collected were made to be simple, practicable and relevant. Such data types, for instance, included: forest boundary monitoring, regeneration
count, monitoring of farm lands in the forest, regular patrolling/protection, verbal or written reporting of observations.

**FMI has legal management and executive body for implementation:** each FMI has its own management and executive body to organize and coordinate the whole community on the forest management and then ensure plan and agreement have been executed according to the planned; moreover, this body also ensure that collective actions, and rules and regulations, community rights and responsibilities, coherence among the members and different cases entertained according to the plan and agreement. This has given the community to manage and administer their own affairs and PFM plan and give security to exercise their right and power.

### 3.2. PFM and Responsible Forest Management

The ultimate goal of PFM is to achieve SFM. The experiences from PFMP have shown that community based forest management in the form of PFM 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. Although the extent of success varies from site to site and from FMIs to FMIs within a site based on the degree of commitment of FMIs, their institutional stability and externalities, it is noted that the projects had led to the following major achievements:

- **Forest boundary maintained:** While forests outside PFM scheme continue to degrade both in volume and in spatial coverage, those managed by local communities under PFM scheme maintained their demarcated territorial integrity. This has been achieved as the result of raised community awareness and reservation from forest destruction and committed protection;

- **Forest regeneration:** Though the extent differs from site to site, PFM helped several forest species to regenerate (Fig. 2), and to form healthy/viable vertical and horizontal stand structure. For instance, in Chilimo pre and post project regeneration assessments conducted revealed increases of over 150% in regeneration density at forest and individual species levels. Moreover, in Borana the local communities have shown a deep awareness of the locally relevant ecological factors that effect natural regeneration. Using their traditional knowledge *Juniperus procera*, a species that had lost regeneration for long, has made a come back;

- **Degraded forest parts treated:** In some of the PFM sites, FMI have exercised enrichment plantings to treat previously degraded forest sections. FMIs have implemented enrichment plantings by raising seedlings of various indigenous and exotic species that improved the state of the forest;

- **Forest productivity rose:** Upon gaining legal right of access to 'their' forests, communities swiftly decided for discontinuation of any use which they considered were damaging the forest. Accordingly, local communities banned charcoal making, excessive harvest for firewood, illegal logging, over grazing, fire incidence and other similar activities and put in place systems of controlled uses coupled with intensive management. On the other hand, regulated harvest of forests products, mainly proper production and marketing of NTFPs, has raised forest's productivity and income opportunity for the locals, mainly the poor;

- **Fauna diversity regained:** PFM has contributed to recurrence of wild animals that were once rare in the forest mainly due to reduced human interferences, and improved forest conditions;
• **Open access curtailed:** A number of footpaths in the forest sharply reduced, indicating reduced human intrusion;

• **Communities self-initiative for forest development demonstrated:** In some cases local communities took self-initiatives to establish nurseries, raise seedlings, and sale or distribute free of charge. This assists forest resource expansion. This may witness the level of awareness created among the community members;

• **Forest fire incidence minimized:** the protection role played by FMI and the gaining of legal right of ownership has significantly reduced incidence of fire since PFM. For instance, before PFMP was launched in Borana, fire was a major forest management problem that occurred annually. However, following the introduction of PFM and discussion of legal right of access, local people and GO officials confirmed that there has been a drastic decline in fire incidence. This was because the FMIIs have recognized, identified and willingly banned those forest use activities that could result in fire outbreaks;

• **Rehabilitation of degraded forestlands:** In some cases (e.g. Dano FCOOP of Chilimo) locals rehabilitated degraded forests on the anticipation of future benefits;

• **All at no cost to the governments:** through the strong social fencing established, PFM was able to eliminate the cost that otherwise should have been paid to forest guards, which was demonstrated ineffective in ensuring conservation of the natural forests.

![Image](image1)

![Image](image2)

**Fig. 2.** Regeneration at forest floor for forests under PFM at Bonga (a), rehabilitated degraded forestland at Chilimo (b), and enrichment planted degraded forest part in Borana (c).

• **Spill over effect:** Interview with non FMI members in the PFMP sites have shown that PFM had spilled over effect even to non-members. Non-FMI members gained skill by observing and discussing with FMI members and have established their own woodlots. They also witnessed changes in forest conditions.

**Lessons Learnt**

1. When legal right are granted, the probability of coming up with a workable management plan and getting it implemented becomes easy. The legal right issuance is a motivation to local communities willingness to conserve forests even those degraded ones that do not provide ready-to- harvest products (e.g. in Liban FMG of Borana; Dano FCOOP of Chilimo);

2. Local communities are committed to make use skills and knowledge they gained. They are also capable to organize themselves to properly manage the forest resource. They also benefit from backstopping from GO staffs to implement PFM;
3. The building of FMI on local traditions and with local institutes are creating strong coherence for forest managements among FMIs members, e.g. the case of Borana;

4. Livelihoods supports to poor and disadvantaged groups, who are often more dependent on the forests, through the complementary natural resources related intervention such as CDF, agro-technologies, NTFPs technologies etc. are fundamental in creating a transitory livelihoods system, offer opportunity for building rapport between outsiders and the community, and also to lower pressure on the forest;

5. Success in forest conservation with the newly established FMI is a win- win strategy. First for the forests and second to convince GO officials by developing a working model of PFM;

6. Local communities, DoA experts, district administrators and zonal experts all alike have witnessed the improvement in the status of the forest following the launching of PFM. Thus there is a growing belief that PFM constitutes a better forest management approach.

