

# INFORMING FOOD SECURITY PROMOTION THROUGH IMPROVED SEEDS AND BREED MULTIPLICATION PROJECT

Agency for Accelerated Regional Development (AFARD)

June, 2004

## Acknowledgement

The report is a joint effort of the Agency for Accelerated Regional Development (AFARD) and Action Aid Nebbi (AAN). It is part of an on-going project aimed at livelihood promotion through building food security among rural households in Nebbi district. Although the project has started in a limited number of communities, it is envisaged to expand gradually while institutional learning in the process is embedded to enrich the design.

Foremost, I'm grateful to both organizations – AFARD and AAN- for kick-starting this project but more importantly for adopting a systematic analytical process other than the emotive response to food insecurity. Further thanks go to Atona Alex Ellyson, Okia John, and Dr. Adubango Julius for actively participating in the preliminary project organization. Your unreserved contribution in data collection and sharing your vast experiences in agriculture has been helpful.

It cannot go without finally thanking the individual members of the six Community Based Organisations (CBOs) who provided invaluable information upon which this report is based. Such an approach deserves respect and is one of the ways how local farmers can inform policies and get involved in policy implementation. In true participation we believe!

Alfred Lakwo June 2004

# TABLE OF CONTENTS

	owledgement	
List of	f Tables	4
1.0	INTRODUCTION	5
2.0	ABOUT NEBBI DISTRICT	6
<b>2.</b> I	Geography	
2.2	Demography	6
2.3	Socio-economic status	6
3.0	AGRICULTURE: A PRIMARY LIVELIHOOD ACTIVITY	
<b>3.</b> I	Farming zone	
3.2	Access to information and extension services	
3.3	Appropriate technology	7
4.0	FOOD INSECURITY	8
5.0	ABOUT THE ASSESSMENT	
5.1	Objective of the study	
5.2	Methodology	12
6.o	ANALYSIS OF FINDINGS	
<b>6.</b> 1	Seed practices and sources	
	.1.1 Type of seeds used	
6	.1.2 Seed source	
6	.1.3 Formal seed strategies	
6	.1.4 Seed processing and storage	
	.1.5 Seed marketing and pricing	
	.1.6 Seed promotion and extension	
6	.1.7 Seed credit and grant	
6.2	01	
6	.2.1 Access to and ownership of land	
6	.2.2 Reasons for and methods of farming	
6	.2.3 Involvement in non-farm activities	
6	.2.4 Access to better farming methods training	
6	.2.5 Knowledge, attitude and practices of better farming methods	
6	.2.6 Why not use improved method	
6	.2.7 Varieties of crops and livestock being used	
6	.2.8 Estimated yield from the crops grown and animals reared	
6	.2.9 Involving non-group members in the community	20
7.0	MONITORING FRAMEWORK	22
8.0	CONCLUSION AND RECOMMENDATION	23
	nex 1 Group experience, willingness, and management strategy	
Refere	nces	1

# List of Tables

Table 1:	Respondents characteristics	13
Table 2:	Land size owned	16
Table 3:	Cropping system	16
Table 4:	Estimated daily time spent on non-farm activity	
Table 5:	Heard of and using improved farming methods	
Table 7:	Why not using improved farming methods	
Table 8:	Varieties in use	
Table 9:	Number of people that a person can distribute crop/livestock	21
Table 10	Outcome indicator matrix	

#### 1.0 INTRODUCTION

Livelihood insecurity is a fact of life for the majority of the people of Nebbi district. One form of its manifestations is in 'food insecurity'. The primary causes of food insecurity are the marginal productive agricultural practices on which majority of the people depend, the inability to buy needed food from the market, cultural rigidity to accept other foods, and the lack of knowledge on quality food. It is in this regard that AFARD and AAN are focusing at a long-term livelihood promotion intervention that enables rural communities to increase their production both for domestic use and the market through community-based seed, planting material and breed multiplication.

Although this community seed/breed banking strategy is not totally knew in the district, it needed to learn lessons from past programmes and to juxta-fit with on-going practices while gradually changing those that makes farming purely a subsistence and survival activity into a vibrant entity, whatever the farm size.

To do this, the study focused at exploring the current knowledge, attitudes and practices of rural farmers in the district. Through a traingulative approach, information was collected from individual farmers; focus group discussions held with farmer groups; key informant interviews with personnel from government and NGO extension staff; literature reviewed; and participant observations made in some markets. The analysed data, thus, presents the on-going farming practices.

### Organization of the report

This report is presented in seven parts. It starts with a brief about Nebbi district. Part two presents an overview of the agricultural sector, which sets a basis for discussing food insecurity and the project understanding of it in part three. The fourth past shws a synopsis of the assessment and in part five a detailed analysis of farming systems in the district is done. Gender disparities there in are presented and the how and why of such gaps are analyzed using qualitative data. In part six, the future task related to monitoring framework is drawn and in the last part, recommendations are made.

# 2.0 ABOUT NEBBI DISTRICT

### 2.1 Geography

Nebbi district, located in North-western Uganda is bordered by Arua district to the north, Gulu district to the east, Masindi district to the southeast and the Democratic Republic of Congo to the West and South. It is composed of 3 counties (Jonam, Padyere and Okoro) subdivided into 16 sub counties and 3 town councils, 87 parishes and 1222 villages covering a total area of 3,288 sq km with arable land (62%), game reserves (29.1%), swamps and open water (6.4%) and forest reserves (2.5%).

The district experiences a tropical climate (dry and sub-humid) associated with orographic rainfall, and occasional hailstorms. Initially, rainfall was bimodal peaking in May and October and dry spells were experienced in June - July and December - early March. However, there seems to be a drastic change with one rainfall peak between July to December and January to June largely with dry spells. However, temperature is generally warm except in Okoro and parts of Padyere counties. This trend is however changing towards a single reliable rainfall from June to November.

Due to geological differences, variation in relief and soil exist. Jonam county has a flat relief with young and immature lithosols, vertisols and ferruginous soils of negligible productivity. Padyere is a raised plateau with mainly ferallitic soils. Okoro is generally a highland with intermediate and mature soils. Along the slopes and valleys are hydromorphic soils.

Savanna vegetation is predominant with Jonam dominated by thick dotted grassland. Padyere is a lot more woody. Okoro is dominated by open grassland as the natural trees have disappeared giving way to dotted planted trees. The high population densities have led to wooded areas being cleared for agriculture, construction wood and fuel wood.

#### 2.2 Demography

The total population of the district is 433,600 composed of 48% males and 52% females (2002 census). Children under 15 years make up 46.4% of the population and the elderly (over 65 years) constitute 3% hence a high dependency ratio (92%). The district's population is distributed as 90.2% rural and 9.8% urban. Okoro county has 41% of the total district population compared to Padyere, 37% and Jonam, 22%, hence a population density (persons/sq. km) highest in Okoro (>200) compared to Padyere's (>100) and Jonam (<100).

#### 2.3 Socio-economic status

The quality of life in Nebbi, a predominantly rural district, is low. Only five in every ten people are literate with seven women in ten illiterate. Life expectancy is only 45 years. While only five in ten households have access to a safe water source only 2 in ten households have a pit latrine. More than 45% of the children are stunted and majority of adult, under the pretext of wealth show-off, are getting malnourished (the obesity case). The feeder roads on which rural farmers depend are getting into deplorable state as funding for their routine maintenance is squeezed by central government.

