

SOCIAL FORESTRY NETWORK

**COMMUNAL WOODLOTS IN TANZANIA:
FARMERS' RESPONSE AND AN EVOLVING EXTENSION STRATEGY**

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**SOCIAL FORESTRY IN NORTHERN ETHIOPIA:
TURNING FELT NEEDS INTO A DRIVING FORCE**

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INTRODUCTION

Many farming communities in war-torn, famine-ridden Northern Ethiopia are now actively involved in social forestry programmes. When the programmes started five years ago many farmers did not believe that they could grow trees successfully, but as timber was in very short supply and extremely expensive a few farmers planted trees in the hope that a some might survive. Now, many village communities have tree nurseries in which they raise enough seedlings to plant between 30,000 and 40,000 trees a year. Some of these will be used for individual planting around the farm, but the majority will be planted on uncultivable hilltops in true social forestry programmes.

Why has there been this positive response? What lessons can we learn from Northern Ethiopia? The purpose of this paper is to examine these questions, taking as an example a small mountain hamlet close to Adargi Arbi in the region of Tigray.

GETTING STARTED

The area around Adargi Arbi is mountainous. There are many steep-sided valleys which are intensively cultivated as are the pockets of fertile land on the mountain sides. The natural tree cover has been destroyed; having been cut for timber and fuel or grubbed up to increase the area under cultivation. Erosion is widespread with deep gullies extending far out into the flat-bottomed valleys. Rains have become unreliable and, twice in recent years, have failed completely, resulting in severe famine.

Farmers living in the area around Adargi Arbi often talk about the forests that used to grow on the hillsides around their hamlets and how they used to go and cut down trees without thinking of the future. Now they are amazed at their lack of foresight, and this growing awareness has been put to good effect by encouraging them to grow trees. The Department of Agriculture has adopted two main tactics to foster a change in attitudes: mobilisation and increasing farmers' knowledge.

Mobilisation

The mobilisation tactic was used when many people were gathered together, for example, at the beginning of meetings or on field days. It involved discussing three sets of questions. To begin with, older people were asked to look back to the time when the hills were still forested and to describe, to the rest of the group, farming conditions at that time. Then people were asked to describe how the lack of trees may have created difficulties and hardship for themselves, their family and community. Finally people were asked to look forward to envisage the possible advantages of re-foresting the hilltops.

This simple tactic was repeated frequently, encouraging as many people as possible to respond each time. These repeated public statements helped to generate positive attitudes towards reforestation and to sharpen people's resolve to undertake planting work.

Increasing Knowledge

In 1985, all the people of Tigray were asked to decide what major problems affect their socio-economic status. This was debated at local mass gatherings throughout the country, with everyone over the age of 15 was expected to attend. The findings from these meetings were taken, by representatives, to the Department of Agriculture at regional level. There, at a regional conference, the peoples' representatives stated firmly that the major problem facing the farming community was soil and water conservation. The Department were asked to advise communities on ways to alleviate this problem.

Among other soil and water conservation measures, the Department suggested that the planting of trees would help reduce soil erosion, hold more water in the soil, help refill aquifers, and possibly induce more rain. In summary, the Department said 'Why not grow your own tree seedlings and, as a community, plant them on all hilltops that cannot be used for cultivation'.

At Adargi Arbi this reply was discussed at the next mass gathering, but the people did not believe that they could propagate trees successfully, or plant them and keep them growing on the hillsides where they were needed. They also thought that herdboys would not be able to control their goats and stop them destroying young trees.

However, a few farmers said that as timber prices were so high, they would like to plant some trees close to their homes to see if some would grow - but they did not know how to grow tree seedlings or look after them when they were planted out. The Agricultural Department responded by offering to train elected village representatives in the skills needed to grow trees successfully.

Production cadre (local farmers elected by the people to act as grass-roots extension agents) were also given training in raising tree seedlings. This was part of a regular programme of training set up by the Department of Agriculture and involving all staff. The programme also acts as an efficient two-way information system.