7. PFM principle stipulates the importance of the simplifying the PFM technicalities without overriding basic forestry technical parameters in order to be managed and used by the local community, and thus the community has been fully involved on the planning process, which gives the community to develop feeling of ownership and contributes to the empowerment process.

3.3. PFM contribution to sustainable livelihoods and income opportunities

The livelihood diversification component of the FARM-Africa/SOS Sahel PFMP is founded on the understanding that poverty alleviation among the most deprived forest users will contribute to SFM by reducing household dependency on forests for cash and subsistence needs. Complementary livelihood interventions are needed at the start of PFM in order to introduce regulated access and control the extraction of forest products until the forest's ability to provide sustainable flow of goods and services is rehabilitated. At this stage of PFM, however, losses of livelihood to the most deprived, poor and minority groups may become a challenge unless alternative means of livelihoods are put in place.

This was practically observed among most of the PFM of Bonga, Borana and Chilimo where people have voluntarily given up charcoal, firewood harvest for sale and pit sawing following the introduction of PFM. The Menjas of Bonga are a very good example at hand. These are a minority ethnic group living in and on the forest encompassed in the PFMP, Bonga site. The Pre-project Menjas were the most ostracized group, and were known as "fuelwood sellers". Thanks to the 'open access' of the Bonga forests in the past, the Menjas have enjoyed years of unregulated access to the forest to cut and sale fuelwood and other forest products for survival. When PFM was initiated, Menjas felt that the process could even endanger their livelihoods fearing their low social status within the local communities. However, the project's commencement with complementary livelihood interventions has gradually won their interest as they benefited also from such interventions as agriculture focused interventions. Finally, these people willingly participated in PFM and voluntarily compromised to stop unregulated free forest exploitation. This compromise of forest good harvest would not have been possible had it not been for the alternative and complementary livelihood options created by the PFMP. As a result of the livelihood diversification, the Menjas began farming to grow food crops such as cereals, (maize, wheat, barley, teff), vegetables (carrots, beetroots, cabbages), fruits (banana, avocado), cash crops like coffee in the form of agroforestry and semi-managed forest coffee and several tubers (potato, taro) and enset that significantly contributed to meeting their subsistence and cash needs. Furthermore, government staff and local community opinions converged on the multiple significances of the complementary livelihood and income diversification interventions. These stakeholders identified the following as best practices:
• **Introducing new technologies and skills.** For reason of quick introduction, experiment and adoption of technologies for income diversification, participant local communities were trained with new skills and practices in such areas as apiculture, agroforestry, private/communal nurseries, horticultural and crop farming, animal production and NTFPs technologies.

• **Improving productivity and income.** The new technologies adopted by farmers have led to positive economic impacts such as raised income, more grain yield, diverse food item and better nutrition. Several income sources are realized and household annual revenue increased, while the increased grain yield and diversified food item resulted in food and nutritional security. In Bonga, many of the early technology adopters and diligent participants in the diversification of livelihood options have generated revenue enough to construct houses with corrugated iron sheet cover since PFM introduction, an indictor used in wealth ranking as a sign of improved wellbeing.

• **Strengthening the position of rural women.** Involvement of women both in the PFM and complementary income generating activities has enhanced women’s independence in income, and thus, their self-confidence. Women also acquired new skills and better access to information about the new technologies. For instance, the team observed that in Bonga modern beehive introduction and improved honey production specifically benefited women. The traditional apiculture is often considered men’s business as women hardly climb tall trees to hang the hives and collect honey. The modern beehives, however, can be placed at convenient height and around homesteads. This is assisting the women to have a say on the honey produced. Mulu G/Silasie (Fig. 3a) of Metapha FUG in Bonga expressed the advantage of the practice as follows:

"The modern apiculture that Farm Africa/SOS Sahel introduced is excellent. I was trained by Farm Africa, and acquired all the necessary skill for its management. I can manage the colony, monitor the conditions around the hive and extract the honey. I also obtain significant income from the business to support my family. Last year, I sold the honey I collected from two hives for Birr 300. This year six of my hives are hosting colonies and I expect at least to harvest twice as much. Before PFMP, I had no sensible job to do to support myself and my family. What I was doing was to look after sheep owned by people residing in the nearby town to share their lambs when they deliver and when the lambs grow. This takes several months and requires hard work everyday. Now I can buy my own either from the income I obtain from the livelihood support intervention or from CDF loan or from the forest Coops fund. I can do that thanks to the forest" (Mulu G/Silasie, Authors’ translation, August, 2007).