#### 3.0 AGRICULTURE: A PRIMARY LIVELIHOOD ACTIVITY

Nebbi's population is dependent on subsistence agriculture. However, the farming practices have a strong reliance on indigenous technical knowledge, small per capita land holding, simple hand tools, and inter-cropping. Many people use low yielding local planting varieties and breeds due to the inability to access improved hybrid breed. The reliance on the local indigenous technology and knowledge (ITK) is partly because government extension services reach only 2.4% of farmers (UBOS 2002).

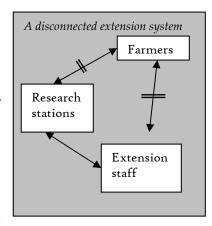
#### 3.1 Farming zone

The district belongs to the West Nile cotton-tobacco-coffee farming system. However, in the district there are two distinct farming systems. These are the lowland zone (Jonam and part of Padyere county) which have a low and unreliable rainfall, high temperatures and soils with low fertility and the highland zone (Okoro and part of Padyere county) with a high rainfall, low temperatures and soils with average to high fertility. Crop cultivation is common while livestock rearing is limited especially in Okoro. Overall, two out of every ten households do not have any kind of livestock.

# 3.2 Access to information and extension services

The main source of information to many farmers is the radio (74%). This is attributed to the very many radio stations that are accessible to the farmers (in Paidha, Arua, Hoima and Kampala). Other sources of information are neighbors (5.2%), and extension agents (1.7%).

The notably low access to information from extension agents manifest the ineffectiveness of extension system in promoting a mass transformation of the farming sector. Consequently, 'farmers have been generally sidelined from policy-making processes and technology development but are erronoeuly and assuptously considered the 'customers' of the new technologies and prime compliant of such policies' remrked the chairperson of Nebbi District Farmers' Association. This tendency has perpetuated disconnection between farmers (practicing traditional farming system), extentionist (with new scientific knowledge) and researchers (who are developing technologies without adequately considering farmer needs and absorption capacity). Likewise, the agricultural extension service has not integrated farmer-based knowledge. And, by targeting landowners who are mainly men they deny women access to new production information and skills.



# 3.3 Appropriate technology

The use of appropriate technology has been promoted in Nebbi district by the department of Agriculture and several NGOs, notably ACORD, CARE and Nebbi Oxenisation Programme (NOP). ACORD was involved in popularizing improved seeds, planting materials, and animal breeds, food processing and post-harvest technologies. CARE was involved in manual food processing equipments and animal traction. NOP specialized in animal traction. The department of agriculture, under various programmes, e.g., Agricultural Extension Project, Sasakawa Global 2000, etc has tried all the technologies mentioned above plus many more. However, the fact that most of the technologies promoted have tended to die out after the projects ended, gives an indication that their adoption and diffusion were problematic. There is no authoritative information about what factors adversely affected the adoption of those technologies. No one has established empirically whether the Appropriate Technology themselves were perceived not to be appropriate by the beneficiaries, or whether it was the people who were not prepared for the technologies (socio-cultural preparedness, financial, technical, etc) or was it the economics, politics of the times and other environmental factors that militated against the adoption and diffusion of the technologies.

# 4.0 FOOD INSECURITY

May households are reported as persistently faced with: a) low and declining agricultural outputs in both food store and cash terms; b) high post harvest losses<sup>1</sup>; and c) unsteady supply of a variety of foodstuff. This situation exposes them to food insecurity. Already reports of death from starvation are not new in the district. In fact there are general consensuses that were it not to be for the inflow of food from the neighbouring Democratic Republic of Congo, the situation would have been worse (NDLG, 2000).

FAO (1995) defines food security as a situation where there is availability and access by all people at all times to enough food for an active and healthy life. Food security is, therefore, more than just the aggregate balance between demand and supply of food. There may be food available in aggregate terms but many people may not be able to access it, for instance, because of lack of purchasing power or unequal social relations. The time aspect of food security is also important. An overwhelming majority of households cannot produce enough food to last the whole year and so is food insecure for a good part of the year. There are also many other households that in normal times produce enough for all-year consumption, but because of natural occurrences, particularly drought, such families become vulnerable to food insecurity. The last aspect of food security is the food consumed. Food consumed should contain the necessary balance to allow children to grow without impairment and adults to maintain active lives.

# The CARITAS (2003) survey in Nebbi found that:

- Many households (55.8%) do not have enough food throughout the year. The danger periods are around April, May and June when the previous year's stocks are low and the new crops are still growing. When rain comes late (late April or May) the lean period can extend up to July-August. During periods of plenty, 99% of families eat at least two meals a day and during food scarcity only 62.6% eat at least two meals a day. Households respond during scarcity by reducing the number of meals (78%), buying food from the market (14%), taking credit from neighbours and in-laws (2%) and starving (4%).
- Only four people in every ten know about balanced diet. People are confined to their traditional dishes: *Kwen* (bread made from cassava flour rarely mixed with either millet, sorghum or maize flour for the majority) and *angira* (beans cooked in green vegetable) in Okoro and *kwen* and *rec* (fish: fresh, smoked, sun dried, roasted) in Jonam.<sup>3</sup> Reasons for not eating a balanced diet from include difficulty of preparation, lack of knowledge, and non-availability of the necessary ingredients. There is also a misconception that balance diet is expensive because it involve a lot of market based foods.
- Gender disparity does occur in eating habits. Men are in a better position to eat a balanced diet than the other members of the household. This is a cultural element whereby men are discriminately pampered. In 35.8% of the households, men eat some foods like chicken, eggs, and certain fish species that women are not allowed to eat. Besides, men eat first, followed by their children, and women eat last. This sequencing means less quantity of food is available for women in times of food scarcity.

-

<sup>&</sup>lt;sup>1</sup> See Deloitte Touche - Canada, 1996, West Nile Region Smallholder Agriculture Improvement Project (Draft Inception Report). Kampala: Office of the Prime Minister.

<sup>&</sup>lt;sup>2</sup> See Ad Oomen, 'Regional Cooperation from the Bottom Up: Food Security Management in West Africa' in *ECDPM* Reprint Series 95-3.

<sup>&</sup>lt;sup>3</sup> This is commonly referred to as the 'ongura, angira, and angara' circuit.

Thus, a holistic approach to issues of food security needs to take into consideration production, purchasing power, and food sharing habits. It should provide for increased ability to produce more notwithstanding the ability to also buy more. How this can be done is the task of the next part.

# 5.0 ABOUT THE ASSESSMENT

Faced with food insecurity in Nebbi district, AFARD and AAN have joined hands to facilitate rural communities to solve the problem sustainably. The intervention sees food security as an 'Equitable access to 4A's – Availability, Adequacy, Acceptability, and Affordability – of quality foods at all times by all household members regardless of social categorisation'.

This implies that people should, always, be able to either produce or buy the right food they need. And given the reality that own production is marginal in respect of 'all food needs' people should access other foods from the market. However, this requires financial ability, which many rural households lack. It is thus important that any intervention should facilitate an increase in both production and (farm, non-farm an off-farm) income so that for what cannot be produced 'locally by a household' the household members should be able to raise enough cash with which to buy food from the market. Following this approach thus requires re-orienting production into a broader perspective, i.e., making use of the available local resources to produce market friendly products.

