RURAL ECONOMY AND AGRICULTURE PRODUCTION (REAP)
PALENGA AND BOBI IDP CAMPS-GULU DISTRICT

FINAL REPORT FOR THE EVALUATION OF REAP I AND BASELINE OF REAP II

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LIST OF ABBREVIATIONS AND ACRONYMS

ACDI/VOCA	Agricultural Cooperation Development International/ Volunteers for Overseas Cooperative Assistance
CRS	Catholic Relief Services
DAO	District Agricultural Officer
DDS	Dietary Diversity Score
FGD	Focus Group Discussion
IDPs	Internally Displaced Persons
MT	Metric Tonne
Ha	Hectares
NGOs	Non Governmental Organisations
PHH	Post Harvest handling
REAP I	Rural Economy and Agricultural Production economy (first phase)
REAP II	Rural Economy and Agricultural Production economy (second phase)
Ushs	Uganda Shillings
WFP	World Food Program

EXECUTIVE SUMMARY

ACDI/VOCA Uganda designed the REAP project to prepare the people in the internally displaced peoples' (IDPs) camps in Gulu District for eventual re-settlement should the war come to an end. The goal of the project is to improve livelihoods and food security for residents of the two camps through increased agricultural productivity and revitalized local rural economy. The project has two components; improvement of agricultural production and productivity through communal farms and demonstrations on crop production and agro-forestry, and improvement of access to farmers and of farmers to markets through the improvement (and construction or rehabilitation) of the feeder road network.

Implementation of REAP I in Palenga IDP camp in Gulu District began in July 2003 with the setting up of a communal farm at Atega with 78 IDPs as beneficiaries. Improvement of agricultural productivity through communal farms was carried out concurrently with the road improvement component of the project. Between September and October 2004 ACDI/VOCA carried out an evaluation survey to determine the changes in project targets on; knowledge of improved agronomic practices; recommended traditional agricultural practices; crop production and productivity, value addition and crop marketing, and experience with farmer organisations in Palenga IDP camp. A baseline survey was also carried out (alongside the evaluation study) for REAP II, which included both Bobi and Palenga IDP camps, to determine current status of agricultural productivity; practice of improved and recommended traditional agricultural practices; value addition and agricultural marketing; farmers organisations and institutions which support these farmers.

Survey data was collected using an administered questionnaire as the principle tool of data collection (based on one-on-one interviews), in which 72 people (35 from Palenga and 37 from Bobi) were interviewed. Additional data was drawn from focus group discussions (5) held with business people in the IDP camps, local leaders, 2 farmers groups and a women's agro forestry groups. Further discussions were held with the local government agricultural extension officer and REAP project staff and officials from Northern Uganda Social Action Fund (NUSAF).

The findings from the evaluation survey highlighted land access as the principle-limiting factor to agricultural productivity in the Palenga IDP camp. The evaluation team noted that while the major component of the REAP project provided access for farmers to land through the communal farm for a selected crop they were not adequately covered for all their food security and income requirements. Subsequently all the project beneficiaries sought land outside the project communal farm to grow other crops to supplement the communal farm crop. The IDPs negotiated with the landlords for extra land and the terms of the agreements were payment of rent of Ushs 10,000 per season or an equivalent amount of crop produce.

The level of awareness and practice of farm management activities generally improved over the period when REAP I was implemented. However, pest and disease management lagged behind the other farm management practices. The evaluation team found that the bean leaf miner had attacked some of the bean crop in farmers' fields visited. Chemical pesticides especially applied especially before pest and disease attack (specifically for beans Dithane M45 and Dimethoate) can reduce the economic losses incurred by farmers.

Crop production contributed the most regular source of income mentioned by the IDPs. Charcoal trade, small businesses and the sell of local brew were the most common sources of income at evaluation. The road construction component of the REAP project has employed over 600 people in the Palenga – Bobi area and some IDPs have used the money earned to pay school fees for their children and to set up businesses. However, because of the strict turnover of workers (every three months the old workers are replaced by new recruits), even though many of the beneficiaries have been employed at some stage by the road improvement program of REAP I, few of the REAP beneficiaries (fewer than at baseline) are still employed in the road construction program.

The crop production and productivity improvement component of the REAP project provided access to an organized communal farm for the beneficiary IDPs. One crop agreed between the REAP extension staff and the IDPs was grown, using an improved

seed, fertilizers, in addition to training in proper farm management practices and supervision of farmers on how to manage their fields.

The productivity of maize, the crop prioritized under the communal farm for the second season of 2003 improved from farmers productivity prior to implementation of REAP I, while the productivity of the other crops, beans, millet, cassava, vegetables and upland rice, grown entirely on the farmers personal field was lower than at baseline.

There evaluation team held discussions with IDPs and REAP project staff and found that three prominent issues explain the disparities in crop productivity found; the IDPs continually mentioned the weak land agreements they had with the landlords in the area and that some of them have been chased away from their plots mid season (even losing their crop in the process). Previously, in the terms of agreement of between the farmer and the landlord, the landlords accepted part of the farmers' crop or money (Ushs 10,000) as rent for the land. In recent times however, the landlords have been asking for more money (more than Ushs 10,000) and they refused to accept part of the farmers crop, a situation which has denied farmers without this money (at the time its asked for) access to more land. This was compounded by the fact that many IDPs have constructed semi-permanent (huts) dwelling units further reducing the little land left within the camp itself.

A second issue that emerged during the discussions was that of the time allocation between the communal farm and personal fields. Since the farmers grow only one crop on the communal farm, it was important to maintain a second field and to allocate adequate time to this field as well. However, the evaluation team found that the IDPs spend the early part of the season in the communal farm and very little time was spared for their personal fields. This was attributed to the work schedule organized by the farmers and REAP staff in order to exploit the early planting season, which left them little time to tend the other fields. However, it was also observed that on returning from the communal farm the rest of the time was spent in non-farm activities.

The evaluation team also found that while the REAP staff provided training and guidance on improving farmers crop production practices, production of other crops outside the communal farm were largely independent of the REAP project. The farmers searched for their own seed and planted at their own discretion. Therefore while they planted improved seed on the communal farm because it was provided, it was more than likely that they planted traditional seed if they had no source of improved seed for the second or third crop and that the other farm management practices were also less strictly followed in the personal fields. This and the other issues mentioned above may have caused a decline in the performance of crops like beans, vegetables, cassava, millet and rice and created an advantage for the communal farm were maize production improved.

REAP staff should develop a schedule for the communal farm activities that enables IDPs to have more time for the other fields they maintain. The REAP staff may also have to increase their participation in monitoring, training and supervising these additional farming activities that REAP beneficiaries are engaged in outside the communal farm. There may be a need for REAP to consider meeting additional improved seed and fertilizers requirements for it beneficiaries (up to at least two other crops grown by farmers on their personal fields).

Cribs were the most important post harvest technology introduced in Palenga between the baseline and evaluation survey. Indeed more farmers acquired knowledge of clean grain, so much so that they were more inclined to sort their produce at evaluation than at baseline and grading, which was practiced to distinguish good quality grains from an inferior quality has been has lost prominence as the seed sold was largely uniform.

The most noticeable success of the REAP project was in the area of crop produce marketing and use of market information. In contrast to the findings of the baseline survey were the local market was the dominant outlet and source of market information, the evaluation survey found that the farmers in Palenga are, at present, more likely to pursue urban markets or the collective marketing arrangements similar to the one organized by REAP I (at farm gate) because they can fetch a better price, all produce is

bought at once and they are paid at once. Access to market information was found to have risen to 94 percent from 78 percent at the baseline. Furthermore farmers obtained most their market information from extension staff, the radio and fellow farmers at the evaluation and less from local traders (as had been the case at baseline).

In assessing the findings of the baseline survey of REAP II the survey team found that in Bobi the marketing was still largely based on the local market transportation by bicycles was the most frequent higher in Bobi than in Palenga. However, record keeping was much way of reaching the market as opposed to Pickup vehicles, which are now more popular in Palenga as farmers travel to urban markets that are farther from the camp. Production of millet, beans and groundnuts was higher in Bobi than in Palenga, while maize production is higher in Palenga because of the earlier intervention. The community found at Okwii in Bobi was working with in their home area and therefore had greater access to land (and the communal farm was just starting), although they too had been destabilized by the war. The farmers in Bobi also used their bean crop as payment for schools fees for their children, and the rest as in Palenga was sold or kept for home consumption.

Non-agricultural enterprises contributed only a small fraction of overall economy of the IDP camps, a situation that can be improved through a set of intervention that not only emphasize farming as a business (skills) but also emphasize entrepreneurship training for the farmers and local business people. To attract that section of the community which is not directly engaged in agriculture.

