

FOOD FOR THOUGHT (FFT) PROGRAMME IN UGANDA



EXTERNAL EVALUATION REPORT

December 2005

Map of Uganda showing Districts where FFT Project is Implemented

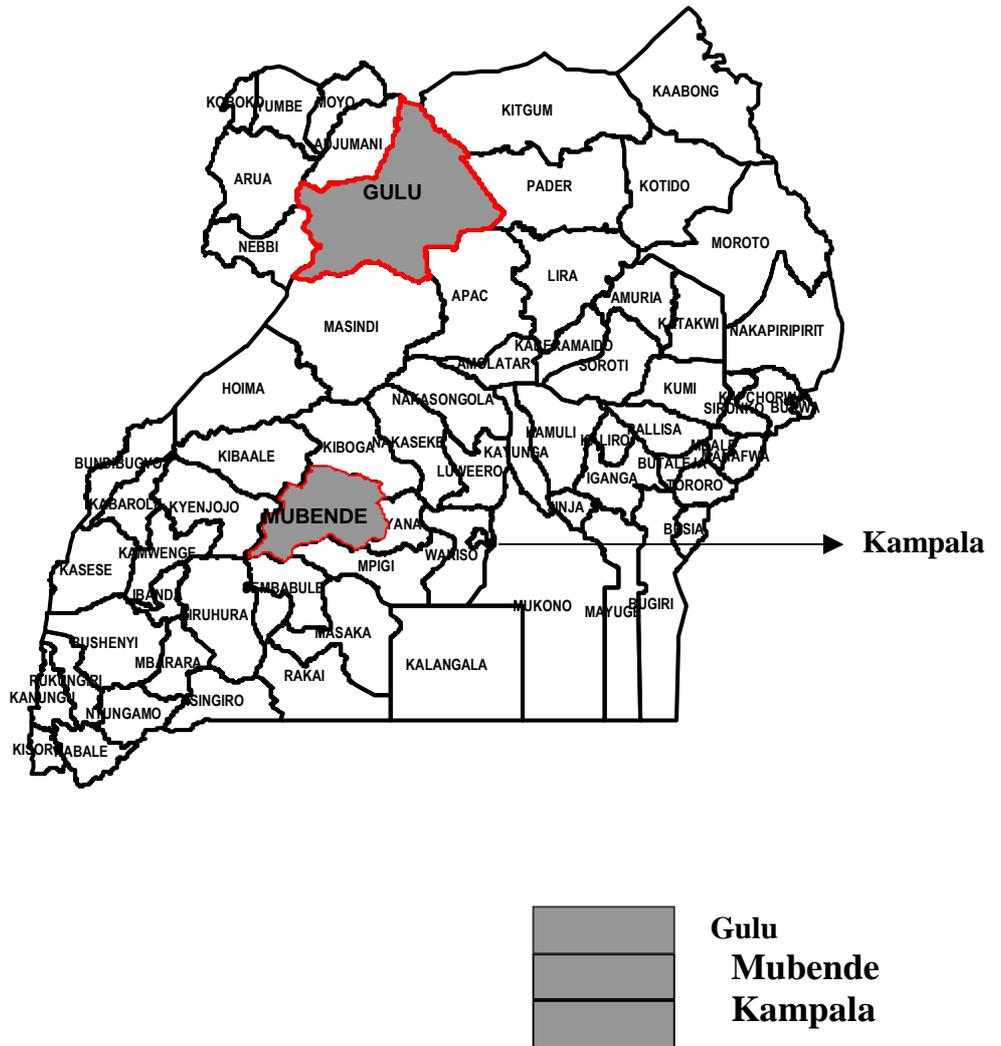


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The Head teacher, Amuru Reckiceke C/U Primary School, Gulu
The Head teacher, Koch Koo Primary School, Gulu
The Head teacher, Ajulu Primary School, Gulu

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EXECUTIVE SUMMARY

Food For Thought (FFT) programme started its link programme in 2001, the year when its implementation started in Uganda in Kirume Public Primary school in Mubende District and Amuru Reckiceke Church of Uganda (C/U) primary school in Gulu District. The two schools were linked to Chagford Primary School and Stoke Canon Primary School in Devon, respectively. Later the programme was expanded to Kyamukoona, Kasaana and Maaya Primary Schools in Mubende District, and Koch Koo, Keyo and Ajulu Primary Schools in Gulu District. These schools were linked to Farway and Charmouth, Stoke Canon Church of England, Yeo Valley, Ladysmith Middle, Topsham and The Erme Primary Schools in Devon, UK, respectively. Hill Preparatory Integrated School, Kampala was linked to West of England School for Children with Little or No Sight in Devon, UK in 2004. The two schools linked together have children with disability (special needs) which make them unique from the other schools.

Currently, the programme is being implemented in the Districts of Gulu, Mubende and Kampala. It targets rural schools in order to provide them with skills and knowledge in sustainable agriculture. It is hoped that this would ensure food security, better nutrition, school meals, and help pupils acquire skills will help them to generate income after school, share experience, knowledge, resources and information.

An evaluation was carried out to determine the impact and contribution of “Food for Thought” School Link Programme participating schools in Uganda. It also assessed the impact of FFT programme on the agricultural skills and knowledge that the pupils acquired, and the programme’s impact on diet of the pupils and income of their families. A participatory approach of evaluation that integrated observation, focus group discussion and visiting school gardens was used. The focus group discussion were conducted with male and female pupils and their parents

The programme is providing a direct link between pupils and teachers in schools in Uganda and Devon, UK. A number of exchange programmes were made in the project schools in Uganda. Head-teachers, Key Farmer Trainers visited the link schools in Devon UK and shared experiences with the teachers and pupils in those schools. Pupils in the link schools share information through “information packs” that are sent to them. The schools within Uganda were also linked to each other. Through exchange visits, the pupils from Gulu and Mubende District share experiences.

FFT has linked programme schools in Uganda to other organisations. This has enabled them to acquire scholastic and other learning materials which enhance the quality of education. Kirume and Kyamukoona Primary School in Mubende and Keyo Primary School in Gulu have acquired infrastructural development support. The programme has developed close links between amongst the programme schools in Uganda and those in Devon, UK. Schools are now linked to the British Council which has opened opportunities for the schools to access training.

The district education authorities are pleased with the work that the programme is doing in the various programme schools. This has raised the profile of those schools within

their respective districts. It has enhanced close cooperation between the school administration and the parents. Therefore, FFT has benefited pupils, teachers, parents and the surrounding communities. It has facilitated the exchange of knowledge, fostered friendship amongst the pupils and teachers of the participating schools. The FFT School Agricultural Programme is supplementing the education curriculum of Uganda which emphasizes teaching of agriculture in primary schools.

All schools in the programme established school gardens. The school gardens are used for training and demonstration purposes for the pupils, teachers and parents, and producing food for the schools. The schools are growing a variety of crops in school gardens. The programme has increased the variety of food available to pupils at school and home. In Koch Koo, Amuru Reckiceke C/U and Ajulu Primary Schools in Gulu District, the programme supplements the school feeding project being implemented by UN World Food Programme (WFP) in the displaced and host schools.

Schools near the programme schools have benefited from the programme since they bring pupils to school gardens for the agricultural practical lessons. With continuous interaction of the head teachers and agricultural teachers, Mugugulu primary school neighbouring Kyamukoona primary school which is a project school in Mubende is establishing its own school garden. Displaced primary schools near the FFT Programme Schools in Gulu use the established school gardens for practicals in agriculture for their pupils. The teachers and pupils are given opportunity to eat the food crops produced on the host school garden. Pupils, parents and teachers are now using/applying the knowledge acquired through the programme in their gardens at home. Kulika Uganda has posted skilled, experienced and committed Key Farmer Trainers (KFT) in Sustainable Agriculture in areas where the FFT programme is being implemented. The FFT programme can actually exploit the benefits that the Kulika KFT network offers to expand to other areas.

FFT has been a good investment that has yielded excellent results with significant impact on the skills and knowledge acquired by the pupils, the nutrition of the pupils and their family members. The programme has increased food diversity in the area and has established a solid foundation upon which to build. It is therefore recommended that: a) the garden teachers be trained in sustainable agriculture so that they strengthen and/or fill the gap that might be created by the absence of the KFT during some parts of the month; b) the project be extended to the community by conducting community outreach so that more parents in the community who do not have children in the respective schools are reached. The programme should also be extended to other places. This will ensure a bigger multiplier effect within the community, ownership and sustainability of the project.

