Development of a Farm Field School Methodology for Smallholder Dairy Farmers.

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Executive Message

- Farmer Field Schools (FFS) are a way of disseminating technical information based on a participatory and interactive learning approach.
- This project is adapting the approach for animal health and production management, for smallholder dairy farmers.
- Issues addressed by this project include integrated methods to control tick-borne diseases and helminth infections, efficiency of utilization of available feed resources and the management of nutrients within the crop-dairy system.
- Currently there are over 1,000 FFSs in Kenya funded by a variety of agencies and the approach is rapidly gaining popularity across Africa.
- This project has fostered the start of 10 new livestock FFS groups with another 16 in the pipeline and developed information and materials for use by farmers in those new groups.

Background

The challenge facing the research and extension services in the livestock sector of developing countries is to help farmers to increase productivity while sustaining and enhancing the productive potential of the available natural resources.

Dissemination has traditionally been seen by research and extension as finding effective ways of transferring technology, and passing on relevant, usable information to farmers. In complex situations, where farmers need to adjust to a changing situation - such as animal health and production - this approach doesn’t work because farmers generally lack expertise in identifying problems or trying possible solutions. In a climate of declining governmental support and the lack of success of traditional means of extension alternative methods are needed for identifying the problems faced by farmers and appropriate disseminating technologies to help alleviate poverty.

The Farmer Field School Approach

Farmer Field Schools (FFS) are based on an innovative, participatory and interactive learning approach. The FFS approach was developed by FAO in South East Asia as a way for small-scale rice farmers to learn the skills required for integrated pest management (IPM) practices in their paddy fields.

The aim of FFS is to:

- build farmers’ capacity
- analyse production systems
- identify mayor constraints
- test possible solutions
- identify and adopt the most suitable practices

The knowledge acquired during the learning process can be used to build on existing knowledge enabling farmers to adapt their
existing technologies so that they become more productive, more profitable, and more responsive to changing conditions, or to adopt new technologies.

**Objectives**

The specific objective of this project is to adapt and test the FFS methodology for animal health and production, for poor smallholder dairy farmers.

The approach is targeted at developing integrated methods that:

- control tick-borne diseases and helminth infections
- improve the efficiency of utilization of available feed resources and the management of nutrients within the crop-dairy system.

Using the FFS approach, the project develops an innovative process through which farmers will adapt existing technologies and try out new ideas, which are developed through interactions between farmers, scientists and extension workers.

Successful development of this methodology and adoption by the appropriate institutions will provide an effective means of promoting proven strategies in high potential productions systems which address the control of livestock disease and production.

**Highlights**

**Establishment of collaborative links**
Regular and very active collaborative links have been established with the Ministry of Agriculture, FAO, The Coast Development Authority, Land O’ Lake, CAPE programme, ITC, SPFSS-FAO.

**Seek and secure funds**
The project is mainly funded by DFID-AHP with by FAO providing monies for training of facilitators.

**Capacity building**
A group of 25 people were trained for 2 weeks in Bungoma.

**Establishment of farmer groups**
Two FFS were formed and registered in each of the five divisions.

**Development of materials**
Materials have been developed to help farmers to diagnose their problems through innovative, participatory and interactive learning approaches.

Intensive networking with the 10 FFS groups and facilitators enabled information and materials to be incorporated into the curriculum.

A training of trainers’ manual was produced in collaboration with FAO.

**Graduations**
Over 200 farmers graduated during the programme and 8 farmers started their training to become facilitators.

**Monitoring & evaluation**
In addition to the day-to-day monitoring, two studies to evaluate the impact of the project were initiated.

Dr Nelson Mango, a Kenyan Social scientist is looking at the technical and social impact of the first eight FFS groups that have already graduated. Gertrude Buyu is identifying criteria crucial for the success or failure of group learning.

**Comparison of FFS with other extension approaches**
To raise awareness of the livestock FFS approach and enable informal evaluation of the value of the FFS approach for animal health and production issues, presentations were made at a number of agricultural workshops including the following:

- EU Concerted Actions, Integrated Control of Pathogenic Trypanosomes and their Vectors (ICPTV) and the International Consortium on Ticks and Tick-Borne Diseases (ICTTD-2) workshop on Integrated vector control including synergistic use of drugs and bait
- PFI-FFS farmers’ Congress “FARMERS DECIDING THEIR FUTURE”, FEBRUARY 2003, LIMURU.
- Farmer Field School Stakeholders meeting, April 2003, ILRI.

Currently there are over 1,000 FFS in Kenya funded by a variety of agencies and the approach is rapidly gaining in popularity. However not all institutions understand the FFS approach so FAO, KARI and ILRI have organised an FFS stakeholder’s forum for a wide range of
institutions, NGOs, projects, government officials and private sector. Stakeholders learnt about existing activities in Kenya and discussed how FFS could fit within current Agricultural and Rural Development Extension policy.

New FFS
Following the original set of 10 FFS created by the project a further 16 will be set up, 8 during 2004. Furthermore, 2 FFS were started with agro-pastoralists (Masai) in Narok. There are also plans to establish 50 new dairy FFS in Kenya in collaboration with a project led by Land’O Lakes (LOL) under USAID funding. A number of FFS for small ruminant are planned following assistance in the training of trainers by the International Trypanotolerant Centre (ITC) in The Gambia. FFS for poultry, pig and goat will be initiated as a result of collaboration with the Special Programme for Food Security from FAO. They will help in the training of trainers and the backstopping of facilitators.

Impact
Livestock FFS like the ones stimulated by this project are crucial in facilitating the exchange of knowledge on appropriate technologies that allows smallholders to improve their dairy production system in environments with high disease risk and nutrition stress. This project is directly assisting farmers to make critical and informed decisions that will make their farming enterprises more productive, profitable and sustainable. Through development of the training of trainers manual and curriculum the project is building the capacity of extension staff to work as FFS facilitators. It will also provide further training and learning materials that they can use. The project has put a lot of effort into involving high-ranking government policy makers. Their attendance at field sessions, field days and workshops has been very positive and will go a long way to encouraging country and regional wide FFS initiatives. These will ultimately have a very beneficial impact on African smallholder farmers and their families.

Dissemination
Two radio interviews were recorded by Wren Media from the UK and broadcast in 40 different country. Articles have appeared in the New Agriculturist and Leisa magazines reaching over 70,000 readers.

Whilst the main target institutions, the Kenyan government and FAO are all directly involved there is regular contact with NGOs and other delivery agents through awareness workshops and forums.

Selected Publications & Presentations


Next Steps
Over the next year the most important project activity is to edit the dairy curriculum. This will enable other dairy FFS to be created in the region. The current monitoring and evaluation studies will allow improvement of the content and targeting of the FFS. Researchers will also be exploring private sector financing for FFS. The project will also assist countries in the region to write project proposals for the integration of the FFS approach in their extension service.

Technical backstopping for implementation of FFS in other developing countries will be needed to build on the success of the current project. Work is also needed to develop a FFS curriculum for other animal species and their production systems.