In May 2004, AFARD and AAN operationalised the food security promotion project with a broad aim of 'household food security and income of 32 partner group members' improved in a sustainable, self-reliance and market-oriented manner'. This project is to be implemented in phases starting with 6 groups.

To pursue this objective, the below strategies were proposed:

- Use community based groups as contact points because it reduces cost per head in service delivery; it increases a one-off service outreach; it provides a basis for a large adoption (use) rate; its spill over effect is larger.
- Develop demonstration sites on the group-owned facilities (land, houses, etc) so as ensure the use of collective resources and it will set a basis for local ownership. At these sites, skills can be taught, adapted and adopted by group members and their communities. The demonstration points will be made accessible to many people both group members and members of the community.
- Liase with extension officers in the project areas to build a uniform message and emphasis on better production technologies to ensure that demand for better technologies are promoted jointly and successes and failures also learnt jointly.
- Promoting an integrated approach of domestic-cum-market friendly crop and livestock production in order to guarantee home use and generate income. Improved livestock breeders and crop varieties) are to be distributed to the groups for on-multiplication and on-lending.
- Gender equity will be integral in the project to distort the gendered farming system.
- Adopting a group based multiplication system with groups supplied with improved varieties for multiplication and distribution to their group members and the wider community.

The activities enlisted in the project include:

Selection, debriefing, and needs assessment of groups (with area extension staff).
These groups will act as farmer contact points to provide access to better
production practices to both the group members and other members of the
community.

- Organizational strengthening training to make the groups cohesive and focus.
- Establishing demonstration point in the groups. The demonstration points will be guaranteed to be accessible to both the group members and people in the community who may by self-selection due to own interest need to learn the new technologies.
- Procurement and distribution of breeds: The agreed upon crop and livestock combination will be sourced from both local stockist and other multiplication or research centers.
- On-going group site based training in better farming practices in soil and water conservation, organic farming, and small ruminant and poultry management building on indigenous technical knowledge (ITK) and on disseminating familiar but highly productive agronomic principles. This training will be done at the time when the skills learned can be put to use immediately.
- Training in entrepreneurship skills to re-orient the farmers out of the focus that farming is a subsistence activity.
- Facilitating exchange visits among same crop growing and animal rearing groups.
- Nutrition education to ensure that people know of the methods of preparation and preservation of accepted quality food.
- Advocacy at sub county levels to ensure that they strategically allocate their 'production sector' budget for viable agricultural support so that the farmers commercially produce let alone being able to balance between own and market supplied food 4A's.
- On-going supervision to keep a clear track of what is on-going within the demonstration farms and the beneficiaries' reaction, and to review with the groups what lessons they are learning and what needs to be responded to, by who.

Impact (Food Security) Equitable Availability, Adequacy, Acceptability, and Affordability of food by all, always Outcome \*\* Increased production \*\* Increased income Individual 0ther \*\* Improved technology community group members members Activities: \*\* Group identification, debriefing. Community based \*\* Training in group dynamics organizations (Entry \*\* Setting demonstration plots points in 32 groups \*\* Improved breed provision with >900 people of \*\* Agronomic training which 70% are women) \*\* Improved variety provision \*\* Training in entrepreneurship \*\* Exchange visits NARO (Abii Farm in Arua) \*\* Nutrition education \*\* Advocacy at sub counties \*\* Follow-up visits Sub county extension staff Action Aid Nebbi Local variety stockists Development Initiative (Funding agency) **AFARD** (Implementing agency)

**Figure 1:** Project intervention matrix

Source: Research proposal document

#### 5.1 Objective of the study

That the above noted project was designed on a broader district based farming practices data, it may (or may not) reflect the reality of the project population and there is need for caution in ensuring that interventions are customized to suit the project beneficiary needs and practices. Consequently, this study was aimed at 'customizing the project to the local project site farming practices' by assessing the knowledge, attitudes and practices of the project communities. To achieve this, the study objects were to:

- Assess seed practices in the district and project site and recommend better alternatives for sustaining the seed multiplication strategy. The focus of this objective is to unearth the practices involved in the seed cycle right from purchase to storage and marketing by various actors involved in seed supply and demand.
- Explore the broader farming practices in the project area in order to provide better entry options for the project activity implementation. This objective targets exploring what the farmers know, feel and are using in view of improved farming methods.
- Establish a clear monitoring guideline. In this objective, a framework for intervention monitoring will be established.

## 5.2 Methodology

# 5.2.1 Research design

The study used a traingulative approach to collect data. Individual quantitative survey questionnaire was designed and administered to randomly sampled members of the six community based groups that are active in the first phase of the project. A team of assessors that includes personnel from AFARD and local government production department administered the questionnaires.

Focus group discussions immediately followed the individual surveys. The group discussions focused on current knowledge, attitude and practice (KAP) of farming and why farmers were engaged in what they were doing, especially where recommended technologies exist but are not being utilized by farmers. Their opinion was also sought about their willingness to act as points from which the benefits of access to improved seeds, planting materials and livestock breeds could reach the wider community.

Through participant observations in the groups' community and field visits to the market, some valuable information was also collected. This also applies to information collected from key informants through informal interviews. And finally, secondary data were collected from various literatures that touch on agriculture in the district.

#### 5.2.2 Research Process

From the 3<sup>rd</sup> to 5<sup>th</sup> May, a team of assessors visited six of the 32 groups selected for the first project implementation phase after a prior formal letter sent to the groups and a radio announcement made for the activity. The venue for the needs assessment was the group's meeting point. A total of 149 people (58% women and 42% men) participated in the needs assessment exercise.

However, a total of 60 randomly sampled people (indicating 16.7% in each of the 6 groups) were interviewed. Of these, 37% were males and 63% women; aging from 19-70 years (mean age=42 years); largely married (97%). Men (45.5%) were largely in young active age-group and women (47.5%) in old active age-group. This reveals how men are free to interact in society while the women gain the freedom to interact and join and participate in such a venture while already old.

Majority of the members have children/dependants that they are taking care of. 42% and 37% are caring for 1-5 and 6-10 children/dependants (mean no=7). Women are taking care of many children/dependants compared to men. This scenario was attributed to teenage pregnancy where young girls after delivery leave their children with their mothers to take care of; and also the AIDS scourge where grandmothers are now looking after the orphans from their deceased children.

Also, majority of the members have formal education. 57%, 20%, and 10% are with primary, secondary and tertiary education respectively. None of the men have no education and none is participating in functional adult literacy (FAL) programme. There is a strong relationship between sex and education (chi=0.044). This situation confirms the district status where women dominate in the illiteracy groups and are thus being targeted by FAL in order to introduce them to basic reading and writing.