1.0 INTRODUCTION

Food For Thought Programme was set up in 1999 with the overall goal of increasing knowledge, understanding and interest in food issue, food rights and responsibilities in Global context. It started its link programme in 2001, the year when its implementation started in Uganda in Kirume Public Primary school in Mubende District and Amuru Reckiceke Church of Uganda (C/U) primary school in Gulu District as the two pioneer schools. They were linked to Chagford Primary School and Stoke Canon Primary School in Devon, respectively. Currently, the programme is being implemented in nine schools in the Districts of Gulu, Mubende and Kampala of Uganda that are linked to nine schools in Devon, England.

The programme hoped that the participating schools would embed the global dimension of food into their development plans and curricula. This would enable pupils to know and understand where food comes from and how it grows, the food cycle, and health eating. The programme planned to achieve the above objective through growing food within the benefiting schools using sustainable agricultural methods, sharing experience and information amongst the participating schools and the wider community.

In Uganda, the programme focuses on rural schools, their pupils and teachers and the wider community to provide them with skills and knowledge that ensure food security, better nutrition and generate income for the pupils after school. The Food For Thought programme would enhance its activities through School Link Project that linked the nine participating schools in Uganda with nine primary schools in Devon, United Kingdom.

Food For Thought (FFT) programme in Uganda focuses on rural schools in the Districts of Gulu and Mubende in Uganda. Although the programme is serving Hill Preparatory School located in Kampala, it does not have plans to expand its activities in Kampala. This school was targeted because of its special needs children and it is linked with West of England School for Children with little or no sight.

1.1 Food for Thought Operating Environment

It is worth making a special note of the extremely difficult operating environment in which the FFT is being implemented in Northern Uganda. The on-going conflict in the region caused by war has resulted into the following problems affecting programme implementation.

- 1 Personal safety to programme staff and participants and a general feeling of risk and insecurity.
- 2 Military policies that mandate enforced displacement of people into Internally Displaced People's (IDP) camps and restrict agricultural activities in some areas to short crops like groundnuts and beans.
- 3 The need for security escorts and security to position themselves resulting in an effective work day in the field in many areas from 10:00 am to 4:00 pm.

- 4 Time movement restrictions on roads, reducing the effective working hours for the Key Farmer Trainer (KFT).
- 5 Limited monitoring of activities in the region required to ensure effective utilisation of resources

The situation in Central and Western Uganda is different. These areas are more peaceful and conducive to production and other programme activities. Staff and visitors easily and freely visited the programme schools. However, the schools are at considerable distance apart which pose transport problem to the KFTs. This affects the implementation and monitoring of programme activities in the region to ensure effective and efficient utilisation of resources. The achievements of the programme, therefore, should be understood in the context of the operating environment in the different regions

1.2 Objectives of the Food For Thought Link Project

The Food For Thought programme started School Link Project that linked the nine participating primary schools in Uganda with nine primary schools in Devon, United Kingdom, the objective of sharing experience, knowledge, resources and information.

The specific objectives of schools in Uganda-Devon link project are:

- a) To provide a direct, positive link between pupils and teachers in schools both in Uganda and Devon, UK;
- b) To increase knowledge, understanding and interest in food issues in Uganda and Devon, UK;
- c) To broaden horizons, encourage understanding of pupils and teachers;
- d) To exchange information about food issues in Uganda and Devon, UK;
- e) To involve the pupils in growing food using sustainable agriculture techniques; and
- f) To share experience and information with the wider community in Uganda and Devon, UK.

An evaluation was, therefore, carried out to determine the impact and contribution of “Food for Thought” School Link Programme in the nine participating schools in Uganda. The focus of the evaluation was on the programme’s contribution and impact on the participating school and the surrounding community. The team also assessed the impact of FFT programme on the agricultural skills and knowledge that the pupils acquired, and the programme’s impact on diet and income of the pupils and their families. The evaluation was therefore conducted with the following objectives:

- a) To determine the impact and contribution of the programme to the participating schools;
- b) To establish the impact of the programme on the community;
- c) To determine the skills and knowledge acquired by the pupils;
- d) To determine the impact of the programme on the pupils’ or families’ diet and income; and

- e) To examine the dissemination approaches being employed and their impact on sustainability of the programme

2.0 EVALUATION METHODOLOGY

A combination of quantitative and qualitative methods were used to gather data. The evaluation team adopted a participatory approach of evaluation that integrated the use of visual observation, visiting school gardens, and visiting gardens for identified pupils and parents within the vicinity of the school and conducting focus group discussion with the segmented stakeholders.

In each school, focus groups were conducted with male pupils, female pupils, parents including members of school management committees (SMC), Parent and Teachers' Association (PTA) and members of the community surrounding the schools. During the focus group discussion pupils and parents who were practising agricultural techniques acquired at school were identified by show of hands. Then the moderators of the focus group visit the gardens of three people from each focus group. Teachers filled in questionnaires and the team had discussions with the key informants (District Education Officer (DEO) and District Secretaries for Education, Head teachers, garden teachers).

Using qualitative methods, the evaluation team assessed (1) the quantity and quality of outputs that the programme produced, (2) the quality of the processes used in implementing the programme, (3) the beneficiaries of programme interventions, and (4) key lessons learned from the programme. The following focus group discussions (FGDs) and key informant interviews were conducted by different members of the evaluation team.

- 1 Eight focus groups (FGD) for Female pupils (Gulu – 4 and Mubende - 4)
- 2 Eight focus groups (FGD) for male pupils (Gulu – 4 and Mubende - 4)
- 3 Eight focus groups (FGD) for the parents (Gulu – 4 and Mubende - 4)
- 4 Garden teachers (4 Key Informant Interviews per District)
- 5 Head teachers (9 Key Informant Interviews; Gulu – 4, Mubende – 4, Kampala – 1)
- 6 District Education Officers (2 Key Informant Interviews; Gulu -1, Mubende - 1)
- 7 FFT Key farmer trainers (4 Key Informant Interviews, Mubende -2 and Gulu – 1, Kampala - 1)

The team collected information from different sources to enable it triangulate the information to ensure accuracy. The results of the information collected are presented in the next section.

3.0 RESULTS (PROGRAMME ACTIVITY ASSESSMENT)

The school link programme has nine primary schools in Uganda linked to nine primary schools in Devon, UK. This section of the report summarizes the impact of the school link programme at two implementation strategy levels; the school exchange programme and the agricultural programme in school. The report documents the observations of the evaluation team relative to each of the proposed activities implemented by the programme.

3.1 School Exchange Programme for Schools in Uganda and Devon, UK;

The programme has so far linked 9 primary schools in Uganda to 9 primary schools in Devon, UK since its inception in Uganda. The schools in Uganda that have participated in FFT programme include: Kirume Public, Kyamukoona, Kasaana and Maaya Primary Schools in the district of Mubende; Ajulu, Amuru Reckiceke C/U, Koch Koo and Keyo Primary Schools in Gulu District and Hill Preparatory School in Kampala District. While in Devon, UK, the schools involved in the programme include: Chagford, Stoke Canon, Farway, Charmouth, Yeo Valley, Ladysmith Middle, Topsham and Erme Primary Schools, and West of England School for Children with Little or No Sight.

The Linked schools in the programme exchanged information, supported each other in one way or the other, and conducted exchange visits for staff who taught in the different programme schools in the counterpart country. Therefore, the school link and exchange programme:

- 1 Provided a direct, positive link between pupils and teachers in schools in Uganda and Devon, UK;
- 2 Increased knowledge, understanding and interest in food issues in Uganda and Devon, UK;
- 3 Broadened horizons and encouraged understanding of pupils and teachers;
- 4 Facilitated exchange of information about food issues in Uganda and Devon, UK; and
- 5 Promoted Sharing of experience and information with the wider community in Uganda and Devon, UK.

The implementation strategy is discussed in the subsequent section.

