

# **STRENGTHENING USE-RIGHTS OVER RESOURCES FOR FARMER-LED NATURAL RESOURCES MANAGEMENT**

**By**  
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## **1 INTRODUCTION**

### **1.1 Background to Meket Woreda**

Meket Woreda (North Wollo Administrative Zone) is almost wholly dependant on agriculture for the livelihood of its people. Ranging in altitude from below 2,000 metres above sea level (masl) to about 3,400 masl, it is characterised by a mix of agro-climatic zones, each offering a different set of opportunities and constraints for subsistence farming. However, over the last 20 years or so, a gradual trend of natural resource degradation has accelerated so rapidly as to render the Woreda structurally food insecure, even in the years of "good rainfall".

According to many official documents, as increasing population has put more pressure on the land, fallow periods have been severely curtailed and continuous ploughing is becoming the norm. Extensive deforestation (due to expanding cultivation and increasing demand for wood products) has left even the steepest slopes unprotected. As a result much of the annual rainfall is now lost in run-off while provoking both flood damage to crops and severe soil erosion (both gully and sheet). Natural regeneration of indigenous trees is non-existent (or limited to some church land) and efforts at promoting reafforestation have had little impact on the steadily increasing rate of degradation.

Futhermore, inaddition to technical and methodologiocl failure in natural resource management, land tenure or user-rights has been one of the key problens in promoting sustainable natural resource manegement in the Amhara National Regional State.

Faced with this reality, the line-departments and people of Meket (with support from the SOS Sahel team working in the Woreda), have begun to develop and pilot a range of participatory methodologies to strengthen agricultural and off-farm sources of livelihood while promoting longer-term natural resource regeneration.

One of these approaches (PLUPI - Participatory Land Use Planning & Implementation) deals with some of the technical and methodological concerns. That is, it attempts to develop a holistic approach to sustainable land husbandry to complement the Government's existing agricultural extension programme . The experiences to date (on PLUPI) have already been documented in SOS/ MoA technical paper no.2 by Tenna Shitarek and Dagnachew Adugna, 1997).

This paper shares the experiece in developmeing a usufruct procedure in Meket Woreda N. Wollo. It describes the process, the achievenemts and initial impacts. It also shows the progress to date and concludes by highlighting the key lessons learnt from the process. It further gives some tips and recommendations who wish to practice a usufruct-rights (to communities) approach for sustainable naural resource managemnt.

## 1.2 Deforestation and existing forest and forage resources

Only an estimated 8% of the total area of Meket Woreda now remains as forested land (*Central Planning Office Inventory, 1990*). The coverage and species composition varies according to altitude, but no indigenous stands now remain except those protected by the Orthodox Church. These protected stands tend to be only a few hundred square metres in area and only in exceptional cases rising to a few hectares. Communities confirm that even within one generation the degree of deforestation has been dramatic, as has the depletion of grazing resources - not only in coverage but also in quality. Eating wild fruit while keeping herds is now history and the children of the present generation would not even know of many of the multipurpose trees that were familiar to their parents. The population of indigenous trees has become dangerously low; some species have completely disappeared (especially from the mid and low lands).

In the Woreda different types of ownership of forest stands can be found (see Appendix 1 for details). However, none of them have proved to be effective in reversing trends of natural resource depletion. Either they are designed to meet immediate timber needs (as in the different forms of *Eucalyptus* plantations) or they represent small and threatened pockets of remaining indigenous trees (as in the isolated stands protected within church compounds). In addition, *Eucalyptus* plantations are limited because of their competitive effects with agriculture and because of the lack of clear ownership associated with previous kebele plantations.

## 1.3 Constraints to reforestation and natural regeneration

The following constraints to natural regeneration are recognised in Meket:

- \* free grazing practice in dry season
- \* over-stocking of livestock and lack of suitable forage material
- \* cultivation of all land with sufficient top soil, even with slopes over 30%
- \* lack of mother trees
- \* structural soil degradation producing unfavourable micro-environment for establishment
- \* sheet and gully erosion destroying young seedlings.

Reforestation in the Woreda is constrained by:

- \* Farmers' reluctance to invest in land over which they have no security of ownership or usufruct
- \* Competing land uses - natural or active regeneration is almost nil since farmers are reluctant to cease free grazing of uncultivated land. Arable farming encroaches annually on the remaining traditional pastures and supply of livestock feed remains a central problem in all areas.
- \* Existing reforestation strategies of MOA have focused on promotion of *Eucalyptus spp.*, with no consideration for grasses, multi-purpose trees etc.
- \* Growing recognition of the negative effects of *Eucalyptus* on arable and forage production.
- \* Tax laws governing sale of high quality indigenous species, in which prohibitive taxes were imposed on farmers who cut and sold such trees (these have been recently modified to encourage planting and selling by farmers, but much of the rural population is unaware of these changes).
- \* For group woodlots, weak management plans and unclear benefits to individual members
- \* Poor survival rates of transplanted seedlings.
- \* Costs of protection from grazing during establishment phase.

\* Lack of animation and weak participatory approaches used in the past by GOs and NGOs.

