

# MONITORING AND BACKSTOPPING REPORT ON THE IMPLEMENTATION OF THE FARMER FIELD SCHOOL METHODOLOGY IN FITCA

*November 2004*

*The Results of a Consultancy  
conducted by ILRI - Nairobi on the  
Provision of Training Services on  
Farmer Field School to AU/IBAR's  
Farming in Tse-tse Controlled Areas  
Regional Programme*

*Kenya, Tanzania and Uganda  
(7 ACP RPR 578)*

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## SUMMARY

The Farmer Field School (FFS) methodology, an informal adult education approach, has been introduced in the final phases of The Farming in Tse-tse Controlled Areas Programme in Kenya, Uganda and Tanzania (7 ACP RPR 578). In May 2004, 36 livestock officers, selected by government departments of the countries and Rwanda, underwent a two-week Training of Facilitator course organized by the International Livestock Research Institute (ILRI). Out of the 36 officers (called FFS facilitators); the three facilitators in Rwanda did not pursue any FFS activities and are therefore not considered in the report. In Tanzania, one facilitator left to conduct a study and thus from June to October 2004, 32 facilitators carried out the FFS ground working activities. Ground working in a FFS entails site- and participant-selection; formal establishment of the FFS groups and putting together a grant proposal.

In Kenya and Bukoba/Karagwe District in Tanzania, the grant proposals have been approved in August 2004 and the schools have been implementing sessions and Participatory Technology Development trials since then. In Tanga/Pangani/Handeni District in Tanzania and Uganda, the grant proposals were only approved during the second support mission conducted by ILRI in October 2004. At present 32 FFS are registered aiming to turn 792 farmers into experts in dairy, poultry and crop production. The majority of the FFS enterprises focus on dairy and poultry production. Only three FFS in Uganda include crop production.

The FITCA programme is ending in December 2004 and as a result auditing activities and lack of a replenishment of EU funding, hampered effective FFS implementation. Consequently the FFS which were ready to start could not receive the grants. Even though, the FFS groups initiated self-sponsorship activities (personal contribution and income generation activities) the shortage in funds delayed the FFS implementation and therefore at this stage little can be said about the effect of the FFS in FITCA. What has been monitored is the perception of the actors involved and the situation at present. The FFS has been received positively and all actors involved are eager to work with the methodology. The majority of the schools have just started or are about to do so, even though FITCA as a programme is ending in Tanzania and Kenya. Under the assumption that all grants will be released, the FFS is capable to continue and complete a full cycle.

However, additional assistance is required in order to ensure FFS implementation which is sustainable and of good quality. The facilitators need support from their employers in terms of time, specific training (e.g. experimentation techniques), and moral and technical backstopping. In Uganda, FITCA can take up this role as the programme will be extended for two more years. In Tanzania and Kenya, it is recommended to explore the opportunities to link up with the Ministry of Livestock and the Veterinary Departments, and NGOs active in the specific areas. The FFS methodology as used in FITCA functions as an exit strategy but it will only work well when it is a well thought-through and planned strategically. Therefore it is highly recommended that the FFS methodology is assessed well by its implementers and joint action plans (with the government and NGOs) are developed to ensure sustainability and future development of the FFS.

# 1. INTRODUCTION

This report is the result of an assignment given by The Farming in Tsetse Controlled Areas (FITCA) in Kenya, Tanzania, Rwanda and Uganda (Project no: 7A CP KE 087) to the International Livestock Research Institute (ILRI) in Kenya. FITCA is a rural development project with a strong emphasis on increased livestock productivity. The Project is implemented through the African Union/ Inter African Bureau for Animal Resources (AU/IBAR) and is funded by the European Union.

FITCA project is ending in December 2004 and so all training activities will automatically cease. FITCA requested ILRI to assist the project with the introduction and the integration of the Farmer Field School (FFS) methodology for animal health and production within the overall training strategy of the regional FITCA project (Kenya, Tanzania, Uganda and Rwanda). Since the project is ending, the FFS could be considered as an exit strategy where training activities will continue after the closure. By incorporating the FFS approach, FITCA aims to enhance the utilization of the existing crush pens and to develop integrated methods to control trypanosomiasis, tick-borne diseases and helminth infections. In addition, the objective is to improve the efficiency of utilization of available feed resources and the management of nutrients within the crop-livestock system.

With the integration of FFS in the already existing training strategy, the Project's prior expected output is to improve the knowledge and learning capacity of approximately 900 farmers through their direct participation in FFS. The FFS is a methodology based on non-formal adult education. In a FFS, farmers are encouraged to explore and discover by themselves the causes behind their problems and actively search for the best solutions. Knowledge obtained this way is more easily internalized and put into practice after the training is over. The training farmers receive will allow them to improve management practices on their farms and to become adaptable to future changes in agro-climatic and socio-economic environments as their analytical and decision making skills will be strengthened.

The DFID-AHP project conducted by ILRI to develop the FFS methodology for livestock purposes provided the expertise and tools needed for this support work to the FITCA project. In addition, a support team including actors from other FFS programmes in Kenya was formed and briefed on the objectives of the study.

This report outlines the background, context, and preliminary process monitoring and evaluation results of the integration of the FFS approach in FITCA. The set-up of the report is as follows: Chapter 1 gives a general introduction; chapter 2 describes the approach of the consultancy work including the set-up of the integration of the FFS and the monitoring framework and methods used. Chapter 3 contains the regional report wherein the general background and overall regional findings are described. The specific country report can be found in chapter 4, 5 and 6 followed by the conclusion and recommendation in chapter 7.

## **2. PLAN OF ACTION**

ILRI's plan of action to integrate the FFS methodology in FITCA entailed the following approach:

### **Training of Facilitators (TOF)**

In May 2004, a Training of Facilitators (TOF) was held in Bungoma (10-21 of May 2004) (for the TOF report see Annex 8). In the TOF, 36 government livestock extension workers involved in FITCA were trained during a two week exercise to become facilitators incapacitating them to apply the FFS methodology. See table 2 to see the names and area of work of the extension workers trained. Hence, the facilitators went back to prepare the FFS, and to perform ground working activities. During ground working the facilitator selects the site and the participants, and develops a work plan (called grant proposal) together with the FFS group. Where after the group needs to open a bank account and register in order to be able to receive the funds (called: grant) to finance the FFS.

In order to support this process and evaluate the implementation of the FFS, ILRI identified a Support team including FFS Master Trainers with the aim to provide technical and methodological backstopping and process monitoring. In addition, the team gave feedback to the different stakeholders about the potential of FFS in the existing FITCA activities and to be able to reflect, learn and take corrective action. As a result of these activities ILRI committed itself to compile a report documenting the experiences and achievements gained.

### **Monitoring - Support missions**

Under the supervision of Dr. Bruno Minjauw and Kim Groeneweg, the support team consisting of Gertrude Buyu; Masai M. Masai, Godrick Khisa and Dorothy Maye conducted two monitoring- support missions of one week each. In the first mission, carried out on 9-13 of August 2004, the team carried out a baseline study that aimed to draft a profile of the facilitators, FFS participants, the FFS context and design (curriculum) of the FFS before the initiation of the FFS lessons. A series of methods and tools were developed, such as questionnaires, checklists, and two newly developed Participatory Monitoring and Evaluation tools. In addition, the team assisted the FITCA coordinators and facilitators in the preparation of the FFS grant proposal and curriculum. A complete overview of the work plan is presented in table 1.

The second mission conducted on 24-29 of October 2004 aimed at monitoring the practitioners' perception, first hand experiences and potential of the FFS and to provide methodological backstopping. According the work plan (table 1), the second mission was supposed to focus on delivering results on the performance of the FFS in achieving FITCA's objectives. Due to delays in the ground working, the majority of the FFS were merely in the initial phases of the FFS implementation. For this reason, one can not provide conclusive information on the effects of the FFS on e.g. the control of trypanosomiasis, tick-borne diseases, helminth infections and the efficiency of utilization of available feed resources and the management of nutrients within the crop-livestock system. For this reason, the second mission mainly focused on understanding the situation and learn, providing feedback and assistance to the FFS and provide specific recommendations for the development of FFS within FITCA.

## Methods used

In summary, the most important methods and tools for FFS evaluation developed are the following:

- **Baseline data checklists:** Guidelines for the ILRI support team to generate information on the situation at hand before FFS implementation to be able to measure changes as a result of the intervention. For this purpose, the following formats have been developed:
  - *Format A: Baseline data: Profile FFS Facilitator* (annex 1)
  - *Format B: Baseline data: Profile FFS farmers* (annex 2) to be filled in by FFS facilitators (part I) and through semi-structured interviews with FFS groups and individual participants conducted by the support team.
- **Technical Backstopping and Monitoring (Format C):** Due to the fact that FITCA involves project coordinators assisting FFS implementation, a technical backstopping and monitoring handout will be provided to enable them to monitor and to provide assistance. (annex 3)
- **Pre and post FFS Evaluation wheel:** The evaluation wheel facilitates to measure the effect of the FFS on the problems and issues it aims to tackle (annex 4).
- **FFS record keeping format:** Adequate record keeping of the FFS implementation phase is important to monitor the process, to enable corrective action, and to ensure understanding of its effects on the target areas. Therefore, FFS records need to be kept systematically by FFS facilitators and farmers throughout the entire FFS season. (annex 5)
- **Livestock FFS grant proposal:** Each FFS needs to present a proposal after having completed the ground working. This proposal outlines the set up and curriculum of the FFS in order to receive the grant. (A format has been already distributed to FFS facilitators)
- **Semi-structured interview and meetings:** Aim to gain information face to face from an individual or small group, using a series of questions to guide the conversations, but allowing for new questions to arise as a result of the discussion. Semi-structured interviews are critical for developing an in-depth understanding of qualitative issues in particular (guidelines are formats A, B, and C).
- **Evaluation wheel:** This tool can be used to evaluate different aspects/ indicators of change. Each spoke in the wheel represents an indicator. The group then decides on the score to give to the indicator and chooses a location of the dot on the spoke that is subdivided into a ranking such as 5 = very good, 1 = unsatisfactory. (see Annex 6)
- **Ballot box:** At the first and the last FFS meeting, the participants take a test to evaluate their knowledge level before and after the FFS. The pre-test provides the FFS facilitator with some diagnostic information that he/she can use to adjust the FFS curriculum to the knowledge level of the group. The post-test results are an indicator of progress made during the FFS season. The facilitator prepares each test by formulating questions that relate directly to local (field) problems. To answer the questions, participants choose among three alternatives. When possible, the alternatives should be live samples, for instance various types of Tsetse flies or a calf with disease symptoms. Each question and answers are written on cardboard paper and placed next to the sample e.g. on a stake. The pre- and post-test should be of similar difficulty, and in the local language. (annex 7)

Baseline study implement in 1 <sup>st</sup> Support Mission			Process monitoring in 2 <sup>nd</sup> Support Mission		
fo required	Indicator	Method	Info required	Indicator	Method
Profile of the FFS Facilitator (age 7)	<ul style="list-style-type: none"> <li>- Background</li> <li>- Work experience with FITCA</li> <li>- Extension experience</li> <li>- understanding of FFS methodology</li> <li>- Attitude towards FFS (TOT)</li> <li>- FFS management planned (quality of FFS curriculum developed)</li> <li>- quality of facilitation skills</li> <li>- Expectations of FFS</li> <li>- vision on their role in FFS</li> </ul>	Format A (ST)*  Semi-structured interviews (ST)*	<b>Changes in farmers' skills/ knowledge</b>  (Page 15)	<ul style="list-style-type: none"> <li>- Increased technical knowledge and skills of FFS farmers</li> <li>- Enhanced confidence of FFS farmers to take decisions for them selves.</li> <li>- no. and type of farmer innovations</li> <li>- Understanding of AESA</li> <li>- No. of farmers capable and willing of teaching others.</li> </ul>	Ballot box: pre test/ post-test + F+ ST) **
Profile of the FFS participants (age 13)	<ul style="list-style-type: none"> <li>- Type of relationship/ experience with FITCA</li> <li>- Duration of collaboration with FITCA</li> <li>- type(s) of enterprises involved</li> <li>- reason(s) for participation in FFS</li> <li>- Expectations of FFS</li> <li>- Understanding of FFS principles</li> </ul>	Format B (ST)*  Semi-structured interviews (ST)*	<b>Change in attitude</b>  (Page 15)	<ul style="list-style-type: none"> <li>- Participation from week to week</li> <li>- Active involvement of participants</li> <li>- No. and type of group dynamics</li> <li>- FFS process</li> <li>- Drop out rate</li> <li>- Dissemination of FFS message to other farmers</li> <li>- Expectations met of No. farmers</li> <li>- Level of satisfaction with FFS curriculum</li> </ul>	Semi-structured interviews (ST)  Evaluation w/ (F + P, and C)
Enabling environment (age 17)	<ul style="list-style-type: none"> <li>- Profile of organization/ supervisor</li> <li>- Perception of FFS</li> <li>- Type of assistance to FFS implementation</li> </ul>	Format A and B (ST)*	<b>Change in productivity</b>  (Page 15)	<ul style="list-style-type: none"> <li>- Cost-benefit analysis of trails in comparison with farmers own practices/ trails</li> </ul>	FFS record keeping (F)**
Design FFS curricula (age 19)	<ul style="list-style-type: none"> <li>- Design of FFS curriculum reflecting the main problems identified</li> <li>- no. and type of farmers enrolled in FFS</li> <li>- no. and type of FFS principles incorporated</li> <li>- Strategy used for FFS ground working</li> <li>- On National level: No. of FFS formed</li> </ul>	Revision of FFS proposals (F + C + ST)* Semi-structured interviews (ST)*  FFS Record keeping (F)**	<b>Evidence of positive attitude towards technologies trained</b>  (Page 15)	<ul style="list-style-type: none"> <li>- Response of FFS towards problem identification</li> <li>- Quality of harvest/ cost-benefit analysis</li> <li>- No. of farmers yet testing/ using technology in their own fields</li> <li>- Opinion farmers on field trials</li> <li>- No. farmers having the intention to practice new technologies</li> <li>- Presentation of farmers of the subject matter</li> </ul>	Semi-structured interviews (ST) (2 <sup>nd</sup> mission)  Evaluation w/ (ST)*  Field day (F + P)**

During first support mission \*\* Throughout the FFS season

ST = Support team F = FFS Facilitator P = FFS participants C = Coordinating

### **3. REGIONAL REPORT: GENERAL FINDINGS**

This chapter provides baseline information and general findings of an assessment conducted in the initial phase of the FFS implementation in the regional FITCA Programme in Tanzania, Kenya and Uganda. It describes the profile of the facilitators and their perception of the FFS methodology; the FFS participants and their expectations of the FFS; the context of the FFS; and the FFS curriculum (technical content). In addition, it describes the status of the FFS implementation as can be analyzed after only a couple months in the implementation process. The initial work plan as is outlined in Table 1 could not be followed completely since the FFS project had not come to the stage where results can be seen and evaluated. Therefore, it is not possible to provide conclusive evaluation findings on the effects of FFS and its feasibility to strengthen FITCA's capacity building programme. Instead, this chapter describes and analyses the processes at hand in order to understand the development the FFS and to provide assistance for setting out a path for the future.