3.1.1 Overview of implementation strategies

Food for Thought provided a direct, positive link between pupils and teachers in schools in Uganda and Devon, UK as a gateway to achieve the set objectives of the programme. The linking of the programme schools since the inception of the FFT programme in Uganda was done in four phases (cycles of schools). The phases of the schools linked include:

- 1 In the first cycle included Kirume Public School and Amuru Reckiceke C/U Primary that were selected and linked in 2001. The two schools were linked to Chagford Primary School and Stoke Canon Primary School in Devon, respectively. The pioneer schools completed a three-year orientations and implementation cycle with the programme and they have better understanding of the programme. At the time, the FFT was working only in Gulu and Mubende Districts.
- 2 The second cycle of schools involved selecting 2 schools in Mubende and 2 schools in Gulu that were linked to schools in Devon, UK in 2002. In Mubende District, Kyamukoona Primary School, Uganda was linked to Farway Primary School and Charmouth Primary School in Devon, UK. Kasaana primary school was linked to Stoke Canon Church of England Primary School. In Gulu, Koch Koo and Keyo C/U Primary School were linked to Yeo Valley Primary School and Ladysmith Middle Primary School, respectively. These schools at the time of evaluation had completed a two year implementation cycle. With the exception of Kyamukoona Primary school and Keyo primary schools, the other schools needed more time to understand and fully benefit from the programme.
- 3 The third cycle of schools involved the selection of Ajulu Primary school in Gulu, and Maaya Primary School in Mubende that were linked to Topsham Primary School and The Erme Primary School in Devon, UK, respectively, in 2003. These schools at the time of evaluation had completed a one year implementation cycle. The schools needed more time to comprehend the programme to benefit both the pupils and communities. In addition, Maaya Primary School in Mubende had problems of transfers of the head teachers which affected the programme implementation advancement.
- 4 The fourth cycle of schools included Hill Preparatory Integrated School in Kampala that was selected and linked to West of England School for Children with Little or No Sight in Devon, UK in 2004. The two schools have children with disability which makes them different from the other schools.

3.1.2 Outputs produced

A number of exchange programmes were executed in the various schools in the three districts. The exchange programmes enabled head teachers and Key Farmer Trainers to visit the link schools in Devon UK and share experiences with the teachers and pupils in those schools. In addition, pupils from the link schools share information in form of information parks that are sent to link schools. The Schools within Uganda were linked and they promoted exchange visits amongst themselves. The achievements of FFT in the school link programme are summarized in Table 1.

Table 1: Exchange programmes for the various Schools

School in Uganda	The Link school in Devon	Visitors from Uganda to Devon,	Visitors from Devon, to Uganda	Outcomes for Schools
Mubende District				
Kirume Public P/S	Chagford	Yes	Yes	<ul style="list-style-type: none"> ✓ Exchange of information ✓ Water tanks and construction of VIP Latrine ✓ Provision of scholastic and learning materials to Kirume public
Kyamukoona P/S	Farway P/S & Charmouth P/S	Yes	Yes	<ul style="list-style-type: none"> ✓ Exchange of information ✓ Water tanks and construction of a 2-classroom block ✓ Provision of scholastic and learning materials to Kyamukoona P/S
Maaya P/S	Erme P/S	Yes	Yes	<ul style="list-style-type: none"> ✓ Exchange of information ✓ Provision of scholastic and learning materials to Maaya P/S
Kasaana P/S	Stoke Canon CE	No	Yes	<ul style="list-style-type: none"> ✓ Exchange of information ✓ Provision of scholastic and learning materials to Kasaana P/S
Gulu District				
Amuru Reckiceke C/U P/S	Stoke Canon CE school	Yes	Yes	<ul style="list-style-type: none"> ✓ Exchange of information ✓ Provision of scholastic and learning materials to Amuru Reckiceke P/S
Koch Koo P/S	Yeo Valley P/S	No	No	<ul style="list-style-type: none"> ✓ Exchange of information
Keyo P/S	Ladysmith Middle P/S	Yes	Yes	<ul style="list-style-type: none"> ✓ Exchange of information ✓ Provision of scholastic and learning materials to Keyo P/S ✓ Support for establishment of a vocational school
Ajulu P/S	Topsham P/S	No	No	<ul style="list-style-type: none"> ✓ Exchange of information
Kampala District				
Hill Preparatory P/S	West of England School for Children with little or no sight	Yes	Yes	<ul style="list-style-type: none"> ✓ Exchange of information ✓ Provision of scholastic and learning materials to the school

*The Exchange visit under the FFT programme was affected in Gulu District due to insecurity in the region which could not allow free movement to the various programme schools.

The programme used World Food Day as an opportunity or a strategy to share and exchange information regarding food to a wider community. During the celebrations, pupils and teachers from different schools stay together, share experience and learn from one another. Since inception of FFT in Uganda, a number of World Food Day celebrations were held in various places. On the yearly basis the celebration were convened as follows:

- 1 In October 2002, pupils from Amuru Reckiceke in Gulu District travelled to Kirume Public School in Mubende where they celebrated the World Food Day. The pupils stayed together for 5 days, sharing experience and learning from one another. The head-teacher of Koch Koo who had been head-teacher of Amuru Reckiceke said, 'This was a great opportunity for the pupils and the first time the pupils went out of Gulu on a school visit in the last 20 years'. In Devon, UK, the celebrations were held in Chagford School.
- 2 In October 2003, the World Food Day was celebrated at Kyamukoona Primary School in Mubende District, Uganda where Pupils from the programme schools in Gulu and Mubende district converged and shared experience. It was also held at Chagford school in Devon UK and it was attended by the head-teachers of Kyamukoona Primary and Kirume Public School.
- 3 In October 2004, the World Food Day celebrations were held in Gulu where pupils from Programme schools in Mubende and Gulu converged. A teacher from Stoke Canon School attended the celebrations in Uganda and a teacher from Kyamukoona Primary School at attended the celebrations at Pennywell farm, Buckfastleigh in UK.
- 4 In October 2005, as a strategy to dissemination information to the communities surrounding the programme schools, each school was facilitated to organise its own world food day at their respective schools. This strategy, however, was received with mixed feeling from teachers and pupils as it denied them opportunities to visit other places in order to learn new ideas and cultures.

a) Impact and contribution of the programme to the participating schools

- ✓ The exchange visits of teachers, KFTs and pupils and their participation in the various programme activities has increased the enrolment of pupils in most of the programme schools. This was reported in the primary schools of Kirume Public, Kyamukoona, Kasaana, Amuru Reckiceke, and Keyo. The exchange visits of teachers, pupils amongst the programme schools within Uganda promoted learning as they shared information amongst themselves.
- ✓ As a result of contacts made through the FFT Programme to other organisations, the programme schools acquired learning materials and infrastructure. They include the following:
 - i. Programme Schools acquired scholastic and other learning materials which would enhance the quality of education in the schools.
 - ii. Kirume Public School and Kyamukoona primary School in Mubende and Keyo Primary school in Uganda acquired infrastructural development. Kirume

Public School acquired water tanks and VIP Latrine. In Kyamukoona Primary, water tanks were acquired and a two-classroom block constructed.

- iii. In Keyo primary school in Gulu, the programme supported the establishment of a vocational school to equip the disadvantaged young people with vocational skills. Two blocks, each with 3 classrooms and an office were constructed.
- ✓ Pupils are exchanging information in form of information packs.
- ✓ The programme has developed a close link amongst the programme schools within the Uganda and between the link schools in Devon, UK.
- ✓ The programme has linked the schools to the British Council in Uganda which offered training to all the programme head-teachers in leadership and management skills. The training would enhance good leadership skills of the head teachers in various schools to improve the quality of education. Linking schools to the British Council has opened opportunities to the programme schools to access other training opportunities.
- ✓ The profile of the programme schools in Gulu and Mubende within their respective districts has been raised significantly. The district education authorities are pleased with work done by the various programme schools. They would wish that the programme is expanded in their respective districts to cover other schools.
- ✓ Kulika Uganda has a network of well trained Key Farmer Trainers (KFT) in sustainable agriculture in the country. Kulika Uganda provided the programme with KFT to train teachers and pupils in the programme schools in sustainable agriculture. They promote sustainable agricultural methods of production, pest management, and soil and water conservation. Their work on the school gardens has inspired teachers, pupils and parents. The connection between the programme schools and Kulika is on-going and will see the KFT network growing in these areas. Currently, Kulika Uganda is training the garden teacher at Kirume as a Key Farmer Trainer.

b) Impact of the programme on the community

- 1 The programme has enhanced close cooperation between the school administration and the parents;

3.1.3 Who has benefited?

The link programme generally benefited pupils, teachers, parents and the surrounding communities. The programme facilitated the exchange of knowledge, fostered friendship amongst the pupils and teachers of the corresponding schools. It has provided opportunities to head teachers, key farmer trainers and teachers to visit and learn different cultures, eat different foods and live under conditions which are different from their home countries. Pupils are now exchanging information in form of information packs; the British Council in Uganda is empowering the head teachers of the participating schools to acquire skills in leadership through training.

