# HOUSEHOLD WOODLOTS IN THE SUDAN
## A Qualified Success

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## Introduction

This note briefly documents the progress of a small Social Forestry project in the Sahel Savannah zone of Sudan. We think it may be of interest to others working in similar environments for two reasons. Firstly, the project evolved a sustainable strategy for tree planting which may be applicable elsewhere. Secondly, it demonstrated the advantage of allowing local people to define the nature of the project's activities, which resulted in a shift away from community forestry to supporting the planting of household woodlots.

## Environment and Problems

The project area is in Dinder District, in the Central Region of Sudan, and consists principally of fifteen villages scattered along the course of the seasonal Dinder River. Annual rainfall is usually quoted as 450mm, but is extremely variable from year to year. The rainy season lasts 3-4 months. Before the droughts of the 1970s and 1980s there was dense savannah woodland over much of the area, but this has now been replaced by very open woodland, and more commonly scrub and bare soil. Gulley erosion is becoming more widespread.

Demands for forest products are heavy. Locally settled people and nomads cut for domestic use (building poles, thorn fencing and fuel), and there is widespread felling for charcoal production, by both outsiders and local people. Woodland is also cleared for agriculture under a bush-fallow system. In addition to restricting growth and regeneration, drought increases villagers' demand for tree fodder and cash from charcoal production, and thus the rate of cutting. The net result is a degraded forest resource, with no potential for recovery under present conditions, even in years of good rain. This has created serious problems for the local population, who are faced with shortages in essential materials for which there are no other affordable sources.

## Project History

In response to these problems, and at the invitation of local leaders, CONCERN (an Irish NGO) began a community forestry project in Dinder in 1986. The principal aim was 'to help local communities to plan, manage and utilize their forest resources, meeting related needs on a

sustained and environmentally sound basis'. Given the paucity of existing woodland, and the lack of control over the bush by local communities, this aim was to be met by planting trees, rather than natural forest management.

In cooperation with the local forestry office, an ambitious programme of extension was embarked upon to encourage villages to plant communal woodlots. At that time this approach was popular in Sudan, as elsewhere and indeed CONCERN was under explicit instruction from the Central Forests Administration to pursue this strategy. The opinions and wishes of the villagers were not ascertained at this stage.

However, after two years it had become evident that this approach was completely unworkable. No community commitment had been generated, and where trees had been planted they were untended, unprotected and soon dead. At this point, a farmer requested seedlings to plant his own woodlot, which he did successfully. In the following two years (1989 and 1990) extension activities focussed on this new idea, and it was adopted widely in the other project villages. Individual men and women, and households, chose sites for their own woodlots, carried out all ground preparation, fencing and irrigation, and made all the decisions regarding the number and species of trees they planted. CONCERN's involvement was reduced to the provision of advice, seedlings and motivation.

The final step towards complete local control and self-reliance is to take over seedling production. This began spontaneously in one village in 1990, and interest was expressed in all the project villages. CONCERN's final involvement, before withdrawal at the end of 1991, will be to train individuals in the establishing home nurseries.

**Conclusions**

1. Even in a very resource-poor area, in which tree planting involves considerable investment of time and labour, private woodlots can be attractive to villagers where community planting is not. This is because of the direct control by the owner(s) of the benefits from labour invested, and the adaptability of such woodlots to the product requirements and land/labour resources of the individual or household. In contrast, community woodlots offer uncertain returns, lack flexibility to suit individual needs, and require a level of organisation and cohesion which is often not present.

2. Success was achieved through adopting a locally-devised system, which arose independently of the project. Time and money could probably have been saved by stimulating such innovation at the outset and involving local people in project design, rather than by importing a socially and economically inappropriate approach which proved unworkable.

3. Despite great enthusiasm for private tree planting, villagers require much encouragement by project extension staff to maintain their woodlots. This will be true until the first harvest, but should be a decreasing problem as the benefits from woodlots become more widely

appreciated.

4. Woodlot size is limited by availability of water and labour. The woodlots planted - averaging around forty trees - can substantially contribute towards household requirements for building poles and fencing. However, they cannot hope to provide more than a fraction of fuelwood needs, nor can they reverse the trend of environmental degradation, except by reducing the need to cut trees from natural woodland. To tackle these larger-scale problems by tree-planting is virtually out of the question given the climatic changes which have occurred in the area, and the consequent ensuing land-use changes.