#### **3.1 The FFS facilitator**

In the Training of Facilitators (TOF) in May 2004, 36 Governmental Livestock Officers were trained in the principles of the FFS methodology. The livestock officers trained were selected by the district offices of the Ministries of Livestock and Fisheries in collaboration with the FITCA representatives in each of the four countries. Kenya sent 11 officers; Tanzania 10; Uganda 12 and Rwanda 3. Each of the persons trained is called a FFS facilitator and was expected to implement one FFS in the period of June 2004 – June 2005.

However, not all facilitators trained are implementing and will implement FFS. This report does not consider the FFS developments in Rwanda for the reason that in August 2004, Rwanda could not be included in the first support mission due to the fact that no FFS activities were undertaken at that time. No additional information has been received from Rwanda and thus we expect that no FFS have been established. In Tanzania, one facilitator left his area of work to conduct studies and in both Kenya and Uganda one facilitator was replaced by a colleague who has not attended the TOF. In summary, out of the 36 facilitators trained: four facilitators have not started with the implementation of FFS (3 in Rwanda and 1 in Tanzania), two extension workers have been replaced (one only temporarily) and thus 32 FFS are under implementation (or ready for implementation). See table 2 for more details.

##### **3.1.1 Profile of the FFS facilitator**

The facilitators trained are all male, except for one female facilitator in Uganda. Most of the facilitators are in their early forties and have extensive experience in Livestock and extension work. The majority of the facilitators has been working with FITCA for 2-3 years and has formal background training on animal health; husbandry and management practices. In general, all have received specific training in livestock management practices. In Kenya, all facilitators are on the payroll of the Ministry of Livestock and Fisheries Development. In Tanzania, half of the facilitators are employed by the Ministry of Water and Livestock Development, three work for the Local Government and one facilitator works for a non-governmental organization. In Uganda, the variety of employers is larger. Among the facilitators there is an entomologist and

officers from different sectors and levels within the government (local government, Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) and Veterinary Department) (Box 1).

In Uganda, the majority of the facilitators are Veterinary and Animal Health officers and in addition two agricultural officers were trained. The Kenyan team consists of Livestock Production Officers of different levels, two Division Livestock Extension Officers and an Assistant Animal Health Officer. In Tanzania the designation of the facilitators is quite diverse: The majority of the officers trained are active as Dairy Livestock, and Extension Officers. Furthermore, a Veterinary Officer; two Animal Health Officer; a Tse-Tse control Officer and one representative from a local NGO are implementing FFS (see Box 2).

**Table 2: Overview FFS implementation in FITCA**

	Country	Facilitator			Name FFS	District
		Name	Sex	Institution		
1.	Tanzania	Issa Mwambuga	Male	Ministry of Water and Livestock	Umoja ni Nguvu	Handeni
2.	Tanzania	Simon J. Mollel	Male	Tanga Municipal Council	Motomoto	Tanga
3.	Tanzania	Abdallah S.J. Kimnaa	Male	Local Government	Muongano	Pangani
4.	Tanzania	Zuberi O. Mkodo	Male	Local Government	Kweisasu	Handeni
5.	Tanzania	David Michael Tupa	Male	Local Government	Kikokwe	Pangani
6.	Tanzania	Adam Kuleit Ole Mwarabu	Male	Imugot e Purka	Ramat	Handeni
7.	Tanzania	Gerazi C. Kajuna	Male	Ministry of Water and Livestock Development	Rugaze Tweyambe	Bukoba
8.	Tanzania	Paschal L.M. Kashajja	Male	Ministry of Water and Livestock Development	Karuika Group	Karagwe
9.	Tanzania	Longino T. Theobard	Male	Ministry of Water and Livestock Development	Tuinuane-Ruhita	Karagwe
10.	Kenya	Sebastian Asemboh	Male	Livestock Production	Buswenu	Busia
11.	Kenya	Andrew O. Ngesa	Male	Ministry of Livestock animal production	Lukure farmers	Busia
12.	Kenya	Ben Alex Emukule	Male	Ministry of Livestock and Fisheries Development	Kapamo	Teso
13.	Kenya	Okisegere John Maurice	Male	Ministry of Livestock Fisheries Development	Kokare	Teso
14.	Kenya	Charles W. Pepela	Male	Ministry of Livestock Fisheries Development	Masima Livestock	Bungoma
15.	Kenya	George Mukachi	Male	Ministry of Livestock Fisheries Development	Syoya	Bungoma
16.	Kenya	Eric Wetende	Male	Ministry of Livestock Fisheries Development	Jitegemee	Siaya
17.	Kenya	William O. Okoth	Male	Ministry of Livestock Fisheries Development	Nyi-ginga	Siaya
18.	Kenya	Augustine Ochieng Ngesa	Male	Ministry of Livestock Fisheries Development	Sueru	Bondo
19.	Kenya	Tom K. Nyabundi	Male	Livestock Production Department	Aduwa	Bondo
20.	Kenya	Joash Nyayiera	Male	Ministry of Livestock Fisheries Development	Riat Kolemo	Bondo
21.	Uganda	Patrick Ngobi	Male	Production Sector	Improving local poultry	Mayuge
22.	Uganda	Alfred Wejuli	Male	Entomology	Isagaza	Bugiri
23.	Uganda	Ibanda Musa	Male	Jinja District Local Government	Mukulima Dev't Group Kisirira	Jinja
24.	Uganda	Okello Tonny	Male	Veterinary Department	Aloet-Akum	Soroti

### *'Participatory'*

The first and most commonly shared merit of the FFS methodology, according to the facilitators, is that they consider it to be participatory. In their view, FFS enables sharing of information and it is practical as farmers learn by doing. The majority of the facilitators are of the opinion that the methodology is more participatory than extension of technologies through demonstrations. Facilitators expressed their appreciation about the FFS enabling a learning by doing approach, that is more effective than learning by seeing for the reason that farmers own the process and find their own solution for their own problems. It brings farmers together to share ideas and to undertake collective action.

### *'Different relationship'*

Facilitators often highlighted that through the FFS they are able to develop a more intensive relationship with more farmers. In previous approaches, facilitators trained community representatives who were stimulated to disseminate the specific messages to their community members. It was indicated that the disadvantage of that approach is that knowledge and skills are not easily passed on and hence mostly benefits the representatives. The FFS is recognized by the facilitators to promote transparency between both facilitator and farmer. Furthermore, it is considered an easy way to meet farmers. However in comparison to their conventional methods, fewer farmers are reached. Some facilitators fear that the FFS requires a long term commitment from both farmers and facilitator. They fear that this commitment is time-consuming and requires funds and in addition is vulnerable to other seasonal activities interfering and slowing down the developments. For this reason, some facilitators recommend that the FFS include learning activities that are short term and provide immediate little benefits to avoid that farmers loose interest.

The formation of a FFS is considered to be rather tedious (registering the group, opening bank account, develop curriculum, etc.) and demanding to the facilitator. Therefore it is crucial that the FFS is planned well in advance, that the resources (materials and grants) are available on time and that the facilitator has full support to be dedicated to his or her task.

### *'Time-cost-benefit effectiveness'*

The advantage of the training & visit and demonstration trials is that farmers get direct information and a large number is reached. Facilitators are of the opinion that the costs per farmer are lower than in FFS where 25-35 farmers are being trained extensively. Nevertheless in some facilitators' opinion, demonstration material is expensive and the approach time-consuming and less effective than a extensive training like FFS due to the fact that farmers are often not in the position to immediately understand the package and lack the required resources to adopt it. This limits the outreach per farmer and especially illiterate people are difficult to reach. Most of the facilitators appreciate that the FFS enhances an open and relaxed atmosphere of learning, emphasizes individual capacity building and because learning takes place in the field, all community members can participate.

Both approaches, FFS and previous extension methodologies, are recognized to be demand-driven (Although the expectations and services provided differ.). The facilitators appreciate that FFS farmers get a sense of belonging to the programme, it creates unity as a group and empowers farmers to become experts and can even come facilitators themselves. The FFS approach focuses not only on capacity building in terms of strengthening farmers' knowledge but moreover changes farmers' attitude towards farming and their community members. A few facilitators indicated that it is difficult to satisfy farmers' needs as they find it hard to find groups having common interests; to avoid disintegration of groups and reduction of attendance rates. Both approaches face the challenge to effectively upscale and maintain to be demand-driven.

## **3.2 The FFS participant**

In the regional programme of FITCA in Tanzania, Uganda and Kenya, 32 FFS are under implementation with an average of 20-35 participants per school. In total 792 farmers are registered as FFS participants (195 in Tanzania; 316 in Kenya; 281 in Uganda). The distribution of male and female participants is fairly evenly divided. In Kenya and Tanzania slightly more females are involved where as in Uganda more male are attending the FFS (Box 3). It is important to have the participation of both men and women in livestock oriented FFS for livestock because it is often a share responsibility.

### **3.2.1 Profile of FFS participant**

In general, the farmers participating in the FFS are subsistence farmers involved in both livestock and agricultural production. Some farmers practice fishing, market fodder and drugs, and have petty trading activities to provide an additional source of income. The level of illiteracy in the FFS is not a major challenge. The majority of the participants are able to read and write and can assist illiterate participants were necessary (see Box 5).

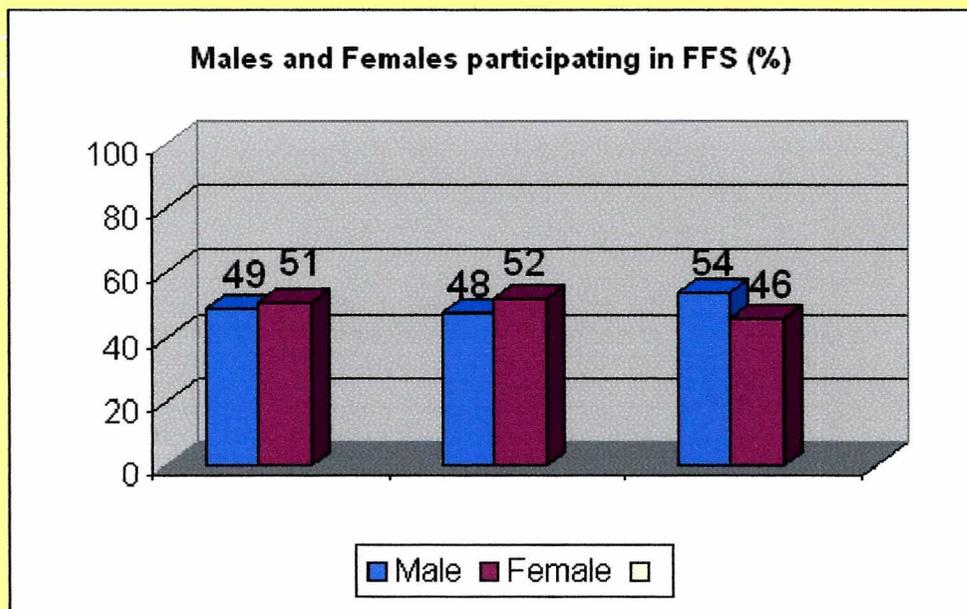
The majority of the FFS groups are already existing groups who have worked with FITCA before (Box 4). Four facilitators decided to select a new group in order to be able to start afresh and to observe the true effects of the methodology without the interference from existing activities. So in most cases, the relationship between the facilitator and the group was already established which makes it easier for a facilitator to implement a new activity like FFS.

FFS groups indicated that their motivation for participation is that they like to try out new things and that they are interested in learning more about the subject at hand. To the question why other farmers were not participating, FFS participants indicated that often members of rural communities rather wait for results first before they become involved. It was also said that not all community members are aware and/or have the money to contribute to the registration fee. Others are too busy or lack interest in learning or in the subject, or do not like to work in groups or simply because they were too late and could not join because the number of participates in FFS is limited (maximum is 30-35 partipants).

The facilitators mentioned that most of the farmers were eager to participate and ready to learn. However, it can be noted that the readiness is clearly linked to the introduction of the FFS concept and principles to the communities. It is very important to level the farmer's expectations and that all participants approve the objectives of the FFS before starting. In cases where the introduction was weak, fragile group cohesiveness and commitment is observable. However, in the majority of the FFS, the facilitators have done thorough ground working and it is a remarkable achievement that in nearly all FFS, members make personal financial contributions to the FFS. This clearly indicates that farmers value the FFS and it forms a strong basis for the sustainability of the FFS.

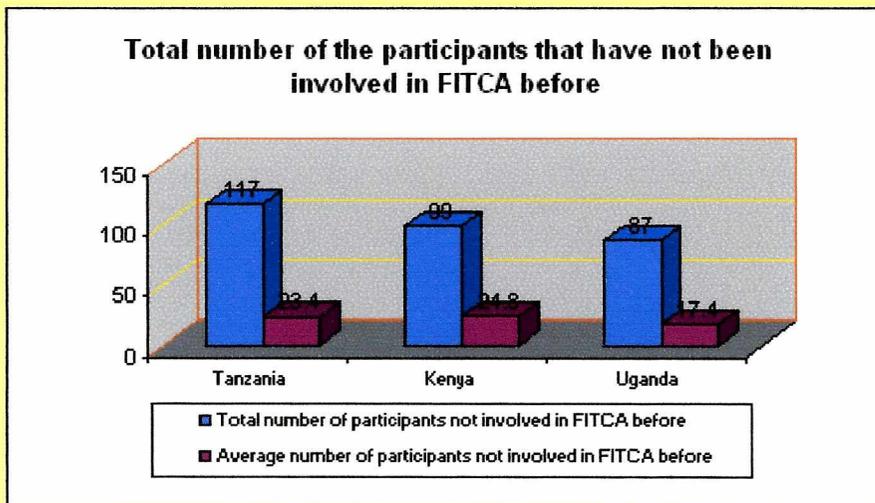
**Box 3: Male and Female participants in FFS**

	<u>Tanzania</u>	<u>Kenya</u>	<u>Uganda</u>
Male	49	48	54
Female	51	52	46



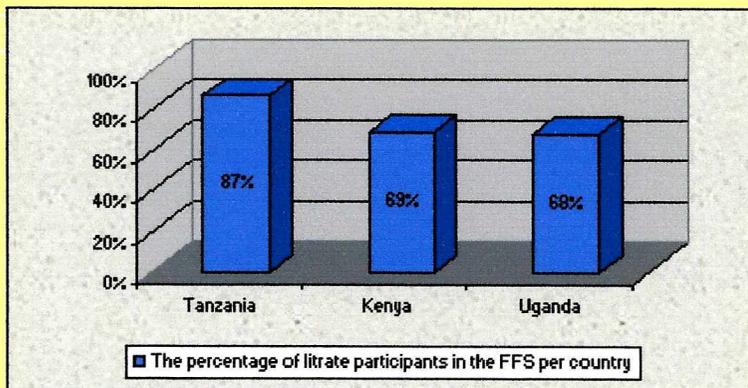
**Box 4: Total number of participants that have not worked with FITCA before**

	<u>Tanzania</u>	<u>Kenya</u>	<u>Uganda</u>
<b>Total number of participants not involved in FITCA before</b>	117	99	87
<b>Proportion of participants not involved in FITCA before</b>	23.4	24.8	17.4



**Box 5: Percentage of literate participants in the FFS**

<u>Tanzania</u>	<u>Kenya</u>	<u>Uganda</u>
87%	69%	68%



### 3.2.2 Perception of the FFS participant

There are various things the FFS participants aim to gain from their participation in FFS. In general they hope to improve their living conditions by having healthy cattle and poultry in order to increase their family income and improve their nutrition. Through the FFS, farmers expect to acquire knowledge and skill in the following areas:

- Higher and better milk production
- Better animal health
- Improved animal husbandry
- Safe use of acaricides and anti-helminths
- farming as a business
- combat diseases in poultry
- grow good quantity and quality of fodder
- combat their problems together
- get to know strategies to enhance production (dairy, fodder and agricultural)
- reduce poultry and calf mortality
- increase sales (mainly poultry)
- work towards poverty eradication
- become experts
- reduce their problems
- get to know new technologies.
- come together and to learn from each other

As a result of the delays in FFS implementation, the FFS are still in a too preliminary phase to assess the changes in farmers' skills and knowledge (see work plan, table 1). A change in attitude could be measured by looking at the attendance and participation rate. All FFS keep register of the attendance rate and on average the rate is 80% per session. Drop outs have not been registered except for some cases where a participant past away. In general, facilitators stimulate active participation of all farmers during sessions and farmers are involved in setting the agenda though different levels of involvement can be identified. In all FFS, the participants are in charge of the FFS budget. All groups have opened a bank account and pay the facilitator for his/her services. In each FFS, a committee has been established consisting of a chairman, vice-chairman, treasurer, secretary and members. These committees are responsible for the management and well-being of the FFS and are fully aware of that responsibility.