TRAINEES	LENGTH OF TRAINING
Production cadres	1 - 1½ days every month
Local extension agents	2 days every month
District extension coordinators	3 - 4 days every month
Area coordinators	3 - 4 days every 3 months

At these training sessions, staff were given technical training, and were also trained how to train the next level down. They also passed information up to senior staff. Production cadre were trained how to raise tree seedlings, plant them out and care for them. They were also taught how trees helped conserve soil and water. All this information they passed on to the people at farmers' training sessions and at field days. During the next year, several farmers sowed Eucalyptus seeds in their back yards and grew them on successfully. Eucalyptus was selected for several reasons: they already grew in the area so people knew them well; experience had also shown that Eucalyptus grew well in the area and were relatively easy to raise from seed. In later years, when the people were confident in their ability to grow trees, native trees were grown in preference.

In this first year of planting, seedlings were grown in back-yards and later planted around the house or in gulleys around the farm. It was soon found that herdboys were able to control their goats and very few trees were eaten. Despite this, the people were still not prepared to take part in a communal forestry programme, mainly because it would involve large scale commitment in both time and effort and because they were not

convinced that it would succeed.

The local production cadre arranged farm visits to those farms where seedlings were being grown and, by the end of the second year, could demonstrate how the young trees were already resisting soil erosion. They also made sure that tree growing was frequently on the agenda of farmers meetings to keep people thinking about trees. At these meetings farmers who were growing tree seedlings talked of their experiences and the production cadre passed on technical information gained at training sessions and from other farmers.

By these means - through training programmes, farmers' meetings, and farm visits, the peoples' technical knowledge about trees and their effect on soil and water conservation increased greatly. This technical knowledge reinforced and helped strengthen attitudes favouring reforestation and convinced the people that they were able to grow the trees themselves.

GATHERING MOMENTUM

Two years later, at a mass gathering, it was decided that the community would try a small social forestry project. The technician surveyed possible planting sites and the community decided which ones to use. They selected several gulleys and an exposed hilltop which was communal land. As the demand for tree seedlings for private use had also grown enormously, the people decided that they would need to grow 40,000 seedlings that year. To grow this number of seedlings they decided to establish a communal tree nursery on a site close to the centre of the village and nearby water supply. The Department of Agriculture appointed a technician to supervise the nursery and offer technical advice.

One knowledgeable farmer who had been trained by the Department was elected to collect all the Eucalyptus seeds for the nursery, another ploughed the land and the technician laid out the beds. In all 216 beds were planned with each expected to produce 150 to 200 seedlings. After ploughing, communal work groups dug each bed properly, removing poor soil and replacing it with good soil mixed with well rotted manure. When the rain started in February they dug each bed again, sowed and fenced them.

Each bed produced seedlings for a specific group of farm families plus the communal planting site. These families assigned two people to water, weed, cultivate, and prune the seedlings in their bed. This work was done to a high standard because:

- a. all farm families wanted good seedlings and put pressure on the 2 elected people to do a good job;
- b. because the nursery was in a public place everyone was interested in progress and quickly noted any bed that had not been tended well or in which seedlings were not up

to the standard of the others. There was thus an element of competition between the people tending the plots, and a desire not to lose face in front of the rest of the community.

All work was unpaid (except for the technician). This was accepted as Tigrayans consider communal work to be their social duty and are usually proud to be elected.

In July, when the seedlings were about 50 cm high, they were planted out. Every family took between 5 and 20 seedlings to plant around their houses (9,000 seedlings were used this way). One group planted 700 seedlings to fill in an old tree planting site, and the community organised itself into groups to plant around 30,000 seedlings in gulleys and on the hilltop site.

The technician and production cadre supervised planting. Initially 400 to 600 seedlings were planted per hectare to make sure there was an adequate survival rate. Although many seedlings died a sufficient number flourished for the villagers to consider the planting a success. People from neighbouring villages heard of their experience and came to see for themselves. The following year many came back for seedlings. All were given a few free of charge as, in this area, it is felt important that village groups help one another.

In 1989 roughly the same number of seedlings were grown and planted out, but because of the drought many died. However, most of those which were planted in previous years look as though they will survive. Despite this setback, the community has decided that tree planting in 1990 should be about the same as in 1989, but with an extended nursery to partially accommodate the growing needs of the surrounding area.

LESSONS TO BE LEARNED

1. Involvement of the People

The people were involved in all decisions related to the forestry programme in their village area. This is a feature of Tigrayan local government, where the people are expected to make all major decisions at mass gatherings, while the local government organisations, called Baito, are primarily executive bodies.

In general, social forestry programmes are much more likely to succeed if the people feel it is THEIR programme, not the government's.