Clearly, many of these problems are inter-related. However, through many community meetings, it was clear that the lack of security of ownership (or user-rights) was a predominant constraint in the minds of farmers. Too many people have had direct experience of land reallocation over the last 20 years to now have the confidence to invest in long-term reafforestation or regeneration activities.

On the basis of this analysis, SOS Sahel together with the Office and Department of Agriculture (at Woreda and Zonal level) and the Administration, begun to develop an approach to tackle as many of these problems as possible. Central to the approach was the establishment of **official usufruct rights for rural communities to sustainably manage their resources**. In the following sections.

## **2 HOW THE METHODOLOGY FOR PILOTING USER-RIGHT WAS DEVELOPED**

### **2.1 Initiating the pilot**

While lack of land tenure appears to have been a major constraint to effective community-led environmental conservation, this was seen to be a policy issue too big and sensitive for a small Woreda-based development programme to become involved in. However, the introduction of systems for giving legal usufruct to interest groups wishing to undertake enclosure seemed more attainable. Usufruct - the rights of an individual or defined group of people to all products from a defined piece of land - allows land tenure policies to remain unchanged (i.e. all land remaining the property of the State), but gives sufficient legal security of use to promote long term investments in the land by farmers.

In mid 1996, SOS Sahel therefore approached the Regional Bureau of Agriculture in Bahir Dar and was subsequently encouraged to proceed with a pilot in conjunction with the MOA and Administration at Zonal and Woreda level. Over several months, the draft procedures for the pilot were drawn-up, discussed, modified and finally approved for piloting in one kebele (PA 34) in the high-land area (above 3,000 masl) of Meket Woreda.

### **2.2 Draft procedures developed for the pilot**

The procedures developed for the pilot aimed to ensure that a clearly defined group wishing to enclose a defined area could only do so if all levels of local society (community and Government) were first given full chance to approve or oppose the request. Two formats, "Format 1" and "Format 2" were developed so that local legislative bodies could follow these procedures systematically (the Amharic versions, as used in the pilot are shown in Appendix 2).

The first ("Format 1") ensured that the following steps were carried out:

- naming of all individuals in the group requesting usufruct and their next of kin
- definition of their objectives for enclosure and anticipated impacts
- demarcation of the proposed site in a way that is publicly visible to all surrounding communities
- production of an acceptable management plan for the site (involving the assistance and approval from the Office of Agriculture)

- approval by all relevant bodies at kebele level (i.e. village - or "gott" - representatives, kebele administration, DAs, church leaders).

Once approved at kebele level, "Format 1" was submitted to the Woreda Administration and Office of Agriculture. If approved, these two bodies would then sign "Format 2", giving official usufruct to the defined interest group for the defined site, a copy of which is given to the interest group and the kebele administration.

### 2.3 Methodology developed for introduction of pilot usufruct procedures

A summary of the sequential steps followed for introduction of these pilot usufruct procedures is shown over-leaf in Box 1. It should be noted that to undertake this methodology effectively, a strong shared vision is required between all facilitators (e.g. Office of Agriculture experts, DAs, Woreda and kebele administration and, in this case, an NGO). From experience, we know that the necessary common understanding is easily developed if Administration and MOA officials (at Woreda and Zone) play the lead role in introducing and explaining the procedures. This can be done effectively in one initial meeting with all village and kebele representatives, followed up by a second meeting if necessary to clarify any misunderstandings.

No predefined criteria were set for specifying which type of land could or could not be considered for usufruct. This was because the whole approach was focused on linking usufruct to enclosure of degraded land suitable only for rough grazing.

The pilot was designed to work at the *gott* (or village) level. A 'typical' *gott* in Meket has some 40-80 households. Very often, all households belong to the same community-based organisation (CBO), typically the traditional funeral association ("*k'ire*"). In our initial experience, every household head (either female or male) wished to become a member of the interest group applying for usufruct protected enclosures. While the *k'ire* formed a useful entry point, the full involvement of the kebele administration is essential (see section 5.2).

#### Box 1 Methodology for introduction of pilot usufruct procedures

1. Call a meeting with the kebele administration and leaders (CBO, religious, administrative) from each *gott*, in order to:
  - a) explain the procedures;
  - b) identify potential sites ;
  - c) distribute painted marker poles to allow proposed sites to be clearly demarcated
  - d) distribute copies of "Format 1" to relevant representatives;
  - e) establish co-ordinating systems to deal with possible conflict-resolution between *gotts*.
2. Follow-up visits to each *gott*, to assist them to clarify their objectives for enclosure, prepare sketch-maps of proposed enclosed areas and management plans.
3. Facilitate a 2nd meeting of all *gott* representatives with kebele administration to resolve any disagreements between *gotts* over proposed sites for enclosure (*only if necessary*).

4. Facilitate signing of "Format 1" by all involved parties and then submit to Woreda Administration.
5. Facilitate signing of "Format 2" to give official usufruct to defined community groups for proposed sites with approved management plans.
6. Give necessary support for establishment of woodlots (seedlings, tools etc).