Similarly, other participant households of other sites have also benefited from options that helped them diversify income sources. For instance, Bekele Chalisisa (Fig. 3b) of Galessa FCOOPs in Chilimo expressed the advantages of doing so as follows:

"After gaining good awareness on the potential of forest as income source, and gaining new skill on plantation management through training from the project, I together with my brother established plantation woodlot. We planted 1.5 ha of land with Eucalyptus globulus with seedlings obtained from the PFMP nursery. In just five years, we were able to grow and sale the poles from stand for Birr 15,100. This is a major income for the household. The coppice is also doing very well and will soon be ready for the second harvest." (Bekele Chalisisa, Auithors’ translation, Sept. 07)
Fig. 3. Some examples of the positive impacts of complementary livelihood interventions: a) Mulu G/Silasie next to her beehives just behind her home, and b) Bekele Chalisisa near his *E. globulus* woodlot.

- **Regulating harvest and legalizing income from the forest.** The collection of forest products, wood and non-wood, from the forest was not regulated. Hence income obtained from doing so was generally considered as illegal. Following the establishment of PFM and demarcation and allocation of the forests to the respective FMIs, a number of NTFPs (e.g. wild spices and coffee) are no more collected haphazardly but in a planned and regulated way so as to ensure sustainable production and dependable income for the FMIs.

- **The need for improving nutritional and health status.** In some cases such as Bonga, PFM facilitated the growing and harvest of diverse food items (grains, fruits, tubers, spices, etc.) that besides contribution to food and income are playing important role in improving nutritional and health status. For instance, Alemu Asefa, Metapa FUG member in Bonga witnessed by saying the following:

  “I have never seen or heard about Avocado fruit until Farm Africa introduced it with PFM. I planted and managed it properly although I did not know what the taste of the fruit would look like. Now I and the community around are using it widely in our diet. We use it as cooking oil for cabbage preparation enjoying the usual cabbage with much delicious taste than before. We also eat the fruit. Its juice is an antidote for uneasiness and internal discomfort after a drinking night. The children also like the fruits very much.” (Alemu Asefa, Authors’ translation, August, 2007).

- **Intensification of agriculture helps reduce pressure on forests.** Intensification of production on own lands previously converted to agricultural uses have reduced the horizontal expansion of farming activity that otherwise would have been inevitable. This has contributed to reduction of forest degradation and improved forest conservation. Similarly, some of the livelihood diversification interventions have also resulted in reducing income from selling wood from the forest. E.g. the Agroforestry intervention has managed to integrate tree crops with coffee and spice production. Tree crops also provide wood products need by households (Fig. 4). This also reduced the pressure that could have been exerted on the forest to collect these NTFPs.
Fig. 4. Agroforestry technologies introduced and adopted by FUGs in Bonga PFM project

- **Assist GO's rural development policy implementation**: Through introduction, training and dissemination of improved agricultural technologies, the complementary interventions of PFMP contributed to the food-security initiatives of the Government of Ethiopia, and the participating regional states (Oromia and SNNPRS).

**Lessons learnt from promoting complementary livelihood options**
1. Farmers have been practicing multiple livelihood activities for centuries mainly as a coping strategy or risk aversion emanating from low technology production system and unpredictable meteorological condition. Consequently, they have accumulated a good deal of IK (indigenous knowledge?) from their long years of engagement in livelihood options besides forestry. Moreover, agricultural production systems provide short-term subsistence and cash gains than forestry, which requires relatively long gestation period. Thus, involvement in alternative livelihood activities such as agricultural production presents the comparative advantage of short-term livelihood improvement with long term poverty alleviation;
2. The short-term subsistence and/or economic gains from other than forestry engagements allow local community to get off the forest (reduce pressure) for their immediate needs, and can help them to use the system as a transitory mechanism. This in turn creates window of opportunity for the forests to restore to a productive state. This is particularly the case where the forests to be managed are heavily degraded (e.g. Liban in Borana), and may not be able to provide sufficient short-term subsistence and cash needs for the local community and/or when the FMIs can not afford to wait longer to harvest the benefit from the forests they manage;
3. The strategy also helped to build trust between the community and other stakeholders (NGOs and GO) and to create platform to discuss issues of the forest, which is less frequently discussed otherwise. This laid the foundation to collaborate on PFM;
4. These non-forest based livelihood options not only allowed transitory tolerance for forest aggregations but also provided enough time for the FMIs to mature and build their capacity and confidence to be actively engaged in PFM;
5. Diversification of livelihoods became an incentive for the FMIs to conserve and protect their forest resources besides contributing to better nutrition and improved health;
6. By and large the transitory advantage from other livelihood sources will allow resistant professionals and politicians who do not have confidence in community’s ability to manage natural resources to wait, see and believe;
7. Intensification of agriculture on already owned land would curb the horizontal expansion, which has been the case for centuries in the forested landscapes of Ethiopia;

8. It also allows the community to analyze the complex interrelationships between ecosystem components and livelihood systems, and to appreciate the need for INRM. Some of the livelihood interventions are agricultural such as fattening, irrigation etc. Sustainable operations of these livelihood activities are basically supported by healthy forest ecosystem, not only by inputs such as seeds and fertilizers. For instance, unless water resources are available, which in most cases are flowing from the forest ecosystem, sustainable irrigation is unthinkable;