It was observed in the first mission, that not all FFS group had a clear understanding of their role in the FFS. It is understandable that in the set-up of a FFS; the influence of the facilitator is predominant because of the already existing relationship between the facilitator and the group, where both are accustomed that the facilitator sets the agenda. It requires time to gradually change peoples' perception and customs. It was therefore very surprising to note that many facilitators through proper ground working managed to empower the FFS group in a time-frame of three month and made them responsible for their own learning process. In some FFS however, the facilitator used the FFS methodology as an instrument to train the group on what he wanted them to know instead of adjusting the programme to the farmers' needs identified. In these schools, farmers expected to be taught by the facilitator and were less active than in FFS were farmers were fully aware and involved in the execution of the FFS. In general, FFS participants appreciated using the field as the training area and that they were learning by doing. A FFS participant in Uganda mentioned that before joining the FFS, he was ignorant about the FFS principles as they are very different from other training programmes. Most groups showed commitment by attending regularly and making contributions and demonstrating commitment to group work. Many groups valued the collective action and want to share the knowledge they hope to obtain with their community members and are looking forward to exchange visits.

It is recommended that the facilitators continue to level the expectations of the participants in their groups as many groups are diverse (different types of livestock keepers and agriculturalist). The evaluation wheel (annex 6), a newly developed tool to enhance participatory process monitoring, has proved to be a useful instrument to monitor the FFS internally and to stimulate dialogue in order to make sure that the FFS stays on track. The FFS should be stimulated to use this tool to facilitate brief evaluations at the end of every session (only in Tanzania, the evaluation wheel is being used).

### 3.3 Enabling Environment

A FFS can not operate in a vacuum. It requires an environment that provides the FFS the required assistance, tools and mechanisms to perform well. In this paragraph, an analysis is given of the environment of the FFS in FITCA.

In Tanzania, FITCA contracted a consultancy agency in both Tanga and Bukoba to manage the implementation of their programme. (Carpricorn Consultants Limited at the coast and Yaasila in the North). In Kenya and Uganda the government is taking up that responsibility. A general note of criticism expressed in Kenya is that FITCA contracts consultants and does not work closely enough with the government. In Tanzania, two facilitators do not completely fall within the project area or scope. It is not clear why these people have been selected for the TOF when neither FITCA, the consultants nor the government is willing to take full responsibility to support those facilitators. These two cases on the other hand could provide interesting cases studies for understanding the influence of the institutional setting on the FFS. Both facilitators seem to work independently and have full support from their organizations and target groups. Table 3 provides a list of the representatives of the different institutions involved in the FFS implementation in the three countries.

**Table 3: Representatives of the institutions involved**

Country	Persons involved	Position	Area of work
Tanzania	Ms. Joyce W. Daffa	National Project Coordinator, FITCA Tanzania	National
Tanzania	Ms. Birgit van Munster	FITCA Project Advisor	Tanga
Tanzania	Dr. Chesnodi Kulanga	FITCA Project Manager	Tanga
Tanzania	Mr. Mntambo Archie	DLDO/FITCA FFS Coordinator	Pangani
Tanzania	Mr. Ayubu Samata	FITCA FFS Coordinator	Handeni
Tanzania	Dr. Silas Omolo	Project manager, FITCA Kagera	Bukoba
Tanzania	Mr. Lutatazu	FITCA supervisor	Karagwe
Tanzania	Mr. Binamungu	Representing DLO	Karagwe
Kenya	Dr. Stephen Orot	Project manager	National
Kenya	Mr. Tendwa	National Project Coordinator and Deputy Director Production	National
Kenya	Mrs. Lucy Makanda	Training Officer FITCA	National
Uganda	Dr. Ambrose Gidudu	FITCA Uganda National Coordinator	National
Uganda	Mr. Ameto Abdala	District FITCA coordinator	

<b>Country</b>	<b>Persons involved</b>	<b>Position</b>	<b>Area of work</b>
Uganda	Ms. Muja Annah Eutebuka	Sociologist FITCA Project	National
Uganda	Mr. Simon Gould	Technical Assistant, FITCA	National

### *'Involvement'*

Looking at the visitors books of the FFS, representatives from the different institutions have been visiting the FFS and provided support to the groups and the facilitators. In general, the institutions have been very receptive to the FFS and have taken time to do their own assessments. In Kenya, the facilitators mentioned that they are under pressure by other activities with the government that they have to attend to.

### *'Concerns'*

In addition, the coordinators and supervisors raised the following issues of concern: First of all, the facilitators found it difficult to effectively supervise the FFS implementation without having gone through a FFS training course themselves. Especially during the first mission, they indicated that they could not provide support to something they did not know and lacked confidence to adequately assist the facilitators in the implementation. They recommend that funds should be made available to provide the coordinators and supervisors with a general training course on the FFS methodology.

### *'Lack of funds'*

Secondly, the lack of funds available to pay the grants of USD \$600 to the FFS groups or and delays in information flow with regard to the release of FFS grants, has been the main reason for the delays in the FFS implementation. Some facilitators in Kenya and Uganda even threatened to dissolve their FFS as the delays and lack of prospects of funding demoralized both the facilitator as the groups. In the North of Tanzania, the FFS have merely received a first installment of the grant. The facilitators in Bukoba and Karagwe all indicate that the grant should be deposited in once, not in installments. This slows down the development of the FFS as the participants do not have free access to make large payments and purchase expensive input. Rugaze FFS, for example, wants to buy a pump for disease control and the 150,000 Tanzanian Shilling grant they received is not sufficient to buy the pump and keep the FFS going.

### *'Type of support required'*

The FFS, newly initiated under FITCA are not ready to be left alone yet, simply because the facilitator is not a qualified facilitator yet. He/she first needs to experience a full FFS cycle. However, even a fully qualified FFS facilitator can not set up successful FFSs alone. Facilitators need an environment that enables him/her to dedicate sufficient time to develop FFS curriculum and tools that are adapted to the local context and specific needs. Technical, logistical and moral support from his/her institution is important in order to ensure that facilitator facilitate appropriate capacity building.

### *'Fiscal sustainability'*

Besides this support, fiscal sustainability of the FFS is an important issue to ensure adequately development of the activities that are still in a premature phase. The FFS should be able to finance the FFS with the grant under the assumption that all the FFS receive the grant. That means that the FFS under implementation are financially stable until May 2005. The fiscal

sustainability of the FFS under implementation is high do to fact that in the majority of the FFS, individual contribution are made and income generating activities have been taken up. However, if one wants to up-scale by implementing more FFS and training more livestock extension workers, additional funding is required. It was indicated that linking up with NALEP and Heifer Project International could provide technical and fiscal sustainability to the development of the FFS in Kenya. In Tanzania PATTREC (Pan Africa Tse Tse and Trypanosomiasis Eradication Campaign) is an interesting opportunity to explore. PATTREC will be initiated soon and will most probably take up a lot of FITCA's activities.

It is highly recommended that FITCA coordinators and government supervisors meet with the FFS facilitators to further plan the implementation and the future of the FFS. In Kenya and Tanzania the establishment of FFS has been an effort that is already showing positive effects. It would require a little more effort in terms of strategic planning and identification of roles and responsibilities of each one of its stakeholders to complete one FFS cycle, and jointly reflect and assess the activity to decide whether the approach has positively enhanced performance and contributed to better livelihoods for livestock farmers. In Uganda, the fact that the FFS implementation has been delayed could work as an advantage especially since the FITCA project expects an extension of two more years. Thorough planning and linking the FFS to the overall goals and objectives of the project can provide new opportunities to develop a capacity building strategy beyond the FFS approach adapted to the specific context and problem areas.

### **3.4 The FFS Set-up**

The curriculum of every FFS is different as it is a product of the problem identification and analysis per community. In order to facilitate the problem analysis and develop a curriculum reflecting the learning needs of each specific FFS group, the facilitators were trained on Participatory Epidemiology tools. Out of these, paired-wise ranking; transect walks; mapping; proportional piling; and focus group discussions were the tools that were applied mostly and were highly appreciated by the facilitators.

All the FFS have set a fixed day in the week for their sessions and aim to run for the recommended 52 weeks (up to May-June 2005). Most sessions are held in the mornings from 8.00/9.00 am - 12.00/13.00 pm. All have planned a field day; exchange visits and graduation ceremony (however, the budgets allocated to these activities vary). The enterprises of the FFS are primarily poultry and crops in Uganda and dairy and poultry in Tanzania and Kenya (see Box 6).

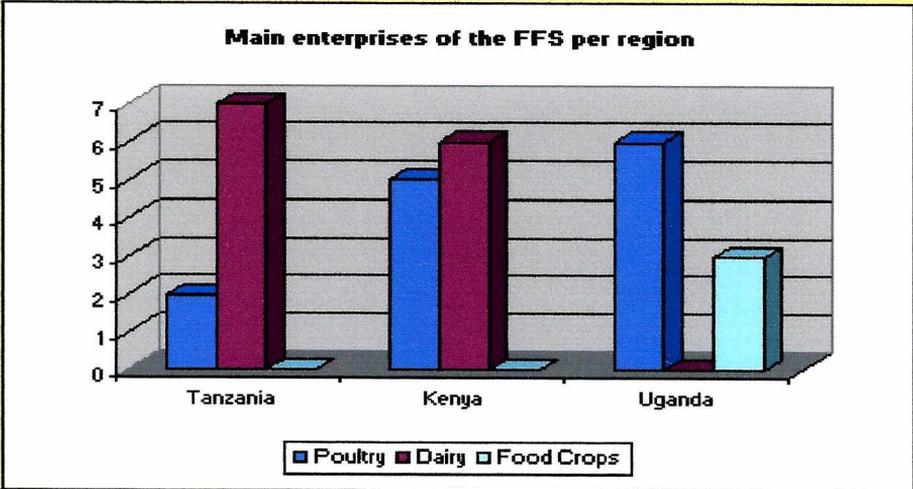
Only in Uganda and the coastal area in Tanzania, a few FFS grant proposals are left for approval but in the majority of the cases, the schools have started with the sessions. The number of sessions conducted varies from 0-12. The advanced FFS have designed and installed PTDs (Participatory Technology Development but in the FFS referred to as small learning experiments) and are conducting AESA (Agro Eco System Analysis; a tool to enhance farmers' observation skills). The quality of the PTD and AESA varies from one school to the other. In general, the concept of the AESA is well understood, although the organization of the groups and in-depth analysis of the field results were not always well planned.

It can be observed that the majority of the facilitators lack technical skills to adequately implement PTDs (on-farm trials/experiments). A common example is that a comparison is made between the husbandries of two cows; one cow is being nurtured in the ways farmers always practice and the other cow receives 'new' treatment. Having only one cow and thus no repetition could distort the experiment, when e.g. the cow falls sick and it does not exclude genetic features which could positively or negatively influence the results and thus the learning process. More samples are required. In addition, some FFS groups do not define the parameters or indicators they require to measure the performance of the treatments. For example in a FFS in Kenya, five different varieties of napier grass were tested but no clear indicators for analysis such as speed of growth, disease resistance, weight, preference of the cow were selected to assess which of the varieties is most attractive. The TOF or an additional training exercise should focus on training the facilitators in the basic principles of designing a trial for learning and develop tools to facilitate this process in a FFS.

As outlined in the work plan (Table 1) the study aimed to generate data to assess whether a positive attitude of the farmers towards the technologies addressed in the FFS has occurred. Unfortunately, this information is not available due to the delay in FFS implementation and thus no changes in attitude can be measured yet. One has to wait for the first PTD to be finished. However, one can state that the FFS participants demonstrated a great interest in the technologies under observation and some farmers mentioned that they repeat the experiments at their homes.

**Box 6: FFS Enterprises**

	<u>Tanzania</u>	<u>Kenya</u>	<u>Uganda</u>
<b>Poultry</b>	2	5	6
<b>Dairy</b>	7	6	0
<b>Food Crops</b>	0	0	3



## 4. COUNTRY REPORT: TANZANIA

FITCA in Tanzania identified 10 government staff for training. Out of them, four FFS facilitators came from the northern districts Bukoba and Karagwe. Three out of the four facilitators are implementing a FFS due to the fact that Mr. Kisanga Makigo, a veterinary officer from Bukoba District left the country to conduct a study. Six facilitators from the coast, Tanga and Handeni District have completed the training and each one of them is running a FFS. In total, 195 farmers are participating in FFS in Tanzania.

In table 3 an overview is given of the 9 FFS in the country. Two FFS are focusing on poultry and the other seven FFS have dairy cattle as their main enterprise of study.

**Table 4: Overview of FFS in Tanzania**

District	Name FFS	Name Facilitator	Enterprise identified	Objectives
Tanga, Pangani	Kikokwe FFS	David Michael Tupa	Improvement of local chicken	Compare modern poultry production with free range poultry keeping including the use of improved cockerels will be introduced. The group constructed a Poultry House and fence.
Tanga, Pangani	Muungano FFS	Abdalla S.J. Kimda	Improved of milk production via Tse Tse control	Address pests and diseases in livestock management, through training and treatment services. Group assists each member to construct a zero-grazing unit.
Tanga, Handeni	Umoja ni nguvu FFS	Issa Mwambuga	Poultry management	Poultry improvement through semi-intensified managed poultry
Tanga, Mkindi	Ramat Mkindi FFS	Adam Kuleit Ole Mwarabu	Livestock cattle disease control (local animals)	East coast Fever control, promoting the use of ITK for pests and diseases in livestock.
Tanga, Handeni	Kweisasu FFS	Zuberi O. Mkodo	Dairy cattle and goat and calf rearing management	The group plans to construct a house for goats to compare housing and open grazing systems.
Tanga per urban	Motomoto FFS	Simon J. Mollel	Dairy cattle husbandry/ low milk production	The group is contribution towards the purchase of a improved bull to enhance the genetic quality of the dairy cattle.
Bukoba	Rugaze-Tweyambe FFS	Gerazi C. Kajuna	Dairy cattle and extensive cattle system, tick control	Livestock disease control; Planning to buy a pump for disease control
Karagwe	Karuika (Maziwa Mengi)	Pascal L.M. Kashaija	Dairy production (inadequate milk yield)	Zero grazing, dairy animals improvement in productivity through improved fodder production.
Karagwe	Tuinuane-Ruhita	Longino T. Theobard	Calf mortality/ pests and diseases	Cattle rearing to get healthy calves and reduce mortality (extensive system), improved husbandry and veterinary service to indigenous cattle (dipping, deworming, tick control, etc)

#### **4.1 Tanga, Pangani and Handeni District**

The FFS are located in Handeni (3 FFSs), Pangani (2 FFSs) and Tanga (1 FFS). The location of Motomoto FFS in Tanga is not part of the FITCA project area. The FITCA coordinator indicated that this FFS and Ramat Mkindi FFS will not be able to receive as much support from FITCA and have to rely on self-sponsorship because Motomoto FFS is situated outside of the project area and the facilitator Adam Kuleit Ole Mwarabu is not a government employee. He works for a local organization called Ole Mwarabu.