An important part of the process involves facilitating each community group to produce a clearly stated management plan for enclosed sites. It is only after the management plan has been produced and approved by the members and technical experts from the Office of Agriculture, that final authorisation for usufruct can be given by the Woreda Administration. Box 2 gives a summary of what is included in a standard management plan:

- Box 2 Summary of management plan for enclosure sites**
- Objectives of the enclosure
  - List of members
  - Species and numbers of seedlings to plant and source of seedlings  
(either by establishing a village nursery or by buying from others)
  - Design and management of plantation
  - Work plan (at least for one year)
  - Use and management of all the produce
  - Means of guarding the site
  - Definition of group bylaws

### **3 IMPLEMENTATION EXPERIENCES - THE PILOT IN PRACTICE**

#### **3.1 Summary of outputs**

In general the initial outputs from the pilot were very encouraging, although several weaknesses were observed which could be avoided in the future. A summary of outputs from all the 22 *gotts* in the pilot kebele is given over-leaf (to familiarise the reader with the general results) and then the remainder of this section examines key issues in more detail.

- All 22 *gotts* demarcated their own sites for enclosure and reforestation, covering a total of approximately 130 hectares of steep, rough grazing land.
- 16 weeks after the initial explanatory meeting, 14 *gotts* had successfully completed all procedures and had been given official user-rights by the Woreda (i.e. "Format 2" completed) for 14 sites covering approximately 75 hectares.
- Over 50,000 pits dug (for receiving seedlings) and seedlings planted.
- On all sites with user-rights, social systems for guarding proved very effective. Since establishment only 3 recorded instances of grazing have been recorded and in all instances the culprits were apprehended and fined by the respective communities.
- 7 *gott* nurseries established to provide seedlings for enclosed sites.

- Some *gotts* used income earned from sale of grass to buy seedlings for planting in the enclosure and distribution to their members.
- (see section 4.1 for summary of impacts)

### 3.2 Initiation and conflict resolution

After the initial discussion with all targeted *gott* leaders and local Administration officials, the village participants were given the responsibility to define their members and to discuss with all to identify sites and prepare application. Some of these participants were active (immediately identifying sites and employing guards before the approval process was even initiated!), while others were very slow and disorganised.

The strongest means of animation proved to be the distribution and use of painted marker poles (with bright red and white stripes) for *gotts* to publicly demarcate their proposed sites. Following the initial demarcation using marker poles by one, active village, all other villages in the area were demanding their own poles to start the process themselves. The poles thus served the purpose not only of demarcation but also of raising awareness of the process to people in the area. As one person remarked "Painted poles are better than newspapers in this place".

To resolve any conflict arising from disagreement between villages as to traditional access to given sites, a general meeting was organised to be chaired by the local administration. All the stake holders participated and agreed procedures for coming to agreements were established. This meeting proved essential to the whole process. It provoked very animated discussions and was difficult to facilitate but eventually it led to a general consensus between all villages on the establishment boundaries of woodlots.

Seven *gotts* established their own nurseries to produce seedlings for planting in enclosed sites. Tools, seed, technical support and follow up was provided by project and Office of Agriculture staff. It was agreed those villages not producing their own seedlings would purchase from CBO or MOA nurseries (at a prices ranging from 100 to 20 seedlings per 1 Birr, depending on species).

### 3.3 Protection of enclosures

Well defined protection procedures were included in all management plans and were themselves a pre-requisite for final approval of usufruct. However, it was left to each village to develop their own particular means of guarding. No type of physical fencing was promoted or attempted. The majority decided to use a guard with some form of payment, but some arranged systems whereby the individual members took in turn to guard on a rota basis. Different types of guard payment were developed by different villages:

- Money only (from 120 -150 Birr per year per sites). N.B. in several cases, one guard was able to protect 2 or 3 sites, thereby increasing his salary accordingly.
- Barley only (1-3 quintals per year)
- Money and barley
- 1/3 of the grass harvest

To date, only a few cases of people "stealing" fuel wood from enclosures have been recorded. These were all outsiders (i.e. from other kebeles). On being apprehended they were taken to the

Administration and given an official warning. The fuel wood was sold and the money distributed to the community members.

### **3.4 Utilisation of produce from enclosures**

As for site protection, the means of sharing benefits between members had to be included in the management plan but could be defined by each and every village according to their wishes. The only produce for distribution at this stage is grass and many villages divided up the total harvest and shared equally among members. Others sold grass to members at an agreed cheap price and used the money generated for payment of guards, loans to members, purchase of tree seedlings for further planting, establishment of their own nurseries. One village even collected enough money to allow them to construct their own community managed cereal seed store.

### **3.5 Species planted**

One of the greatest failings of the pilot was in the supply of seedlings to participating villages. Because of the timing (being somewhat rushed at the onset of the main rainy season), there was no alternative to seedlings of *Eucalyptus spp.* This was particularly unfortunate since all villages requested a mixture of species, including indigenous trees such as *Olea africana* and *Juniperus procera*. In addition, seedlings were supplied later than the preferred date (due to logistical problems experienced at the time) contributing to a poor establishment rate.