1.0. INTRODUCTION

Gulu district has for the last 18 years suffered a high level of insecurity as a result of activities of the rebel Lord's Resistance Army (LRA). The insecurity forced many residents of the district into Internally Displaced Persons' (IDP) camps. It is estimated that over 80% of people in Gulu district are in IDP camps. Conditions in these camps are poor, as most people are unable to continue with normal farming activities, have no access to employment opportunities and (IDPs) suffer malnutrition and several other hardships. Apart from the insecurity in the area, the capacity of local government to provide basic services is severely limited by lack of resources. Support directed towards inadequate food, poor shelter, lack of clean water and inadequate sanitation facilities has been the focal point of most international and local NGOs. The residents of the camps are largely dependent on aid from several NGOs for their survival. The danger in this is that aid dependency and loss of farming capabilities could hinder re-settlement when the war comes to an end.

ACDI/VOCA Uganda designed the REAP project to prepare the people in the camp for eventual re-settlement should the war come to an end. The REAP project is targeting more than 10,000 residents of Palenga and Bobi IDP camps in Gulu district. The goal of the project is to improve livelihoods and food security for residents of the two camps through increased agricultural productivity and revitalized local rural economy.

1.1 A summmary of activities by development agencies in Palenga and Bobi

There are several agencies (Government and NGOs) working towards the improvement of livelihood of the IDPs in the Palenga and Bobi area. The main forms of intervention are categorised, for the purpose of this report, as (1) assistance towards education; payment of school fees, building of school structures and training of adult members of the IDP camps. (2) Improvement of agricultural production (or productivity) and marketing. (3) Provision of food and clothes. (4) Health and sanitation assistance, which was assistance towards prevention and treatment of HIV/AIDS, treatment and prevention of malaria, immunisation, training on maintenance of proper sanitary conditions and hygiene, and provision of water.

Assistance through Education	
Agency	**Intervention**
SAVE THE CHILDREN	They renovated schools and Construct latrines in schools Pay school fees for IDP children
GUSCO	Pays school fees for orphans and also helps households with building material for building houses
ACCORD	Pays for the education of children and takes care of returnees and provides capacity building for camp leaders
CRS/CARITAS	Provides training camp leaders, religious leaders and traditional leaders especially those involved in peace missions
CPAR	Pay school fees for children

Agricultural production and marketing, and environmental protection	
Agencies	**Interventions**
The Government	Northern Uganda Social Action Fund (NUSAF) supports community-based organizations that carryout activities which lead to the improvement of the welfare of all people in Northern Uganda. Interventions include women's livestock projects, micro-finance projects e.t.c. Through the District Extension staff Government provides training in agricultural production and marketing. There are also extension staff who help with community mobilization (Community Development Officers) and other local government duties handled by the District and Sub county staff. Government also funds the Universal Primary Education program
ACDI/VOCA-REAP	Improvement of agricultural production and productivity through communal farms at Atega (Palenga) and Okwii (Bobi), and demonstrations on crop production and agro-forestry. Improvement of access to farmers and to markets through the improvement (construction and rehabilitation) of the feeder road network.
CPAR	Agro-forestry through the planting of moringa and support to farmers growing pineapples CPAR has introduced IDPs to fuel saving stoves
HUNGER ALERT	HUNGER ALERT provides training in agricultural production and they also provide seeds for maize and beans crops.
WORLD VISION	World Vision trains and provides inputs for tree planting (agro forestry) and also provides the tree planting plots
WFP	WFP encourages tree planting and provides seedlings for planting

Provision of food	
Agency	**Intervention**
WFP	Provides food to IDPs; 3 kg of beans, 7 kgs of maize flour, 1.7 litres of cooking oil and 2 kgs of soya flour per person for 3 months
WORLD VISION	Provides some food items from time to time. World Vision also provides clothes for the IDPs

Health and Sanitation	
Agency	**Intervention**
WORLD VISION	World Vision provides training and counseling on HIV and AIDS. They also provide Toilet slabs for schools.
CPAR	Construct boreholes and provide training on hygiene and sanitation
UNICEF	Provides Immunization for IDPs and their children. They also provide daycare services for children aged between 2 and 5 years Provides water (water points), water is pumped from under ground and they pay Ushs 200 per month for fuel for the diesel engine
CARE	CARE is carries out HIV/AIDS awareness, latrine construction, malaria control (smart nets), and road maintenance
AMREF	Construct boreholes for the IDPs and carry out training and sensitization on hygiene
ACTION FAIM	Construct boreholes and water wells, and carryout training on sanitation and hygiene
TASO	Assists those who are living with HIV, promote awareness, offer testing, provide ARVs
ADDRESS	Provide training on family planning and reproductive health for the youth

1.2. Objectives of the study

This study was designed to achieve two objectives;. Firstly to evaluate the activities of REAP I, specifically changes in project targets on; knowledge of improved agronomic practices; recommended traditional agricultural practices; crop production and productivity, value addition and crop marketing, and experience with farmer organisations in Palenga IDP camp. The second objective was to carry out a baseline survey for REAP II, which includes both Bobi and Palenga IDP camps, specifically to determine current status of agricultural productivity; practice of improved and

recommended traditional agricultural practices; value addition and agricultural marketing; farmers organisations and institutions which support these farmers.

2.0. METHODOLOGY

2.1. Description of the study

Three methods were used to collect the information reported, namely a rapid knowledge, practice and coverage (KPC) survey based on one-on-one interviews involving 72 people (35 from Palenga and 37 from Bobi), five focused group discussions involved 10 – 14 people per group and direct observations both in the field and within the camps. Discussions were also held with local government agricultural extension officer and as well as agricultural extension officers of the REAP project. The study was accomplished in four main stages: Preparatory stage; literature review; household survey and focus group discussion and data analysis and report preparation. During the preparatory stage, The Ssemwanga Centre (TSC) recruited and trained six (6) research assistants, and designed the questionnaire. The questionnaire was pre-tested at Bobi IDP camp and adjustments were made. The household survey, which constituted the main activity of the study, was conducted over a period of one week. All the research assistants were fluent in the local language (Luo).

Data collected from the survey was entered and analysed using SPSS statistical package and MS Excel. Descriptive statistics were obtained, presented and discussed. Word processing was done using MS word.

2.2. Sampling method

From the two camps, Bobi and Palenga, a random sample of 35 REAP beneficiaries and 37 listed farmers (future beneficiaries) respectively were selected for one-on-one interview. The sampling frame was a list of beneficiaries obtained from ACDI/VOCA

office in Palenga. The sampling method used in both areas was systematic sampling starting from the first female on the list.

The members of the focus group discussion (FGD) were not selected randomly. The first FGD for Palenga camp comprised of 4 direct beneficiaries; 2 indirect beneficiaries; 2 contact farmers; 2 local businessmen whereas the second FGD in Palenga had local leaders (Camp leaders; youth leaders; women leaders). In Bobi one FGD comprised members of women group involved in agro-forestry project. The other FGD from Bobi had a combination of local leaders, direct beneficiaries and indirect beneficiaries.

2.3. Source of data

Primary data was collected at household level by administering questionnaire on a one-on-one basis. Qualitative information were obtained through FGD, field and camp observations, discussions with the Local Government Agriculture extension staff and the Agricultural Extension Officers of the REAP project.

2.4. Data analysis

The data collected from the one-on-one interview was subjected to statistical analysis using SPSS statistical package. MS word was used for word processing and the analysis results were presented using tables, graphs and text.

