

KEEP ROLLING



Dung beetles will be rolling up the themes again. When we publish a Newsletter on a certain theme, we hope that readers will digest it so that new ideas can emerge. In this section "Keep Rolling" you have a chance to present further information about themes highlighted in previous issues, thus giving still more food for thought and action.

Conservation and market development

Farmer participation in developing and spreading sustainable agricultural practices has been central to many articles in previous theme issues of the ILEIA Newsletter. In this article on a project in western Kenya, Hugh Gibbon argues that experimentation with developing market opportunities should be integrated into such an approach.

Hugh Gibbon

In mid-1991 the Kenya Indigenous Forest Conservation Programme (KIFCON), a joint initiative between the Kenyan and British governments, selected several forest areas, including the Kakamega forest in western Kenya, to develop and test a series of management scenarios for natural forest conservation. Work in Kakamega focused on ways to improve natural forest conservation through close consultation and involvement with the Forest Department, Kenya Wildlife Service, district administrators, politicians, councillors and farm families living beside the forest.

Through involving local people in management, it was hoped that pressure would be taken off the natural forest, providing project staff with time to introduce a sustainable forest management structure and to do long-term planning for the forest reserve area and approximately 15,000 households depending on the forest. Household size (defined as those persons sharing the same evening meal) in the project area ranges from 4-6 members to 16-18 members with a mean range of 7-9 members. Land holdings per household are small, with a mean range of 1-3 acres (0.4-1.2 ha). Although the area has a favourable climate with high rainfall (2000 mm per annum) and high temperatures (mean maximum of 27.7°C), creating impressive tree and crop growth rates, soil fertility is declining due to heavy leaching and poor land husbandry practices. As a result, the area suffers from a food deficit (the "hungry season") between late February and late June each year.

Households beside the forest depend for up to 75% of their daily needs on the for-

est reserve area (Emerton 1992). The project therefore aimed at finding effective ways to involve the communities in sustainable forest use. However, partly due to low progress with this approach, the project also looked at options for income generation outside the forest. Little was to gain from awareness raising and conservation education initiatives without being able to offer some practical alternatives for income generation. One of the most promising alternatives appeared to be horticulture using organic farming methods. This article analyses farmer response and farmer assessment of the new ideas and methods, as well as farmer-to-farmer training and experimentation as key methods to introduce these.



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Encouraging farmers

In October 1993 KIFCON decided to fund a six-month intensive agricultural development initiative with selected farmers around the Kakamega forest in order to develop income-generating alternatives to the traditional forest-focused activities in which they were engaged. Together with the Kenya Institute of Organic Farming (KIOF), the Association for Better Land Husbandry (ABLH) and the forest-adjacent farmers, a strategy was developed with the following components (Cheatle & Nekesa 1993):

- awareness creation and training to enable farmers to intensify production through conservation (organic) farming
- a focus on crops farmers were familiar with and systems of production that built on what was already practised
- investigation and pilot testing of market opportunities for horticultural crops
- action to strengthen and support self-help farmer groups and networking
- participatory development with an emphasis on self-help.

By November 1993 four villages had been selected as sites for a one-week on-farm training in organic farming methods. Six self-help farmer groups participated in this activity, which involved some 277 individuals. More than half of these were women. Although the groups existed when the project started, none were involved in conservation farming. The course focused on the principles and practices of soil and water conservation, compost making, animal husbandry, soil cultivation, planting systems, nursery establishment, crop production, agroforestry and beekeeping, water harvesting and farm layout and design. Demonstrations were held on farms previously selected by the villagers at each of the six training sites.

Many of the farmers had no formal schooling, but response to the one-week awareness creation and training was positive in all groups and led to an agreement for a second on-the-job training to be organised by KIFCON and KIOF on a cost-sharing basis with farmers in the four villages. This training involved placing a "conservation farming promoter" in each of the four villages for a period of three months from January to March 1994. Accommodation and water were provided by the villagers, while KIFCON paid the salaries and field allowances for the promoters (two female, two male). During this three-month period, the costs of seed and planting material, stationary for record keeping and farmer-to-farmer exchange visits were met by the project. The KIFCON agriculturalist and village promoters introduced two new trial crops in order to focus farmers' learning during the three-month support period. These were carrots and pineapples.