## **4 INITIAL IMPACTS AND LESSONS LEARNT**

### **4.1 Summary of impacts**

In December 1997, almost 18 months after the first sites were enclosed, a participatory evaluation was facilitated in which a sample of 69 villagers were interviewed and a number of focus group discussions were carried out. The results of this evaluation are currently being compiled in Amharic and will be circulated to all participating communities and used to refine the methodology used for future replication and scaling-up. The findings are described below.

- Natural regeneration of indigenous grass and tree species has been dramatic, with very clear differences compared to unprotected sites.
- Community based control systems for dry season grazing have been proved to be effective in keeping all livestock out of enclosed areas.
- A high level of interest and commitment among communities has been sustained, with participating groups applying to expand sites and "new" communities requesting to establish their own enclosures.
- Participating community groups have earned enough income from sale of grasses (for thatching, animal feed and household use) from enclosed sites both to pay their guards and establish a group fund (see Appendix 3).
- Communities have started to produce and sell seedlings from their own nurseries established to supply planting material for enclosed sites, on their own initiative (i.e. autonomous development) - see Appendix 4.

- As a result of increased confidence inferred from user-rights, all participating communities have expressed a strong interest to start planting slow-growing, indigenous trees in preference to *Eucalyptus* to produce high value timber and "to replace what has been lost".
- Communities have started to not only organise their expansion programmes for enclosure sites but also facilitate compensation from the kebele administration for individual farmers who are cultivating land within areas proposed for future enclosure.
- Participating communities are coming to realise that not only do their livestock not suffer as a result of enclosure, but that they can actually improve fodder supply. The gradual introduction of cut-and-carry systems that appears to be evolving as a result of enclosures may have a significant impact on long term grazing management systems. To date, farmers have demonstrated a great reluctance to even consider controlled grazing in the dry season. The enclosures may promote the essential change in attitude needed for cut-and-carry systems to become widely accepted. If so, this may turn out to be one of the most significant impacts of the introduction procedures into the highlands of Amhara Region.

#### 4.2 Participatory evaluations - analysis of benefits

Box 3 summarises the different perceived benefits mentioned by the sample group interviewed in the participatory evaluation :

**Box 3: Benefits perceived (as a % of total responses)**

1. Improved grass production (quality & quantity) (for animal feed, roofing, sale, household use)	98%
2. Regeneration of natural vegetation	22%
3. Reduced run-off	18%
4. Returning wild-life	7%
5. Less time spent looking for grass	4%
6. Reduced land-slides	4%

One farmer considered that rainfall had improved as a result of regeneration; another stated that damage of crops by monkeys was reduced since they were now able to obtain sufficient wild foods from the enclosed sites. It should also be noted that of the 14 farmers from this sample who lived directly below the sites, 13 of them mentioned reduced run-off as a clear result, and benefit, of the enclosures.

Clearly, after only one year we can not expect improved access to fuelwood or timber. The immediate benefits provided by increased grass availability therefore provides the much needed immediate impact for farmers to participate actively in enclosure activities. One participant, who had no livestock described how he was able to sell (at the weekly market) for 15 Birr the grass that, as a member, he was able to purchase for only 5 Birr from the village site.

#### 4.3 Perceived problems caused by the enclosures

Of the total sample of 69 farmers interviewed, 6 considered that the enclosures provided either no benefits or actually had had a negative impact on their lives. All of these were individuals



who before enclosure had benefited directly from easy and unrestricted access to grass and wood.

Reduced access to fuel wood was the most commonly cited problem experienced by the pilot, during the first year or so after enclosure. While still expressing their overall support for the enclosure, 39% of respondents recognised that fuel wood supply had deteriorated. Of 29 village women interviewed, 86% stated that before the enclosure, they relied on the sites to collect fuel wood. Following enclosure, they had to cease using wood for fuel and increase their consumption of crop residues, leaves, twigs and cow dung. One woman mentioned that being forced to use cow dung instead of fuel wood had caused her to get eye infections provoked by the additional smoke generated by burning dung. Box 4 gives more details:

<u>Fuel used</u>	<u>Before Enclosure</u>	<u>After Enclosure</u>
Wood	86%	0
Cow dung	69%	93%
Leaves and twigs	17%	52%
Crop residues	6%	20%

The women interviewed all proposed that this short-term problem could be minimised if management plans allowed some controlled collection of wood from the enclosed sites. However, this clearly needs further investigation - we are not yet certain for how long this 'short-term' draw back of enclosures will persist, nor how controlled wood collection might work in practice.

**4.4 Who participated? - lessons learnt**

The evaluation attempted to explore within the community groups with enclosures the level of participation of different community members. In general it was found that while all members of the group received equally shared benefits, management and decision making was dominated by men. Box 5, over-leaf, shows the disaggregated data for the 69 people interviewed.

Women respondents indicated that their relatively low level of participation in activities was due to their existing busy workload and the assumption that the men would be able to carry out the tasks. They also said that they had not been encouraged by the men to take an active part. This relative dominance of enclosure management by men is probably why short term fuel wood needs were not fully considered in management plans.