Table A I: Indicators of REAP I project for Palenga IDP camp

Indicators	Maize		Beans		Cassava		Vegetables		Millet		Rice	
Production	**Baseline**	**2004**	**Baseline**	**2004**	**Baseline**	**2004**	**Baseline**	**2004**	**Baseline**	**2004**	**Baseline**	**2004**
% Of farmers growing crop	33	60	23	37	27	20	50	26	37	20	3	3
Mean area planted per farmer (Ha)	0.57	0.49	0.51	0.28	0.62	0.26	0.23	0.05	0.32	0.32	0.8	0.02
Mean output per farmer (MT)	0.54	0.48	0.32	0.18	2.51	0.38	0.24	0.05	0.11	0.11	1.5	0.02
Yield (MT/Ha) pure stand	0.97	1.05	0.63	0.67	4.05	1.46	1.04	1	0.34	0.34	1.87	1.2
Yield (MT/Ha) mixed stand	0.81	N/a	0.44	N/a	7.6	N/a	N/a	N/a	N/a	N/a	N/a	N/a
% Of output sold per farmer	60	60	66	21	23	N/a	96	32	67	12	33	N/a
Total output (MT)	17.68	27.64	11.03	9.74	15.74	4.89	10.81	1.22	11.1	6.02	2.26	0.06

Farm management practices	**Awareness**		**Practice**	
	Baseline	**FY 2004**	**Baseline**	**FY 2004**
Line planting	100	97	90	100
Recommended spacing	90	97	66	97
Timely planting	96	100	26	60
Soil fertility management	80	97	36	80
Weed management	96	100	100	94
Crop rotation	70	100	80	100
Pest and disease control	76	94	16	23
Planting improved seeds	73	94	26	91
Intercropping	86	100	80	31
Ox-ploughing	66	97	0	17
Use of selected local seeds	66	86	93	43
Principal Income sources	**Baseline**		**FY 2004**	
Crop farming	53		87	
Livestock farming	3		6	
Casual labor	23		9	
Sale of local brew	N/a		14	
Charcoal burning	10		31	
Business	7		17	
Dietary Diversity score				
DDS	5.0		5.1	
Market outlets	**Baseline**		**FY 2004**	
Farm gate	18		44	
Local market	36		17	
Urban market	18		28	
Stores managed by other NGOs	9		11	
Characteristics	**Baseline**		**FY 2004**	
Female headed household	33		14	
% of IDPs who own radio	33		46	
% of IDPs who own bicycle	47		40	
Households keeping records	19		71	

Source: REAP I EVALUATION SURVEY 2004

3.0 FINDINGS AND DISCUSSION: EVALUATION OF REAP I

3.1 Land Tenure

In July 2003, the REAP project in Palenga started with a 200 acre (80 ha) piece of land negotiated with landlords in the Palenga area to assist residents of the IDP camps get access to farm land. Originally 2.5-acre plots (1 hectare) were allocated to 78 farmers. However, some households were unable to use the 1 ha entirely so the project allowed some more IDPs to join in and the number of farmland beneficiaries grew to 92 farmers. On the basis of the information obtained from the one-on-one interviews, it was found that most farmers felt that the land tenure arrangement in the camps was the most limiting factor as far as their production and productivity were concerned. The findings of the focus group discussions bear the same resonance. While the project farm enabled them to grow some crops they needed additional land to grow other crops that may not be prioritized by the project in particular for both food security and additional income (sale). Between 1996 and 2001, when the earliest IDPs came to the camp in Palenga, the landlords allowed the IDPs access to their land, which enabled them to grow some food. As the population of the camp increased landlords started renting out land, the present rate is Ushs 10,000 per season or an equivalent amount of produce for a plot close to the size of an acre. Sometimes the landlords interrupted the IDPs production cycle by chasing them off the private fields. While admitting to this hostility, the landlords were asking for compensation from the project as they argued that the people who were using their land under the project were receiving inputs (benefits), but the landowners had been ignored.

3.2 Characteristics of the farming system

The crops traditionally grown in the Palenga IDP camp and the surrounding area are maize, beans, groundnuts, cassava, millet and vegetables; tomatoes, cabbages, cowpeas and eggplants. From the interviews, focus group discussions and field observations the evaluation team found that the farmers (IDPs) had differentiated roles (of importance) for the different crops. Millet and beans were largely grown for home consumption (and

they are supplemented by the food donated by the WFP, which is 3 kg of beans, 7 kg of maize flour, 1.7 litres of oil and 2 kg of Soya flour per person (IDP) for a period of three months). Maize and groundnuts were grown as cash crops. Cassava, maize and millet were used to make local brew, which was sold to other members of the camp. When the households had an urgent need for money the available crop produce was sold to meet the emergency. Vegetables and cassava lie in the middle (both cash and food crops) when a bumper harvest was realized most was sold and when the crop harvest was poor little or some time no vegetables or cassava were sold.

3.3 Farm practices and crops grown

Table 3.1: Percentage of awareness and practice of agronomic practices

Practice	Awareness		Practice	
	Baseline	FY 2004	Baseline	FY 2004
Line planting	100	97	90	100
Recommended spacing	90	97	66	97
Timely planting	96	100	26	60
Soil fertility management	80	97	36	80
Weed management	96	100	100	94
Crop rotation	70	100	80	100
Pest and disease control	76	94	16	23
Planting improved seeds	73	94	26	91
Intercropping	86	100	80	31
Ox-plough	66	97	0	17
Use of selected local seeds	66	86	93	43

Source: REAP I EVALUATION SURVEY 2004

Annual crops of groundnuts, maize, millet, cassava and vegetables were still the most important crops at this evaluation stage as had been at the baseline study. REAP I introduced ox-ploughs, which were absent at baseline and from this survey 17 percent of the farmers reported that they used ox-ploughs for their cultivation. However, the percentage of farmers who have knowledge of using the ox-plough in the Palenga IDP camp was much higher at 97 percent up from the 66 percent from a year ago. There was an improvement in practice of improved farm management techniques between the baseline and the evaluation, which may be largely due to training received by the farmers from the extension officers. Use of improved seed rose from 26 percent at baseline to 91

percent at evaluation, which was complimented by the reduction in use of local seed from 93 percent at baseline to 43 percent at the evaluation. Since the interviews concentrated on project beneficiaries it would have been expected that all farmers used improved seed, which was the case for the project allocated plot of land, and that none used local seed. However, the project provided seed only for a prioritized crop and not for the other crops grown by the IDPs. Therefore when farmers needed to plant an additional crop they sought seed from elsewhere and in some cases they ended up using local seed. Fertilizers, improved seed and ox-ploughs were got directly from the project (REAP I) and therefore represent utilization of resources provided. Pest and disease control was only practiced by one fifth of the farmers a situation that had not changed much between baseline and the evaluation study. Visits to farmers' fields revealed that the bean leaf miner was a major pest for farmers, which may lead to a reduction in present yield of beans. The farmers' felt they could not do anything to counter diseases and pest, and there has been little emphasis on pest or disease control in the project activities perhaps because it was not considered a limiting problem before.

3.4 Crop production and productivity of households

Table 3.2: Output and yield for baseline (2003) and FY 2004

Indicators	**Maize**		**Beans**		**Cassava**	
Production	**Baseline**	**2004**	**Baseline**	**2004**	**Baseline**	**2004**
% Of farmers growing crop	33	60	23	37	27	20
Mean area planted (Ha)	0.57	0.49	0.51	0.28	0.62	0.26
Mean output (MT)	0.54	0.48	0.32	0.18	2.51	0.38
Yield (MT/Ha) pure stand	0.97	1.05	0.63	0.67	4.05	1.46
Yield (MT/Ha) mixed stand	0.81	N/a	0.44	N/a	7.6	N/a
% Of output sold	60	60	66	21	23	N/a
Total output	17.68	27.64	11.03	9.74	15.74	4.89

Source: REAP I EVALUATION SURVEY 2004

The table above summarizes the findings on productivity for the Palenga IDP camp under the REAP I program. There were 80 beneficiary households in the Palenga IDP camp

(but the number has increased to 94) and from the results of the survey (beneficiaries) total output of maize increased from 17.68 metric tones (MT) at baseline to 23.03 MT at the time of the evaluation study. According to the REAP I project office in Palenga only 9.5 MT of maize was sold under the collective marketing arrangement, which is 41.2 percent of the farmers' total output. Since 60 percent of total maize produce was sold then 18.8 percent of the output was sold under private arrangements of the farmers and it most probably came from the private fields.

Explaining production and productivity results obtained at evaluation

From discussions held with the IDPs and extension staff the total output of maize may have been higher than the figures reported by farmers for the following reasons. The farmers stated that they had started harvesting their field but were stopped by the extension staff who wanted to establish the exact amount of the output. Even then there were some farmers who still sneaked to the fields and stole some combs of maize because "they were hungry." The increased volume of maize grown was due to the increased percentage of farmers growing maize (from 33 percent to 60 percent) in 2004, which was almost double that at baseline. The improved performance of maize was also due to the increased availability and utilization of improved seed from 26 percent to 91 percent and use of fertilizers by 80 percent of the respondent farmers in 2004 from 26 percent at baseline.

The improved performance in the production of maize however, was not carried over to other crops. Even though the number of farmers who grew beans increased the bean crop harvested was disappointing largely because of the poor weather experienced. The survey team found bean leaf borers as mentioned earlier in the demonstration garden of Mrs. Apoku Christine (a contact farmer) at Palenga[1]. From our observations on the demonstration garden the level of damage was above economic injury levels and could have had an effect on the yield of beans in Palenga. None of the other crops considered in the survey showed an increase similar to maize instead the trend was reversed. The

[1] However, it could not be established how much effect (in quantitative terms) the leaf borer could have had on the low yield

percentage of households who grew vegetables fell by half, the percentage of farmers growing cassava fell by 7 percent, and millet by 17 percent and rice was indifferent.