Table 1: Respondents characteristics

Age of respondent					
	Se	x of			
	respo	ondent			
Age of respondent	F	M	Total		
Very young (<20 yrs)	1.7%	1.7%	3.3%		
Young active (21-35 yrs)	15.0 %	16.7%	31.7%		
Old Active (36-50 yrs)	30.0 %	8.3%	38.3%		
Mzee (51+ yrs)	16.7 %	10.0%	26.7%		
Total	63.3	36.7%	100.0		
	%	30./%	%		

Number of children and dependants					
Number of	Sex	of	Total		
children	respon	ident			
/dependants	F	M			
О	1.7%	3.3%	5.0%		
1-5	26.7%	15.0 %	41.7%		
6-10	25.0%	11.7 %	36.7%		
11-15	8.3%	5.0%	13.3%		
16+	1.7%	1.7%	3.3%		

Educational status					
	Sex	of			
	respor	dent	Total		
Education	F	M			
FAL	5.0%		5.0%		
Junior	3.3%	1.7%	5.0%		
None	3.3%		3.3%		
Primary	41.7%	15.0%	56.7%		
Secondary	6.7%	13.3%	20.0%		
Tertiary	3.3%	6.7%	10.0%		
Total	63.3%	36.7%	100.0%		

#### 5.2.3 Data analysis

SPSS software was used to analyze data. Because an open-ended questionnaire was used, first, a general frequency table was run. This provided an input for coding of the data into agreed clusters for variables that were similar in content and context. Finally, for quantitative data a simple frequency table and cross-tabulations were done to test the variable relationships. For qualitative data, transcription was made of the community meetings and only issues relevant to the presentations extracted.

#### 6.0 ANALYSIS OF FINDINGS

This part presents the empirical data and the interpretations derived or stated by the members during group discussions. It starts by answering the first objective (in 6.1) basing on the market visits, key informant responses, and participant observations and ends with the second objective (in 6.2) based on the individual member questionnaires and the focus group discussions. Attempts have been made to derive gender differences particularly in farming practices.

# 6.1 Seed practices and sources

That many farmers are crop farmers indicate the importance of improved seeds if at all farmer productivity must increase. It is thus important to ascertain what seed practices are in use in the district. It can not be over emphasized that farmers are not relying on government extension system but are equally struggling to fill the unmet gaps by such a system. What follows is a synopsis of the seed system in the district.

# 6.1.1 Type of seeds used

The types of seeds used by farmers in the district are mixed. Majority use local seed species and very few are using improved varieties. Besides, even the availability of improved varieties is largely for selected crops: vegetables, beans, maize, cassava, and Irish potatoes.

#### 6.1.2 Seed source

Seeds are mainly obtained locally. Farmers preserve their own seeds after every harvest season and these seeds are used for cultivation the next season. It is only to a limited extent that seeds, particularly improved varieties, are accessed from stockists, research stations, NGOs and government. But government production departments supply seeds only to contact farmers, NGOs supply only to their partner groups; research stations supply only to selected field trial sites although stockists also sell only to farmers with money to buy their products. This signals that few people are reached with improved seeds and breed and the discrimination partly explain more the reason why farmers use their self-stocked seeds.

#### 6.1.3 Formal seed strategies

There is no formal seed strategy in Uganda generally. Institutions like Uganda Seeds do not act for the government. The major government seed generating institution is NARO that is involved in R&D of improved varieties. In West Nile region a branch is based in Abii Farm in Arua district. Through the branch, a piecemeal extension services is provided to Nebbi farmers as a pilot station for the various agro-ecological areas.

# 6.1.4 Seed processing and storage

With the closure of Technoserve and in the absence a commercial stockist, seed processing and storage is rudimentary. Although processing differ with crop species (cereals, pulse, tubers, etc.), in most cases the methods used makes the crops susceptible to destruction.

Many farmers process their seeds like they are processing the crop product for eating. For instance, millet is harvested, winnowed, and stored in sacks. Maize is either husked and stored as live seeds or are the covers unwrapped and tied on a pole. Potato vines are always left in the garden after harvest to sprout for use when the next rain falls. Likewise, cassava stocks are left in the field. This exposes the plating materials to destruction by dry season roaming goats and termites.

The commonest practice for cereals is that seed are store in granaries; over fireplace; and hanged on shady trees or on a planted pole in the compounds. Sometimes, seeds are dressed

with ashes or mixed with red paper and goats feaces to reduce infestation by weevils and other microbes.

# 6.1.5 Seed marketing and pricing

The marketing of local seeds specifically does not occur. Farmers do not offer specific crop product for sale like seeds. Local seeds are bought from the market at the same price and unit as food. It is upon the decision of the farmer to buy say groundnut from the market and use it for seeds or for food. It is only improved variety seeds that are offered in the market as seeds. The prices of these seeds are higher than the prices for local seeds. For instance, while local beans will cost Ushs 350 per kilo, improved bean seed will cost Ushs 1000 per kilo.

Farmers, however, prefer seed marketing through the barter system. They exchange like potato vines for millet seeds. This does not necessarily occur in the same planting season. Besides, the quantity of exchange depends on the agreement between the parties involved. For instance, a woman X provided her brother's wife with *longe* cuttings worth planting ¾ of an acre during the first rainy season. She received her pay in the form of sorghum seeds worth planting ½ an acre. The reason here is not the market value but the social capital involved as woman X puts it: 'mer mit calo kwen ku ringo' (meaning a good relation is as nice as having a meal with meat). Such an exchange does not care of the short term market equivalent loss but is imbued with long term reciprocity which is a good fall back position in times of need.

#### 6.1.6 Seed promotion and extension

In view of the poor processing, storage, and marketing, even the few available stockist do not engage in seed promotion like over the radio, posters, etc campaigns to encourage people to know of the seeds, where they can be bought from and their importance. Likewise, no seed extension takes place. Government extension system covers the whole range of farming system and that there are no seed specialist (because every extension agent is expected to have and deliver crop, livestock, and market skills) limited attention is paid on seed promotion and extension. It is the few agencies involved in seed promotion for their agency interest such as UCDA and cotton buyers who provide a limited package of seed extension.

#### 6.1.7 Seed credit and grant

No formal seed credit system, worth learning from, exists in the district. Few agencies such as COPCOT for cotton, and UCDA for Coffee provide seed credit and grant respectively. For COPCOT any farmer who has received cottonseeds will be obliged to sell his/her cotton proceeds strictly to COPCOT (even if the prevailing market prices offered by COPCOT is low compared to other buyers). UCDA however provide seed grant by buying coffee seedlings from its identified and supervised nursery groups. The groups are provided with a contract to grow and supply a specific amount of seedlings to farmers in a designated area for the farmers' cultivation. Currently, UCDA has entered into a court action filed by the nursery farmers for failure to buy the agreed upon coffee seedlings and pay for the already supplied seedlings. It is rumored that the UCDA officials in the district diverted the funds and bought only their nursery seedlings and those of the groups they have patronized.

# 6.2 Farming practices

From the rapid survey the following can be seen:

# 6.2.1 Access to and ownership of land

It was found that 20% of the female respondents have no land of their own. This was associated with internally displaced persons from Congo DR and Acholi districts. Besides, it was attributed to the cultural practices that deny women ownership over land in both their paternal and marital homes. The observed cases with no land were those who divorced and/or widowed. This scenario confirms why it is also only women (10%) who have a land size of I

acre because if they are to buy or be granted ownership the land sizes are always small. Further, majority of respondent have 1-5 acres of land (mean size of land is 5 acres) with only men (3%) having land sizes upto 16 acres or more. A significant relationship exists between sex and land size (chi=0.000). This finding rhyme with previous studies. In a study conducted by AFARD for CARITAS – Nebbi in 2003, it was found that the mean land size was 4.3 acre.