The programme has enabled members to identify gaps that exist which have direct negative impact on quality of education and the performance of the pupils in the programme schools. Contacts have been made through the FFT Programme to other organisations that have provided the schools with scholastic materials and other support. As result Kyamukoona Primary School and Kirume Public School have acquired water tanks to harvest rain water for the schools. Kirume was able to sink a pit latrine to cater for the increasing population. The Keyo Primary schools has got support to establish a vocational school to cater for young people in the community who can not continue with education.

The FFT Council in Mubende district was supported with income generation activity to ensure sustainability. These included a loan to purchase a 4 ton Tipper lorry to generate income for Food For Thought in Mubende. It would also assist rural farmers to transport their produce at fair rates to the market to get better prices. In addition, FFT Council in Mubende received 10 computers and 2 cyclostyling machines from The UK Charity 'Tools with a Mission' for income generation, communication and setting examinations for the programme schools.

3.1.4 Observations relative to implementation processes and the quality of outputs produced

Most schools have benefited from the exchange visits of teachers with the exception of Ajulu Primary School. This school entered the programme late and was affected by the insecurity that made access to the school difficult. Teachers that visited the different schools under the programme had the opportunity to teach the pupils in the various schools in the programme, for a period of 10 days or more. The minimum period set by the British council to fund these exchange visits is 5 days, but teachers usually went for 10 days in the FFT schools during which they shared experience with the host pupils and teachers. The exchange visit of the teachers and pupils to the programme schools and their participation in teaching and other activities in schools have enhanced the acceptance of the programme in the school by the pupils, teachers and parents.

3.1.5 Challenges to the link programme implementation

Despite the impact and contribution that the exchange programme had on the school and surrounding communities, there were a number of challenges that hampered effective and efficient implementation. The challenges include:

1. The transfer of the head-teachers from the programme school to other non-programme schools especially after that head-teacher had visited the link school. This was the case in Maaya Primary School in Mubende, where so far two head-teachers have been transferred since the programme started in the school. In Amuru Reckiceke church of Uganda Primary, Gulu District the head-teacher who went to Stoke Canon Church of England was transferred to Koch Koo Primary School.

2. Insecurity in Northern Uganda that deters free movement of people to the various areas where the programme is being implemented.

3.2 Agriculture in Schools

Agriculture is the backbone of the economy of Uganda where over 80% of the population is engaged in it. Government of Uganda appreciates its contribution and therefore, she has incorporated Agriculture in her primary education curriculum. The FFT School Agricultural Programme supplements the education curriculum which emphasizes teaching of agriculture in primary schools. It was to provide hands-on experience to the pupils to foster learning and acquiring knowledge of where food comes from and how it is grown.



Photo 1: Pupils at Kyamukoona P/S, Mubende weeding pineapple field

It also provides a diversity of food crops that are grown in schools hence exposing pupils to agronomic practices and management of various crops. The project also teaches pupils how market the produce in order to improve their diet and income. The implementation strategy is discussed in the subsequent section.

3.2.1 Overview of implementation strategies

Food for Thought aimed at providing knowledge to the pupils about where food comes from, how it is grown, how it is prepared and eaten, and using sustainable agricultural methods. It was planned that each school would establish a school garden where the garden teacher and the Key Farmer Trainer (KFT) would demonstrate new methods of sustainable agriculture to the pupils, teachers and parents during training sessions. On the school garden new crops and varieties and other new technologies in the area are tested for performance and acceptability. They would also act as laboratories for agricultural practical lessons, where the participants will have hands-on experience.

It was planned that each school would receive about 400,000/= Uganda shilling per term to cater for input requirements and the allowance for the Key Farmer Trainers (KFT). The planning for the agricultural activities and funds would be conducted by the FFT

committee in each school which comprise of the Agricultural (garden) teacher, representative of the pupils, the head teacher, a representative of the parent and teachers, and/or KFT.

The parents were to get information from the head-teacher during school management meetings and from the pupils when they go home. Both parents and pupils would participate in the agricultural activities in school, field tours and visits, and collectively use the produce and proceeds from the school garden. The outputs are presented in the subsequent section.



Photo 2: Pupils at Amuru Reckiceke C/U P/S, Gulu preparing land for planting

3.2.2 Outputs produced

All schools in the programme established school gardens irrespective of the size of the garden, diversity of crops grown on it and agronomic techniques practised. The school gardens were used for training and demonstration purposes for the pupils, teachers and parents, and producing food for the schools. The KFT trained the pupils, teachers and parents in sustainable methods of agricultural production, pests and disease control, soil and water conservation. This has enabled trainees to acquire skills and knowledge that enable them to optimally utilise limited land available. This has been possible because the KFTs have the practical skills, and experience of ensuring that the sustainable agriculture methods deliver increased output. In addition, they have confidence in the training they offer as they are practicing farmers, and the skills and sustainable agricultural methods have worked for them.



Photo 3: Pupils at Kyamukona P/S, Mubende planting banana sucker in a school garden

a) Skills and knowledge promoted and adopted by the pupils

The skills and sustainable agricultural techniques that the programme promoted at school include: mulching, nursery bed preparations, crop rotation, compost manure making, soil and water conservation, horticulture and vegetable production, use of bio-rations as pesticides, and pruning. However, a few of the agricultural practices were adopted/practised by the pupils and parents. Pupils practice the agricultural techniques at home either on their own gardens or jointly with the parents.



Photo 4: Compost manure heap at Kirume P/S, Mubende

For pupils from Kirume Public School, 35 pupils out of 60 pupils who adopted agricultural practices, have their own land. A number of pupils that were visited at home in Mubende District had their own gardens where they were practising some of the agricultural techniques. A summary of agricultural techniques that the programme promoted at school and adopted/practised by the pupils and/or parents are presented in Table 2.

Table 2: Agricultural Skills & Practices that were promoted at school and adopted by the pupils

School	Skill/Practice Trained at school	No. of pupils that participated	Skill/Practice Adopted at home	No of Pupils practising at home
<i>In Gulu District</i>				
Keyo Primary school	<ul style="list-style-type: none"> ✓ Mulching ✓ Nursery bed preparations ✓ Crop rotation ✓ Compost manure making ✓ Soil and water conservation ✓ Horticulture & Vegetable production ✓ Use of Bio-rations as pesticides ✓ Pruning 	600	<ul style="list-style-type: none"> ✓ Nursery bed preparations ✓ Crop rotation ✓ Vegetable production 	75
Ajulu Primary School	<ul style="list-style-type: none"> ✓ Mulching ✓ Nursery bed preparations ✓ Crop rotation ✓ Use of Bio-rations as pesticides ✓ Compost manure making ✓ Soil and water conservation ✓ Horticulture & vegetable production ✓ Pruning 	200	<ul style="list-style-type: none"> ✓ Nursery bed preparations ✓ Crop rotation ✓ Vegetable production (cabbages) 	11
Koch Koo Primary School	<ul style="list-style-type: none"> ✓ Mulching ✓ Nursery bed preparations ✓ Crop rotation ✓ Soil and water conservation ✓ Use of Bio-rations as pesticides ✓ Compost manure making ✓ Horticulture & Vegetable production 	402	<ul style="list-style-type: none"> ✓ Nursery bed preparations ✓ Crop rotation ✓ Vegetable production (cabbages) 	20
Amuru	<ul style="list-style-type: none"> ✓ Mulching 	450	<ul style="list-style-type: none"> ✓ Nursery bed preparations 	50

Reckiceke	<ul style="list-style-type: none"> ✓ Nursery bed preparations ✓ Crop rotation ✓ Use of Bio-rations as pesticides ✓ Soil and water conservation ✓ Compost manure making ✓ Horticulture & vegetable production ✓ Perennial crops (Banana) 		<ul style="list-style-type: none"> ✓ Crop rotation ✓ Vegetable production ✓ Perennial crops (Banana) 	
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In Mubende District