Explaining performance of non-prioritized target crops

There are several factors that together have contributed to the poor results reported for the other target crops (other than maize). Firstly the results were captured from direct beneficiaries of the project and are largely influenced by project activities and the situation in the camp itself. The project allowed farmers to plant one target crop on the project farm plot therefore the farmers have to find land elsewhere to plant another crop. However, there are some limitations on the amount of land, outside the project farm, to grow additional crops because landlords have been reported to be increasingly less willing to lend out land to the IDPs. Even the ones who are lucky to get land from the landlords have to either pay money or leave part of their harvest for the landlords. The success of the private field therefore depended a lot on the farmers' negotiation skills and ability to convince the landlords of their need for an extra plot of land. Another reason for the poor performance of the non-prioritized crop was that while the project beneficiaries got input for the target crop from the project and had extension staff to supervise their project farm fields, they did not have the similar attention for the other crops. Managing the project plots took a lot of time away from the farmers and they had less time for their private fields. As the extension staff and the farmers concurred, effort has shifted towards the project allocated plot away from growing other crops. All these factors have cumulatively led to a reduction in production and productivity of the other crops considered for this survey.

Production and productivity of non prioritized target crops

While millet and beans are mostly important for food security purposes, the role of cassava both as a food crop and cash crop has dwindled so has its productivity. Cassava has to be grown a period longer than one year, and with the loose land tenure, few farmers risk growing it in the camps. The figures reported for cassava belonged to the few landowners and the camp members who were courageous enough to plant cassava in

the present land tenure situation. Some of the information volunteered by farmers on the cassava was based on their home fields in areas that are far from the camp, where they hardly ever go to harvest the cassava. This therefore skewed the comparisons between baseline yield and present yield figures. In the baseline study there were some expectations that upland rice would proliferate among the farmers but the findings at the evaluation stage show that the position held at baseline was unchanged (only 3 percent of the farmers grew rice and it was for domestic consumption). There was very little interest generated (some farmers refused to consider the possibility of growing rice) when the evaluation team mentioned rice as an alternative crop. Vegetables are grown in small land in the camps on average 200 square meters for those who do have the land. Unfortunately it would seem that the percentage of farmers growing vegetables halved and the output was just one quarter of what it was at baseline because there was very little space available for growing anything in the camps.

Table 3.3: Output and yield for baseline (2003) and FY 2004

Indicators	**Vegetables**		**Millet**		**Rice**	
Production	**Baseline**	**2004**	**Baseline**	**2004**	**Baseline**	**2004**
% Of farmers growing crop	50	26	37	20	3	3
Mean area planted (Ha)	0.23	0.05	0.32	0.32	0.8	0.02
Mean output (MT)	0.24	0.05	0.11	0.11	1.5	0.02
Yield (MT/Ha) pure stand	1.04	1	0.34	0.34	1.87	1.2
Yield (MT/Ha) mixed stand	N/a	N/a	N/a	N/a	N/a	N/a
% Output sold	96	32	67	12	33	N/a
Total output	10.81	1.22	11.1	6.02	2.26	0.06

Source: REAP I EVALUATION SURVEY 2004

3.5 Income generating activities

Trend of income generating activities

The baseline study showed few income generating options that had not been adequately patronized by the IDPs. The evaluation study on the other hand showed what seems to be an increased willingness on the part of the people in the camp to participate in several income-generating activities. Of the respondents interviewed at the evaluation 87 percent carried out crop farming (to generate income) as opposed to 53 percent at baseline.

Table 3.4: Trend of Income generating activities and welfare in Palenga IDP camp by percentage

Principal Income sources	Baseline	FY 2004
Crop farming	53	87
Livestock farming	3	6
Casual labor	23	9
Sale of local brew	N/a	14
Charcoal burning	10	31
Business	7	17

Source: REAP I EVALUATION SURVEY 2004

Charcoal burning was a growing enterprise as it attracted 30 percent of the respondents at evaluation thrice the percentage at baseline. As the camp expanded and security improved more IDPs went out to forests to make charcoal, which they sold to travelers, to other camp residents and local businesses. Production and sale of local brew, which was categorized under business activities at baseline, grew considerably making up more than one tenth of income generation activities in the Palenga IDP camp. This was supported by findings from the focus group discussion, where the participants stated that consumption of alcohol was the most regular form of leisure for the IDP inhabitants. They further contended that the local brew was very cheap, which made it affordable to many people. In this evaluation study therefore the local brew income category was considered independently as an income generating activity. Small businesses making and selling pancakes, collecting wild passion fruits and selling in Gulu town, cooking and selling food, largely dominated by women, have proliferated with many taking advantage of the increased NGOs activity and road construction workers in the area some of the workers are drawn from the camp community itself. The men were mostly engaged in

providing casual labor for road construction[1]. Approximately one quarter of the respondents participated in road construction in the previous year but the proportion of project beneficiaries who are involved in the casual labor may have fallen because of the strict worker turnover policy. The policy is meant to allow more people to have an opportunity of working with the road construction component of the REAP project. The practice allows a causal worker to work for a brief period of three months then they are replaced with new recruits. During the brief period of working with the REAP road construction the workers participate in a savings program, which ensures that they have some extra income. In one case at Minakulu St. Thomas the money was used to pay school fees and in Palenga some IDPs used the money to set up small businesses and to improve their house with bricks and iron sheets.

Although, participation in crop farming was constrained by poor access to land, late arrival of seed and non-conducive weather, there was a reasonable amount of food privately produced that was kept back for home consumption as people hedged against the prolonged dry spell and supplemented the food received from WFP.

Household incomes from target crops

Table 3.5: Mean output produced (MT), sold and incomes from target crops

Crop	Output (MT)		Percentage sold		Gross income[2] Ushs		Percentage change in gross income
	FY2004	Baseline	FY 2004	Baseline	FY2004	Baseline	
Maize	0.48	0.54	60	60	95,040	80,000	16
Beans	0.18	0.32	21	66	22,680	126,000	-455
Vegetables	0.05	0.24	32	33	4,800	34,500	-618
Cassava	0.38	2.51	N/a	67	N/a	69,200	N/a
Millet	0.11	0.11	12	96	6,600	24,500	-271
Rice	0.02	1.50	N/a	23	N/a	318,000	N/a

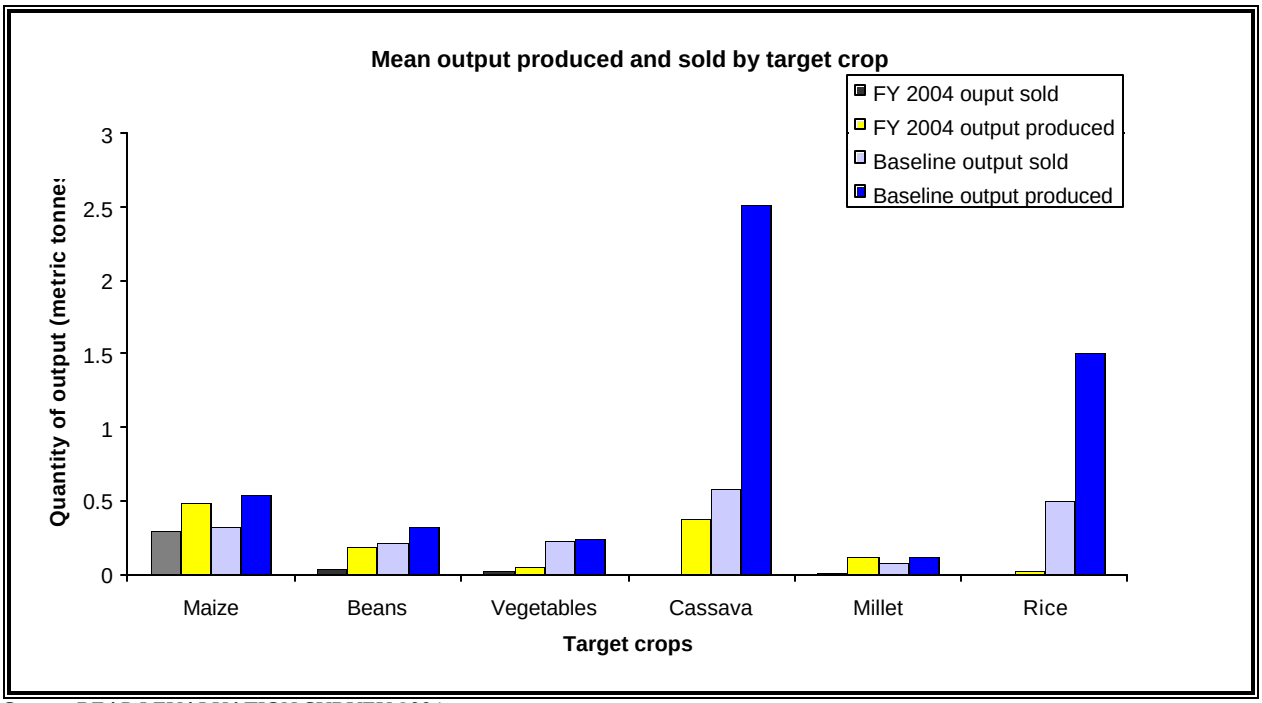
Source: REAP I EVALUATION SURVEY 2004

[1] Road construction up to 600 men have worked although turnover is high, casual labour in construction of buildings, hired bicycle transport (boda boda), charcoal burning and firewood, selling passion fruits and small businesses selling paraffin.