	<b>% of respondents who answered positively</b>		
	<u>Total sample</u>	<u>Male respondents</u>	<u>Female</u>
<u>respondents</u>			
Knowledge of purpose	56%	80%	7%
Knowledge of procedures	60%	100%	7%
Participation in activities	72%	100%	31%

When asked about who actually made decisions concerning the enclosed sites, the majority (88%) were comfortable that all members of the *gott* were fully involved. A much smaller group (some 9%) considered that decision making was dominated by the elected committees with or without participation of elders.

In general it was found that the proposed management routine of enclosed sites (with monthly committee meetings and quarterly full community meetings) was not being followed. While at this stage, no direct weakness were detected as a result, greater effort will be needed to facilitate communities to develop a management system that is followed in the future. The female members of the co-ordinating committees proved to be active in some villages, being able to make a significant contribution to decision making. However, in others their role was clearly minimal. Reasons given included illiteracy, lack of encouragement by male colleagues and existing household workload.

#### **4.5 Institutionalisation and Progress To Date**

##### ***Institutionalisation***

The initial successes of the pilot prompted sufficient interest at Zonal level, for the North Wollo Department of Agriculture to request a workshop to share experiences with all 8 Woredas in the Zone. Facilitated by SOS Sahel and Zonal MOA, a 2-day workshop was therefore held in Meket Woreda in April 1997 to which Agriculture, Administration, NGO and community representatives came from all parts of the Zone and a senior expert from the Bureau of Agriculture. With over 30 participants, this workshop was able to promote lively and productive discussion on the opportunities and constraints for improving the methodology and scaling-up. A Zonal Usufruct Co-ordination Committee was elected (with members from Zonal Administration and Agriculture to support the initiative and to ensure future sharing of experiences. It was agreed that usufruct could become an important component of future soil and water conservation strategies and that enclosure should thus be considered as a separate, and important, land-use in its own right.

In few months since that (initial) workshop, four other Woredas have started to initiate their own procedures for introducing usufruct as a means of encouraging communities to enclose and reforest degraded sites. In Meket, a further 20 sites in 4 kebeles enclosed with full user-rights approved and given by the Administration. Collectively these sites represent an additional 257 hectares (ranging in size from less than 2 ha. per site to over 50 ha.) of protected hillsides, directly benefiting 2,403 households (equivalent to over 10,000 people).

Following the implementation of the usufruct procedure through out N. Wollo Administrative Zone, the Regional Government has considered the approach seriously, and conducted a workshop for further institutionalisation of the methodology. As a result of this workshop, therefore the Regional Government produced a legislation (directive) to ensure the implementation of the Usufruct procedure throughout the Region ( in about 105 Woredas). Thus, distribution of hillsides has now being underway in all Woredas throughout the Region (see BoA, 1998). As a rotation period of some indigenous hard woods (e.g. *Hagenia abyssinica*) takes more than 60years, the Regional Government, therefore, introduced a lease for 99-years for farmers to benefit from their investment.

### ***Progress to date***

At the time of writing this paper, a complete information about the size of land, number of beneficiaries, and the potentials and/or constraints that other Woredas experienced has not been compiled. However, from the informal discussions that the authors had with people working in other Woredas, it is known that each Woreda in the Region is currently distributing marginal hillsides for various community groups.

Furthermore, it is also known that the N. Wollo Zone Department of Agriculture has produced a progress evaluation report based on the an evaluation mission that was conducted in 1999. According to this report, in North Wollo Zone alone more than 12,585 hectares of land has been distributed (for enclosure) for more than 74,954 rural people (DoANR, 1999). (see also appendix 6 for details of hillside distribution in 8 Woredas of N. Wollo).

This report has also indicated some of the strengths that usufruct-rights methodology has interms of improving farmers confidence that farmers developed to invest their time and labour on natural resorce management (see box 6 below).

#### **Box 6: Some of the strenghts of the methodology which were indicated in the eveluation report.**

- ◆ Farmers were observed to have better sense of ownership than before due to the usufruct-right they were able to posses.
- ◆ Farmers' household income has generally increased from the grass harvest.
- ◆ Better maintenance of the remnant indigenous trees was generally observed.
- ◆ More physical achievement as compared to previous attempts for area closure. That is before the passing of the new directive.
- ◆ The passing of a new legislation/directive which helped in uniform implementation.
- ◆ Good integration of seedling planting with soil and water conservation.
- ◆ The problem of free grazing was improved and the production of grass harvest has also increased.
- ◆ There was generally enough site assessment by experts before each land was enclosed.
- ◆ There has been an increase of seedling demand by farmers.
- ◆ Improved pre-planting site preparation by farmers with out any external pressure.

DoANR, 1999

Despite such progress to date interms of number of hectares of land distributed and nuber of beneficiaries reached, there are also issues that need to be addressed. In this regard the evaluation report the Department of Agriculture and Natural Resources has identified some of the challenges and constraints which Woredas are facing in implementing the regional legislation/directive. These include,

that there is a considerable gap in the understanding of the essences of the idea behind the usufruct procedures; that experts or development agents at woreda level lack lack a facilitation skill;and that there is a tendency towards achieving targets instead of facilitating communities to set their own plans.