Kyamukoona Primary School	<ul style="list-style-type: none"> ✓ Mulching ✓ Use of Bio-rations as pesticides ✓ Nursery bed preparations ✓ Crop rotation ✓ Compost manure making ✓ Soil and water conservation ✓ Horticulture & vegetable production ✓ Banana production ✓ Pruning 	400	<ul style="list-style-type: none"> ✓ Mulching ✓ Nursery bed preparations ✓ Crop rotation ✓ Compost manure making ✓ Soil and water conservation ✓ Horticulture & Vegetables production ✓ Banana production 	32
Kirume Primary School	<ul style="list-style-type: none"> ✓ Mulching ✓ Use of Bio-rations as pesticides ✓ Nursery bed preparations ✓ Crop rotation ✓ Compost Manure making ✓ Soil and water conservation ✓ Horticulture & vegetable production ✓ Banana production 	211	<ul style="list-style-type: none"> ✓ Mulching ✓ Nursery bed preparations ✓ Crop rotation ✓ Compost Manure making ✓ Soil and water conservation ✓ Horticulture & vegetable production ✓ Banana production 	60
Kasaana Primary School	<ul style="list-style-type: none"> ✓ Mulching ✓ Use of Bio-rations as pesticides ✓ Nursery bed preparations ✓ Crop rotation ✓ Compost manure making 	364	<ul style="list-style-type: none"> ✓ Mulching ✓ Nursery bed preparations ✓ Crop rotation ✓ Compost manure making ✓ Soil and water conservation 	42

	<ul style="list-style-type: none"> ✓ Soil and water conservation ✓ Horticulture & vegetable production ✓ Banana production 		<ul style="list-style-type: none"> ✓ Horticulture & vegetable production ✓ Banana production 	
Maaya Primary School	<ul style="list-style-type: none"> ✓ Mulching ✓ Use of Bio-rations as pesticides ✓ Nursery bed preparations ✓ Crop rotation ✓ Compost manure making ✓ Soil and water conservation ✓ Horticulture & vegetable production ✓ Banana production 	250	<ul style="list-style-type: none"> ✓ Nursery bed preparations ✓ Crop rotation ✓ Compost manure making ✓ Soil and water conservation ✓ Horticulture & vegetable production ✓ Banana production 	22

In Kampala District

Hill Preparatory School	<ul style="list-style-type: none"> ✓ Mulching ✓ Use of Bio-rations as pesticides ✓ Nursery bed preparations ✓ Crop rotation ✓ Compost manure making ✓ Soil and water conservation ✓ Horticulture & vegetable production 	80	Adoption in this school is limited due to shortage of land for cultivation as the pupils come from urban areas where land is a limiting factor.	
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The programme is promoting similar agricultural practices in all programme schools in Districts of Gulu, Mubende and Kampala, irrespective of the variation in agro-climatic and soil conditions, security situation and availability of land for agricultural activities. The variation in agro-climatic and soil conditions and variation in security situation in Mubende and Gulu districts may partly explain the variation in the diversity of the agricultural practices that were adopted as in Table 2. In Gulu District, people are living in Internally Displaced Peoples' (IDP) camps limiting their access to enough land for cultivation. Results show that pupils and parents in Gulu District have adopted fewer practices than their counter parts in Mubende District. However, in Kampala, availability of land for cultivation is a limiting factor since it is located in urban centre.

In Mubende, the programme is growing a variety of crops in school gardens established in the various schools in the district. The crops include: bananas, pineapples, mangoes, oranges, and passion fruits, cabbages, carrots, 'sukuma wiki', 'dodo' and 'bugga' (*Amaranthus spp*), tomatoes, spinach, onions, and green pepper, beans, peas, cowpeas, and soybeans, maize and rice and groundnuts.



Photo 5: School Garden at Kirume P/S, Mubende

While in Gulu a limited variety of crop were promoted include: pineapples, sesame (simsim), yams, sweet potatoes, groundnuts, egg plants, cabbages, onions, carrots, tomatoes, rice, water melons, beans and (bananas in Amuru Reckiceke C/U Primary). Crops being promoted and adopted in the two districts are given in Table 3.

More pupils, parents and teachers are growing the crops and practising skills acquired at schools in their home. The pupils are either practising skills acquired at schools jointly with the parents or on their independent gardens. In Mubende, the evaluation team visited a number of pupil's gardens where the main practices adopted on these gardens include: pineapple growing, soil and water conservation, vegetable growing (mainly cabbages and onions), compost manure making and optimum utilisation of small pieces of land. Parents have started growing pineapples and carrots in Mubende District and Bananas in Amuru Reckiceke, Gulu District. Two of the parents of Kirume Primary School in Mubende are growing pine apples on a larger scale.

Table 3: Crops promoted at school and adopted

School	Crops promoted at school	Crops Adopted at home
<i>Gulu District</i>		
Keyo Primary school	<ul style="list-style-type: none"> ✓ Fruits (pine apples) ✓ Potatoes (“Irish Potatoes”) ✓ Root crops (sweet potatoes, yams) ✓ Oil crops (groundnuts, simsim) ✓ Vegetables (egg plants, green peppers, cabbages, tomatoes, onions) ✓ Cereals (maize, rice) 	✓ Cabbages
Ajulu Primary School	<ul style="list-style-type: none"> ✓ Vegetables (egg plants, green peppers, cabbages, tomatoes, onions, green gram) ✓ Root crops (sweet Potatoes) ✓ Oil crops (groundnuts, simsim) ✓ Cereals (maize) 	✓ Cabbages
Koch Koo Primary School	<ul style="list-style-type: none"> ✓ Vegetables (egg plants, green peppers, cabbages, tomatoes, onions, green gram) ✓ Root crops (sweet Potatoes) ✓ Oil crops (groundnuts, simsim) ✓ Cereals (maize) 	✓ Cabbages
Amuru Reckiceke C/U Primary School	<ul style="list-style-type: none"> ✓ Oil crops (groundnuts, simsim) ✓ Cereals (maize, rice, millet) ✓ Vegetables (egg plants, green peppers, cabbages, tomatoes, onions, green gram, okra, carrots) ✓ Pulses (pigeon peas, cowpeas, beans) ✓ Root crops (cassava, sweet potatoes) ✓ Fruits (pine apples, paw paws, bananas & Plantains) 	<ul style="list-style-type: none"> ✓ Vegetables (cabbages, onions) ✓ Bananas & plantains
<i>Mubende District</i>		
Kyamukoona Primary School	<ul style="list-style-type: none"> ✓ Fruits (pine apples, paw paws, bananas & Plantains) ✓ Vegetables (egg plants, green peppers, cabbages, tomatoes, onions, spinach, carrots) ✓ Oil crops (simsim, groundnuts) ✓ Pulses (beans, soy beans) ✓ Cereals (maize) 	<ul style="list-style-type: none"> ✓ Fruits (Pine apples, bananas & plantains) ✓ Vegetables (carrots, cabbages, spinach, tomatoes, green peppers)
Kirume Primary School	<ul style="list-style-type: none"> ✓ Fruits (pine apples, paw paws, bananas & plantains, water melons, pumpkins) ✓ Vegetables (egg plants, green peppers, cabbages, tomatoes, onions, spinach, carrots, cauliflowers, Amaranthus (dodo), cucumbers, sukuma wiki) ✓ Cereals (maize) 	<ul style="list-style-type: none"> ✓ Fruits (pine apples, bananas & plantains) ✓ Vegetables (cabbages, tomatoes)

School	Crops promoted at school	Crops Adopted at home
	✓ Pulses (beans, cowpeas, peas)	
Kasaana Primary School	<ul style="list-style-type: none"> ✓ Fruits (pine apples, paw paws, bananas & Plantains) ✓ Vegetables (egg plants, green peppers, cabbages, tomatoes, onions, spinach, carrots) ✓ Pulses (soybeans, beans) ✓ Cereals (rice, maize) ✓ Oil crops (simsim, groundnut) 	<ul style="list-style-type: none"> ✓ Fruits (Pine apples, bananas & plantains) ✓ Vegetables (cabbages)
Maaya Primary School	<ul style="list-style-type: none"> ✓ Fruits (pine apples, paw paws, bananas & Plantains, passion fruits) ✓ Vegetables (carrots, cabbages, spinach, tomatoes, green peppers) 	<ul style="list-style-type: none"> ✓ Fruits (Pine apples, bananas & plantains) ✓ Vegetables (cabbages)
Kampala District		
Hill Preparatory School	<ul style="list-style-type: none"> ✓ Fruits (pine apples, paw paws, water melons, pumpkins) ✓ Vegetables (egg plants, green peppers, cabbages, tomatoes, onions, spinach, carrots, cauliflowers, Amaranthus (dodo), cucumbers, sukuma wiki) 	<ul style="list-style-type: none"> ✓ Vegetables (egg plants, green peppers, cabbages, tomatoes, onions, spinach, carrots, cauliflowers)



Photo 6: A farmer in Mubende making compost manure

b) Impact of the agricultural programme on the pupils' or families' diet and income

The programme has increased the variety of food available to pupils at school and at home. This is due to the introduction of new crops to the respective schools that pupils and parents have been taught to grow, prepare and eat. Some of the new crops introduced to schools in the programme include: Cucumber, carrots, pineapples, spinach, and cauliflower.