9. The classical thinking in Ethiopia is that forestry and other livelihood systems are rivals and competitive. PFMP demonstrated otherwise. Agricultural or other livelihood systems can be integrated with SFM interventions and that they can be made complimentary rather than competitive. This is also a good lesson to be drawn for the present extension system in the country, which is biased towards one corner of livelihood abandoning the forestry corner;

10. Finally, the positive impacts of complementary interventions at the level of local communities are seen in their increased knowledge and skills in various livelihood activities, their more positive attitudes towards working with government bodies on development agenda including forestry, their heightened confidence in interacting with government staff, among themselves, with courts on legal issues, the greater involvement of rural women in decision-making about local problems, and the establishment and good functioning of the FMIs;

11. The positive outcomes from the complementary intervention are highly acknowledged and liked by government bodies as one of the key successes of the project and key elements leading to SFM. Nonetheless, there are some potential drawbacks associated with the diversifications of income opportunity and livelihoods if and when improperly handled. These may include:

- The too many privileges provided to the FMIs (right of forest use, support for livelihood and CDF, etc.) may create envy from the non-participant neighbors, that are not getting any support. This may as well be a cause for conflict especially when non-participants are not supported and if their previous right over the forests is limited;
- The many privileges to the FMIs may disfavor the non-participant households and result in wider income disparity between the participants and non-participants at community level (community scale equity);
- When budgetary and logistic limitations are prevalent, investing more on non-forest based livelihood options significantly could affect opportunities that should have been created and/or utilized for forest based livelihood options. The gains from the diversified livelihoods become an incentive for SFM when the benefit is directly related to forestry sector. If not, it will destruct the effort and resource for forest conservation;
- If households are engaged in too many and diversified activities, this takeaway their time, focus and effort for forest management, and may undermine efforts towards SFM;
- The failure to maintain the right balance between the various interventions may in some cases lower interest in SFM.

12. Livelihood intervention approach has enabled forest dependent communities like Menja ethnic group at Keffa areas to diversify their means of livelihood and engaged in to the agriculture-based activities, which are new after PFM intervention and thus they produce various food crops for the domestic consumption and sale. Currently some of the community members are recalling their past expression of their level of poverty as ‘white poor’ meaning having no assets of what so ever sort.
3.4. Capacity building of partners

To achieve SFM through local community management system, the capacity of communities and their institutions must be strengthened. The capacities needed are not only technical (i.e. about forest management) but also organizational and managerial. Capacity for negotiation, conflict management and resource administration must be built. FARM-Africa/SOS Sahel ran several courses on PFM concepts, principles and practices Training were also organized to build institutional capacity of FMIs on such topics as PFRA, FMA, FMP preparation, Participatory Monitoring and Evaluation (PM & E), conflict management, gender balances, etc. The projects also sponsor staff of partner governmental offices to attend PFM related workshops and conferences, and arrange exchange visits both in-country and abroad.

Effective training for capacity building is characterized by:

- Use appropriate media;
- Focus on topics that are based on identified needs than on a generic package that outsiders assume essential;
- Simplification of the training process, rather than making it too technical and advanced;
- Use appropriate animation and do it in a friendly environment;
- Content and delivery methods matches with the capacity of the trainees;
- Use variety of training aids, mix theory with real world cases and complement all elements with field practices. The latter has no best substitute;
- Use complete set of necessary tools/equipments, but use always those tools/equipments that fit the comprehension of local farmers, when field practical is part of the exercise;

Important element of the capacity building is the collaborative field implementation of some of the PFM components such as PMP between local communities, government and project staff. This collaborative implementation of PFM links the various training courses with real field exercising. The major challenge undermining the capacity building efforts is the high turn-over of staff from government offices. This needs to be addressed, possibly through institutionalization of PFM or streamlining its activities in the job description of concerned staff.

![Fig. 5. Metapa FUGs implementing forest management practice as per the FMP.](image)
Capacity building work done included several complementary interventions (see section 3.3) besides forest management.

**Lessons learnt**

1. Local community can manage forests using plans they co-produced with government experts provided that they have given training;
2. Farmers quickly apply knowledge and skill when shown technologies that contribute to their livelihoods provided that these technologies are compatible to their environment and social-cultural settings. For instance, in Bonga participants of PFM have applied successfully the technical knowledge and skill they gained in modern apiculture, improved potato variety cultivation, coffee/spice based agroforestry system, private nursery for coffee and tree seedling production, fruit and horticultural crops production, crop production using improved technologies and some animal husbandry, and NTFPs technologies to improve their livelihoods and income sources;
3. Disadvantaged groups such as women can tap advantage of capacity building and if supported properly they can achieve self-reliance and develop self confidence, and
4. Informal means of sharing information facilitated wider dissemination of the preferred potato variety, fruit trees and skill of nursery management.