At the time of the second mission, all the six FFS groups had submitted their grant proposal out of which five had been assessed by the technical team while Ramat Mkindi FFS submitted their grant proposal during the mission. The FFS funding has not yet been released to the groups due to the fact that the technical team waited for the ILRI support team member to arrive as they considered the quality of the proposals to be below expectation. The majority of the FFS budgets were above the recommended budget (USD\$600) due to the fact that the proposals included items of expenditure outside of the FFS curricula e.g. commercial activities for the groups. It was therefore recommended that the budgets would be revised taking into account expenditures related to the curricula only and stimulate FFS members' contributions to finance commercial activities, like in e.g. Muungano FFS in Pangani District. In a meeting with the Project Management team, FFS facilitators and the ILRI support team member grant proposals were analyzed and revised jointly. All agreed that now the funds can be disbursed to the groups.

The support team member noted that the facilitators need additional assistance to fully understand the FFS concept. In the second mission the concepts were further discussed with all the facilitators in order to identify the gaps in understanding and discuss the alternatives. In addition, the TOF (held in Bungoma-Kenya) was evaluated and it was noted that some of the facilitators were at a disadvantage during the training because of the language used (English). They had not fully comprehended some of the issues discussed. They furthermore commented that the duration of the TOF was very short (2 weeks) and the content of the programme too dense. Both the coordinators/ supervisors and the facilitators pointed out that it have been better if the coordinators/ supervisors had been included in the TOF since they are responsible for supervision of the facilitators' work. Hence, it was recommended that the project should organize for continuous backstopping from external experts and create opportunities for the coordinators/ supervisors to undergo training in the FFS methodology.

Farmers from Motomoto FFS in Tanga requested that some of the FFS members are to be trained in the FFS methodology and become farmer-facilitators. The facilitator supported the idea, and they indicated that there are plans to organize the TOF for them.

#### **4.2 Bukoba and Karagwe District**

Bukoba District counts one FFS and Karagwe District two. All the FFS have started with the sessions and have received a first installment of the grant (150,000 Tanzania Shilling = approximately USD\$ 150) in the first week of October 2004. All FFS had initiated their session even before the grant arrived and funded their activities through contributions and the ground working funds. However, the lack of sufficient funds slowed down the progress of the FFS due to lack of training materials and inputs to conduct PTDs. All school made a request to receive

the grant in bulk instead of installment in order to meet expenses at any given time. For example, Rugaza FFS wants to buy a spray-pump for tick control and indicated to require access to the full grant to be able to purchase the pump.

Tuinuane-Rhita FFS faces difficulties due to environmental and geographical conditions. The number of FFS participants is low as farmers live scattered and have to migrate far in search for green pastures. The FFS had to suspend its activities for a month due the absence of the participants. The area chosen by the facilitator demonstrates to be difficult and unfavorable for FFS however; the participants show great interest and commitment to participate and hope to become teachers in their communities.

Karuika FFS is the FFS that made the most progress and had the opportunity to receive many visitors from FITCA and the government and even FFS facilitators. At the time of the second mission they had conducted 12 sessions; established two PTDs and were implementing the AESA on a regular basis. In all the FFS, the participants are assessing themselves using the evaluation wheel. By looking at their own performance and the content of the FFS after each session, they hope to ensure good quality FFS.

#### **4.3 Conclusions and Recommendations**

- (i) Progress made in the implementation of the FFS approach within FITCA is satisfactory, which can be attributed to the solid ground working of the facilitators and strong conceptual perception of the National Project Coordinators of FITCA Tanzania and the coordinators in the field to adequate support the FFS. This has enabled them to adequately supervise and provide backstopping.
- (ii) The facilitators have laid a very strong foundation during ground working which provides a great potential for successful FFS given the right financial and technical support.
- (iii) The commitment displayed by both the farmers and facilitators in the implementation of the program, even in the absence of the grants is very promising. Farmers give personal contributions, both in cash and in kind towards the implementation of their FFS. This could be recognized by FITCA by providing the grants to the groups and stimulating these initiatives.
- (iv) The challenges and factors affecting good FFS performance include lack of exposure of the FFS coordinators to the FFS concept as the facilitators still need to fully grasp and appreciate the FFS concept.
- (v) The facilitators, coordinators/supervisors and farmers all noted to appreciate the role FFS can play in facilitating transfer of technology and community empowerment and they are therefore motivated to further develop the programme.
- (vi) Future prospects of the FFS lie within the FFS groups that have been sensitized and prepared in terms of their contribution both in cash and in kind in the implementation of the FFS program. This will ensure sustainability, even after the project ends. Future funding sources for FFS after the closure of FITCA include the Government through the Ministry of Livestock and Water Resources Development, PATTEC (Pan African Tse Tse and Trypanosomiasis Eradication Campaign) and exploring the presence of other development partners in the Districts.

- (vii) Attendance during the FFS sessions, which reflects on the attitudes towards the FFS approach, is satisfactory for most of the groups except for a few cases which have been as a result of poor weather conditions or members attending to personal issues with them sending apologies. Discussions on the curricula for each FFS to confirm the level of satisfaction with the training material content was done exhaustively during the meeting with facilitators and coordinators and recommendations given where appropriate.
- (viii) Given that the FFSs have been in existence for a short time, group-marketing strategies and other group dynamic activities are yet to be applied in the FFSs. At least one group i.e. Muungano FFS does not anticipate marketing problems because of an established marketing channel for milk and milk products being used by the farmers.
- (ix) Most of the groups opted to undertake commercial activities along side the FFS training phase. It was felt that this is not appropriate in that commercialization should follow the training phase. The facilitators were therefore advised accordingly after exhaustive deliberations on the issue.
- (x) It was noted that most of the groups have been visited at different times by a wide range of visitors, an indication of the interest the FFS has generated both in Government and development partners.
- (xi) The need for more time for the implementation of the FFS approach given the little exposure the facilitators have had was emphasized, so as to allow them to adjust from the old extension approaches to the FFS concept where the farmers take the lead hence allowing change of mind-set.

## 5. COUNTRY REPORT: KENYA

In western Kenya, the FFS are distributed over five districts, each having two facilitators implementing their own FFS. In total 10 FFS are under implementation having 316 farmers registered. The types of enterprises in Kenya are diverse i.e. diary production, animal husbandry, calf mortality, fodder production, poultry disease management, housing and feed (Table 5).

**Table 5: Overview of FFS in Kenya**

District	Name FFS	Name Facilitator	Enterprise identified	Objectives
Bondo	Aduwa FFS	Tom K.Nyabundi	Diary Production	Dairy cow husbandry practices
Bondo	Riat Kolemo	Joash Nyayiera	Diary Production (milk)	Husbandry practices and disease contr
Bondo	Sueru	Augustine Ochieng Ngesa	Local poultry production	Poultry management practices
Teso	Kapamo FFS	Ben Alex Emukule	Local poultry/ dairy	Poultry management with emphasis of vaccination on New Castle disease. Cal mortality reduction
Teso	Kokare FFS	John Maurice Okisegere	Local poultry	Poultry vaccination, housing and supplemented feeding using by-products from cassava processing
Bungoma	Masima Livestock FFS	Charles W. Pepela	Local poultry production	Vaccination, housing and feeding using home-grown feeds including sunflowe
Bungoma	Syoya LFFS	George Mukachi	Livestock: raising of healthy heifers	Forage production and poultry vaccination
Siaya	Nyi-ginga FFS	William O. Okoth	Local poultry	Commercialization; Poultry housing; feed production; selection and disease control
Siaya	Jitegemea LFFS	Eric Wetende	Fodder production	Comparison of various varieties and methods of napier production
Busia	Lukure Farmers	Andrew O. Ngesa	Livestock	Calf mortality and management
Busia	Buswemu	Sebastian Asemboh	Livestock: Ticks and tick control, worms	Disease control; crush pen management

In all the five districts; Teso, Busia, Siaya, Bondo and Bungoma, the FFS implementation has been hindered by the lack of funds to buy training materials and input for setting up experimentation trials (PTDs). At the time of the second support mission, the grants had not yet been released to the groups. In Busia, the FFS received a check which they unfortunately were unable to cash due to lack of funds in the FITCA bank account.

In Siaya the grant arrived at the end of September 2004. The facilitators explained that they had to put a lot of pressure on FITCA in order to get it. They said that they even had to threaten with having to dissolve the FFS.

In addition, Jackson M. Andera, a facilitator from Busia District has been replaced by his colleague Sebastian Asemboh, who has not undergone the TOF. It is highly recommended that Sebastian will be further assisted by colleague that have been trained by FAO or ILRI or have him participate in a next TOF.

The facilitators selected in Kenya are government staff: Two Livestock Production Officers and four Assistant Livestock Production Officers; one Assistant Animal Health Officer and two Division Livestock Extension Officers. All the Kenyan facilitators trained have an extensive experience in the field of livestock production and extension and are facilitators that demonstrated commitment. They showed that they have a good enough understanding of the FFS methodology to use it in a flexible and problem oriented manner. A constraint facilitators face is lack of time due to other commitments. Most of them are involved in the NALEP that is in some cases extremely time-demanding and thus affecting the time the facilitator has left to spend on the FFS. In case the facilitators and the government recognize the FFS as a viable methodology to be incorporated in to its extension strategy it is highly recommended to identify areas of collaboration between the FFS and NALEP that are complementary and search for a more effective performances of livestock extension.

Both facilitators and FFS farmers are aware of the extensive FFS experience and FFS networks in Western Kenya. Especially in Bungoma, Bondo and Busia District many FFS initiated by FAO can be found and all considered that it would enhance the quality and sustainability of the FITCA FFS to seek contact with these initiatives.

The Veterinary Department in Western Kenya has a low budget and is therefore too weak to fund FFS in the future. For this reason it was suggested to link up with the Livestock Department that manages a larger budget. Furthermore, the involvement of the Livestock Department could also extent the scope of the FFS from livestock disease control practices only to livestock management practices. In this sense, the FFS can become a capacity building tool for a broad range of livestock issues affecting farmers in many different areas.

## **5.1 Conclusions and Recommendations**

- (i) The facilitators' employers and respectable bosses have demonstrated interest and support. Most of the direct supervisors have visited the FFS and expressed to be willing to assist the FFS development in the future. Some colleagues have voluntarily joined the facilitator on visits to the FFS and wish to be trained as facilitators. However, more formal and more pro-active assistance to the FFS from the supervisors is required to make sure that the environment of the FFS is an enabling one and ensure FFS of good quality.
- (ii) The FFS in the five Districts have demonstrated a great interest in income generating activities. For example, a FFS in Teso District rented four hectares of land to grow sunflowers to generate income for the school. Such initiatives enhance the income of the group and strengthen the cohesiveness of the group and financial sustainability of the

FFS. However, at the same time it puts the FFS under pressure and it could lead to a 'production FFS' instead of a FFS where learning by doing is the main point of interest. It is the role of the facilitator to find a balance between generating financial benefits from and sustainability of the FFS and allowing enough room for farmers to make mistakes and lose money in order to enhance learning.

- (iii) The conditions for FFS in Livestock in Kenya is the most favorable of the three countries due to yet existing FFS networks and sufficient knowledge and skills available within the government. Even though these structures have been developed in the agricultural (crop) sector, the name of the FFS is established and methodological assistance is present (e.g. Sebastian Asemboh who replaced Jackson M. Andera received a FFS training manual from FFS facilitators from the Ministry of agriculture).
- (iv) It is recommended to approach FAO who is present in Busia and Bondo to mainstream FFS initiatives in terms of the technical and financial set up of the FFS curriculum. In order to strengthen the development and sustainability of the FFS it is recommended to explore the possibilities for partnerships with other local projects such as The Heifer Project International and NALEP (National Agriculture and Livestock Extension Programme funded by SIDA Sweden). Heifer Project International is run by an International NGO targeting improved livelihoods by giving grants in the form of a cow to rural communities. Furthermore, the FITCA coordinator mentioned that Action Aid would be an interesting organization to approach as they could provide funding.

## 6. COUNTRY REPORT: UGANDA

The implementation of FFS in Uganda went through a different process than Kenya and Tanzania. In Uganda, none of the FFS have been able to actually start with the implementation of FFS. A delay in the replenishment of EU funding was been the most significant reason. The FFS facilitators over-budgeting the requirements of the FFS and their apparent weaknesses in planning participatory technology development trials were others reasons for a slow take off of activities. Due to this, the second mission merely focused on building capacity to develop the FFS grants proposals rather than assessing on-going FFS activities and the effect of FFS.

During the second mission, a meeting was held with the project management staff and facilitators to guide the facilitators; to revise the proposals and reduce the budgets to the recommended USD\$ 600. The reason behind over-budgeting could be that the facilitators lack experience with the set-up of simple low-input experiment but instead emphasize high-tech technologies. The use of high-tech technologies and expensive inputs do not only made the grant proposals to be over-budgeted but could also affect the success of the FFS. For instance, a PTD to compare home reared chickens with those reared in commercial unit, vaccinated and treated regularly, and fed on high nutrient supplements and feeds. It is suspected that the chickens in big coops will perform much better than the local ones but due to the high cost of the technology it might have little impact on farmers' live if they can not reproduce at home what they have learned. Therefore, the facilitators were stimulated to look for low-cost, locally available inputs to make the technologies affordable and easier to adopt for farmers.

The performance of the facilitator is crucial for the performance of the FFS. In this perspective, a lesson that can be learnt from the experience in Uganda is that adequate selection and profiling of the characteristics of a FFS facilitator is crucial. In Uganda the majority of the FFS facilitators are vets and it has been debated whether vets are the most appropriate choice or whether more front line extension workers, operating much closer to the field are more suitable as facilitators. In addition, the availability of facilitators is an important factor to ensure effective FFS implementation. In Uganda the availability of the Veterinarian doctors as facilitators is still a concern. Vet facilitators responsible for two Aloit-Akum FFS and Sibange Women of Destiny (SWOD) did not attend the meeting and did not send a representative and yet the grant proposals of the FFS needed revision. The FITCA coordinator was stimulated to establish dialogue with the facilitators to decide on the FFS curriculum and mode of work.

One of the trained FFS facilitators, Ametto Abdalla was temporarily replaced by Alfred Wejuli. Alfred came back after the ground working was completed and took over when the sessions began. It is not advisable to have a colleague, who has not been trained as a facilitator take over. In this way, good quality FFS implementation can not be assured.