The schools in FFT programme can provide food produced from the school gardens to the pupils at school at least twice a year. The schools also give them food stuff and

seedlings to take home. This was identified in Mubende district mainly in Kirume Public school, Kyamukoona Primary school and Kasaana Primary school. Children within the community and pupils appreciated the introduction of carrots and they love eating them fresh from the garden. In Gulu District, the programme supplements the school feeding programme being implemented by World Food Programme (WFP) in the displaced and host schools. The programme provides vegetables (mainly cabbages), tomatoes, onions, and fruits (paw paws), in Amuru Reckiceke C/U Primary School, that WFP can not provide to the pupils. This helps to balance the diet.

The impact of the programme on the income could not easily be established. The agricultural programme in Kyamukoona Primary School, Kirume Public School and Kasaana Primary Schools in Mubende District had impact on the surrounding community whose family incomes increased. During the focus group discussion with parents, it was established that parents that adopted agricultural practices had on average Uganda shillings five hundred fifty thousand two hundred only (550, 200/=) or £ 172 increase above what they used get before (Table 4).

Table 4: Average increase in the household income from the sale of the produce

Crop	Units	Increase in Quantity	Price (Cost /unit) (UGX)	Change in Total Revenue (UGX)
<i>Parents with Children at Kyamukoona Primary School</i>				
Maize	Kg	3,060.0	100.00	306,000.00
Beans	Kg	980.0	300.00	294,000.00
Pine apples	Head	56.0	500.00	28,000.00
Ground nuts	Kg	240.0	1,000.00	240,000.00
Total				868,000.00
<i>Parents with Children at Kirume Primary School</i>				
Beans	Kg	150.0	300.00	45,000.00
Pine apples	Head	155.0	200.00	31,000.00
Bananas	Bunch	85.0	4,000.00	340,000.00
				416,000.00
<i>Parents with Children at Kasaana Primary School</i>				
Beans	Kg	350.0	300.00	105,000.00
Pine apples	Head	48.0	200.00	9,600.00
Bananas	Bunch	50.0	4,000.00	200,000.00
Maize	Kg	260.0	200.00	52,000.00
Total				366,600.00
Average				550,200.00

Exchange rate of B£1: UGX 3,200/=

The parents were able to improve the production on their farms through use of sustainable agricultural practices and diversifying the crops that are planted. Parents started growing crops like pineapples which they used not grow and increasing the productivity of their land through good soil and water management practices. The families of pupils in the programme schools in Gulu lack or have limited access to land for cultivation due to displacement of people in internally displaced peoples' (IDP) camps. This deterred the improvement in the income for the families of the pupils into the programme school in the district.

c) Dissemination approaches employed to pass information

1. The parents get information regarding the programme through pupils. Pupils acquire the information and knowledge during trainings that Key Farmer Trainers (KFTs) and Agriculture teachers conduct on school gardens. In addition, teachers pass on information to pupils during classroom lessons.
2. Parents get information regarding the programme through:
 - ✓ School management and parents meetings. This does not give opportunity to other members of the community who do not have children in the school to get the information.
 - ✓ From pupils when they go home. However the pupils may not pass information to the parents accurately or the parents may ignore this information from their children. The best approach here is for the pupils to be encouraged to practice the agricultural techniques on their own gardens so that the parents learn through demonstration. However, the family may not have enough land to allow the pupils to practice what they learn from school.
3. Both parents and pupils get information through field tours and world food day celebration and tours. This is effective as people are allowed to interact and share information and experience. They may have the opportunity to eat crop produce in order to appreciate and have some seed for trial on their gardens.

d) Impact and contribution of the programme to the participating schools and on the surrounding communities

The KFTs have demonstrated to the pupils and teachers on the school gardens practically how theory is translated into reality. The continued efforts of the KFTs to establish school gardens in collaboration with the garden teachers have demystified theory that pupils are taught in class. A number of teachers reported practising sustainable agriculture on their farms. The garden teacher of Kirume was very sceptical of the methods of sustainable agriculture before seeing its benefits. Currently, he is the crusader of sustainable agriculture in Kirume Primary School, in his home and village. He is currently being trained by Kulika Uganda as a KFT.

The establishment of the school gardens has enabled the pupils to have hands-on experience, hence facilitating learning and adoption of the practices, technologies and new crops and varieties introduced in the area. In terms of nutrition, the schools in the different districts target people differently.

In Mubende district:

- 1 The programme schools give carrots and fruits (paw paws, pine apples, plantains) which provide vitamins especially vitamin A from carrots and other food nutrients to pupils and the family members. This is good contribution of the programme since it supplements the government of Uganda's effort to combat vitamin A deficiency amongst children.



Photo 7: Pupils at Kirume P/S, Mubende Harvesting Carrots

- 2 In addition, school authorities prepare meals of bananas, maize and potatoes from the school gardens for pupils, teachers and parents during Parents and Teachers Association (PTA) and/or management meetings. This provides the opportunity to the head teachers and pupils to share their proceeds from the schools garden with the parents of the school. This strategy seems to have worked well in Kyamukooka, Kirume and Kasaana Primary school and parents feel they are part of the programme.

In Gulu district:

- 1 In Koch Koo, Amuru Reckiceke C/U and Ajulu Primary Schools, the programme supplements the school feeding programme implemented by UN World Food Programme (WFP) in displaced and host schools in the district. The programme provides vegetables mainly cabbages, tomatoes, onions, and fruits (paw paws) to pupils hence improving their nutrition as they provide vitamins and other food nutrients to the pupils. The Amuru Reckiceke C/U Primary School used the money from the sales of the produce in 2003 to purchase other requirements such as salt and paying cooks.

3.2.3. Who has benefited?

The FFT Agricultural Programme benefited pupils, teachers, parents and the surrounding communities. The programme facilitated the introduction of new crops and sustainable agricultural practices, increase in crop diversity and knowledge, improvement in the nutrition of the pupils at school and at home. It has provided opportunities to head-teachers, parents, teachers, the members of the communities to acquire agricultural

knowledge, improve the nutrition and sources of income, and exchange knowledge through exchange visits and tours.

In Mubende, Primary Schools that are near the FFT Programme Schools have benefited from the programme since they bring pupils to school gardens established for the agricultural practical lessons. With continuous interaction of the head teachers and agricultural teachers, Mugugulu primary school neighbouring Kyamukoona primary school in Mubende is establishing its own school garden.

In Gulu, Primary Schools that are displaced at or near the FFT Programme Schools have benefited from the programme since they use school gardens established for the agricultural practical lessons for their pupils. The teachers and pupils are given opportunity to eat the food crops produced on the host school garden. In Ongako Sub-county, Gulu, where Koch Koo Primary School is located, the KFT is working directly with all the primary schools in the area to assist them to establish their own school gardens and provide training to pupils and teachers in sustainable agriculture.

3.2.4. Observations relative to implementation processes and the quality of outputs produced

Pupils, parents and teachers are now practising the knowledge acquired through the programme. There were variations in number of practices adopted amongst the district and schools. The variation amongst districts was due to the variation in security situation that deterred household access to land for cultivation and effective implementation and monitoring of the programme. In addition, the agro-climate between the two districts (Gulu and Mubende) greatly varies. However, Kampala and Mubende receive bimodal type of rainfall with peaks in the months of April and August and a very short dry season from the month of December to January which allow the production of both annual crops [Vegetables, beans, maize, Solanum Potatoes (“Irish potatoes”)] and perennial crops (bananas, pine apples). While Gulu District receives bimodal type of rainfall with peaks in the months of April and August and a long dry season from the month of December to March which allow the production of annual crops and make the production of perennial crops such as bananas, pine apples difficult.

There were variations observed in performance and impact of the agricultural programme amongst the programme schools within the district. The variations observed were due to: a) the commitment of both the head teacher and garden teacher; b) the length of time the school has stayed in the programme; c) transparency and accountability exercised by the head teachers; d) the involvement of the pupils, teachers and parents in the programme; e) micro agro-climate and soil factor (physical, chemical, fertility) variation; f) Availability of arable land for cultivation in Kampala where Hill Preparatory School is located. This is a special case, as one of the criteria for selecting schools for the FFT Programme is possession of plenty of land for the school garden. Hill preparatory is an exception, included in the programme because of to its special needs children; and g) effectiveness of the KFT.