[2] The prices Ushs/kg at evaluation were for maize 330, beans 600, Vegetable (eggplants used as proxy measure) 150 and millet 600.

In the first year of the project (REAP I), only maize was promoted and there were gains of 16 percent in the gross income earned from the maize. The other crops suffered from the land tenure problems people had in the camps, the rise in population of the camp over the last year where there were intensive rebel activities meant less and less land available to the farmers but perhaps more importantly the time farmers allocated to the project plot, away from their fields, especially during the planting season deprived most households of labor to manage the other crops. Subsequently the output at evaluation was lower compared to the baseline output as less land was put to productive use.

Graph 1: Mean output sold by target crop for baseline and FY 2003



Source: REAP I EVALUATION SURVEY 2004

Investment of Income

While income drawn from the other target crops reduced, there were signs that the income obtained from non-crop income sources was being put to uses that would improve the welfare and livelihood of the income earners. Of all income received during the period of REAP I about half of the respondents used it to pay school fees for their children, one quarter of the respondents used the income to buy livestock, one third of the respondents re-invested the income into farming; buying small pieces of land to grow

other crops, hoes and other farm implements. One fifth of the respondents used the income to buy either a radio, a bicycle or household items and 6 percent invested it in business activities or opened up a bank account respectively.

Table 3.6: Investments of income generated[2]

Investment activities	Percentage level of investment
Paid school fees	49
Bought livestock	26
Re-invest in farming activities	32
Opening a bank account	6
Bought radios, bicycles and household utensils	20
Investment in business	6

Source: REAP I EVALUATION SURVEY 2004

3.6 Post harvest handling practices

Drying and storage facilities

At baseline IDPs kept their maize and beans crop in the field until it was dry, while cassava and vegetables were sold in the field or eaten fresh. The produce at baseline was stored in sacks inside the dwelling units. However, the evaluation team observed that since then a number of farmers have constructed cribs and the evaluation survey team found yet more farmers were preparing to set up cribs having received wire mesh and other materials from the REAP project. The quality of produce obtained and the higher price earned with grain stored in the cribs has motivated some farmers to borrow tarpaulins from friends for drying their produce. The size of the wire mesh is rather large and only comb maize can be stored in the crib, as it would be in appropriate to keep other produce in the crib. The rest of the produce shelled maize, beans, millet and vegetables were stored inside the farmers' dwelling unit. Some IDPs complained of having little space after building their hut that even if they were given materials they have no space left to build a crib. There was no improvement in storage facilities for vegetables between baseline and evaluation as vegetables were still kept in pots and jerry cans.

[2] Investment activities were only mentioned at the Evaluation survey and not in the Baseline survey. The information obtained from the focus group discussions and the primary data in the Evaluation were compared to illuminate changes in investment over this period.

Value addition activities

During the baseline study grading was considered to be more important than sorting by a ratio of 10:1. At the evaluation sorting was considered by far more important than any other practice, three quarters of the respondents had sorted their produce compared to 3 percent who graded. This may have been a response to the present situation in the market and the camp. Grading was important at baseline because different households grew different varieties of the same crop from locally kept varieties Longe 1, e.t.c. The only way they could differentiate their produce in the market was by arranging it in away that would convince buyers that they had better produce. However, with the uniform seed received from REAP I and other organizations grading would have little effect on the value of the product if the other post harvest practices like proper drying and storage are practiced. Sorting would be the more worthwhile value addition activity because the producer can differentiate their product based on cleanliness. The sorted produce for example maize (or an other grain) would then be sold faster then the unsorted lot.

Table 3.7: Post harvest handling activities (by percentage) in Palenga IDP camp

Activities	Baseline	FY 2004
Grading	33	3
Sorting	3	77
Milling	3	49
Packaging	3	0
Threshing	0	26
Shelling	0	3
Winnowing	0	6

Source: REAP I EVALUATION SURVEY 2004

Farmers were more inclined to mill their own produce (49 percent) by the time of the evaluation than had been the case at baseline an indication perhaps that they have settled down to the life in the camp and they are processing more and more of their food. The milling activity partly accounts for the increased percentage of respondents who held back their millet at evaluation, 84 percent higher than at baseline. There are three other post harvest-handling activities that were not reported by the respondents at the time of

the baseline study, but they are practiced according to the findings of this evaluation these are threshing (26 percent), winnowing (6 percent) and shelling (3 percent).

3.7 Marketing and marketing outlets

Crop produce marketing

At baseline the local market was the most regular market outlet for crop produce followed by farm gate. Most of the maize grown by REAP I beneficiaries during the second season of 2003 was sold collectively to Uganda Grain Traders (UGT) through a marketing plan organized by REAP I staff. This may account for the growth of the farm gate market outlet. The arrangement between UGT, REAP I staff and the beneficiaries of REAP I seems to have stimulated attention towards the urban market. Conversation with farmers showed that the good prices earned from the maize sold had opened their eyes to the possibility of earning better prices for their crop produce in urban markets. The women farmers interviewed were particularly pleased with the collective marketing arrangement were interest in having a similar arrangement for the other crops. Men were less enthusiastic about the collective arrangement because it denied them a chance of having money in their pocket but appreciated the benefit of having a lump sum payment for their produce.

Table 3.8: Market outlets (by percentage) for the baseline and evaluation

Market outlets	Baseline	FY 2004
Farm gate	18	44
Local market	36	17
Urban market	18	28
Store managed by NGO	9	11

Source: REAP I EVALUATION SURVEY 2004

Many rural communities in Gulu district sell their produce to middlemen from the urban centers. The most prominent "middle women" are the Awaro. The Awaro have agents within the camps, who make contacts for them with local farmers and at the end of the season they come in and buy produce from the farmers who have agreed to sell. Many interviewees and focus group discussion participants complained about the low prices

they received and being cheated by the measurements used by the Awaro. In most cases they sold because they had few market outlet options and they needed the money as well.

Mode of transporting produce to the market

Table 3.9: Means transport costs Ushs/kg/km

Mode of transport	Percentage		Costs (Ushs/kg/km)	
	Baseline	FY 2004	Baseline	FY 2004
Bicycle	52	31	12	12
Pickup	4	20	34	2
Truck	4	3	27	5
Head load	40	20	11	24

Source: REAP I EVALUATION SURVEY 2004

The bicycle was still the most popular mode of transport from the camp to the different centers although only 30 percent, as opposed to 52 percent at baseline, of the respondents use bicycles. There has been a growth in the use of pickups, which mirrors the increase noted in urban market outlets. It looks like farmers have developed a preference for the markets that are far away from them, where they earn higher prices for their produce. Contrastingly the cost of pickup and truck transport has dropped to as low as Ushs/kg/km 2 and Ushs/kg/km 5 from Ushs/kg/km 34 and Ushs/kg/km 27 respectively. This may have been due to an increase in the volume of commodities transported and the number of pickup and truck carriers. The people may have substituted the distance where they used a bicycle, for example from Palenga to Gulu town, with vehicle transport. It was considerably cheaper since the pickups and trucks are usually overloaded and therefore they can reduce the carriage fee whereas a hired bicycle transporter (boda boda) may not be able to reduce his charge. The security in the area, over the last few months, has improved which may have lured some transporters back. Some times NGOs and business people hired pickups and trucks, which also carry farmers' produce only as an additional item this means little extra costs would be incurred thus enabling farmers' benefit from the lower fare. Head load carriers were the most expensive mode of transport, at the evaluation, as they carried little produce over short distances. Consequently, the use of the head load mode of transport halved between baseline and evaluation from 40 percent to 20 percent.