In Uganda, 12 FFS are planned to be implemented in 12 different Districts in the country (table 6). The number of FFS participants inscribed is 281. The main enterprise is poultry and three FFS focus on crop production. The PTDs in poultry-FFS in general focus on housing; feeding and vaccination (disease control) of local birds, and pest and disease control in crop-FFS.

**Table 6: Overview of FFS in Uganda**

<b>District</b>	<b>Name FFS</b>	<b>Name Facilitator</b>	<b>Enterprise identified</b>	<b>Objectives</b>
Mayuge	Improving local poultry	Patrick Ngobi	Local Poultry keeping	Improve the management of local poultry to enhance economic gains by keeping birds on a semi-intensive system, with improved feeding and a disease control programme.
Bugiri	Isagaza FFS	Alfred Wejuli	Dairy cattle management	Improve management systems in order to increase milk production; disease control; provision of proper housing; breeding; calf management.
Jiwja	Mkulima Development Group Kisrira	Ibanda Musa	Vegetable Growing	Enhance poor soil condition through application of both organic and inorganic fertilizers.
Soroti	Aloet-Akum FFS	Tonny Okello	Poultry keeping	Disease control, poultry nutrition and improve house management
Kayunga	Twenunule Mu Bwavu	Sseruwo Badru	Local poultry keeping	Compare vaccinated birds with birds that are not vaccinated in order to reduce the mortality of birds and increase productivity
Mbale	Sibange Women of Destiny (SWOD)	Dr. Denis Okello	Livestock-poultry	vaccination
Tororo	Kayoro 'A'	Mugala Omodo Zipora	Maize production	Variety and soil fertility including soil and water conservation
Mukono	Bwegiire Farmers Group	Dr. Keeya Ibrahim	Local chicken improvement	Vaccination, feeding and housing
Kamuli	Akuwa Ekiboono Bugondha FFS	Robert Isabirye	Maize varieties & Local poultry farming	Plant and animal diseases and poultry keeping with special topics on bee keeping, livestock and brick laying
Pallisa	Budaka FFS	Julius Nyiro	Groundnuts	Prevent stunting in groundnuts caused by groundnut rosette by use of resistant varieties and spraying; improve yields through inoculation and fertilizer approach.
Busia	Buhumi Farmers FFS	James Ndinywa	Local Poultry (Vaccination against New Castle Disease)	Combat high bird mortality through control of New Castle Disease by vaccination
Iganga	Bwanalira Tukole Bukole Livestock	Dr. Fredrick Kabi	Poultry Production	Improve the nutritional levels through livestock production; to conserve the environment and encourage supplementation of family incomes through livestock and crop sales.

## 6.1 Conclusions and Recommendations

- (i) The slow start of activities should not be interpreted as the project being failure. The chances of the FFS concept being internalized by facilitators are promising. They have facilitated the group mobilization and have been involved in solving their own design and implementation challenges. They are still motivated possibly by the knowledge of the interesting option of the methodology in the programs in their country. The facilitators are in different stages of adapting the FFS. One facilitator already organized a field day and received 'The end of project mission-team'. It can be of interest when the project can facilitate exchange visits between FFS. This enhances learning and motivation and provides positive competition and recognition, which are can be important stimulants for facilitators to perform well.
- (ii) The project officially closes in 2004, but the FITCA Uganda project has been granted 2 additional years with funding from STABEX- EU. Uganda is the only country in the regional FITCA programme that will be extended. This enhances the opportunities to thoroughly analyze the circumstances and adequately plan the FFS implementation. It is recommended that the project staff monitor the FFS activities and give it a sense of security.
- (iii) In addition, FITCA should look into providing additional assistance too enhance facilitators' understanding of what the FFS concepts and plan strategies to make it operational. The project management can assist in making plans on how to link ongoing FFS groups or communities to other stakeholders who can play a role in sustainability of the FFS approach.
- (iv) FFS fits in Government program (NAADS ).The Ugandan government has an ongoing programme for the next 25 years, Uganda National agricultural Advisory Services (NAADS), which funds farmer groups to adopt technologies. Its mission is to increase farmer access to information, knowledge and technology for profitable agricultural production. It is envisaged that NAADS becomes a decentralized, farmer owned and private sector serviced extension system contributing to the realization of the agricultural sector development objectives. The FFS approach is appreciated by NAADS for its ability to mobilize groups, link them to recognized NGOs and train them in specific technologies. It is recommended that FITCA gets in touch with the government and discuss the role of the FFS can play.
- (v) In addition, it was raised that also the department of fisheries is interested in working with the methodology.

## 8. CONCLUSION AND RECOMMENDATIONS

### *'Where we are with the FFS in FITCA'*

In short the integration of the FFS methodology in FITCA in Kenya, Uganda and Tanzania can be described as follows: After a long pregnancy the baby is finally born and even though it is still in its infancy, with the right nurturing and care it has all the potential to become a strong and independent human being. For the FFS in FITCA this means that the FFS foundation has been laid through the Training of Facilitators, ground working (site-selection and participant selection) and development of the grant proposals. In Kenya and Tanzania, the first steps into the implementation of sessions have been made. In Uganda, the FFS have not started the actual implementation phase and need to work on the release of the grants and reshaping of the grant proposals.

The FFS in FITCA faced starting up problems that hampered its progress. Due to delays in the release of the grants, the FFS could not start as a whole and facilitators and FFS groups had to improvise. Hence, it has not been possible to assess the effects of the FFS on the utilization of crush pens and available feed resources; control of trypanosomiasis, tick-borne diseases and helminth infections; and management of nutrients within the crop-livestock system. It has furthermore not been possible to be conclusive about the change in farmers' knowledge and decision making skills. The information available provides baseline information on the actors' perception and the results of the monitoring and feedback exercises conducted.

The most prominent results of the FFS initiative in FITCA is that all actors involved i.e. farmers, facilitators, government and FITCA coordinators, have a positive attitude towards the methodology. The FFS groups have demonstrated to value the initiative by contributing money; regularly attend the session and show commitment to the group and the group work. In general, the groups aim to improve their livelihoods by increasing their knowledge and obtain technical and analytical skills in dairy, poultry and crop production. In addition, group communication, sharing of experiences, learning by doing, collective planning and dissemination of knowledge to the community is emphasized.

### *'Lack of release of grants'*

The lack of release of the FFS grants hampered not only the effective set-up and progress of the FFS; it also de-motivated both farmers and facilitators. Some FFS were (some still are) on the verge of dissolving. Lack of funds caused that FFS groups could not purchase stationary and inputs for the PTDs and the group was not able to pay the allowance of the facilitator. However, the delays in funding did trigger self-sponsorship initiatives. All FFS demonstrated some sort of fund raising activities mainly through participant contributions and income generating activities. Some level of income generating activities in FFS benefits the sustainability of the group however when too much emphasis is put on making money the room to make mistakes in order to learn becomes smaller and smaller. The focus on the FFS methodology then becomes financial capacity building and thus compromises on developing farmer's social, experiential and thus learning skills. Another consequence of this is that the FFS grant of \$600 is not sufficient as the use of new, high- input "technologies" become more prominent instead of low

input solutions adapted to local circumstances. This was clearly visible in Uganda where the majority of the grant proposals were over-budgeted.

Another effect of the delay in funding of the FFS is the time span between the TOF and actual implementation of the newly learned methodology was long. The information the facilitators learnt slowly ebbed away from the minds and less and less is put into practice. Facilitators in Tanzania indicated to not feel fully confident because the TOF was intensive and some elements of the methodology were not fully understood by them (also due to language problems). However, the majority of the facilitators demonstrated to understand the main principles of the FFS methodology and showed to be committed to the FFS and the groups.

#### *'Support required'*

As stated above, the FFS is still in its infancy and the facilitators and FFS groups require additional support. Especially additional training is required in the technical aspects of experimentation and how to use it as an effective learning tool in the FFS. It is therefore highly recommended that FITCA coordinators and government supervisors meet with the FFS facilitators to further plan the implementation and the future of the FFS. In Kenya and Tanzania the establishment of FFS has been an effort that is already showing positive effects and it would require a little more effort in terms of strategic planning and identification of roles and responsibilities on each one of its stakeholders to complete one FFS cycle. Therefore, it is important to facilitate that stakeholders jointly reflect and assess the activities in place to decide whether the approach has positively enhanced performance and contributed to better livelihoods for livestock farmers. In Uganda, the fact that the FFS implementation has been delayed could work as an advantage since the FITCA project expects an extension of two more years. Thorough planning and linking the FFS to the overall goals and objectives of the project can provide new opportunities to develop a capacity building strategy beyond the FFS approach which is adapted to the specific context and problem areas.

As discussed in the introduction, the FFS has become an exit strategy in FITCA and showed to have potential. Provided the grants are being released, all FFS indicated to complete the full cycle with or without FITCA. Nevertheless, it would have better to use the FFS, as an exit strategy earlier in the project when it still had a proper flow of funds and staff that is not under pressure by review processes. FFS implemented at least one year before the end of a project would be sufficient as facilitators and farmers have then the opportunity to experience a full FFS cycle.

#### *'Partnerships to enhance sustainability'*

FFS facilitators request additional support from ILRI as many of them are of the opinion that they are not ready to stand on their own and especially in Tanzania facilitators feel that there is no other entity in the country that has the required FFS experience and know-how to assist them. In Kenya, the facilitators have access to a much broader network of FFS expert as many FFS have been and continue being set-up with the help of FFS. Here FFS networks are functional and facilitators have been approached to attend their meetings. Is important to explore these FFS networks, in order to link up and in the future develop a FFS support-system that adequately exchanges new training materials and experiences and thus supports the effectiveness of the FFS.

To further sustain the FFS set up under FITCA it is recommendable to search for linkages with other initiatives and organizations in the specific areas: In Kenya, NALEP and Heifer Project International could be interesting partners. In Tanzania, linking up with PATTREC would be interesting to explore. In most countries in the world where FFS has been a success, the national government played an important role. This is also the case with the Ministry of Agriculture that is involved in FFS implementation since 1996. In Kenya, the facilitators doubt whether the Veterinary Department is capable of adopting the FFS as they consider it an expensive extension strategy. It is understandable that the FFS methodology looks like an expensive method as one school merely trains 20-35 farmers. Yet it is suggested to calculate the expenses of the FFS on the long run. In the first years it requires an investment but due to fact that farmers disseminate information to their community members and generate farmer-facilitators the cost exponentially decrease over the years. It has a slow start but catches up quickly. In addition, it is recommended to conduct cost-benefit analyses and compare the FFS with other extension methods. In order to facilitate the involvement of the government it is suggested to link up with the Livestock Department that manages a larger budget. The Livestock Department can then also extent the scope of the FFS from livestock disease control practices only to livestock management practices. In this sense, the FFS can become a capacity building tool for a broad range of livestock issues affecting farmers in many different areas.

The three country reports clearly show that the FFS implementation went through different processes and had to face different conditions. Hence, it is recommendable to study each country separately in order to develop site (country)- specific strategies to ensure that each location benefits from the FFS effort already undertaken. Much has been done and the foundation for further develop of the FFS has been laid down. What the FFS requires now is fine tuning and creating the adequate conditions for it to flourish i.e. release of the grants; support to the facilitators in terms of time and follow up training; integration of the FFS into existing programmes. Beside this, the FFS programme needs adequate monitoring and evaluation in order to gain insight in all elements that affect the success of the FFS methodology as a suitable method for capacity building of rural communities incorporated in the FITCA Project.

**Date** .....  
**Country**.....  
**Name Evaluator:**.....

Name Facilitator: \_\_\_\_\_

Sex:  Female  Male

Age: \_\_\_\_\_

Institution: \_\_\_\_\_

Position/ Function: \_\_\_\_\_

Location/Area of work: \_\_\_\_\_

Name of FFS implementing: \_\_\_\_\_ District \_\_\_\_\_

Education/ Training received:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Work experience with FITCA:**

- Duration: \_\_\_\_\_
- Responsibility: \_\_\_\_\_
- Extension methods used: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

What were the advantages and disadvantages of those methods used?

<i>Type of Method</i>	<i>ADVANTAGES</i>	<i>DISADVANTAGES</i>

What do you consider the advantages and disadvantages of the FFS methodology?:

<i>ADVANTAGES</i>	<i>DISADVANTAGES</i>

What are in your opinion the 5 main key characteristics of the FFS methodology (put them in order of importance: 1 = most significant characteristic, 5 = less significant characteristic):

- 1)
- 2)
- 3)
- 4)
- 5)

What do you expect to achieve with the FFS?

What is in your opinion the role of the facilitator in FFS?:

What is in your opinion the role of the farmers in FFS?:

What will be the main enterprise of your FFS?:

How did you come to choose this enterprise?:

Any doubts or questions?:

*Additional Comments/Observations of the ILRI support team:* .....

.....

.....

.....

.....

.....

.....

.....

***PART I: To be filled in by the FFS facilitator***

Date .....

Country.....

Name Facilitator: .....

Name FFS: \_\_\_\_\_

Number of Participants: \_\_\_\_\_ Female: \_\_\_\_\_ Male: \_\_\_\_\_

What is the number of literate (can read and write) participants in the FFS? \_\_\_\_\_

What is the highest level of education in the group? \_\_\_\_\_

What is the FFS participants' main source of income (put the most important source first)?: \_\_\_\_\_

What is the position of the participants in the community?.....

Has this FFS group worked with FITCA before?

Yes

Since when? .....

What kind of activities did they undertake together?:

➤ .....

➤ .....

➤ .....

No

How did they meet FITCA?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Are there any members in the group that have not worked with FITCA before, how many? \_\_\_\_\_

Which of the activities undertaken have shown impact? Explain the impact and how this occurred?

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

**PART II: To be filled in through semi-structured interviews with FFS groups and individual FFS participants conducted by the Support team.**

How did you get to know the FFS?.....  
.....  
.....

What do you think will be happening in your FFS (try also to find out whether the FFS principles are known)?:  
.....  
.....  
.....

What do you want/hope to gain from participating in the FFS?.....  
.....  
.....

Do you think the FFS is of interest to the whole community?  Yes  No

Explain why:.....  
.....  
.....

Why do think some people are not joining FFS?.....  
.....  
.....

What are the main problems the FFS group faces?: (Try to also get the scale of the problems: i.e. NOT: "production is low" but "Production is low, only 2 liters of milk a day").

- .....  
.....
- .....  
.....
- .....  
.....

➤ .....  
.....  
.....

**What are the (management) practices you are applying to tackle these problems (list them all)?:**.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....

**What are the main objectives of your FFS? Outline : “We like to go from ... situation to ... situation”**

➤ .....  
.....

➤ .....  
.....  
.....

➤ .....  
.....  
.....