Table 2: Land size owned

		Sex of re		
		F	M	Total
Land size	o acre	20.0%	1	20.0%
(acre)	1 acre	10.0%	,	10.0%
	1.1- 5 acre	23.3%	20.0%	43.3%
	6-10 асте	5.0%	13.3%	18.3%
	11-15 acre	5.0%	,	5.0%
	16+ acre	,	3.3%	3.3%
Total		63.3%	36.7%	100.0%

# 6.2.2 Reasons for and methods of farming

Although it was found that in the project area 90% engage in crop and livestock farming, the sole objective of crop farming among both men and women is dual (both for consumption and for sale) and for livestock farming 97% said they kept animals for sale. The finding reveals why farming is seen as a subsistence activity because it provide the food basket for survival. However, while mainly crops are grown for food, some are sold off for cash to meet other pressing needs. Group members said 'crop farming decision is changing with some crops currently being grown specifically for sale'. For instance, in Jonam while men grow cotton for sale women are now growing simsim for sale.

The farming system is overwhelmingly traditional – crops are mainly intercropped while goats are tethered the whole day and chicken scavenges for food. Such practices are not due to lack of knowledge (as will be shown below). Risk aversion measures and time management are part of the reasons why farmers stick to their old practices.

Intercropping of maize and beans

Table 3:Cropping system

		Sex of re	Sex of respondent	
		F	M	
Cropping	Intercropping	46.7%	30.0%	76.7%
system	Monoculture	16.7%	6.7%	23.3%
Total		63.3%	36.7%	100.0%

# 6.2.3 Involvement in non-farm activities

On average 6 hours is spent daily on off- or non-farm activities. It is largely women who are engaged in such activities. Overall, 10% of men compared to only 5% of women (largely old) are not engaged in any off-farm activities. Meanwhile 40% and 28% of women compared to 8% and 18% of men are engaged in off-farm activities for a quarter to half day and for the whole day respectively.

This is a reflection of the high labour burden that women have. It also indicates the increasing shift in gender roles with many women entering the productive labour market. The unfortunate bit is that the sector in which this labour market penetration is taking place is informal with low productivity. Activities such as brewing alcohol (*kwete and enguli*), selling of pan-cakes (*kabalagala*) along the roadside that are common among the women have low input-output return rates. Therefore, caution should be noted that while gender roles are slowly changing, the persistence of women in lower market hierarchy will continue in the short term.



Table 4: Estimated daily time spent on non-farm activity

		Sex of re		
		Females	Males	Total
Time	o hrs	5.0%	10.0%	15.0%
used in off-farm daily	1-3 hrs	6.7%	1.7%	8.3%
	4-6 hrs	23.3%	6.7%	30.0%
(hrs)	7+ hrs	28.3%	18.3%	46.7%
Total		63.3%	36.7%	100.0%

### 6.2.4 Access to better farming methods training

Agricultural training and education takes a multiple of methods. Demonstrations, tours and shows are examples. Households were asked whether they have participated/attended agricultural shows, tours or demonstrations. In the CARITAS- Nebbi study it was found that the majority of farmers have never ever attended any agricultural show (79.3%); 94% have never gone on any agricultural tour; and 72.4% never ever attended an agricultural demonstration. These findings are important because while farmers can hear about innovations over the radio, from neighbors, etc, it is the practical exposure that concretizes what they heard and is therefore likely to lead to a change in attitude and practice. The proportion of farmers who have never attended any of the above functions is important because even where extension coverage and density is ideal, adoption of innovations is good as complete after 75% (late majority) have adopted. In our situation where extension is very poor by any standard, it would appear unreasonable to expect a change in practice of farmers from the traditional to modern methods.

It is thus not surprising that only 57% of the respondents have had a training in better farming practices. Half of men and more than half of the women have attended any form of training. Such an exposure level that appears high can be attributed to the long duration of linkages that the groups (in which the members have exposure) have had with different support organizations. For instance, Pacego and Stoga have both passed through a long history of support from the church, ACORD, and Action Aid.

# 6.2.5 Knowledge, attitude and practices of better farming methods

Despite better farming practices being introduced by the government extension system and NGOs, all respondents were asked whether they have heard of better breeds and practices, whether they are using such practices, and if no why not. Table 5 and 6 below summarizes the knowledge and practices of improved farming methods.

Table 5: Heard of and using improved farming methods

Improved method	Heard of method			Using method		
	Female	Males	Total	Female	Males	Total
Land opening	58.3%	35.0%	93.3%	45.0%	21.7%	66.7%
Seeds	58.3%	35.0%	93.3%	27.1%	13.6%	40.7%
Other planting materials	58.3%	30.0%	88.3%	36.7%	13.3%	50.0%
Weeds control	58.3%	35.0%	93.3%	29.3%	17.2%	46.6%
Pest and disease control (crop)	56.7%	28.3%	85.0%	10.5%	10.5%	21.1%
Processing	60.3%	32.8%	93.1%	35.2%	25.9%	61.1%
Storage	52.7%	34.5%	87.3%	36.0%	24.0%	60.0%
Breeds (livestock)	58.3%	30.0%	88.3%	5.6%	7.4%	13.0%
Feeding	54.2%	30.5%	84.7%	5.7%	13.2%	18.9%
Pest and disease control	55.0%	21.7%	76.7%	5.7%	5.7%	11.3%
(livestock)						
Housing	56.7%	26.7%	83.2%	6.7%	10.0%	16.7%
Fencing	53.3%	33.3%	86.7%	15.0%	16.7%	31.7%

Source: survey data

Although it appears in the table above that women have the highest access to information on improved farming methods, compared against their sample population, men have a higher access in real terms. This is because many extension services have been poorly designed to target landowners who are mainly men. Women are twice at risk of not hearing information regarding better planting materials and pest and disease management (for both crops and livestock) although they have equal chances of practicing such methods. This is because, as it was stated by the groups that, 'government improved planting material distribution such as under PMA are done secretly. Not all people in the village know about and receive the inputs. It is mainly the men who know and access such inputs.' They as women mainly get the inputs from their husbands or in exceptional cases from their paternal places, especially from their fathers.

Further evidence from table 5 and 6 reveal that limited effort is placed on crop pest and diseases management as well as livestock disease management and housing. Gender disparity can also be seen in the use of better farming practices especially in the livestock sub-sector. Women who culturally don't own livestock and rarely engage in looking after them equally engage less in such practices.

# 6.2.6 Why not use improved method

Respondents were also asked why they were not using improved methods. The primary reason for not using improved methods are related to lack of knowledge, non availability of such technology and high expenses related to use both direct in terms of cash and indirect in terms of time, attention, and recycling ability without deteriorating quality. In Kubbi Community it was pointed that relying on Irish potatoes was becoming difficult because the species accessible is now of low quality due to regenerative planting of same species. However, while to women, the prime reasons are related to non-availability due to gender-based limitations, to men aspects of cost are common. For instance, land opening are roles of men; improved seeds and other planting materials largely provided by government departments are discrinatorily given to men, and animals, especially cows and small ruminant, are a preserve of men.