2. Peoples' Attitudes and Beliefs

In the past, villagers considered trees a gift from god. No one gave a thought about planting trees. In the debate

surrounding the cause of the 1984/5 famine, the role of trees in inducing rainfall was discussed in detail and, nowadays, most people in this area believe that at least part of the problem underlying unpredictable rains is the denudation of hillsides. They also know erosion, poor penetration of rainfall, and other problems related to soil and water conservation, have been created by deforestation. There is, therefore, a very positive attitude towards reforestation as the people now believe it will help fulfil their most urgent need - the re-establishment of regular rains and reduction of erosion.

The development of positive attitudes was not left to chance. The Department found out what the people felt were their most urgent needs, then used mobilisation tactics to force people to recognize the importance, to themselves and to the community, of fulfilling those needs; and to strengthen attitudes towards accepting practical measures to fulfil those needs.

The Department also helped people to increase their knowledge so that their attitudes were reinforced by being based on a sound scientific foundation.

3. Basing Action on Peoples' Needs

One of the first actions of the Department was to determine the people's needs. This obviously helped them plan an appropriate programme, but also helped in ways they did not at first expect.

People are often unclear about their real needs, or the priority which should be given to competing needs. During the early days of the programme, discussion and debate enabled the people to clarify and articulate their needs. This had three main attributes.

Individuals became clear about their own needs and whether they could realistically be fulfilled. To a limited extent the discussion also made people face up to the amount of effort they would be willing to expend. Debates held at mass gatherings also helped them recognise needs felt by others in the community, which were generally felt to be important and which were important to only a few.

Discussion helped the people to identify the underlying causes of a problem. All too often people are asked about their needs without being given the opportunity to discuss them. Because of this, they often quote day to day difficulties which may only be superficial symptoms of a deeper problem. Usually, as in this case, it is the underlying cause that has to be tackled - not just the symptoms.

After discussion and debate in the community, the peoples' representatives could present their needs clearly and concisely to the Department of Agriculture, and be authoritative in their dealings with them.

4. Scale of Commitment

At first farmers rejected communal planting because of the large scale commitment and uncertainty of success. During the first few years tree seedlings were grown for private planting not for communal planting programmes. The Department did not force the people to plant communally, but made use of this private enterprise because they realised that the people needed time before embarking on ambitious projects, time to convince themselves that they could grow trees and that the trees would survive. It was recognised that planting in gulleys around the home would demonstrate benefits related to soil conservation.

It was also realised that trees planted on private land would be used for timber and firewood and so enable future social forestry projects to be decided solely on the basis of soil and water conservation. Many social forestry programmes break down when communities attempt to agree how future forest products and/or profits are to be distributed. This problem was avoided in Tigray. Many social forestry programmes have tried to force people to start communal forestry immediately. This would probably have had a negative effect on the whole programme. By allowing individual planting first, the Tigray programme reduced uncertainty, reinforced beliefs that trees would, in fact, fulfil farmers needs, and also reduced social problems related to the future use of trees.

5. Starting Simple

The programme started small and as simple as possible. It started by using Eucalyptus, which were known, liked by the community and easy to grow. Later, more beneficial native trees were introduced. It only used resources available to the community. No additional tools or inputs were required and nothing had to be financed by the people. All that was required of the people was time and effort. The programme also started with a few farmers planting trees around their houses, and used these farmers to prove that they, and the rest of the community, could grow trees. These plantings were also used to reinforce the teaching they had received about trees stabilising ground and resisting the formation of gullies.

6. Fitting in with Social Norms

The system of local government in Tigray is 'by the people'; with all major decisions being made at mass gatherings. Mass gatherings consist of meetings by all local people over the age of 15. In the local government system they are used as a forum for discussion and debate prior to the making of decisions by mass consensus. They are also used as a means of gaining information from the people and transmitting information to them. In the social forestry programme this normal process of decision-making was adhered to, with the people making the decisions, and the Department of Agriculture facilitating them chiefly by training villagers and appointing a trained technician.

In Tigray, communal work is normal and it is expected that the individual works for the benefit of the

community. Communal planting in this area depended on these norms as did the election of persons to select seed, plough the ground and care for the nursery plots.

The managers of social forestry programmes have to be sensitive to the social norms of the people they are working with, and use these norms as the basis of strategic planning. Unfortunately, many try to impose their own system on a community and almost always end in failure.

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