Market information sources

Table 3.10: Sources of market information by percentage

Market information	Baseline	FY 2004
Access to market information	*78*	*94*
Market information source		
Extension agents	0	52
Radio	17	49
Fellow farmers	21	34
Buyers	61	18
Local markets	0	10

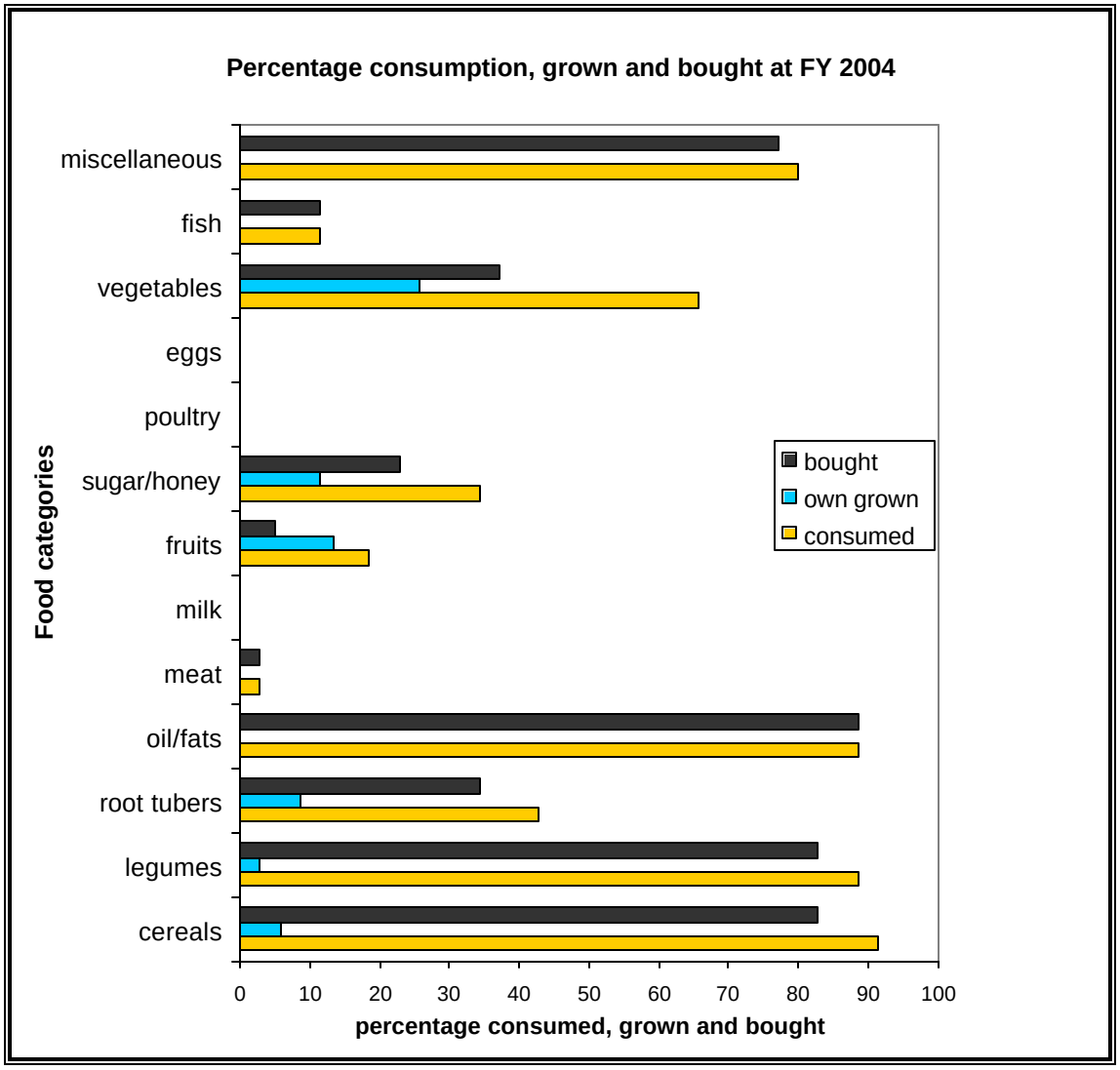
Source: REAP I EVALUATION SURVEY 2004

Access to market information improved from 78 percent to 94 percent. This result was due to the growing influence of the radio and extension workers. While, many of the farmers interviewed had multiple sources of market information, one half of them received information from extension staff and the radio (up from 17 percent at baseline for the radio). Indeed extension staff and the radio represented the most regular sources of market information. Fellow farmers were a popular source of information about the market. The popularity of buyers has receded to one-third the level at baseline. The major reason for this was the lack of trust in the information provided by traders as many farmers felt that the traders cheated them.

3.8 Dietary diversity

Dietary diversity was defined as the extent to which a diet is varied with respect to different kinds of foods in it. It is the measure of the quality of diet of a given population using a dietary diversity score (DDS). The DDS score obtained from the evaluation study was 5.1 which is quite similar to the 5.0 score obtained at baseline. As at baseline the 24-hour recall was used in the survey. The major food groups considered were cereals, legumes, root tubers, oils and fats, sugar and honey, meat, milk, eggs, poultry, vegetables and fish and a miscellaneous category for spices and other additives. As reported in the baseline survey most of the respondents ate on average one meal per day.

Graph 2: Consumption of household by food group



Source: REAP I EVALUATION SURVEY 2004

The DDS score reported at the evaluation showed that in the IDPs' diet increased consumption of oil substituted for the disappearance of milk, poultry and eggs in the diet. The residents of the camp were given oil as part of the food donated by WFP, accounting for the high oil consumption reported. Oil consumption was complimented by an increased consumption of cereals and legumes mostly millet, maize and beans. Consumption of fruits, vegetables and sugar was unchanged from the percentages obtained at baseline. However, none of the respondents interviewed at the evaluation took milk, eggs and other poultry products. The reason for this was that they did not

have these products in their homes and it is considered luxurious buying them from shops. Chicken particularly is reserved for special occasions. The survey team had a chance to observe this on the eve of Independence Day celebrations 9th October 2004. Many of the people interviewed were out in the market buying meat and chicken for this occasion. There were very few cattle in the camp as most people slaughtered their animals so that they do not have to lose them to rebels. However, with the improving security situation and some farmers having received a heifer and oxen from the REAP project the DDS score may improve over the next season.

3.9 Farmer organizations

The level of association found during the evaluation survey was based on small farming groups. On average made up of 4 people (both men and women), they are united by the need to help each other out in their plots. At baseline participation in groups was reported as 25 percent, which was largely based on the groups people had before joining the camps. These groups were still mentioned during the evaluation survey and 49 percent of these were reported to have had a constitution, however, none of these groups was found to be active in the camp during the evaluation survey although the members of the now passive associations held a hope that they would rejuvenate them on return to their homes. The survey team found that 60 percent of the respondents belonged to small groups of four people. Sometimes (31 percent of the respondents said) these groups contributed money, on average the groups in Palenga contributed Ushs 2,200 per year, towards hiring other people to dig their fields for them. Another form of association was based on farming chiefs Rwot Kwere. The Rwot Kwere essentially allowed the community in the camp to maintain some semblance of the leadership structures they had in their home areas. This same system was also used to identify different families on the basis of where they came from to join the camp.

Table AII: Indicators for REAP II Baseline in Bobi and Palenga for FY 2004

Indicators	Maize		Beans		Vegetables		Cassava		Millet		Ground nuts	
Production	**Bobi**	**Palenga**	**Bobi**	**Palenga**	**Bobi**	**Palenga**	**Bobi**	**Palenga**	**Bobi**	**Palenga**	**Bobi**	**Palenga**
% Of farmers growing crop	27	60	65	37	35	26	60	20	30	20	19	6
Mean area planted (Ha)	0.4	0.5	0.3	0.3	0.1	0.1	0.3	0.3	0.2	0.3	0.4	0.7
Mean output (MT)	0.3	0.5	0.2	0.2	0.1	0.1	0.5	0.4	0.2	0.1	0.6	0.2
Yield (MT/Ha) pure stand	0.8	1.0	0.8	0.7	0.9	1.0	0.9	1.5	0.8	0.3	1.4	0.3
Yield (MT/Ha) mixed stand	0.6	N/a	0.5	N/a	0.6	N/a	0.2	N/a	0.2	N/a	1.0	N/a
% Quantity harvested sold	69	60	52	21	32	32	16	32	0	12	34	0

Farm practice	**Palenga**		**Bobi**	
	Awareness	**Practice rate**	**Awareness**	**Practice rate**
Line planting	100	100	92	73
Recommended spacing	97	97	65	49
Timely planting	100	60	92	65
Soil fertility management	97	80	95	51
Weed management	100	94	97	87
Crop rotation	100	100	87	62
Pest and disease control	94	23	78	16
Planting improved seeds	94	91	81	43
Intercropping	100	31	89	60
Ox-plough	97	17	68	11
Use of selected local seeds	86	43	70	68