Table 6: Why not using improved farming methods

Improved method	Why not use	Yes	response by	sex
_	•	Female	Males	Total
Land opening	No Knowledge	4.8%	-	4.8%
	Not available	47.6%	38.1%	85.7%
	Expensive	-	9.5%	9.5%
Seeds	No Knowledge		5.6%	5.6%
	Not available	58.3%	25.0%	83.3%
	Expensive	2.8%	8.3%	11.1%
Other planting	No Knowledge		10.0%	10.0%
materials	Not available	53.3%	33.3%	86.7%
	Expensive	-	3.3%	3.3%
Weeds control	Not available	66.7%	30.3%	97.0%
	Expensive		3.0%	3.0%
Pest and disease	No Knowledge	-	4.1%	4.1%
control (crop)	Not available	30.6%	18.4%	49.0%
	Expensive	36.7%	10.2%	46.9%
Processing	No Knowledge	45.0%	5.0%	50.0%
-	Not available	25.0%	15.0%	40.0%
	Expensive	10.0%		10.0%
Storage	No Knowledge	35.3%	17.6%	52.9%
	Not available	17.6%		17.6%
	Expensive	17.6%	11.8%	29.4%
Breeds (livestock)	Not available	46.5%	16.3%	62.8%
	Expensive	25.6%	11.6%	37.2%
Feeding	No Knowledge	13.0%	10.9%	23.9%
	Not available	32.6%	4.3%	37.0%
	Expensive	26.1%	13.0%	39.1%
Pest and disease	No Knowledge		2.3%	2.3%
control (livestock)	Not available	14.0%	11.6%	25.6%
	Expensive	55.8%	16.3%	72.1%
Housing	No Knowledge	34.0%	17.0%	51.1%
	Not available	6.4%	2.1%	8.5%
	Expensive	27.7%	12.8%	40.4%
Fencing	Not available	64.7%	32.4%	97.1%
	Expensive	-	2.9%	2.9%

# 6.2.7 Varieties of crops and livestock being used

Group members are using primarily local breeds. Only 6% (2% women and 4%) are growing improved beans variety with only 10% yield of 500Kgs/acre and above; 4.2% (only men) growing improved Irish potatoes with 9% over 1000 Kg yield per acre; 30% (only women) with improved cassava; 7% rearing improved goats and 2% (only men) with improved chicken.



Table 7: Varieties in use

		Sex of respondent		Total
Crop/livestock v	ariety in use	F	M	
Beans	Local	56.0%	38.0%	94.0%
(chi=0.054)	Improved	2.0%	4.0%	6.0%
Total		58.0%	42.0%	100.0%
Irish potatoes	Local	58.3%	33.3%	91.7%
(Chi=0.109)	Improved		4.2%	4.2%
	Mixed		4.2%	4.2%
Total	•	58.3%	41.7%	100.0%
Sweet potatoes (Chi=0.063)	Local	66.0%	34.0%	100.0%
Total		66.0%	34.0%	100.0%
Cassava	Local	35.1%	33.3%	68.4%
(Chi=0.002)	Improved	29.8%	1.8%	31.6%
Total		64.9%	35.1%	100.0%
Goats	Local	56.6%	37.7%	94.3%
(Chi=0.567)	Improved	5.7%		5.7%
Total		62.3%	37.7%	100.0%
Chicken	Local	60.8%	37.3%	98.0%
(Chi=0.118)	Improved		2.0%	2.0%
Total		60.8%	39.2%	100.0%

# 6.2.8 Estimated yield from the crops grown and animals reared

Respondents were asked about their estimated yield per acre for crops and weight and maturity time for livestock. The unit of 100Kg bag was used as is commonly used in many homes, as a measure of storage for crops while the kilogram equivalent weight was used for animal caucus. The findings reveal that although there is no significant statistical relationship between variety and yield, improved varieties have a better yield estimate compared to local varieties. All respondents growing beans have 1-5 bags; and Irish potatoes and cassava more than 10 bags. While all those growing local variety largely harvest less than 1 bag yield.

A similar trend was also observed for animals. All improved goats were maturing in les than two years and chicken in a year and were weighing less than 15Kg and 3-5Kg respectively. A caution in the livestock sub-sector is that unlike improved crops that can be left to the wild growth environment with limited yield effect, for livestock such action corresponds with a gross reduction in weight and increased time of maturity. Thus, such a finding explains why there is no marked improvement in yield for livestock to farmers using improved varieties.

#### 6.2.9 Involving non-group members in the community

Overall, all group members were willing to involve non-members in their project. 83% of group members saw this as a good idea while 8.3% even went ahead to proposing that non-members can be allowed to join their groups. This desire to actively engage with non-group members does not arise from a purely good intention because the group members specifically target benefiting their members. However, their experience in such similar programmes before led to

the failure of such programmes. Non-group members who so desire the technology but cannot access freely from the groups resorted to stealing cassava stock and eggs of improved chicken. Members of STOGA reiterated that, 'when we received the high breeds from ACORD we experienced social conflict in the community. Non members always referred to us as the luck ones -a sarcastic and ill intentioned remark. They always retorted that 'we' need not complain of food problems nor farming generally even if there were problems of pest and diseases. Eventually, the community resorted to theft of the breeds they can not access formally from the group.' Therefore, groups members now realize that their success also depend on their cohesion with the wider community members.

Asked on the possible number of people each member can supply with improved seeds/breed, majority of the women estimated 1-10 people over a period of 3 years while no man estimated reaching more than 10 people with livestock.

Table 8: Number of people that a person can distribute crop/livestock

Estimated	Provide people seeds			Provide people livestock		
number of	Sex of respondent			Sex of respondent		Total
people	F	M	Total	F	M	
None	5.0%	6.7%	11.7%	16.7%	15.0%	31.7%
1-10 people	38.3%	21.7%	60.0%	40.0%	21.7%	61.7%
>10 people	20.0%	8.3%	28.3%	6.7%		6.7%
Total	63.3%	36.7%	100.0%	63.3%	36.7%	100.0%

# 7.0 MONITORING FRAMEWORK

In this project food security can be seen in the perspective of 'Equitable 4As – Availability, Adequacy, Acceptability, and Affordability of quality foods at all times by all household members regardless of social categorisation'. This means that tracking the project progress should realign to the key components of the 4As as summarized below.

Caution need be made that this monitoring orientation focuses at impact rather than process monitoring. Although this can be a short coming because the aspects of process monitoring is important in realising implementation effectiveness and efficiency, the approach is informed by result oriented planning that focuses at reaction to intervention (i.e. change in beneficiary life) than inputs and outputs that may or may not translate into behaviour change. A notable example is the current extension system where contact farmers are trained and provided top-up inputs yet adoption rate of better methods is still low simply because they do not translate the inputs into action for life.

Table 9 Outcome indicator matrix

Focus	Aspects	Indicators
Food availability	Constant supply of valued food to meet food demand.	<ul> <li>Food demand level</li> <li>Volume of household food production</li> <li>Seasonality of food supply</li> </ul>
Food adequacy	Food is in enough quantity for body needs	<ul> <li># of meals per day</li> <li># reporting eating balance diet</li> <li># of meals during seasonal fluctuation</li> </ul>
Food acceptability	Food meet cultural needs of the people.	<ul><li>Type of food eaten</li><li>Food distribution pattern</li></ul>
Food affordability	Ability to buy extra food needed from the market	<ul><li># reporting food purchase</li><li>% of food demanded supplied by market</li></ul>

Indicator	Source of information	Frequency	Method	For what type of decisions
Nutrition  • % malnutrition rate among children (by gender).  • % malnutrition rate among adults (by gender).	Health unit report	Yearly	Primary data: from health units serving project area	
<ul> <li>Feeding practices</li> <li>Knowledge and practice of balanced diet.</li> <li># of meals per day (during different seasons).</li> <li>Food distribution pattern.</li> </ul>	Primary information from household survey	Yearly	Primary data: cluster random household survey	

<ul> <li>Production safety</li> <li>Estimated yields per acre (for various crops).</li> <li>Estimated maturity time (for different crops/livestock).</li> <li>Estimated weight of livestock.</li> </ul>	Primary information from farm units	Yearly	Primary data: cluster random farm units.
<ul> <li>Household Resilience.</li> <li>Asset vulnerability index.</li> <li>Asset building strategies.</li> </ul>	Primary data from focus group discussions & household survey.	Yearly	Primary data: Household survey; Focus group discussions on coping and saving strategies.