Any questions/doubts?:

**Additional Comments/Observations of the evaluator:** .....  
.....  
.....  
.....  
.....  
.....

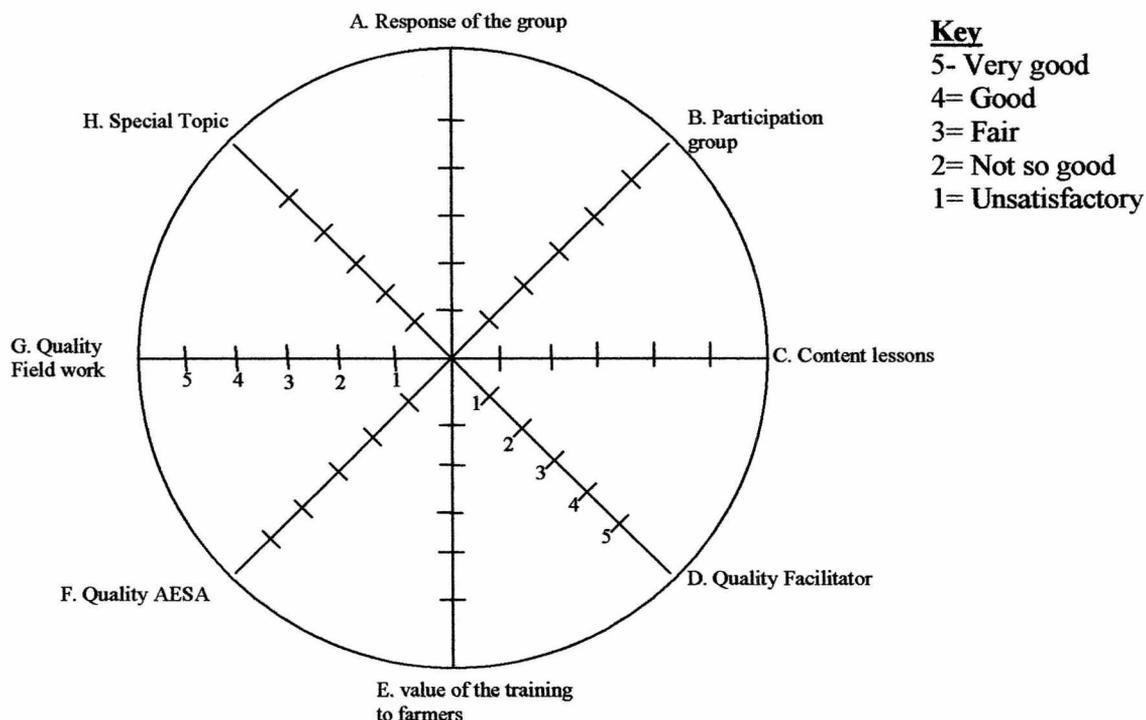


# FORMAT C TECHNICAL BACKSTOPPING AND MONITORING SHEET FOR FITCA COORDINATORS

Date: \_\_\_\_\_  
 Name Coordinator/ Supervisor: \_\_\_\_\_  
 Institution: \_\_\_\_\_  
 District \_\_\_\_\_ Country: \_\_\_\_\_

Name FFS visited: \_\_\_\_\_  
 District: \_\_\_\_\_  
 Division: \_\_\_\_\_  
 Name FFS Facilitator: \_\_\_\_\_

What is your opinion about the following issues in the FFS you are visiting (explain) below: *(Please indicate in the wheel the score you would like to give to the different indicators and explain below per indicator the reason behind your rating)*



A. How is the response of the group towards FFS?

- B. How is the participation of the group?
- C. What is your opinion about the quality of the content of the lessons?

D. What is your opinion on the performance of the facilitator(s)?

E. What do you consider the value of the training to the farmers?

F. How is the performance of the AESA?

G. How did the field work go?

H. What is your opinion about the quality and applicability of the special topic?

What do you think are the strengths and weaknesses of the FFS?

<b>STRENGTHS FFS</b>	<b>WEAKNESSES FFS</b>

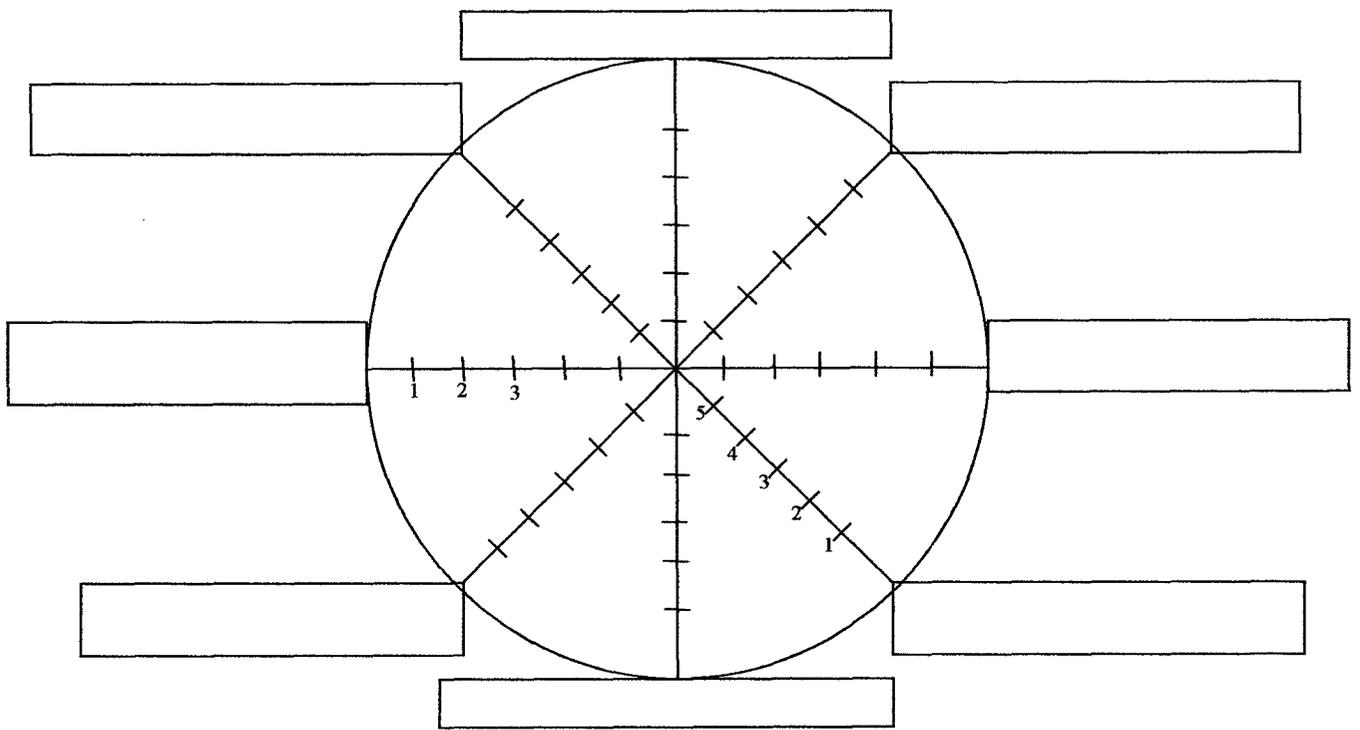
What is in your opinion the difference between an extensionist and a FFS facilitator?

Additional Comments/Observations:

4 = Good  
3 = Fair  
2 = Not so good  
1 = Unsatisfactory

## **Pre and Post Evaluation of FFS**

The situation at hand before FFS implementation needs to be assessed to be able to measure the impact of the FFS. To measure this, identify the main problems and issues the FFS aims to tackle. Select the eight main topics and place those in the evaluation wheel and evaluate the status of that topic in accordance with the key presented. In addition, to facilitate, a list of potential areas is outlined below. Please, describe each topic selected in the box below. At the end of the FFS season this same wheel is being used and the situation to evaluate the situation then and compare between pre and post FFS.



- utilization of the existing crush pens	- Management of crop-livestock system
- Trypanosomiasis control	- Cattle productivity
- Tick-borne diseases control	- cattle husbandry
- Helminth infection control	- Calf mortality
- Poultry husbandry practices	- utilization of available feed resources

Describe the 8 topics chosen and the score given:

## FFS RECORD KEEPING

Name FFS: \_\_\_\_\_  
 Division: \_\_\_\_\_  
 District: \_\_\_\_\_  
 Country: \_\_\_\_\_

Start: \_\_\_\_\_

Graduation:

- Existing FITCA group
- New group
- Other:.....

Name Facilitator: \_\_\_\_\_

Total Number of Members enrolled in FFS: \_\_\_\_\_ Male \_\_\_\_\_ Female \_\_\_\_\_

Total Number of Members graduated from FFS: \_\_\_\_\_ Male \_\_\_\_\_ Female \_\_\_\_\_

Primary Focus Point (enterprise): \_\_\_\_\_

Secondary Focus Point (enterprise): \_\_\_\_\_

Main problems identified	How are these problems tackled in the FFS?
1.	
2.	
3.	
4.	

Do you use any of the tools for Participatory Epidemiology?:

- Mapping  Yes  No
- Matrix scoring  Yes  No
- Pair wise ranking  Yes  No
- Proportional piling  Yes  No

*Please include copies of the results of the tools!*

Did the FFS incorporate any innovations by farmers?  Yes  No

If yes, describe: .....

.....

.....

.....

.....

.....

Describe the PTD activities done:

**PTD 1**

Problem:

Objective:

Treatments:

Inputs (Ksh.):

Output (Ksh.):

Design of PTD (draw it!)

## **PTD 2**

Problem:

Objective:

Treatments:

Inputs:

Output:

Design of PTD (draw it!)

### **PTD 3**

Problem:

Objective:

Treatments:

Inputs:

Output:

Design of PTD (draw it!)

## **PTD 4**

Problem:

Objective:

Treatments:

Inputs:

Output:

Design of PTD (draw it!)

List the Income generating activities done: .....

.....

.....

.....

.....

List all the special topics: .....

.....

.....

.....

.....

Sex of Officials [M/F] Chairperson \_\_\_\_\_ Treasurer \_\_\_\_\_ Secretary \_\_\_\_\_ Host Farmer \_\_\_\_\_

Any Group Savings?  Yes  No

If Yes ..... Members Contribution KShs. \_\_\_\_\_  
 Any FFS Income KShs. \_\_\_\_\_  
 Other source..... KShs. \_\_\_\_\_

Closing balance: KShs. \_\_\_\_\_ (date: .....)

**Study tours conducted:**

Date	Where to (outgoing)	Where from (outgoing)	Area of Study	Attendance		Organisers
				Male	Female	

**Field days conducted:**

Date	Where to	Where from	Attended	Organized	Attendance		Organisers
					Male	Female	

Any Remarks?

.....

.....

.....

.....

.....

**NOTE: At the end of each session, the evaluation wheel needs to be conducted. PLEASE INCLUDE ALL EVALUATION WHEELS OF ALL SESSIONS!!!!!!**

# FFS Evaluation Wheel

Name FFS:

Session No.:

Date:

Name Facilitator:

## Key

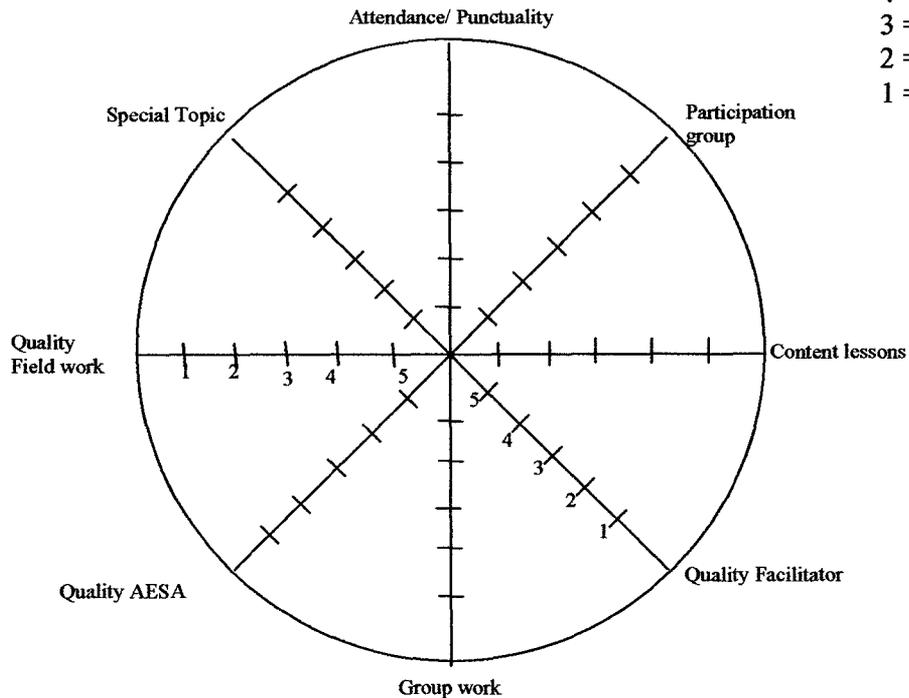
5= Very good

4 =Good

3 =Fair

2 =Not so good

1 = Unsatisfactory



## Explain the results of the Spokes:

-Attendance/ Punctuality: Why is the attendance/punctuality of the group like this?

-Participation group: Why is the participation of the FFS group as it is?

-Content lessons: Why do we feel like this about what we learned today?

-Quality facilitator: What is the reason for marking the facilitator's performance like that?

-Group work: Why do we value the work in teams as such?

- Quality AESA: What is the reason for the rating the performance of AESA like this?

- Quality fieldwork: Why do we feel like this about the field work?

-Special topic: Why we rated the special topic as we did? 50

## ***Ballot box: Pre-test and Post –test***

**Why:** To measure the increase in farmers' knowledge and skills as a result of the FFS. The pre-test provides the FFS facilitator with some diagnostic information that he/she can use to adjust the FFS curriculum to the knowledge level of the group. The post-test results are an indicator of progress made during the FFS season.

**When:** At the first and the last FFS meeting, the participants take a test to evaluate their knowledge level before (pre-test) and after the FFS (post-test).

**How:** The facilitator prepares each test by formulating questions that relate directly to local (field) problems. To answer the questions, participants choose among three alternatives. When possible, the alternatives should be live samples, for instance leaves with pest damage or nutrient deficiency symptoms, and insect and soil specimens. Each question and answers are written on cardboard paper and placed in the field e.g. on a stake. The pre- and post-test should be of similar difficulty, and in the local language.

**Materials:** 10 questions means 10 boxes with three holes (indicating the alternatives), Per FFS participant 10 small pieces of papers that fit through the holes clearly indicating the name or the number corresponding to the participants (see below), 10 sticks, Ballot Box answer sheets, masking tape.

**Time:** The questions and boxes have to be prepared before hand and this requires planning as it requires time to access the materials and to make the boxes. The implementation of the pre- and the post test, including the evaluation of the results require a full FFS session.

Participant no.1: Philip Kamau

1
1
1
1
1
1
1
1
1
1
1

10 little notes with no.1

# BALLOT BOX ANSWER SHEET

Name FFS: \_\_\_\_\_

District: \_\_\_\_\_ Country: \_\_\_\_\_

Pre-test

Post-test

Tick or punch the number corresponding with the right answer (A, B or C)

Question	A	B	C
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

The following table assists in the calculation of the score of test per participant:

Q1 = Question 1

√ = correct answer

X = wrong answer

Finally calculate the percentage of correct answers out of the 10 questions; this is the score of the test.

No. Participant	Name participants	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	% Correct
1.												
2.												
3.												
4.												
5.												
6.												
7.												
8.												
9.												
10.												
11.												
12.												

No. Participant	Name participants	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	% Correct
13.												
14.												
15.												
16.												
17.												
18.												
19.												
20.												
21.												
22.												
23.												
24.												
25.												
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30.												
31.												
32.												
33.												
34.												
35.												
36.												
37.												
38.												
39.												
40.												

*Note: Include an overview of the questions and the alternative answers. Remember that the pre- and post-test should be measuring more or less the same topics (knowledge and skills of farmers).*

**FITCA LIVESTOCK FFS TOT****GROUNDWORKING****Definition:**

- Is a number of activities done at village level in preparing or introduction of a planned FFS in an area.