**3.5. PFM and policy/institutional reform**

PFMP demonstrated to the Governments of both countries that PFM promotes community based responsible forest management, with better conservation and livelihood outcomes than before. This also encourages government officials and forestry experts to believe in local communities' ability for responsible forest management. They also saw that PFM contributes to improve the capacity of local communities for self-governance. The following could be cited as major achievements with regard to policy reform:

- **Critical elements of PFM are being incorporated into regional and to some extent national forest policy documents:**

- **Attitude change achieved:** The successful practices of community based forest conservation and complementary activities sufficiently convinced government officials at all levels that PFM constitutes an avenue to address forest management problems in Ethiopia. Indeed, confidence and attitude on local communities' ability for responsible forest management has positively altered among the policy makers.

- **Signs of political will to promote PFM:** PFM triggered the conception of political will and readiness at various levels for institutional reform to encompass PFM. E.g. SNNRPS has secured fund from World Bank for replication of similar practices. Similarly, Oromia and SNNRPS have included 'Participatory approach' in their respective regional forestry policy.

- **Integrating concepts of PFM in the curricula:** PFM has also entered into the educational curricula of most educational institutes, principally that of Wondo Genet College of Forestry and Natural Resources.

**Lessons learnt**

1. Practical field based demonstration of community's capacity to handle successful PFM and working in close collaboration with concerned GO departments play important role in winning their beliefs in PFM more than theories presented in workshops and trainings;
2. Working on complementary interventions that are inline with GO development policies are also helpful in engaging and changing the attitudes of decision makers;

3. Working with strong local institutes such as the Gada system of the Borana community is also a wiser approach in policy lobbying and getting ears of decision makers.

4.0. Challenges encountered

The pilot PFM projects of FARM-Africa/SOS Sahel, as presented in this document, have provided good experiences of how to operate successful PFM. Government staff and local communities alike have confirmed that the pilot projects have demonstrated successes at project level as well as in bringing about some attitudinal changes among major stakeholders including policy makers. The practices and lessons learned from these projects have laid foundation for possible scaling up and out of similar practices to a wider area and community. Achievements also include the infusion of PFM into the curricula of higher learning institutes such as WGCF-NR. However, field based observations and discussions with concerned staff (NGO and GO) show that there are a number of limitations for wider replication of PFM in Ethiopia. These constraints relate mainly to the GO side though more also needs to be done by development partners introducing PFM. These constraints are:

- **Low commitment, lack of preparedness and support from GO side**: Some government experts believe that the demonstrated successes of FARM-Africa/SOS Sahel in PFM emerges from the sufficient budget that allowed them to recruit qualified personnel and sufficient logistic (mainly vehicles). They feel that with such facilities and singular mandate community mobilization, organization and demonstration of successful PFM project may be possible though it is still recognized and acknowledged not to be a simple task. However, after successful demonstration of PFM on the ground, there seems little sign of preparedness from the GO side to take over the pilot PFM projects. This is witnessed by the lack of budget solicited for PFM projects and poor capacities (logistic and human) to run. This, coupled with the high staff turnover, indicates that opportunities to ensure continuity of the already started and/or scaling up and out of PFM are limited.

- **Weak law enforcement**: Forests under PFM, though relatively better protected, do still face illegal encroachers. In some cases these are people who abandoned FMI membership during the inception process at their own discretion, while some are those excluded on the basis of set membership criteria. These often clash with the legal owners. These non members are repeatedly caught in some areas while illegally harvesting forest products. However, FMI complain that they are not getting adequate support from legal authorities (the police and courts) in timely and appropriately penalizing encroachers (e.g. in Bonga).

- **Legal confusions on rights and responsibilities (FCOOps vs FMI)**: There are concerns on the ambiguity on the legalities of FCOOPs/FMIs. Some professionals doubt whether FMIs are legally recognizable and strong enough in the faces of the country’s legal establishments while making legal deals with the Government itself.

- "**Old wine in a new jar?**" Although PFM had as its rationale the maximization of synergy between conservation and development, there is a clear tendency of PFM to be more of conservationist orientation when practically seen at field level. This is obviously the reflection of extent of right of ownership and/or use granted to the forest users. In other words government
seems less trusting of the full ‘let it go’ of the forest to farmers to practice the optimum conservation and development synergy. Consequently, at all the pilot sites, communities are trained to conserve/protect the forest, and not to harvest and sale forest products in the forms of timber despite the large sellable timber products in their forest stands, which are even being wasted through over maturity and natural death. This also means that PFM is not built on making forestry sector a viable ‘economic’ rather a complementary side activity, which makes less attractive for farmers who are overwhelmed with huge agricultural activities and with little extra labor to put aside. In fact, the illegal timber trade used to operate before PFM introduction at each pilot site was a much lucrative business, and for locals to compromise this business, the new forest management paradigm needs to create enough forest based economic incentive. Unless locals place sufficient value on the forest resource they have no reason to incur costs to protect or conserve it. People must perceive some gains from managing the resource to agree continuing managing and constrain their short-term use of it. Indeed, for wider adoption and popularization of PFM, there must be a balance between conservation and development interests including timber harvesting.

- **Lack of or slow progress in institutionalizing PFM**: In Ethiopia, government commitment for institutionalizing PFM appears still too weak, and there seems no preparedness to take over the pilot PFM projects nor to replicate PFM. Unless the government steps in and assumes its responsibility of taking over, these pilot projects that demonstrated success under NGOs management may fail.