This suggests that there is still a lot to be done to make the methodology more process-oriented than 'product-oriented'.

#### **4.6. The contribution of the usufruct-rights procedure on other NRM approaches**

The introduction of user-rights is also contributing significantly to the community watershed management methodology being developed and piloted by SOS Sahel and MOA in Meket (see Technical Paper no. 2: "Participatory Land Use Planning and Implementation - PLUPI".) With the opportunity to benefit from the new usufruct procedures, enclosure is being adopted by communities as one of their key strategies for catchment protection. Of the 35 new enclosed sites (from 8 kebeles), 25 resulted directly from communities carrying out PLUPI.

The potential of the approach to initiate an autonomous development process is now becoming apparent. Three separate communities have already taken the initiative to start or expand enclosed sites for afforestation without any external influence or facilitation whatsoever. This is an extremely encouraging development and should be considered as an important impact in itself, since it suggests that the process could become self-replicating.

### **5 CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Usufruct procedures as part of a strategy for environmental regeneration**

- The introduction of usufruct to encourage community groups to invest in long-term environmental management strategies appears very effective. It in no way compromises Government policy on land tenure issues but gives sufficient security for communities to have the confidence to initiate their own environmental protection plans.
- Enclosure itself has been demonstrated to be an extremely effective measure for environmental regeneration. It is simple and cost effective and even on the most degraded lands can show dramatic results in just one season.
- Sufficient short term benefits (in improved forage and thatching grass production) are forthcoming to further animate communities to strengthen and expand their enclosure sites. The fact that after only one season, reduced run-off is also identified as a direct benefit from farmers reflects the strength of the approach.
- Currently, the indicators for the process to become self-replicating are encouraging. Every effort should be made to support such a process of autonomous development - training and orientation of DAs and kebele officials is a priority.

#### **5.2 Methodology for introducing usufruct procedures**

In general, the methodology seemed to perform satisfactorily. The following conclusions can be drawn and recommendations for improvement suggested:

- ◆ The use of CBOs as an entry point for initiating the process is recommended, to create the necessary feeling of trust and confidence between members. However, it is essential that this is carried out with the full co-ordination of the Kebele Administration.

- ◆ Communities must be allowed to define their own objectives for enclosure.
- ◆ Attention is needed to facilitate them thereafter to prepare management plans accordingly. The development of long-term plans is required (i.e. 5 to 10 years and even greater where slow growing indigenous trees are being established).
- ◆ Support for communities should be given at least for the first 2-3 years after enclosure to assist in improving management and expansion as required.
- ◆ Efforts should be made to help communities (and especially the women) not only to understand that a short-term reduction in fuelwood availability will result from enclosure, but also to develop strategies to deal with this problem.
- ◆ Capacity building of community committees is required to strengthen outputs and impacts
- ◆ More attention is needed to involve women in management decision making.
- ◆ Capacity building of kebele administrators would help them better to co-ordinate and act as effective resolvers of possible conflict between community groups.
- ◆ Training of Woreda MOA experts, supervisors and DAs is needed, especially in the facilitation of communities to produce action plans.
- ◆ The active involvement of the Orthodox Church should be encouraged, not only to further strengthen extension but also to act as a source of indigenous species planting material.

The introduction of user-rights is of course only one part of a larger strategy to help rural people develop sustainable natural resource management practices. Of the many other aspects involved, it is worth mentioning that our current experiences with the simultaneous initiation of community managed credit and of environmental education (aimed at primary school children) are very encouraging. These will be fully dealt with in Technical Papers due to be released in the near future, but please do not hesitate to contact us if you require further information meanwhile.

### **5.3 Technical issues**

- ◆ Good supplies of planting material of indigenous tree species is required, plus improved recommendations for establishment. The potential of direct sowing of tree seed should be investigated.
- ◆ More research is needed to identify suitable multi-purpose species and to develop optimum practices for establishing and managing silvo-pastoral systems.
- ◆ Impact assessment and the actual progress made in throughout the Region need to be carried out regularly so that some the concerns will be addressed on time.

Finally, we would like to urge all partners in development operating in Ethiopia to work harder at channelling experiences from the ground up to strategy and policy makers at the top. We all need to strive to create an environment in which those operating at the Woreda level (both Governmental and non-governmental organisations alike) are encouraged to develop their own initiatives and actively contribute to formulation of policies and strategies. Unless we do so, we can never expect the great potential of Ethiopia's traditional farming sector to be realised.

## **6 ACKNOWLEDGEMENTS**

**My** appreciation to Dr Belay, Head of Amhara National Regional State Bureau of Agriculture, without whose initial encouragement this pilot would never have been initiated. Thanks also to those members of North Wollo Administration and Department of Agriculture who supported the initiative and helped us to share our experiences. Likewise to Meket Woreda Administration, whose successful efforts at co-ordination and conflict resolution made the pilot easier than it might otherwise have been. We wish also to give our special thanks to all the SOS Sahel and Office of Agriculture team members in Meket and other Woredas who contributed to the pilot and helped make it a successful learning experience for us all.