#### 8.0 CONCLUSION AND RECOMMENDATION

The idea of the seed multiplication itself is not new in Nebbi district. Northwest Smallholder Agricultural Production Project is promoting seed multiplication in the district through Contact Farmers. Action for Socio-economic Development (DED-funded) is operating a farmer-owned seed-curing project for Irish potatoes in Jangokoro Sub County. Both approaches have limitations in terms of ownership and sustainability. Besides, these interventions do presuppose that food security is automatic. They don't have a sequential analysis of how the food insecurity arise and how best to solve it. Importantly, is that they include a limited extension support services in a snapshot fashion.

Well informed that the food insecurity situation arises, ceteris peribus, from subsistence production tendencies, the low production does arise from the whole farming cycle where limited value added techniques are used by many farmers, and especially women. The current seed practices are traditional and befit the subsistence orientation of farming. Farmers plant self-selected and self-saved seeds. To look at farming as a commercial activity, at whatever scale, will require changing the above alluded to seed practices. But such an outlook should take into account that the major constraints affecting the seed sub-sector are: limited access to improved seeds for on –farming and –lending; poor seed production, processing and storage; limited seed marketing outlets; quality control; and inadequate extension and seed promotion.

From the study, it can also be concluded that, other than seeds, there is a greater need for extension services. Farmers need to be sustainably introduced to better methods of farming. The current contact farmer extension system needs to be revisited to ensure that, first contact farmers establish demonstration sites on which to provide services to second contact farmers. The effectiveness of the approach will, however, depend on the monitoring efficiency of the extension agents. So the approach designed in the project where community based organizations will provide a contact point for group members and the community to learn new technologies is handy in terms of cost-per-outreach efficiency.

The issues of appropriate technology adoption need a clear study. Apart from changing the policy process by increasing farmer participation in production sector activities, a farmer-based research into the farming styles will be important. Farmers are engaged in a multitude of activities, which disproportionately affect their time investment in farming. Besides, some of the technologies in use require enormous energies, which old people don't have and are unable to acquire despite increased food intake. This requires the adaptation of technologies that will exploit their existing practices and values. The one-size-fit-all approach to technology spread has already signaled a low diffusion rate and no similar mistake should be made.

All the groups have been in one way or the other involved in farming either on their own or with external support. Most of these supports were in tit-bits such as a once off provision of seeds without the requisite complementary activities. Although this strategy helped the groups to venture into improved farming practices, AFARD and AAN need to learn the lesson that complementary support are vital ingredient for better farming. Provision of inputs should be backed by provision of skills and other required linkages (such as to the market) and facilities (such as storage system).

To have increased community access to improved seeds and breed using a community based groups' multiplication strategy needs the establishment of a community seed bank. This bank should respond to seed supply and seed demand, without loosing the focus of food security building. This will require a number of strategies:

- Responding to improved seed demand calls for an intervention in the community to incite a hunger for improved seeds. This can be done through:
  - Mass seed/breed promotional activities such as campaigns on the radio, posters, and other leaflets that reveal the importance (in verbal, pictorial, and written form) of such inputs. This applies to non-users.
  - Encouraging users to continue with the use of improved varieties. In instances were results are not to the acceptability of the people, like in cases where some potato species were found to have bad smell, new varieties should be introduced.
- Responding to improved seed/brand supply will entail:
  - Providing the initial stock of improved varieties to the groups for (on) multiplication and on-lending/distribution.
  - Guaranteeing better quality without gene deterioration, after some time, by replenishing high quality stock, especially if the distribution cycle is not completed yet. However, where the distribution cycle is short, the market penetration should enable beneficiaries to procure improved varieties from other stockists.
  - The provision of backstopping services that makes the production of the multiplier varieties successful. This includes agronomic field-based and exposure based trainings to change the mindset of the farmers. With the view that the project is delivered through the CBO channel, such training should have equal participation of community members.
  - Setting up a clear supply guideline so that there is mutual respect of roles that each party is to play. While the project will supply the initial stock of multiplier varieties, particularly through the CBOs, there is no automatic guarantee that the wider community members will access the varieties during harvest distribution. To curb such envisageable risk, first the community should be made aware of the project strategy and intended benefits and secondly they should be involved in whatever takes place in view of the project. Again caution should be taken to delimit the community crossing into what purely belong to the groups.
  - Setting up a fairly improved facility for curing the seeds and a moistureconditioned drying space. It also requires training in post-harvest and seed bank management. These aspects have not been included in the project strategy. For instance, while potato vines can, in the face of goats, be left on farm till the next season, Irish potatoes will require a central curing center.
- Experimenting through R&D with popular appropriate technology practices that exist in the communities. A study should be conducted to understand, the different technologies used in the farming cycle from land opening to farm produce storage. This will provide space for popularizing good old practices, adapting feasible practices, and or generating new alternative practices that are acceptable to the community.

- Expanding the seed bank interface through CBOs into the entire community. This will require the role of demonstrated positive results to community members and leaders. It thus sets a basis for establishing 'Small Farmer Forum (SFF)' for farmers and practitioners in the area. The SFF should among others engage in advocacy and lobbying for small farmer friendly policies and resources.
- Finally, the demanded and supplied seeds should be able to translate into food and income if all the 4As are to be met. Doing so will require re-orienting farmers practices outside the subsistence basis. There is need to introduce the farmers to basic commercial orientation outside the notion that commercial farming is only fit for large land size owners. Rightly, the inclusion of entrepreneurial skills training will produce this result other than allowing for activity diversification. Besides, the inclusion of nutrition education will introduce the farmers on how to derive the best from the meager resource base, i.e., quality food preparation and preservation from local supplies as well as the general benefits of a good nutrition.