In conclusion, it is important that FARM-Africa/SOS Sahel plan to remain committed post-projects to continue supporting PFM until it is sufficiently planted in the government system (institutionalized). The post project inputs may include (i) working much more on policy advocacy and lobbying for PFM institutionalization at various levels, (ii) support to consolidate started PFM projects, (iii) continuing awareness creation, capacity building, and provision of advisory services for GO staff and offices where PFM has been and becoming operational and (iv) by and large FARM-Africa/SOS Sahel should establish strong collaboration to educational and research institutes such as WGCF-NR for deeper integration of PFM in their curricula. These institutes are essential in the production of skilled and knowledgeable human resource that can replicate PFM and also to curb the widespread lack of capacity at different levels in the country.
References
Annex I. Sample of Forest management plan

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1.1 የ1934 ዓ.ም. ይ walmart ሰሚ የወን ሀሳብ ሀሳብ ያለት ያለት የወን ሰሚ ሀሳብ ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለት ያለ&t
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3. õpp.
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5. õpp. õppusõid
6. õpp. õppusõid

5.2.1 õppusõid
5.2.2 õppusõid
5.2.3 õppusõid
5.1 የእቶት መልስ የሚል ይህ ያለው የእቶት ያለው ከእ쁘 ያለው ይህ ምስት እረቁት ከርስር ከም መልስ እቁ ያልኈው አንስተኛ ከenção ይናው።

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<th>የእቶት ከእለት በሎ</th>
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**የእቶት ይርጏው ከእሎ**

የእቶት ይችል ይጠናጠን ያስተላለች ከእቶት በሎ በተመልከቱ ይጠናጠን መስት እረቁት ከርስር ከም መልስ እቁ ያልኈው አንስተኛ ከ้ง ይናው።
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<th>Физические характеристики</th>
<th>Химические характеристики</th>
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<td>30% Сахароза</td>
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<td>የአጠቃложений ላይ የሚቀር ዋ ላይ የስፈርድ ጸር ይችላል። የአጠቃложений ላይ ለበታ ሳይ ይህ ለስፈርድ ጸር ይችላል።</td>
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| ይግራይ | የእኔ/200 ከንጆ ከ114732 ከጆ/ ከ-9/ | ከአጠቃложений ላይ የሚቀር ዋ ላይ የስፈርድ ጸር ይችላል። የአጠቃложений ላይ ለበታ ሳይ ይህ ለስፈርድ ጸር ይችላል። 30% ከአጠቃложений  |
| ፈጋ-ት | ከአጠቃложений ላይ ይወጡ። | የአጠቃложений ላይ የሚቀር ዋ ላይ የስፈርድ ጸር ይችላል። የአጠቃложений ላይ ለበታ ሳይ ይህ ለስፈርድ ጸር ይችላል። |
| ፈጋ-ት ለሰራ ላይ ከጆጆች ሊጋ ጸ ቤቶች ይወጡ። | የአጠቃложений ላይ የሚቀር ዋ ላይ የስፈርድ ጸር ይችላል። የአጠቃложений ላይ ለበታ ሳይ ይህ ለስፈርድ ጸር ይችላል። |
| ፈጋ-ት ለሰራ ላይ ከጆጆች ሊጋ ጸ ቤቶች ይወጡ። | የአጠቃложения ላይ የሚቀር ዋ ላይ የስፈርድ ጸር ይችላል። የአጠቃложения ላይ ለበታ ሳይ ይህ ለስፈርድ ጸር ይችላል። |
| ፈጋ-ት | ከአጠቃложения ላይ የሚቀር ዋ ላይ የስፈርድ ጸር ይችላል። የአጠቃложения ላይ ለበታ ሳይ ይህ ለስፈርድ ጸር ይችላል። |
| የአጠቃложения ላይ ለበታ ሳይ ይህ ለስፈርድ ጸር ይችላል። |
| Hoon. | Hoon. | 300 | 129700 | 1/300 Ÿ<
|-------|-------|-----|--------|-----|
| Hoon. | Hoon. | 400 | 324555 | 1/400 Ÿ<

### 30% leppmees

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| | | | | የተወሰደ መሆኑን እና የሚሰጥ የሆነውን የሚለት ይህን ብቻ የሚሆኑ የሚለት ውስጥ ሰው ያስታወቃሉ ሚንም ይዘት ያላለሁ የሚጠቀሮ |
6. ከፋና ይላት ሲሚሚንን

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<th>3ኛ ይላት</th>
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7. ከእን ዲስን የጆ piss:

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97. ከእን ዲስን የጆ piss:

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|---------|----------------|----------------------------|
| ከታ | 5L/C | - | - |

97. ከእን ዲስን የጆ piss:

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<td>ይሸፋው ይሸፋው ይሸፋው ይሸፋው</td>
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<tr>
<td>የጉጆይ ይሸፋው የጉጆይ ይሸፋው የጉጆይ ይሸፋው</td>
<td>ይሸፋው ይሸፋው ይሸፋው ይሸፋው</td>
<td>ይሸፋው ይሸፋው ይሸፋው ይሸፋው</td>
</tr>
<tr>
<td>የጉጆይ ይሸፋው የጉጆይ ይሸፋው የጉጆይ ይሸፋው</td>
<td>ይሸፋው ይሸፋው ይሸፋው ይሸፋው</td>
<td>ይሸፋው ይሸፋው ይሸፋài ይሸፋው</td>
</tr>
<tr>
<td>የጉጆይ ይሸፋው የጉጆይ ይሸፋው የጉጆይ ይሸፋው</td>
<td>ይሸፋው ይሸፋው ይሸፋው ይሸፋው</td>
<td>ይሸፋው ይሸፋው ይሸፋው ይሸፋው</td>
</tr>
</tbody>
</table>
Annex II. Sample of bylaw

Sample of bylaw

The sample bylaw provides an example of how bylaws can be structured. It includes details on the formation of the association, the roles of officers, and the process for amending the bylaws. The bylaw also outlines the responsibilities of members and officers, as well as the procedures for conducting meetings and making decisions.

The bylaw is structured in a clear and concise manner, with sections dedicated to different aspects of the association's operations. It includes provisions for the election of officers, the establishment of committees, and the procedures for addressing conflicts of interest.

The sample bylaw serves as a template for other organizations that may want to establish their own bylaws. It can be adapted to fit the specific needs of the organization, and can be modified to reflect changes in the organization's structure or operations.
• የמלך ቡናት ያመልከኝ ያለባቸው ያስፈጥሮ እና ቤት ሥልጣኞ
• የمالك ባለ የውክት ያለበት ያስፈጥሮ እና ቤት
• የمالك ባለ የውክት ያለበት ያስፈጥሮ እና ቤት
• የمالك ባለ የውክት ያለበት ያስፈጥሮ እና ቤት
• የمالك ባለ የውክት ያለበት ያስፈጥሮ እና ቤት
• የمالك ባለ የውክት ያለበት ያስፈጥሮ እና ቤት
• የمالك ባለ የውክት ያለበት ያስፈጥሮ እና ቤት
• የمالك ባለ የውክት ያለበት ያስፈጥሮ እና ቤት
• የمالك ባለ የውክት ያለበት ያስፈጥሮ እና ቤት

ቁጥር የመምልከት ነጥም

1. ከላለ

1. የمالك የለበት እና የውክት ያስፈጥሮ
2. የمالك የለበት እና የውክት ያስፈጥሮ
3. የمالك የለበት እና የውክት ያስፈጥሮ
4. የمالك የለበት እና የውክት ያስፈጥሮ
5. የمالك የለበት እና የውክት ያስፈጥሮ
6. የمالك የለበት እና የውክት ያስፈጥሮ
7. የمالك የለበት እና የውክት ያስፈጥሮ
8. የمالك የለበት እና የውክት ያስፈጥሮ
9. የمالك የለበት እና የውክት ያስፈጥሮ
10. የمالك የለበት እና የውክት ያስፈጥሮ

ቁጥር

• እና የለበት እና የውክት ያስፈጥሮ እና ቤት በስታች ያስፈጥሮ እና ቤት
• የмеждународ ፈርcmc ለግራ橈 እስከ የአማርኛ ያቀረበ
• የ翡ርcmc 7 ፈርcmc ለግራ橈 እስከ የአማርኛ ያቀረበ
• የ翡ርcmc 8 ፈርcmc ለግራ橈 እስከ የአማርኛ ያቀረበ
• የ翡ርcmc 9 ፈርcmc ለግራ橈 እስከ የአማርኛ ያቀረበ
• የ翡ርcmc 10 ፈርcmc ለግራ橈 እስከ የአማርኛ ያቀረበ

2. ክልል

  1. ያስፋዎች እስከ ውስጥ የአማርኛ ያቀረበ
  2. ያስፋዎች እስከ ውስጥ የአማርኛ ያቀረበ
  3. ያስፋዎች እስከ ውስጥ የአማርኛ ያቀረበ
  4. ያስፋዎች እስከ ውስጥ የአማርኛ ያቀረበ

ፋርን

ተጠራ ወቅቱን እስከ ውስጥ የአማርኛ ያቀረበን ከሆነ ከው ከፋርን ወቅቱን እስከ ውስጥ ያቀረበ

  1. ያስፋዎች እስከ ውስጥ የአማርኛ ያቀረበ
  2. ያስፋዎች እስከ ውስጥ የአማርኛ ያቀረበ
Annex III. Sample of forest Management Agreement

አベース ዋሎ ከተተነር ዓለም ያለ ከገኝ

ሰለ ለማስ የሆኑ ለሆን መስመር መብሳር ከፈኝ

አይ

ጭም መሆን የውር እስከታ

ኋያ ከ 1998 ዓ.ም

ውል ርትና
1. ይ暦

ምን እንወር ከወ-ወስንት ምምራትና ጥያቄ ውስጥ በጠብቃ ይርጉም የርጉም የሚያሰኝ የሚያስችሉ ወልቀ ወላይም ያልያስችሉ ያለው የጠቀም መልኝ.