Finally (and as always!) I must acknowledge the farmers of Meket Woreda, who, when ever given the opportunity, so clearly demonstrate that they hold the solutions for reversing current trends of environmental degradation in up-land Ethiopia.

## **Appendix 1 The different types of plantation ownership found in Meket Woreda**

### Private (individual) plantations

This type of plantation is found mostly around homesteads and sometimes on the boundary (or some part) of the crop lands. It seems that the reason for such boundary planting is not merely for pole production, but because felt that by doing so they were strengthening their claim to a particular field. All such boundary plantations are with *Eucalyptus spp.*, despite the fact that farmers recognise significant negative effects on crop production.

- Not to be reallocated for other farmer
- It is dominantly planted with exotics (*Eucalyptus spp.*)
- The owner is the sole decision making body on what to do with the produce.

### The church plantations

The only areas where one can find indigenous tree species in any sort of quantity, and which are regenerating are the church compounds (and, in some cases, protected surrounding land). Stands vary in size from a few hundred square metres to several hectares. Churches are especially important as guardians of the three main indigenous highland species: *Hagenia abyssinica*, *Juniperus procera*, *Olea africana*. These trees have a religious value and have probably been saved from extinction as a result.

Because of the traditional law of the church, people respect these forests.

The scale of plantation is smaller as compared to others.

The produce is managed by the church committee.

### The Service Co-operative plantations

Service Cooperatives are established by the Department of Co-operatives, usually with large group of farmers, covering at least one kebele. In most cases, service co-operative plantations are around 3has in size (ranging from 1 to 10 ha). *Eucalyptus spp.* are the sole species planted. The co-operative committee (from the farmers) and the Administration would decide on how to use the produce. In practice (at least to date), actual benefits accruing to members are not always evident to all co-operative members.

### PA /'Community'/ plantations [ after called community forests?

These plantations were initially established and protected on food for work basis by MOA and (in most cases) were then handed over to local Kebele Administrations in 1992/93.

Since then, new plantations are established by mass mobilisation.

The management and use of the produce is not well defined.

Plantations are predominantly of exotic trees (*Eucalyptus spp.*).

**Appendix 2**

**Farmer's Woodlot Group  
Application for Registration - Form 1**

(for submission to the Administration and Woreda Office of Agriculture)

**1. Farmer's Woodlot Group**

The following persons are identified as the members of the Farmer's Woodlot Group (chairperson treasurer and secretary are indicated), hereby known as FWG. " ....." "

.....  
.....  
.....

N.B. Full list of group members are attached to the management plan  
(with defined next of kin who will inherit receive user-rights in the case of death)

**2. Proposed Site for Woodlot Establishment**

- a) PA .....
- b) Village .....
- c) Name of the site
- d) Dimensions and area: .....m x ..... m = m<sup>2</sup> (= ..... ha)
- e) Distance and direction from clear land-marks:

.....  
.....

\*\* ( See sketch map attached.)

**3. Declaration of Local Approval**

" The PA chairman, DA, Deber leader and local CBO leaders hereby confirm:

- a) That the above group has formed itself with the express intention to establish their own woodlot.
- b) That all the above defined members are recognised members of this village.
- c) That the proposed site has been marked at all 4 corners with 2m poles (painted red) to indicate its proposed position and boundaries to the surrounding population.
- d) That a meeting has been held with the community and a consensus reached that the indicated site could be established as a private woodlot with full user-rights for all forest and grazing produce to the defined group members only.
- e) That no other claim is made for the land on the indicated site.
- f) The proposed woodlot establishment is approved by the community leaders, PA chairman and DA."

Signed by PA leader ..... Date .....

Secretary ..... Date .....

Signed by DA ..... Date .....

Signed by Deber leader ..... Date .....

Signed by CBO leader ..... Date .....

**4. Woodlot Management Plan**

A management plan for the woodlot has been drawn up by the Farmers Woodlot Group (see attached) and approved by the DA and relevant MOA technician.

Signed by Group chairperson: ..... Date .....

Signed by DA: ..... Date .....

Signed by MOA forestry technician ..... Date .....



**Farmer's Woodlot Group**  
**Registration of Proposed Woodlot and User Rights**

In accordance with the attached documents:

1. " Application for Registration "( from 1);
2. Map of proposed woodlot site;
3. Approved woodlot management plan;

The Administration of Meket Wareda and the MOA of Meket Wareda hereby approves the proposed establishment of the proposed Farmers' Group Woodlot known as " ....." in the Village of ....., PA ....., Woreda of Meket.

**1 User-Rights**

1:1 Hereafter all products arising from the woodlot (timber, fuelwood, forage, fruit and other secondary forest products) will be legally recognised as being the sole ownership of the defined group members.

1:2 Any person removing, using damaging or in any other way interfering with the defined woodlot without the written permission of the defined Farmer's Group will be liable for prosecution.