# Annex 1 Group experience, willingness, and management strategy.

Group	Issues discussed during the assessment	Crop and livestock Choice
Merlony o group	<ul> <li>The group has been involved in various faming activities since it started in 1992. Both crop (Rice, Beans, Tomatoes, and Chili) and animals (goats and chicken) production were engaged in for sale and consumption. While for crops better varieties were used animals were of local varieties. Solar drying (introduced by CRS) is also being used. Further support has been provided by AFARD, CRS, Techno serve, Food Dept, CARE and private Sector Dev. Promotion center.</li> <li>The goats reared are centrally managed. They have not increased as expected because of tick born disease, mange and eye infection.</li> <li>Individual members keep chickens. But poultry diseases like new castle disease, gumboro disease, and fleas have frequently attacked these livestock.</li> <li>The group has land (donated by elders who are also members). Establishment of demonstration plot will thus not be a problem.</li> <li>The group members were enthusiastic of providing non-members with seeds/planting materials once they harvested (in order to speed up the multiplication programme).</li> <li>The proposed management of livestock will be by giving out the goats/chicken they will be provided to individual members. This will reduce the cost of housing, feeding, and safety care. The members taking care of the animals will be provided with 'Sumba' (i.e., care giving fee). It will be an opportunity for women to own animals and so win their husbands to accept them to co-share in their own home animal.</li> </ul>	Beans K 123, Cassava NASE 14, NASE 12 5 Angora goats, 18 chicken
Pacego womens 'Club	<ul> <li>The group has been involved in various farming activities. The crops grown are cassava, simsim and peas. Both local cassava varieties and improved ones as 'longe' were planted. Improved chickens (white leghorn crosses) were also raised by they later died of gumboro disease.</li> <li>The cassava grown greatly improved group member food security and income because on average the yield was 30-35 bags per acre.</li> <li>One group member also received an improved male Angora goat from ACORD on her won for breeding with the local ones. Although the seed goat later died the offspring are still around (5 goats). They are tether them around the compound. Their weights are good and look heavy, better than the local one.</li> <li>The group intends to give out the goats they will be provided to different members to keep in the different villages. They will tether them but give supplementary feed e.g. pennisetum purpureum, Zea mays, panicun maximum, etc. (proposed to be provided).</li> <li>The group has land for farming activities</li> <li>The group accepted to provide non-group members with improved seeds once they harvest.</li> </ul>	Goats Ango ra 5; Chickens White leghorn 35, Cassava NASE 12, NASE 14 (adequate for planting 4 acres), Sweet potatoes
Kubbi Commu nity	<ul> <li>This is a whole community group. It has about 367 members. Many did not failed to turn up in fear that AFARD would 'arrest' them for their defaulted loan.</li> <li>The group has been involved in farming activities. They are raising seedlings and rearing goats for sale. Many of the goats were used during the famine season when the goats were sold and the proceeds helped members. Further, even the cost of paying herdsmen became high.</li> </ul>	Goats Boer 10; Chicken (cockered) Whit e leghorn 200;

	• Few group members turned up for the meeting (only 50 out of 367).	Irish potatoes
	• The group has land available for farming. Church of Uganda has donated 1 ½ acres of land for the group.	Victora/Rutu
	The group has accepted to give out seeds to non-group member for multiplication once they harvest.	k, Beans K
	• How ever they observed that the current planting materials (Irish potatoes) called Victoria, has been recycled more than three times and the performance is poor now. They begin rotting in the field before harvest so the seeds going to be supplied to them should not be bought locally. They said actually in the whole of West Nile, there are no good planting materials the Sub-County field Extension worker has good links with the Karyengere Agricultural Research station. He has offered to make the links if AFARD accepts.	131,K132
	• The group also intends to run the demo plot as a farm school, where even non-group members will benefit.	
	• The group intends to use the opportunity to become the sole supplies for planting material (Irish potatoes) in the region that is production of seeds for supply to other area as a Business.	
	• In addition to the seeds, the group has requested AFARD to supply them with Fungicides (Rido mill, mankozeb), insecticides and spray pump.	
	• It has demonstrated on production of improved beans with the support from techno serve, Agriculture Department, Sesakansa, etc.	
	• The group's intended site for demonstration was visited by that day the Sub-County field Extension worker was around.	
	• In addition to providing the chickens (cockereds). The group suggested local eggs could be purchased from Lango and supplied. This is because from experience, the improved bird (cockerels) are double sized and prone to attack by wild animals (wild cats especially). The cocks from Lango are very big (heavy enough), active, and resistant to wildcat attacks. The eggs can be bought and incubated locally here using the local chickens.	
	• The group also suggested chickens to be supplied should initially be vaccinated against norcastle disease and gomboro disease.	
STOGA	• STOGA has worked with ACORD and Nebbi District local government on livestock and improved cassava variety ("longe") multiplication. This led to increased yield of cassava and member incomes. The programme was initially successful but later failed because of poor disease control methods (new cattle disease and Gumboro disease) for livestock and theft of the improved cassava stock by non-group members.	Cassava NASE 14,NASE 12 , Sweet
	• The group feel part of their poor performance was also related to financial mismanagement, and lack of accountability, and transparency on the part of leaders.	potatoes; Goats 10,
	The group has about 2 acres of land for establishment of demo plot.	Chickens
	• The group is willing to share seeds with non-group members on harvest s that theft of stock is minimized.	(cockeresl) 20
	• The group does not intend to keep goats and chicken centrally, but to give out to various paid members to keep in their homes.	
Apalala Group	• The group has been involved in farming. They grow crops mostly been local varieties except the trial of "longe". Which has had low production. Other crops grown are beans, onions, tomatoes, sorghum, millet and other vegetable.	Boran Goats 8; Chicken (cockerels);
	• The group has never reared animals, but some individual members of the group (when they were members of another group) one time reared local birds 30 and crossed them with an improved breed provided by Veterinary Dept. They kept the hens (local) under deep litter system. The number of eggs produced by the birds increased but the eggs never hatched. They were feeding the birds on fish meal (muziri), blood, sorghum, millet, greens, etc. They feel the eggs never hatched because the male bird (Cock) become too fat and was infertile.	Irish potatoes; Sweet potatoes
	The group has accepted to give out improved seeds to other non-members once they harvested.	

	<ul> <li>The group intends to keep the goats centrally after constructing a goat house. They argue that if the goats are given out to individual members in the village the goat may be at a risk. People who are not members of the group and who are jealous can kill them.</li> <li>But they have accepted to give out the improved cockerels to members in the various villages to keep.</li> <li>The group has enough land.</li> </ul>	
	• Although the group has linkages with Action Aid and NARO, they hardly receive support services of the Sub-County field Extension worker and Community Development Assistant.	
Songoli Group	<ul> <li>The group is still very young (and is being nurtured by Action Aid) and has not been very much involved in farming. Members have been initially united because of it functional Adult literacy programme. They have only involved themselves in farming this year (as a group). They have planted cassava (local variety), which is not yet harvested. They have never kept animals, although individual members practice it in their homes.</li> <li>The group has no land of its own BUT individual members are ready to volunteer and offer the group land for its farming activities</li> </ul>	Irish potatoes Victoria, Beans K132; Goats 5, Chickens 22
	<ul> <li>Members are ready to give out improved seeds to other non-members once they harvest.</li> <li>The group prefers giving out the goats (improved) to different members to keep in the different villages where they came from.</li> </ul>	

#### References

- Uganda Bureau of Statistics (Jan. 2001). Uganda National Household Survey 1999/2000. Report on Crop Survey Module. Entebbe: UBOS.
- Uganda Bureau of Statistics and ORC Macro. (2001) Uganda Demographic and Health Survey 2000-2001. Calverton, Maryland, USA: UBOS and ORC Macro. (December).
- Oarkey, P. and Marsden, D (ed) .(1984). Approaches to Participation in Rural Development. Geneva: ILO.
- District Planning Unit. (2000). Nebbi District 3-Year Development Plan 2000-2003. Nebbi District Local Government.
- DPU and UNICEF (2003) 2001-05 GoU-UNICEF Country Programme. 2001 Baseline Study Report, Nebbi District for the Sub counties - Wadelai, Panyango, Erussi and Kango. Planning, Monitoring and Evaluation Programme. UNICEF: Kampala.
- Project Proposal Food Security Promotion Through Improved Seeds/Breeds Multiplication Project, 2004.