Experimenting

By the end of March 1994 it was clear that many farmers had adopted some of the new soil preparation techniques and had planted out both carrots and pineapples in double-dug beds and compost trenches. More importantly, farmers saw vegetable production as an income-generating enterprise and started to experiment further. Some tried other crops. They asked the project to supply them with seeds of various kales, cabbages, lettuces, spinaches, onions and tomatoes. For the first crop the project met the cost of purchasing the seeds, but for following crops, farmers took the initiative and either purchased the seed directly from suppliers or paid for seed supplied through the project office.

While farmers from different villages selected a number of different crops, the project undertook a market survey in nearby centres and towns to seek outlets for the expected farm produce. The market survey findings were discussed with each self-help group and all were encouraged to start a marketing sub-group. Some of these groups, but not all, are now very active.

Farmers soon also started to experiment with nursery establishment methods such as a moveable nursery seed bed to avoid chicken damage, cropping techniques such as an adapted "mandala garden" to reduce soil erosion on sloping land and crop varieties specifically for marketing. More than half of the farmers who had received the original training inputs from the project had begun their own on-farm research and experimentation by early April 1994.

Evaluation and responses

Using a team of 12 private and public sector professionals from the Organic Matter Management Network (OMMN), a project of the ABLH working with farmers to pro-



Photo: Hugh Gibbon

Encouraged by farmer-to-farmer exchange visits, many farmers started experiments with new vegetables.

mote better land husbandry, a one-week participatory evaluation was undertaken in late March. Although farmers were not members of the "core" team, this evaluation had two objectives: to give an "outsiders" assessment of the project as well as to support farmers to evaluate the activities themselves and to move on from there. The methodology was as follows. Four days were spent visiting self-help groups and individual farmers using PRA methods, discussing notes and records of farmers and promoters, and studying third-party reports of interest and adoption. Two days were allocated for writing up and agreeing on the report.

Successful strategy

The evaluation found a high initial rate of adoption of organic conservation practices, particularly of recycling methods. Farmers had become more aware of the links between conservation practices, production and marketing within the farm enterprise. Kitchen gardening, which was one of the main thrusts for on-farm diversification and food security, had been accepted. Farmers had put considerable labour and some financial investment into new crops. In general, farmers' commitment and self-help activities had been stimulated (OMMN/KIFCON 1994).

There is no doubt that three key elements of the project's strategy have contributed to this: the linking of conservation practices, production and marketing, the strong participatory training and experimentation approach, and the collaboration with farmer groups rather than individuals. We learned that the project needs a high level of flexibility to implement this strategy successfully. A farming systems perspective needs to be maintained, including socioeconomic aspects, to be able to identify important problem areas in time. In the end, not all groups were equally effective. Reasons for group strength or weakness

were not always understood. This needs further investigation so that action to stimulate group activity can be properly targeted in future.

Facing the future

As a result of a six-month intensive intervention developed with the active involvement of the farmers in four villages around Kakamega forest, six self-help conservation farming groups have become remarkably successful in a very short time. Two of these groups are now starting to train other farmers from self-help groups living beyond the originally identified project area on their own initiative. Perhaps the greatest challenge for these farmer groups now is to develop marketing and management skills which will ensure that, as horticultural production increases, suitable transport arrangements can be made and regular buyers found, to sustain their initial enthusiasm and success.

It is too early to assess the impact this all has in reducing the pressure on the Kakamega forest, the project's ultimate objective. At meetings and during the evaluation farmers are, however, beginning to compare the results of the new activities in terms of money with the rewards of tree cutting and charcoal burning. The critical question is whether such pockets of change will eventually influence behaviour in other villages.

References

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