1:3 All by-laws covering the sale and export of timber from the woodlot will be recognised by the Farmers' Group - infringement of such laws will make the group liable of prosecution.

*1:4 On the death of any member, user-rights shall pass to his/her defined next of kin.*

1.5 Even if there be reallocation of land, the defined farmer group for whom the site is approved, and who invested their labour, time and money, remain the legal users of all products there of. However, in the case of the Government of Ethiopia requiring the enclosed land, or a part there of, the defined farmers group will be compensated in accordance with estimated value of all investments and products.

Signed by the Administrator of Meket Woreda: ..... Date:.....

This will be prepared (with Form 1 and the Management plan) in 4 copies :

1. Copy to remain with Administration
  1. " " " " Office of Agriculture
  1. " " " " Kebele Administration
  1. " " " " the defined Farmers Woodlot Group

### Appendix 3 Grass production and income from enclosed sites

Farmers revealed that the production of grass prior to enclosure was minimal. Even when there had been limited amounts of grass to harvest, it was the better off farmers who could afford to employ seasonal labour at peak labour times (often those from neighbouring Woredas) who reaped the benefits. But now they are able to mobilise their own labour as a group without fear of outsider competition and share benefits. The following table shows the quantity of grass and income (from subsequent sales) generated in one season directly following enclosure.

PA034

No.	Name the Village	Quantity of Grass harvested (bushels*)	Income from sale of Grass (Birr)
1.	Dergash Bado	50	150
2.	Gazo/Atabkit	48	140
3.	Mekerecha	35	100
4.	Wodihmado marfercho	35	100
5.	Wodya mato "	35	100
6.	Bermetebekia	75	226
7.	Key'amba	25	66
8.	Meketoy	35	100
9.	Lay baltach	50	150
10.	Yelosbado	42	130
11.	Girabda	35	100
12.	Gedeterar	55	165
13.	Zetibel	74	223
14.	Werdyelsh	n.a.	223

**Total** **1,973 Birr**

*N.B. One bushel is approximately 20-30 kg of shaken, semi-dry grass*

*At the time of sale, 10 Birr was worth approximately £1 Stirling.*

#### Appendix 4 Seedling production and income earned from sale of seedlings

Some villages indicated that they would produce their own seedling. Thus seven CBO nurseries were established and produced their own seedlings. Even some are able to generate income from sale of seedling to others:

Name of CBO	Seedlings Produced		Income from sale of seedlings
	Species*	Number	
1. Wodih Mado M/ferche	Euc/Hyg/T. lucerne	55,804	82 Birr
2. Bermetebekia	Euc	200	-
3. Deregash Bado	Euc/Hyg/T. lucerne	14,002	-
4. Atabkit - Gazo	Euc/Hyg/T. lucerne	6,909	-
5. Wodiya mado marferche	Euc/Hyg/T. lucerne	35,006	-
6. Girabda	Euc/Hyg/T. lucerne	1,200	-
7. Keyamba	Euc/T. lucerne	3,931	-
		117,052 seedlings	

\* Euc. refers to: *Eucalyptus spp.*

Hyg: *Hagenia abyssinica*

T. lucerne: Tree lucerne

## Appendix 5 Inputs and support required for the pilot

Inputs	Quantity	Unit cost	Total Cost
<b><u>A. Material Support</u></b>			
1. Seed (Trees and grass)	8kg tree seed, 80kg grass seed		700
			Birr
2. Cultivating hoe	26	@ 12 Birr	312 Birr
3. Watering can	20	@ 30 Birr	600 Birr.
4. Flat hoe	18	@ 20 Birr	360 Birr
5. Meter tape	6	@ 55 Birr	330 Birr
6. Pick axe	54	@ 20 Birr	1,080 Birr
7. Spade	23	@ 20 Birr	460 Birr
8. Rake	19	@ 15 Birr	285 Birr
9. Plastic string	300 m		50 Birr
	<b><i>Sub-total</i></b>		<b><i>4,177 Birr</i></b>
<b><u>B. Stationery</u></b>			
- File box	13	@ 17 Birr	221 Birr
- Record book	14	@ 8 Birr	112 Birr
- Pen & paper			<u>75 Birr</u>
	<b><i>Sub-total</i></b>		<b><i>408 Birr</i></b>
<b><u>C. Technical field support</u></b>			
- Per diem for foreman supervisor			200 Birr
- " " facilitators (management plan) - 150 person days @ 20 Birr			<u>3,000</u>
			Birr
	<b><i>Sub-total</i></b>		<b><i>3,200 Birr</i></b>

Total expenditure for the pilot was therefore **7,785 Birr.**

*N.B. At the time of expenditure 10 Birr was worth approximately £1 Stirling.*

The total number of beneficiaries for this first year who succeeded in established enclosures with usufruct was 556 families (approx. 2,700 people). The cost per participating family was therefore 14 Birr per family (2.8 Birr per person).

The bulk of these costs represent capital investments (i.e tools and equipment) which will be used in future years for continued nursery production and expansion of enclosure sites.