The pioneer schools, Kirume public school in Mubende District and Amuru Reckiceke C/U Primary School in Gulu District, and Kyamukoona Primary School in Mubende District which joined the programme later, have had significant impact on the diet, knowledge in agriculture and income of the pupils, teachers, parents and other members of the surrounding communities.

Kyamukoona Primary School in Mubende District joined the programme later but its performance matches with the pioneer schools. This success may be attributed to:

- 1 The commitment of both the head teacher and garden teacher to seeing that the programme succeeds in the school.
- 2 The commitment of the KFT who spends more time in the school guiding the garden teacher and participating in agricultural activities at school. This provides the school with opportunity of having the KFT more time than other schools that share the services of the KFT. Although KFT is paid to visit the school one day a month, there is need to have increased number of days in a month to provide more guidance and training pupils depending on the time of the year.
- 3 The school has got a fertile and fairly large land of about 9 acres which has allowed the programme to establish a reasonable size school garden and having room for future expansion.

The FFT committees exist in most of the schools with the exception of Maaya primary School in Mubende and Ajulu Primary School in Gulu but they are not fully functional. The head teachers take sole responsibility of planning for the money without involving the committee put in place. The garden teachers and other committee members do not know what happens and how much money is available for activities. This creates conflict between the head-teachers and committee members which may result into “I do not care attitude”. There is need for increased transparency and accountability to all stake holders to ensure efficiency and effectiveness in implementation of the FFT programme.

It was noted that the committee was operational and fully involved in planning for agricultural activities and funds in Kyamukoona Primary School. The FFT committees in Kasaana, Amuru reckiceke and Keyo Primary Schools were partially involved in planning for agricultural activities and funds. There is need to improve the level of involvement of the FFT committees in planning for activities in schools. This would ensure transparency, accountability and participation of parents, teachers, and pupils.

3.2.5. Challenges to agricultural programme implementation in schools

There were a number of challenges that affected the implementation of sustainable agriculture programme in school as an activity of FFT programme. These include:

1. Insecurity in Northern Uganda that caused displacement of people in “protected internally displaced camps” where people have limited access to land for cultivation. Livestock in the IDP camps are set free without any control causing damage to the crops on the school gardens in Ajulu and Koch Koo primary schools

in Gulu. Keyo Primary school has fenced its school gardens while Koch Koo and Amuru Primary Schools plan to fence their school gardens.

2. However, in Kasaana, Kirume and Maaya primary schools animals destroy the crops in the school garden during holidays in. This would require a teacher to stay at school and to fence the gardens.
3. Hill Preparatory school in Kampala has very limited arable land for cultivation and the pupils in this school come from urban areas where land for cultivation is limited or not available at all. This deterred the adoption of agricultural practices by the pupils at their respective homes.
4. Because all school gardens depend on rainfall, the erratic weather conditions which affected the performance of the crops in the field especially in the second season of 2005 in Northern Uganda.
5. Delayed release of funds for the agricultural activities to the respective schools.
6. Most schools experienced problems of getting a committed garden teacher and making the rest of the teachers to become interested in the FFT project. This was reported at Kirume primary school in Mubende in the early stages of the project, Maaya primary school in Mubende, Koch Koo and Ajulu primary school in Gulu. This was attributed to transfer of head-teachers from these schools.
7. The seedlings and crops at Maaya Primary School were stolen. This required the school administration to give some of the seed to the community to plant in their own garden in order to stop these thefts.

4.0 PROGRAMME MANAGEMENT

Programme management covers a range of activities, including vision and leadership, decision-making, communications, programme support, and financial management. This section covers the overview of the management of FFT and observations that the evaluation team made relative to programme management.

4.1 Overview of the Management of the FFT

Overall responsibility for vision, leadership and implementation for FFT rests with the Co-ordinator based in UK; in Uganda this rests with the Chief Executive Officer of Kulika. This position is also responsible for overseeing all other programmes that Kulika Uganda is implementing in Uganda. The FFT in Uganda is being implemented through Kulika Uganda with offices in Kampala and the programme schools in the districts of Gulu, Mubende and Kampala in Uganda. The function of Kulika Uganda is to monitor the implementation of the programme, provide technical support, administer finances, build capacity of the implementing schools, ensure that KFTs are available for this work and provide support to them (KFTs).

At the time of inception of the programme, it was realised that need to form the District FFT committees. They comprise of head teachers of the participating schools to Co-ordinate and steer the implementation of the programme in their respective districts in collaboration with Kulika.

At the school level, committees comprising of the head-teacher, agriculture teacher, key farmers trainer (KFT), pupils' representative and teachers' representative were put in place to voluntarily steer implementation of the FFT activities in schools.

4.2 Observations Relative to Programme Management

The key observation made in relation to vision and leadership, decision-making, communications, programme support, and financial management are discussed in this sub-section.

Vision and Leadership: The programme management has a clear vision for where FFT programme in Uganda should go. It has put mechanisms in place to empower the implementing schools through capacity development and support to manage the programme in a sustainable manner. District FFT committee and school FFT committee were put in place. The District FFT Committee for Gulu is very active and operational, the committee members meet regularly and there is closer cooperation with the district education officials and district local council than their counterparts in Mubende District.

Decision-Making: The decision-making within the programme is perceived by the garden teachers to be top-down and unilateral. This is partly due to semi-functional district committees especially in Mubende that do not meet frequently as planned in order to reach critical decisions as a team. The school FFT committees would provide opportunities for members to participate in decision making process to avoid this situation. The team observed that the capacity of these committees needs to be developed to understand their roles and be able to manage their affairs effectively.

Strategic and Operational Planning: Operational planning appears to be fairly effective as it is the basis upon which funds are released to a given school. The implementing organisation (Kulika) should strengthen the planning process at the district level and it should involve all head teachers, agriculture teachers, and management and PTA chairpersons. The head-teachers in collaboration with the District FFT Committee chairperson should strengthen the planning process at the school level. The planning should address operational issues such as working on the gardens and the inputs requirements. This planning should be done as close to the pupils and gardens as possible, and it should involve the head teacher, agriculture teacher, pupils' and teachers' representatives.

Communications: Communications between Kulika and District FFT Committee chairperson or the head teachers of the programme schools are generally okay. However, communications between district committee chairpersons and the respective schools within the programme are sometimes not consistent or transparent enough. Communications between programme schools and chairman district FFT committee is better in Gulu than it is in Mubende. The KFT who is responsible for Kirume, Kasaana and Maaya primary schools is playing a role that could have been done by the chairman of Mubende District FFT committee.

Programme Support: A loan was taken out to purchase a 4-ton tipper lorry for transportation of schools' materials and rural farmers' produce to the market. This was to enable FFT programme to generate income. In addition, The UK Charity 'Tools With A Mission' has provided Mubende District FFT Committee with 10 Computers for communication and generating funds and 2 cyclostyling machine for preparing examinations.

A small grant was made to District FFT Committees. These committees worked out their budgets and spent these grants accordingly. In Gulu, the group decided to purchase a motor cycle to facilitate the activities of the KFT in Gulu. However, in Mubende they chose to spend the small grant on establishing an office, and not to purchase a motorcycle for the KFT in charge of Kirume, Kasaana and Maaya Primary Schools in Mubende District, even though she had problems of transport to the various schools.

Financial Management: Every year the same sum of money is made available from the UK. This is distributed on a term basis to schools, when satisfactory reports are received by Kulika, Uganda. Financial management at the school level has not been good which might have influenced management to halt or delay the release of funds to some schools. These concerns might be less with execution of generally acceptable/good accounting practices and good financial management practices. This will ensure accountability and transparency in management of financial resources.

Funding: There are very limited funds for the FFT programme as it is not funded as a project. The funds for the programme come from UK. Each year the same sum of money is made available for FFT schools. This fund is used to facilitate KFT for one day a month in a school, to purchase seeds, tools, inputs, and other activities. It is also used to meet the cost of dispatching the Pack information, photographs and postage to UK, and headmaster's attendance at one meeting every term. This is the only fund available on a regular basis. The funds for schools are released by Kulika only when satisfactory financial reports have been received from schools.

5.0 MONITORING AND EVALUATION

The success of a programme ideally relies on monitoring and evaluation that is done. This will determine the direction of the programme and the pace at which implementation will be effected. Monitoring and evaluation will provide useful information the project management team will use to ensure its successful implementation. This section covers the overview of monitoring and evaluation of FFT and our observations.