Principal Income sources by percentage		
	Bobi	**Palenga**
Crop farming	92	87
Charcoal burning	36	31
Sale of local brew	27	14
Business	14	17
Casual labor	8	9
Livestock farming	5	6
Characteristics	**Bobi**	**Palenga**
%Female headed household	8	14
% of IDPs who own radio	41	46
% of IDPs who own bicycle	60	40
% Households keeping records	19	71
Market outlets (percentage)	**Bobi**	**Palenga**
Farm gate	8	44
Local market	67	17
Urban market	7	28
Store managed by NGO[3]	25	11

Source REAP II BASELINE (ACDI/VOCA)

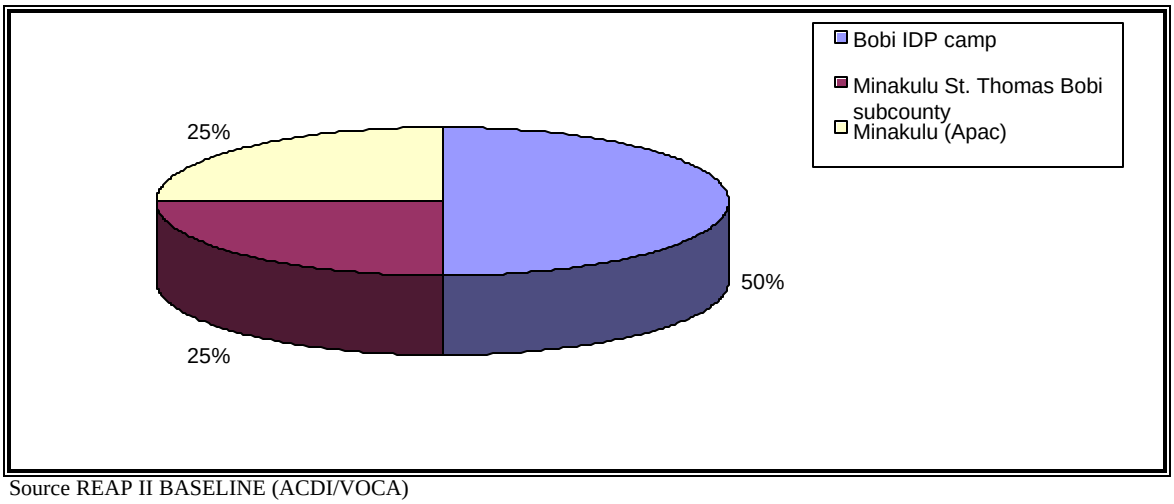
[3] There are other NGOs in the camp that promote agricultural production and market and it is these NGOs that are being referred to.

4.0 FINDINGS AND DISCUSSION OF BASELINE SURVEY OF REAP II

4.1 Characteristics of the Internally Displaced Peoples (IDPs) camp at Bobi

The internally displaced peoples camp in Bobi was created just over two years ago and the earliest IDPs are reported to have arrived at the camp in July 2002. The population of the camp was small until the last influx of IDPs between May and June of this year (2004), when the number of IDPs rose in the camp considerably (the population of the camp is reported to have increased by over 500 percent).

Graph 3: IDP camp settlements in Bobi Sub County by percentage population



Source REAP II BASELINE (ACDI/VOCA)

The area of Bobi and the immediate neighboring area have three displaced peoples' settlements. The camp in Bobi, which has approximately one half all the IDPs in Bobi, was found to be very crowded. Some of the huts built by the IDPs are barely four feet off the ground that adults have to crawl through the entrance. The survey team observed that the rain season had compounded the crowded situation in the camps, as dirty water collected in many places and posed a health risk for the families especially the infants. One quarter of the people resided at Minakulu St. Thomas primary school. This second group sleeps at the primary school in the open classes and on the school verandah. During the day they go back to their homes to their different home tasks and even dig their gardens and return to the camp in the evening. The difference between this group and the one at Bobi is that the Minakulu St. Thomas group has been displaced from their

houses but continue to stay in their home area. The families at Bobi have been displaced from far off places. The third settlement is located at Minakulu in Apac district, which was outside the study area and therefore was not visited by the survey team. The REAP II project has started working with the Bobi group located at Minakulu St. Thomas primary school, the area is specifically called Okwii. However, throughout this report we shall, for purposes of clarity, report on it as Bobi. The group at Okwii-Bobi was chosen because when REAP II was being structured the number of IDPs in the Bobi camp was very small and the surge in the camp population was anticipated. The other consideration was that since the people in the area lived in a state of displacement the extension of REAP I was in part based on communities being able to contribute land as an input, on to which the REAP II project would add it support. Bobi sub-county has 4 parishes Paido, Palwo (where Okwii is located), Patek and Paidwe. The land in Okwii was chosen for project activities as it was relatively safe and it had been offered free of charge. The land was demarcated into 150 plots and by the time the evaluation team visited the first crop of maize was being planted.

4.2 Household characteristics

Table 4.1: Household characteristics by percentage

Characteristics	Bobi	Palenga
Female headed household	8	14
% of IDPs who own radio	41	46
% of IDPs who own bicycle	60	40
Households keeping records	19	71

Source REAP II BASELINE (ACDI/VOCA)

The percentage of female-headed households in both Bobi and Palenga camps was quite low at evaluation. The extension staff suggested that this might have been due to lack of sufficient confidence ingrained in the rural women however, the survey team could not ascertain this independently. Ownership of bicycles was higher in Bobi than Palenga, 60 percent and 40 percent respectively. The farmers in Bobi are farther from the market and need the bicycles to transport their produce to the market, while Palenga is relatively closer to the urban centre and would perhaps have a lower urgency for bicycle transport.

The survey team observed more pick-up vehicles and large trucks plying around the Palenga area these too provide transport and could reduce the need for bicycles as compared to Bobi. The level of record keeping was more thrice as high as that found in Bobi. The high level of record keeping was largely due to the early intervention under REAP I, where farmers had been taught elements of record keeping. The farmers also kept records on the food donations they received from WFP and support from other NGOs working in the area.

4.3 Characteristics of the farming system

Table 4.2: Improved agronomic practices

Farm practice	Palenga		Bobi	
	Awareness	Practice rate	Awareness	Practice rate
Line planting	100	100	92	73
Recommended spacing	97	97	65	49
Timely planting	100	60	92	65
Soil fertility management	97	80	95	51
Weed management	100	94	97	87
Crop rotation	100	100	87	62
Pest and disease control	94	23	78	16
Planting improved seeds	94	91	81	43
Intercropping	100	31	89	60
Ox-plough	97	17	68	11
Use of selected local seeds	86	43	70	68

Source REAP II BASELINE SURVEY (ACDI/VOCA)

The most important crops grown in both Bobi and Palenga are groundnuts, maize beans, sweet potatoes, simsim cotton, beans (a small sized bean called bam), sunflower and millet. In preparing for the cropping season farmers slashed and burned the old crop (or vegetation) in the plot to be used. They then cultivate the land and plant depending on the season. In the first season, usually between March and June, groundnuts, maize, beans, sweet potatoes and simsim are planted. In the second season cotton, beans (bum), sunflower, simsim, millet and groundnuts are usually grown. Millet, beans and sweet potatoes are grown for food, while groundnuts, simsim, cotton, sunflower and maize are grown as cash crops. Commercially grown crops are largely selected on the basis of the market price that can be fetched from selling the crop produce. Beans were also grown as part exchange for school fees instead of paying money to the schools. The current

state of war between the LRA rebels and the UPDF has affected the selection of crops. Farmers now prefer early maturing crops, as that would not be disrupted by the war. Even the cassava that was grown was harvested as early as at 3 months (a very early stage to harvest any cassava variety in Uganda).

Awareness and practice of improved agronomic practices

The level of awareness and practice of improved agronomic practices in Palenga improvements based on REAP I. The results of Bobi however are largely based on traditional practice and previous agricultural extension efforts in the area. The level of awareness of agronomic practice is high and this may be due to the fact that this was a very active farming area before the rebel activities intensified. The level of knowledge and practice already in existence, if not interrupted by rebel activity offers a good base for REAP II. While all practices need to be improved, knowledge and practice of line planting, timely planting, weed management were well embedded in the community. Selection of seed and type of seed planted, pest and disease control, soil fertility management, and recommended spacing used practices were the most neglected practices by the farmers in Bobi.