**Objective**

- To identify actual needs in an area in order to develop FFS activities at various levels.

Main activities done at ground working include: -

- Identify farmers field school site
- Identify the FFS participants.
- Identify farmers practices
- Identify focus enterprise.
- Identify priority problems
- Identify solutions to identified problems.
- Prepare a grant proposal.

**GROUP DYNAMICS****Definition**

- Group dynamics is team building exercise or game for creating a conducive learning environment.

**Objectives:**

- To relax participants.
- To stimulate flow of communication.
- To bring private expectations and group reality closer.
- To encourage everyone to participate and learn.
- To develop new skills.
- To expose participants to new ways of judging their own actions.

**When to employ:**

- AS ice breakers.
- For team building.
- For conflict resolution.
- For rejuvenating the group.

**Examples:**

- (a) Folk songs.
- (b) Poems.
- (c) Drama.
- (d) Role-plays.
- (e) Prayer.
- (f) Farm field school anthem
- (g) Posers.

## AESA

### **What is AESA?**

- It is establishment by observation of the interactions between crop/livestock and other biotic and abiotic factors co-existing in the field.

### **The purpose of AESA**

- It guides farmers to critically analyze and make better decisions on their own fields.

### **The process of AESA**

1. Observation of fields.
2. Analysis.
3. Presentations.
4. Conclusions (Decision-making).

### **Examples of AESA Sheets:**

#### *AESA Sheet 1*

Name of FFS : Motomoto

AESA No: 1

Group No:5

Problem addressed: Calf mortality

Objective: To improve calf feeding to reduce mortality

Date 17<sup>th</sup> May 04

Week No: 1

#### **General information**

Breed:

Date of birth:

Calf No:

Birth weight:

Sex:

Weather:

#### **Parameters**

Weight change

Amount of feed per day

#### **Enemies**

Biting flies

Ectoparasites

Endoparasites

#### **Drawing of Calf**

#### **Friends**

Birds – The white birds pick tick from the animals

#### **Observations**

Feeding habit

Weight change

Body condition

Agility (lively hood)

#### **Recommendations**

Come as observations are made

## AESA Sheet 2

Name of FFS – Inka  
AESA No. 1  
Enterprise: cattle improvement:

Date 17.05.04  
Week 6

### General information

Animal SPP cattle  
Name (identification)  
Breed  
Feed availability  
Watering  
Last date of treatment and drug  
Time of observation  
Weather.

### Parameters

Milk production  
Disease incidence  
Weight

### Enemies

### Drawing of Cow

### Friendly

### Observations

Disease incidences  
Lacrimation  
Loss of appetite  
Alupecia (loss of tail hair)  
Presence of other Ectoparasites

### Recommendation

As per observations or any necessary action seen

## AESA Sheet 3

Name – Juhudi  
AESA No: 01  
Date: 17.05.04  
Week No: 01  
Problem: low milk production due to high tsetse challenge.

### General information

Breed: Friesian crosses  
Type of animals: lactating  
Time: 8:00 am  
Weather: sunny  
Type of acaricide: Deltamethrin 5%  
Spray regime: 2 weeks  
No. of animals: 20  
Cost of spraying: 20/Kshs. Per head  
Cost of milk/Liter: 30/Ksh.

### Parameters

Litters of milk  
No of flies trapped  
Amount of water taken  
Number of tryps cases  
Live body weight.

### Enemies

-Tsetse fly

### Predator

Wasps

### Drawing of Cow

### Observations

Body condition  
Appetite  
Tsetse flies  
Coddung  
Lymphy nodes  
Resposition  
Urine  
Dimenour

### Recommendations

Eyes, Hair coat

**AESA Sheet 4**

Name of FFS: Twaze Kulema  
AESA No.1  
Enterprise: Napier production

Date 17.05.04  
Week 1

**General information**

Fodder (Napier) types: local Napier  
-Clone 13  
-Bana

Planting Date: 15/04/2004

Spacing: 90 x 60 cm

Fodder age: 1 month

Soil condition/moisture: Good

Weather: Sunny and cloudy

Time of observation: Start: 8.00 am

End: 12:00 noon

**Parameters**

Fodder height : 30cm

Stem thickness: 3cm

Number of leaves: 4

Leaf length: 25cm

Leaf width: 2cm

Number of shoots per plant:4

Yield per plot (kgs):

Cutting intervals: every 3 months

Economic factors: -Costs

- Production

**Enemies**

**Drawing of  
Fodder**

**Friends**

**Observations**

Weeds

Stunted growth in plot 1 a

Leaf colour: pale green where manure was not applied

**Recommendations**

Weeding

Manure application

Manure application

**AESA Sheet 5**

AESA No 1  
Group No. 3 (tegemeo)

Week 1  
Date 15.5.04

Problem addressed: To reduce the incidence of Newcastle disease in local chicken

**General information**

Breed

Vaccine type

Dosage

Date of 1<sup>st</sup> vaccination

Age of birds

System of Management

Time of observation

Weather

Design

**Parameters**

No. of birds at start

Age of birds

No of sick birds

No of dead birds

No of hens laying

No of hens incubating

No of chicks hatched

Amount of feed given

Cost of prophylactic treatment

Cost of house

Revenue – Eggs

- Meat

**Enemies**

**Drawing of Chicken**

**Friendly**

## **Observations**

**Mites crawling in poultry house**

## **Recommendations**

**Apply sevin dust immediately**

## **PARTICIPATORY TECHNOLOGY DEVELOPMENT (PTD)**

### **Definition:**

- This is a process of collective and collaborative inquiry with the purposes of initiating community action in solving their own local problems.
- PTD is meant to empower the participants with analytical skills to investigate the cause/effects relationship in their farming practices.

### **PTD Empowers in 3 ways: -**

- Empowers the farmer to learn how to learn.
- Creates new opportunities as participants learn how to create new possibilities for action.
- Empowers because of specific insight, new understandings and new possibilities that participant discovers in creating better explanations about their social world.

### **Steps involved in Establishing PTD**

1. Conduct ground working activities.
2. Conduct village immersion activities.
3. Prioritizing field problems.
4. Plan and design of PTD activities..
5. Implement PTD activities.
6. Collect and interpret results of PTD activities.
7. Utilize results in succeeding PTD activities.

### **Examples of PTDs**

#### **1. PROBLEM: CALF MORTALITY**

#### **Possible solutions:**

- Proper housing.
- Proper feeding.
- Necessary and timely vaccination.
- Regular deworming.
- Regular spraying.
- Timely treatment.

#### **Objective of PTD:**

- Proper feeding to reduce mortality.

#### **Treatments:**

- Number of calves 3 of the same age and breed.
- Optimum feeding regime compared with farmers' practice.
- There will be equal preventive treatment.

### **Design of the PTD**

#### **A: OPTIMUM**

- 3 calves: Friesian crosses.
- Farmers owned and farmer pay for treatments
- 4 litres per day for 16 weeks (2 morning and 2 evening)
- Improved fodder introduced in 3<sup>rd</sup> week (Ad-lib)
- Water also given (ad-lib)

#### **B. FARMERS PRACTICE**

- 3 calves from member of FFS, are also Friesian crosses
- 2 litres per day for 8 weeks.
- Natural pasture introduced in 2<sup>nd</sup> week
- Water provided once a day

### **Requirements:**

1. Standard measuring units.

2. Weighing bands.
3. Data recorded at weekly intervals
4. Economics.
5. Daily liveweight gain (DLWG).

**2. PROBLEM: TSETSE INFESTATION DUE TO LACK OF EFFECTIVE CONTROL MEASURES.**

**Possible solutions**

- Bush clearing.
- Baiting and target traps
- Use of acaricides.
- Prophylactic treatment.

**Objective**

- To reduce tsetse infestation by use of acaricide.

**Treatment**

- Use of decatex.
- No spraying (farmer practice).

**Design:**

- Technology Vs technology
- Grazing system: free range
- Animals from FFS and non FFS members.
- Tsetse population monitoring.
- Animals grazing in different plots but with same quality.
- Check on presence of flies (tsetseflies).

SPRAYING WITH DECATEX FOR FFS MEMBERS
--

VS

NO SPRAYING (FARMER PRACTICE) FOR NON FFS MEMBERS
---

**3. PROBLEM: NEWCASTLE DISEASE IN POULTRY**

**Possible solution:**

- Vaccination of chicken.
- Good hygiene and sanitation.
- Isolation of sick birds.
- Proper disposal of dead birds.
- Proper housing and stocking rates
- Avoid introducing new stock

**Objectives**

- To reduce incidence of Newcastle disease in chicken within one years period.

**Treatment:**

- Vaccination of chicken.
- Isolation of sick chicken.
- Proper disposal of dead chicken.
- Proper housing and stocking rates.
- Good sanitation and hygiene.

**Design**

**FFS CHICKEN**

Purchased 20 chicken
-------------------------

- Birds vaccinated against Newcastle disease.
- Booster vaccination after 3 weeks, 3 months, six months.
- Chicks confined/housed Upto 8 weeks of aged.
- Mature birds housed for ½ day and night.
- Supplementary feeds given and water.
- Routine deworming done.

*Versus*

**FARMERS PRACTICE**



- Free range.
- No proper housing
- No supplementary feeds given.
- No deworming done.
- No vaccination done.

**4. PROBLEM: LOW NAPIER PRODUCTIVITY.**

**Solutions:**

- Training FFS members in fodder/Napier establishment

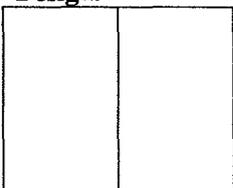
**Objective:**

- To increase fodder Biomass

**Treatments:**

- Varietal test
- Manure

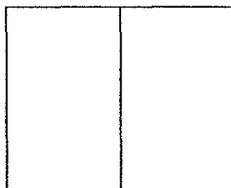
**Design:**



a                  b

Plot 1:

Variety: local Napier

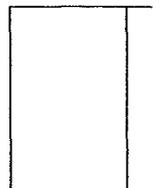


a

b

Plot 2:

Napier clone 13



a

b

Plot 3:

Bana

Note: a: without manure  
b: with manure

- Plot size: 15 metres x 10 metres
- Spacing: 90 x 60 cm
- Duration: one year (cutting 4 times)

## **5. PROBLEM: LOW MILK PRODUCTION DUE TO HIGH TSETSE FLY CHALLENGE**

### **Possible solutions:**

- Application of appropriate acaricide.
- Trapping and targeting.
- Destruction of breeding and resting site by encouraging alternative forms of land use.
- Sensitization of mass on tsetse control.
- Provision of Chemoprophylactic treatment.
- Use of netted banda/protected zero grazing unit.

### **Objective**

- Increase milk production

### **Treatment:**

- Application of Deltamethrin spray at 2 weeks interval.

### **PTD design**

- 20 farmers in FFS having Friesian crosses.  
Vs
- Farmers not in FFS having Friesian crosses.
- Farmers contribute 20/=Ksh per animal per spray.
- Period: 6 months.
- Grazing method: Farmers practice.
- Monitoring of fly density: 2 monitoring traps.
- Monitoring of ticks by tick count.
- Dilution: 1ml of acaricide (Decatix into 1 liter of water).
- Other factors which influences milk production are constant.

# PARTICIPATORY EPIDEMIOLOGY

## **What is participatory Epidemiology?**

- Is the Science that studies the dynamics of the diseases.
- It is based on participatory techniques for the harvesting of qualitative epidemiological data contain within community observation existing Veterinary knowledge and traditional oral history.

## **Tools Used in P.E**

- Mapping.
- Matrix scoring
- Pair wise ranking
- Proportional piling.

## **1. MAP**

- An informative representation on ground/paper of an area showing resources and features.

## **Participatory mapping**

- Is a type of visualization method, which is popularly participatory among animal health workers and livestock keepers.

## **Types of map**

- Resource map
- Social map
- Service map
- Livestock morbidity.

## **2. MATRIX SCORING**

### **(i) What is matrix scoring?**

- It is a method used for understanding local characterization of livestock diseases and meaning of local disease names.

### **(ii) Purpose of matrix scoring**

- Used for general disease survey.
- Study on specific disease.

### **(iii) Process of matrix scoring**

1. Identification of items to be scored. (Stones).
2. Pair wise comparison of named items.
3. Scoring of diseases verse indicators
4. Interviewing the matrix.

## **Examples of Matrix**

### **Example 1: INDICATOR VS DISEASE**

INDICATOR	TRYPS	E.C.F	DIARHOEA	ANAPLAS	MASTITIS
Tsetse	25				
Antibiotics		8	3	5	8
Ticks		15		10	
Forest	15	5		5	
Swolen lymph	9	16			
Biting fly	5			20	

River	7		14		4
-------	---	--	----	--	---

### Example 2

INDICATORS	ECF	MAST	TRYPS	BRUCEL	ANAPL
TICK	17	0	0	0	8
DIAR	10	0	0	0	15
TSETSE	0	0	25	0	0
S.L.N	11	3	4	2	5
LACRIM	10	0	8	0	7
SALVATION	8	0	10	0	7
S. UDDER	0	25	0	0	0
LOW MILK	6	10	4	2	3
TREATMENT	7	7	3	5	4
MORTALITY	15	3	2	1	4

### Example 3

INDICATORS	CBPP	ECF	FMD	ANAPLA. MOSIS	TRYPS
COUPHING	18	7	0	0	0
DIARRHOEA	0	16	0	0	9
SALVATION	0	7	18	0	0
LACRIMATION	0	19	0	4	2
TSETSEFLY	0	0	0	0	25
TICK	0	15	0	10	0
KLHARD FAECES	0	0	0	25	0
EMACIATION	2	3	14	5	1
LYMPHNODES	0	17	0	3	5
BUSH	0	3	0	3	19

## 3. SEASONAL CALENDAR

- Seasonal Calendar is a method for understanding local perception of seasonal variations in disease incidence or population of parasites or other factors.
- Seasonal Calendar can also generate new hypotheses about associations between diseases, environmental factors and interactions with wildlife and vectors.

### Example 1

	DEC-MARCH DRY	APRIL-JUNE WET	JULY-AUGUST DRY	SEPT-NOV WET
	18	2	7	3
	2	16	3	9
DIARRHOEA	4	15	2	9
E.C.F	2	16	2	10
ANAPLASMOSIS	1	17	2	10
MASTITIS	1	19	2	8
BLOAT	15	6	2	7
TICKS	2	18	2	8
WORMS	2	15	4	9
MILK	1	15	4	10
PASTURE	1	18	2	9
FLIES	1	20	4	5

**Example 2**

	D	L/R	D	S/R	D
	• 0 • 0 • 0	0	• 0 • 0	0 0	• 0 • 0 • 0 • 0 • 0
	0	00000000 000000	0	0000 0000	0
E.C.F.	0 0	00000000 000000	0 0	000000	0 0
TRPS	• 0 • 0	• 0 0 0 0 0	• 0 0 0 0 0	00 00	0 0 0 0 0 0
CBPP	00 00 00 00	0 0 0	• 0 • 0	000	000 000 00
MASTITIS	0 0	000000 000000 0	00	000 000	00
ANAP	0 0	0000 00000	000	00000 0000	0 0
TICKS	0 0 0 0	0000 0000	0000 0	00000	0 0 0
TSETSE	0 0	0000 0000	000 00	0000 000	0 0 0
	0 0	00000 00000	000	00000 0	0 0 0

KEY:  
D - DRY  
L/R - LONG - RAIN  
S/R - SHORT RAIN  
O - STONES

**Example 3**

	JAN DRY SEASON	MAR RAIN SEASON	September SHORTRAIN	NOVEMBER DRY
	22	2	0	6
	19	0	11	0
ECF	19	0	11	0
MASTITIS	4	15	8	3
BRUCEL	9	7	6	6
TRYPS	3	17	8	2
ANAPL	13	5	7	6
SALVATION	6	12	10	2
LACRIMA	2	21	6	1
TICKS	2	17	8	3
SWOLLEN UDDER	1	8	11	1
LOW MILK	11	4	3	12

**Example 4**

	DRY JAN-FEB	WET MAR-JUN	DRY JUL-AUG.	WET SEPT-NOV	DRY DEC
	14		3		8
		16		9	
ECF		5	10	3	5
TRKLYPS		14	5	4	2
DIAR.		15		7	3
ANAPL.		11	3	7	2
MASTITIS		15		10	
TSETSE		14	4	12	
TICKS		11	2	9	3
FORESTS		15	2	7	1
RIVER	10	2	6	2	5



#### 4. PROPORTIONAL PILING

##### Definition:

- Proportional piling method is particularly used for determining herd age structures, disease incidence and mortality.