5.1 Overview of Monitoring and Evaluation

Monitoring: The direction of implementation of a programme relies heavily on development of implementation plans upon which monitoring of its implementation is instituted. Schools develop plans on a term basis that are forwarded to Kulika for review through the District FFT Committee. KFTs, District FFT Committee chairperson and Kulika are generally responsible for monitoring the implementation. On the frontlines, project participants, especially the management committee and PTA chairpersons, are

responsible for monitoring and implementation of the programme in their respective schools. This cultivates the sense of ownership of the programme, ensure effective implementation and impact.

Evaluation: An internal evaluation was conducted in December 2003. This external evaluation is being implemented in December 2005.

5.2 Observations Relative to Monitoring and Evaluation

The monitoring systems in the FFT were generally not well coordinated, report formats from different schools were different and there were no feed back from Kulika. There appears not to be much systematic information gathering for programmatic decision-making. The programme could have monitored the diffusion of the ideas from school gardens into the surrounding community and the adoption of the agricultural practices. This would have helped the programme to identify which school is more effective and the factors that affect its effectiveness and efficiency. Therefore, M&E system that provides information for decision-making enables a programme to enhance its impact by expanding activities that work, modifying those that are having less impact and dropping those activities that have no or minimal impact. The internal evaluation, however, provided the programme with useful information at the school level as well as recommendations for improving the quality of FFT.

6.0 CONCLUSION

The FFT programme in Uganda is being implemented in three varying situations, the peaceful rural setting, urban setting and the insecure rural setting. In Northern Uganda FFT has been operating in an extremely difficult context, yet there have been some very significant achievements. The establishment of the school gardens with increased diversity of crops, introduction of new sustainable agricultural techniques in the area and their adoption by the pupils and parents have all been positive outputs.

Kulika Uganda has provided skilled, experienced and committed Key Farmer Trainers (KFT) in Sustainable Agriculture in the different areas where the FFT programme is being implemented. This is because of its extensive network of KFTs that it has in the country. The programme can continue exploiting the benefits that the Kulika KFT network offers to expand to other areas within and without the districts where FFT is currently being implemented.

Generally FFT has been a good investment because it has yielded excellent results with significant impacts on the skills and knowledge acquired by the pupils. It has also provided nutritive food to pupils and their families and diversified the food available in the communities. The programme has established a solid foundation upon which to build.

7.0 RECOMMENDATIONS

- 1 The Key Farmer Trainers should increase the number of visits to each school in month in order to have more time with both the pupils and teachers.

- 2 Pupils, teachers and members of the School Management Committees (SMC) and Parents and Teachers Association (PTA) should participate in the exchange visit programmes.
- 3 The garden teachers should be trained in sustainable agriculture to fill the gap that might be created by the absence of the KFT. This will enable the programme to run smoothly and effectively.
- 4 The project should extend its services to the community in order to cover those parents who do not have pupils programme schools. This would ensure a bigger multiplier effect within the community, enhance ownership of the project and provide sustainability.
- 5 The programme has worked well in the targeted schools and the children have acquired knowledge and skills in agriculture through hands-on approach. There is a need therefore to expand the programmes to other schools in the districts.
- 6 The District FFT committees should be expanded to include a representative of the School Management Committees (SMC), Parent and Teachers Associations (PTA) and The District Education Office (DEO). This will create a committee that will foster a strong and close co-operation between the programme schools and District Local Government. Ensure close and effective monitoring of the programme and minimise the transfers of head-teachers from the programme schools without consent of the FFT District Committee.
- 7 The programme needs to design Agricultural handbooks in English with a few translations in the local language to facilitate the training by garden and KFT.
- 8 The FFT District management committee chair should change on an annual basis to build the capacity of the various head-teachers for the schools under the programme.
- 9 There are very limited funds for FFT programmes that each school receives on a term basis. Each school uses this fund to facilitate KFT for one day in a month (£17); to purchase seeds, tools and other agricultural inputs; meet the cost of printing photographs, postage of pack information and photographs to the link school in Devon, UK, and for cost of the head-teacher to attend one meeting in a term (£17). This may not be enough to cater effectively for intended activities, therefore, there is need to increase the current level of funds for each school by 50%. In addition the release of funds should be timely to allow the agricultural programme to be synchronised with the cropping seasons.

APPENDICES

Appendix 1: Food for Thought Focus Group Guide for pupils

Class: ----- Gender: -----

School----- District-----

1. What agricultural practices do you remember that the program trained you in?
 - a. -----
 - b. -----
 - c. -----
 - d. -----
 - e. -----
2. Are you participating in gardening at school? *Yes or no*
3. If yes, how did you benefit from the produce from the school garden?
 - a. -----
 - b. -----
4. What agricultural practices (topics) are you practicing at home?
 - a. -----
 - b. -----
 - c. -----
 - d. -----
 - e. -----
5. What part of the program (activities) did you enjoy most?
 - a. -----
6. Why did you enjoy that program most?
 - a. -----
7. What part of the program (activities) did you hate most?
 - a. -----
8. Why did you hate the activity?
 - a. -----
9. Do you have your own garden at home? Yes or No
10. If yes, what crops did you plant in your garden?
 - a. -----
 - b. -----
 - c. -----
11. If no, why not?
 - a. -----
12. What crops have you/your family started planting your at home which were not planted before the program?
 - a. -----
 - b. -----
 - c. -----
 - d. -----

13. How much money did you get from the sell of produce at home?

Crops	Quantity	Price (cost/unit)
e.g. maize	200 kg	50/= per kg

14. If the program is to continue what do you suggest to be done

Appendix 2: Food for Thought Evaluation Questionnaire for Teachers

Respondent Name: ----- Gender: -----

School----- District-----

15. Are you personally participating program? *Yes or no*

16. If no, why?

- a. -----
- b. -----
- c. -----

17. What agricultural practices did the program promote?

- a. -----
- b. -----
- c. -----
- d. -----
- e. -----

18. How often did you have the training for staff and pupils?

19. What crops were planted in the school garden?

- a. -----
- b. -----
- c. -----

20. How did you and pupils benefit from the produce from the school garden?

- a. -----
- b. -----

21. What agricultural practices (skills) are you practicing at home on you garden?

- a. -----
- b. -----
- c. -----
- d. -----

22. What part of the program (activities) did you enjoy most?

- a. -----

23. Why did you enjoy that program most?

- a. -----

24. What part of the program (activities) did you hate most?

- a. -----

25. Why did you hate the activity?

-

26. What crops did you plant in your garden?

- a. -----
- b. -----
- c. -----

27. What crops have you/your family started planting your in home which were not planted before the program?

- a. -----
- b. -----
- c. -----
- d. -----

28. How much money did you get from the sale of produce at home?

Crops	Quantity	Price (cost/unit)
e.g. maize	200 kg	50/= per kg

29. How did the school benefit from this?

30. How did program benefit the surrounding community?

31. How was the program disseminating information to pupils, teachers and parents?

32. If the program is to continue what do you recommend to be done to improve the program

Appendix 3: Food for Thought Focus Group Guide for Parents

Gender: -----

School----- District-----

33. Have you heard of agricultural program in this school? *Yes or no*

34. If yes, what agricultural practices or activity is the program promoting?

- a. -----
- b. -----
- c. -----
- d. -----

35. How did you come know about the program?

36. Is your child practicing what he/she learns from the school garden? *Yes or no*

37. If yes, what practice is he/she trying at home?

- a. -----
- b. -----
- c. -----

38. How did you and pupils benefit from the program at school?

- a. -----
- b. -----

39. What agricultural practices (skills) are you practicing at home on you garden?

- a. -----
- b. -----
- c. -----
- d. -----

40. What part of the program (activities) did you enjoy most?

- a. -----

41. What part of the program (activities) did you hate most?

- a. -----
- b. Why?

42. Why did you hate the activity?

43. What crops did you plant in your garden?

- a. -----
- b. -----
- c. -----

44. What crops have you/your family started planting your in home which were not planted before the program?

- a. -----
- b. -----
- c. -----
- d. -----

45. How much money did you get from the sale of produce at home?

Crops	Quantity	Price (cost/unit)
e.g. maize	200 kg	50/= per kg

46. How did the parents and surrounding community benefit from this program?

47. How was the program disseminating information to pupils, teachers and parents?

48. If the program is to continue what do you recommend to be done to improve the program