2. ከርሃ ይህ

- ከሩሃ ይህ እንወር መልኝ፡- ከወ-ወስንት እና ብቻ ወላይ እጎታቸው ለማስታወኝ የሚለው የሚያስችሉ የሚያሰኝ የሚያስችሉ ያለው የጠቀም መልኝ ያስችሉ ያለው የጠቀም መልኝ.

- ይህ እንወር መልኝ፡- ይህ ይህ እንወር መልኝ ያስታወቁም የሚለው የሚያስችሉ የሚያሰኝ የሚያስችሉ የሚያሰኝ የሚያስችሉ ያለው የጠቀም መልኝ.

- ይህ እንወር መልኝ፡- ይህ እንወር መልኝ ያስታወቁም የሚለው የሚያስችሉ የሚያሰኝ የሚያስችሉ የሚያሰኝ የሚያስችሉ ያለው የጠቀም መልኝ.

- ይህ እንወር መልኝ፡- ይህ እንወር መልኝ ያስታወቁም የሚለው የሚያስችሉ የሚያሰኝ የሚያስችሉ የሚያስችሉ ያለው የጠቀም መልኝ.

- ይህ እንወር መልኝ፡- ይህ እንወር መልኝ ያስታወቁም የሚለው የሚያስችሉ የሚያሰኝ የሚያስችሉ የሚያሰኝ የሚያስችሉ ያለው የጠቀም መልኝ.

- ይህ እንወር መልኝ፡- ይህ እንወር መልኝ ያስታወቁም የሚለው የሚያስችሉ የሚያሰኝ የሚያስችሉ የሚያሰኝ የሚያስችሉ ያለው የጠቀም መልኝ.
3 የሉን እን የስለለም

3.1. የምንግወና ደስ

3.2 ይህ የም ምኝ የለን

4 ይህም ይህን የስለለም
6. ያለው ዝቃት ውጤት ውስጥ

6.1. ይህንም-

6.1.1. መጋቢት

6.1.1.1. ይህንም-

6.1.1.2. ይህንም-

6.1.1.3. ይህንም-

54
6.1.2. ዓርፍ

6.2 የጆነ መረጃ ጉዳት

6.2.1 ዉስት

6.2.2 የጆነ

55
7. ይ_parallel የቀበሌ የአንወን የሚከበሌዎቹ

• ለተHECK እና እየሆኑ ከሌላ ሰወቀው ለማቅረብ በፋ siècle ወር የመለያወን ይሆና ይወስስ

• ይህ መሆን እስከ ሳይሆን ይዘተ በፋ siècle ይሆና ይወስስ

• ይህ መሆን ወደ ሲለ ሥለዊነት ወንጀሌ ይሆና ይወስስ ያለንበር ገር መሆን ያለንበር ይወስስ

• ይህ ሦስት መሆን ለሌላ ከእርከት ይችላሉ የአንወን ይህ የሆነ መሆን ያሌረጡ ይወስስ

• ይህን በወቅት የተወሰኝ በሚበር የአንወን ያለንበር የሆነ መሆን ያሌረጡ ይወስስ

8. ይparallel የሚሆስ የሆነ ምወቅት

• ይህ መካከል መሌለ የምስክር የሚሰጥ በፋ siècle ይህ መሆን ለማንስ የሚከፇሬ የአንወን ይሆና ይወስስ ይገባ ይህ በወቅት ያለንበር ይወስስ

• የምስክር ከሆነ መሌለ የሚስክር የሚከፇሬ የአንወን ይሆና ይወስስ ይገባ ይህ በወቅት ያለንበር ይወስስ

• ይህ መካከል መሌለ የሚሰጥ በፋ siècle ይህ በወቅት የሚከፇሬ የአንወን ይሆና ይወስስ

• ይህ መካከል መሌለ የሚሰጥ በፋ siècle ይህ በወቅት የሚከፇሬ የአንወን ይሆና ይወስስ

ሞ ከፋ

የምስክር መሌለ ከፋ

የምስክር መሌለ ከፋ

የምስክር መሌለ ከፋ
አምባłów የጆልጆል猎猎-
1. ከተኝ ከ ከ/ተኝ ወንድ የሰስ ይሆን

ምው:-------------------------------

ምው ያርበ:-------------------------

ማርት:-----------------------------

2. የነ/ስ/ስንቸር

ምው:-------------------------------

ምው ያርበ:-------------------------

ማርት:-----------------------------

3 የም ያለ ከስ/ስንቸር

ምው:-------------------------------

ምው ያርበ:-------------------------

ማርት:-----------------------------

ውል ያለፅ

የራሳት-ሳለ/ርፋ ይህ ከስ/ስንቸር ውሬኔር

ምው:-----------------------------

ምው ያርበ:-------------------------

ማርት:-----------------------------

_Widgets

የራሳት ያለፅ

ማርት:-----------------------------

የራሳት ያለፅ

ማርት:-----------------------------

የራሳት ያለፅ

ማርት:-----------------------------

የራሳት ያለፅ

ማርት:-----------------------------

የራሳት ያለፅ

ማርት:-----------------------------

2