##### Advantages

1. The method does not require herd sizes to be estimated. It does not involve figures and counting which could offend the farmers.
2. When assessing disease incidence and mortality the method involves comparison of different diseases and therefore, avoids exaggerations of a particular disease situation.

##### Examples:

##### Example 1

CALVES	ECF	MAST.	TRYPS	ANALP	WORM	OTHERS
SICKS	2	0	2	0	2	0
DEAD	1	0	2	0	2	0
% INCIDENCE	3	0	4	0	4	0
% MORTALITY	1	0	2	0	2	0
% FATALITY	33.3	0	50	0	50	0
YOUNG STOCK						
SICK	3	0	4	3	4	0
DEAD	0	0	4	1	0	0
% INCIDENCE	3	0	8	4	4	0
% MORTALITY	0	0	4	1	0	0
% FATALITY	0	0	50	25	0	0
COWS						
SICK	4	5	6	3	3	2
DEAD	3	0	4	1	0	2
% INCIDENCE	7	5	10	4	3	4
% MORTALITY	3	0	4	1	0	2
% FATALITY	43	0	40	25	0	50
BULLS						
SICK	1	0	6	3	0	1
DEAD	1	0	3	3	0	3
% INCIDENCE	2	0	9	6	0	4
% MORTALITY	1	0	3	3	0	3
% FATALITY	50	0	33	5	0	75

**Example 2: disease incidence and fatality**

HERD CATEGORY	TRYPS	ECF	ANAPLAS MOSIS	CBPP	FMD	OTHERS
<b>CALVES</b>						
SICK	0	11	6	0	5	2
ALIVE	0	3	2	0	2	1
DIED	0	8	4	0	3	1
<b>YOUNG STOCK</b>						
SICK	3	6	5	0	7	17
ALIVE	3	6	4	0	7	13
DIED	0	0	1	0	0	4
<b>COWS</b>						
SICK	38	0	0	8	25	0
ALIVE	9	0	0	8	22	0
DIED	29	0	0	0	3	0

**Example 3**

	ANAPLASM OSIS	BLOAT	MASTITIS	ECF	DIARRHOEA	OTHERS
SURVIVED	6	1	-	10	5	-
DIED	2	-	-	5	2	-
SURVIVED	7	3	-	5	6	
DIED	3	1	-	5	2	1
SURVIVED	-	1	2	4	4	3
DIED	3	-	1	2	4	-

**Example 4**

	DIARRH	ANAP.	TRYP	E.C.F	MAST.	OTHERS	
SICK	00000 0000			00000 0000			<u>Incidence</u> Diarr. 9% E.C.F 9%
	9			9			
SURVIVED	0000 000			000 000			<u>Mortality</u> Diarrhea 2% E.C.F. 3%
	7			6			
DIED	00			000			<u>Fatality</u> Diarrhea 22% E.C.F 33%
	2			3			
SICK	00000 00000	000 00	000 000	0000 000			<u>Incidence</u> Diarr. 10% Anap. 5% Tryp. 6% ECF. 7%
	10	5	6	7			

SURVIVED	0000 000	000	00	000			<u>Mort.</u> Diarr. 35 Anap. 2% Tryps. 4% ECF. 4%
	7	3	2	3			
DEAD	000	00	00 00	00 00			<u>Fatal.</u> Diarr. 30% Anap. 40% Tryp. 66% ECF. 57%
	3	2		4			
SICK	0000 000	00 00	0000 0000	000 000	0000 000		<u>Incidence</u> Diarr. 7% Anap. 4% Tryps. 8% ECF. 6% Mast. 7%
	7	4	8	6	7		
SURVIVED	000	000	000 00	00 00	0000 000		<u>Mort.</u> Diarr. 4% Anap. 1% Tryps. 3% ECF 2% Mast. -
	3	3	5	4	7		
DEAD	00 00 4	0 1	00 0 3	00 2	-		<u>Fata. %</u> Diarr. 57 Anap. 25 Tryp. 37 ECF. 33 Mast. 0

### Example 5

CATEGORY	C.B.P.P.	E.C.F	MASTITIS	TRYPS	ANAP.	OTHERS
CALVES						
SICK	0000	000 00000000 00000000 00000000				
DEAD	0000	00000000 00000000				
HEIFERS & IMMATURE BULLS						
SICK	00	0000000 000			000000 000	00 WOUNDS
DEAD	0	000			000	
COWS						0000 BROKEN LEGS
SICK		00	000000 000	00000	00000 00	
DEAD		0	000		0000	

# PARTICIPATORY MONITORING AND EVALUATION

## Definition

- Is a continuous process which involves all stakeholders to see the level success of the planned activities and targeted output within a specific time.
- Before P.M.&E tools are used, participants should have the check-list of 6 Ws and 1H
- 6Ws and 1H include:
  - What do we monitor?
  - Why to monitor?
  - Where to monitor?
  - When to monitor?
  - With what to monitor?
  - Who to monitor? And 1H
  - How do we monitor?

## Tools used in P.M. & E

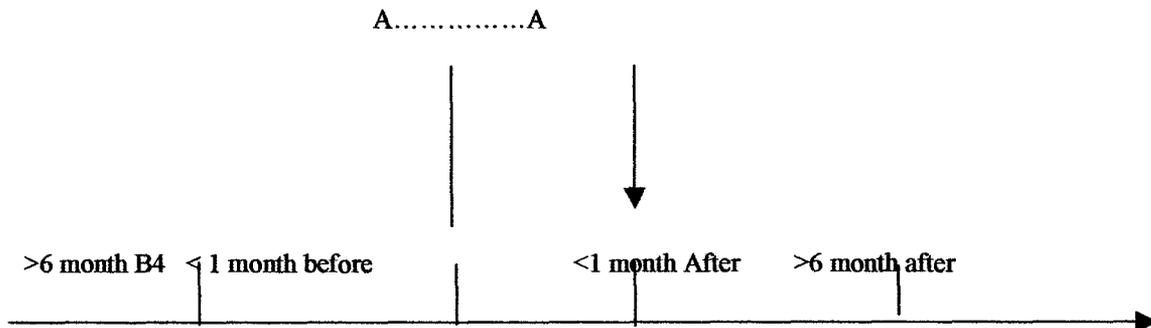
- Semi – structured interview.
- Questionnaires.
- Mappings
- Transect walks
- Proportional piling.
- Direct observation.
- Historical trends and time lines.

## Example:

Parameter: change in farmer's income.

Indicators	Tools	Who-role	where	With What
Cash from sale of milk	Farm records	FFS members/farmers keep records	Farm level res	-transport -Stationary

## Change in farmer income



Key:  
A: Farm records.

## Evaluating FFS

A farmer:

- When I get high yields (milk) therefore income improved livelihood.

A facilitator:

- When there is a positive change in the livelihood of the farmers.

**A Researcher:**

- Increased farmers income on adoption of new technology.

**A Donor:**

- There is improved income.

**Farmer in FFS succeeds when?**

As a farmer in FFS I am I successful?

**When:**

- I am able to apply the technology being introduced. I.e control ticks by spraying/dipping regularly.
- Control ECTO & Endo parasites.
- I don't contract sleeping sickness.
- **When; my animals don't die from preventable diseases.**
- When I get 4 yields (milk, fast growth).
- **When tsetse fly population I markedly reduced.**
- When I can manage to pass on knowledge to other farmers.

**Facilitator of FFS is successful when**

As a facilitator in FFS I am successful when,

- I am given adequate and timely funding/materials.
- Accomplish the curriculum laid for that programme in time.
- **When the community complies.**
- Community adopts the new technologies learnt.
- **When there is a positive change in the livelihood of the farmers.**
- When community attends the class.
- **If trained farmers can do AESAs.**

**Researcher in FFS succeeds when,**

As a researcher in FFS I am successful when:

- Adequately funded during a planned period.
- **New technology is developed within a planned period.**
- New technology disseminated adopted and feedback received within a planned period.
- **When the tsetse prevalence has been reduced to tolerable level (i.e few cases of trips in animals and humans).**
- **Increased farmers on adoption of new technology.**

**Donor in FFS is successful when,**

As a donor in FFS I am successful when: -

- Tsetse prevalence is reduced by 10% at the end of 2004.
- Land under cultivation increases by 30% at the end of 2005.
- Land under improved pasture increases by 10% at the end of 2005.
- Trypanosomiasis incidences reduce by 20% at the end of 2004.
- There is improved Food security & income
- **Better health (for human and livestock)**
- Better accountability of funds.

## **TRAINING OF TRAINERS EVALUATION (10-21 MAY 2004)**

		<b>SCORES</b>
1. Course content and coverage	78%	
2. Training materials	76%	
3. Teaching methods/facilitation	81%	
4. Practical demonstration		83%
5. Practical exercise		83%
6. Organisation	65%	
7. Duration		66%
8. Content of immediate importance		88%
9. Over all average score		77.5%

## LIST OF PARTICIPANTS

NO.	NAME	STATION	COUNTRY	DESIGN.
1	Nyayiera Joash	Bondo	Kenya	ALPO
2	Austin O. Ngesa	Bondo	Kenya	ALPO
3	Tom K. Nyabundi	Bondo	Kenya	ALPO
4	George Mukachi	Bungoma	Kenya	ALPO
5	Charles W. Pepela	Bungoma	Kenya	DLEO
6	Andrew Ngesa	Busia	Kenya	AAHO
7	Anderea Jack	Busia	Kenya	LPO
8	Wetende Eric	Siaya	Kenya	DAPO
9	William Okoth	Siaya	Kenya	LPO
10	Alex Emukule	Teso	Kenya	DLEO
11	Okisegere J.M.	Teso	Kenya	LPO
12	Karisa Frank	Nyagatare	Rwanda	PAHO
13	Karangwa Andrew	Rukara	Rwanda	LEO
14	Mbahamere Titus	Umutara	Rwanda	LEO
15	Kisanga Makigo	Bukoba	Tanzania	V/O
16	Gerazi C. Kajuna	Bukoba	Tanzania	DTO
17	Zuberi O. Mkodo	Handeni	Tanzania	AHO
18	Issa Mwambuga	Handeni	Tanzania	AHO
19	Adam Kuleit Ole Mwarabu	Handeni	Tanzania	Prog. Ass NGO
20	Paschal Kashaija	Karagwe	Tanzania	DLO
21	Longino Theobard	Karagwe	Tanzania	LEO
22	KIMIDA A.S.J.	Pangani	Tanzania	DEO
23	Tupa D.M.	Pangani	Tanzania	DEO
24	Simon J. Mollel	Tanga	Tanzania	DEO
25	Wejuli Alfred	Bugiri	Uganda	VO
26	Ndinywa James	Busia	Uganda	AHO
27	Fredrick Kabi	Inganga	Uganda	V/O
28	Ibanda Musa	Jinja	Uganda	VO
29	Isabirye Robert	Kamuli	Uganda	AHO
30	Sseruwo Badru	Kayunga	Uganda	AHO
31	Ngobi Patrick	Mayuge	Uganda	AHO
32	Okello Denis	Mbale	Uganda	V/O
33	Dr Keeya Ibrahim	Mukono	Uganda	VO
34	Nyiro Julius	Pallisa	Uganda	AO
35	Okello Tonny	Soroti	Uganda	AHO
36	Mugala Omodo Ziporah	Tororo	Uganda	AO

### Key:

AAHO	Assistant Animal Health Officer
AHO	Animal Health Officer
ALPO	Assistant Livestock Production Officer
AO	Agricultural Officer
DAPO	District Animal Production Officer
DEO	Dairy Extension Officer
DLEO	Division Livestock Extension Officer
DLO	Dairy Livestock Officer
DTO	District Tsetse Control Officer
LEO	Livestock Extension Officer
LPO	Livestock Production Officer
PAHO	Provincial Animal Health Officer
VO	Veterinary Officer

**AREAS IDENTIFIED FOR FFS IMPLEMENTATION****1. UGANDA****NO. OF FFS: 12**

NO.	DISTRICT	COUNTY	SUB-COUNTY	RESPONSIBLE PERSON
1	Bugiri	Bukooli North	Kapyanga	Alfred Wejuli
2	Busia	Samia Bugwe	Bulumbi	James Ndiinywa
3	Inganga	Kigulu	Bulamagi	Fredrick Kabi
4	Jinja	Kagoma	Busedde	Musa Ibanda
5	Kamuli	Bugabula	Namwendwa	Robert Isabirye
6	Kayunga	bbaale	Kitimbwa	Badru Sseruwo
7	Soroti	Soroti	Arapai	Tonny Okello
8	Mayuge	Bunya	Immanyiro	Patrick Ngobi
9	Mbale	Bubulo	Sibanda	Denis Okello
10	Mukono	Nakifuma	Kasawo	Ibrahim Keeya
11	Pallisa	Budaka	Badaka	Nyiro Julius
12	Tororo	Tororo	Osukuru	Ziporah O.Mugala

**2. RWANDA:****NO. OF FFS: 3**

NO. OF FFS	DISTRICT	PROVINCE	RESPONSIBLE PERSON
1	Gabiro	Umutara	Mbahamere Titus M.
1	Bugaragara	Umutara	Karisa Frank
1	Rukara	Umutara	Karangwa Andrew

**3. KENYA****NO. OF FFS: 10**

DISTRICT	DIVISION	OFFICER
Siaya	Wagai	W. Okoth
	Karemo	E. Wetende
Bondo	Nyangoma	A. Ngesa
	Usigu	T. Nyabundi
Teso	Amagoro	J. Okisegere
	Angurai	B.A Emukule
Busia	Budalangi	J.M. Anderea
	Funyula	Andrew Ngesa
Bungoma	Malakisi	C. Pepela
	Bumula	G.S. Mukachi

**4. TANZANIA****NO OF FFS: 10**

REGION	DISTRICT	NO OF FFS	RESPONSIBLE PERSON
Tanga	Tanga Urban	1	Simon Mollé
	Pangani	2	Tupa/Kiminda
	Handeni	2	Issa/Adam/Mkodo
Kagera	Karagwe	2	Longino/Kachaija
	Bukoba	2	Kasuna/Makigo