4.4 Production and productivity

Table 4.3: Indicators of production and productivity

Indicators	**Maize**		**Beans**		**Vegetables**	
Production	**Bobi**	**Palenga**	**Bobi**	**Palenga**	**Bobi**	**Palenga**
% Of farmers growing crop	27	60	65	37	35	26
Mean area planted (Ha)	0.4	0.5	0.3	0.3	0.1	0.1
Mean output (MT)	0.3	0.5	0.2	0.2	0.1	0.1
Yield (MT/Ha) pure stand	0.8	1.0	0.8	0.7	0.9	1.0
Yield (MT/Ha) mixed stand	0.6	N/a	0.5	N/a	0.6	N/a
% Quantity harvested sold	69	60	52	21	32	32

Source REAP II BASELINE SURVEY (ACDI/VOCA)

In Bobi two thirds of the respondents reported having grown beans in contrast to the just over one-third in Palenga. This contrasted with maize, which was grown by 60 percent of the respondents in Palenga against just 27 percent in Bobi. The importance of beans

in Bobi ranges from paying school dues, sale, to domestic consumption. The farmers in Bobi sold more of their bean and maize crop harvest than those in Palenga. The proportions of crop produce sold were higher in Bobi as there were substitutes in vegetables, cassava, millet and groundnuts. The households in Bobi may be relatively more food secure than those in Palenga because many of them grew several crops. For instance 60 percent of the respondents in Bobi grew cassava as opposed to 20 percent in Palenga, 30 percent grow millet in Bobi to 20 percent in Palenga and 19 percent grow groundnuts in Bobi to the 6 percent in Palenga. This consciousness of food security in Bobi was reflected in the larger fraction of the cassava and millet crop were kept back for home consumption. Productivity of cassava was six times higher in Bobi than in Palenga the farmers there keep 84 percent of the cassava crop harvest for home consumption. The habit of not selling food was stricter for millet as none of the farmers interviewed had sold their millet crop harvest. The community in Bobi-Okwii does not receive food aid and therefore has to rely on what they produce from their fields.

Table 4.4: Indicators of production and productivity

Production Indicators	Cassava		Millet		Ground nuts	
	Bobi	Palenga	Bobi	Palenga	Bobi	Palenga
% Of farmers growing crop	60	20	30	20	19	6
Mean area planted (Ha)	0.3	0.3	0.2	0.3	0.4	0.7
Mean output (MT)	0.5	0.4	0.2	0.1	0.6	0.2
Yield (MT/Ha) pure stand	0.9	1.5	0.8	0.3	1.4	0.3
Yield (MT/Ha) mixed stand	0.2	N/a	0.2	N/a	1.0	N/a
% Quantity harvested sold	16	32	0	12	34	0

Source REAP II BASELINE SURVEY (ACDI/VOCA)

Further discussions revealed that while the rebels sometimes raid to steal food, they did not carry away millet in the granaries because it usually not milled (and they prefer a form, which is faster to prepare for food). The survey team found reports that UPDF soldiers stole their food especially cassava. The farmers in Bobi revealed that groundnuts were the most preferred commercial crop although the insecurity has not enabled them to plant their fields. There were cases of farmers who had consistent groundnut production cycles, which they have been implementing for several seasons in spite of the poor security situation.

4.5 Income and income generating activities

Table 4.5: Income generation by percentage

Principal Income sources		
	Bobi	**Palenga**
Crop farming	92	87
Charcoal burning	36	31
Sale of local brew	27	14
Business	14	17
Casual labor	8	9
Livestock farming	5	6

Source REAP II BASELINE SURVEY (ACDI/VOCA)

Crop farming was the most regular source of income for the respondents interviewed followed by the sale of charcoal and the sale of local brew for one third of the respondents in Bobi and over one quarter of the respondents in Palenga. Livestock was not kept in Bobi as it attracted rebels to the area. However, they bought livestock, which they kept with their relatives in more secure places like Bweyaale along Kampala – Gulu road. Business owners were reported to have moved away as they often became victims in rebel raids and sometimes they lost their lives. Sale of charcoal and local brew provided the only substantive non-agricultural sources of income.

Table 4.6: Crop income generation

Indicators of crop income	Maize		Beans		Vegetables		Cassava		Millet		Groundnuts	
	Bobi	**Palenga**	**Bobi**	**Palenga**	**Bobi**	**Palenga**	**Bobi**	**Palenga**	**Bobi**	**Palenga**	**Bobi**	**Palenga**
% Of growers	27	60	65	37	35	26	60	20	30	20	19	5.7
Output (MT)	0.32	0.48	0.21	0.18	0.11	0.05	0.51	0.38	0.16	0.11	0.65	0.23
% Output sold	69	60	52	21	32	32	16	32	0	12	34	0
Output sold (MT)	0.22	0.28	0.11	0.21	0.03	0.02	0.08	N/a	0	0.07	0.19	N/a

Source REAP II BASELINE (ACDI/VOCA)

Table 4.7: Investments from income generated by percentage

Investment activities	Bobi	Palenga
Paying school fees	49	49
Buying livestock	51	26
Re-invest in farming activities	24	32
Bought radios, bicycles	27	20

Source REAP II BASELINE (ACDI/VOCA)

In both Bobi and Palenga payment of school fees was the most consistent form of investment made by the IDPs. Acquisition of livestock was twice as important to the farmers in Bobi as it was in Palenga and even if they could not keep their cattle with them because of the unpredictable security situation many farmers kept their livestock with farmers in more secure areas, A quarter of the respondents in Bobi and one third of those in Palenga re-invest some of their income into agriculture and another a quarter and one fifth of the respondents in Bobi and Palenga respectively bought household items, radios or bicycles.

4.6 Value addition activities

Table 4.8: Post harvest handling practices by percentage

Post harvest practices	Bobi	Palenga
Sorting	76	77
Milling	31	49
Threshing	22	26
Winnowing	5	6
Grading	3	3
Shelling	3	3

Source REAP II BASELINE SURVEY (ACDI/VOCA)

Sorting was the most regularly practiced (75 percent of respondents) value addition activity in both Bobi and Palenga. One-third of the by respondents reported that they had milled their produce largely their millet crop (about a third of the population). The farmers in Bobi were used to selling large volumes of their harvest especially groundnuts, beans and maize and sorting was reported by over three quarters of the respondents in Palenga and Bobi. Threshing of dry crop was reported by one fifth and one quarter of the respondents in Bobi and Palenga, an indication that a large proportion of the produce was

harvested fresh and was not threshed. Groundnuts, which could be threshed, are sometimes sold in husks and this might have contributed to the low practice of threshing. Grading in Palenga may be lower especially for maize because it is a fairly uniform product; the farmers in Bobi generally do less grading their produce since they were able to sell fairly large volumes to traders.

4.7 Marketing information and market outlets

Sources of market information

Table 4.9: Market information sources by percentage

Facility	**Bobi**	**Palenga**
Access	100	94
Fellow farmers	59	34
Radio	49	49
Local markets	30	10
Extension agents	5	52
Buyers	8	18

Source REAP II BASELINE SURVEY (ACDI/VOCA)

All the farmers in Bobi and almost all in Palenga reported that they had access to market information. The farming community in Bobi depends on other farmers, the radio and local market traders for access market information, these are institutional linkages that have been developed by the locally with little external intervention. In fact extension staff and buyers were reported to provide less than 10 percent of the market information. This contrasts with Palenga where extension staff intervention meant that more than half of the farmers interviewed relied on extension for market information. Perhaps the most outstanding results was the fact that many farmers are inclined to listen to radio for market information. The radio is an important source of information to farmers who have no other direct channels or institutions to provide market information.

Uses of market information

Having obtained the market information it was important to determine what the farmers did with the market information. The survey revealed that the farmers were mostly worried about the price they would earn from their produce. The market information in

both Palenga and Bobi had little influence on their decision to grow certain crops and the decision of where to sell. The reason for this could be that the farmers already know what crops they want to grow and sell developed under the traditional farming system. Some farmers reported that they stored their produce for up to four months, in Bobi, if they can earn a good price, when they thought rebels would not come and steal it.

Table 4.10: Uses of market information by percentage

Uses of information	Bobi	Palenga
Decide when to sell	41	29
Decide minimum and acceptable price	38	37
Making decisions to sell fresh or dry	38	31
Decide what to grow	11	20
Decide where to sell produce	14	6
No choice but to sell anyway	3	0

Source REAP II BASELINE (ACDI/VOCA)

Market outlets

Table 4.11: Type of market outlet used by percentage

Market outlets	Bobi	Palenga
Farm gate	8	44
Local market	67	17
Urban market	7	28
Store managed by NGO[3]	25	11

Source REAP II BASELINE (ACDI/VOCA)

Two thirds of the respondents interviewed in Bobi sold their produce in the local market, a quarter to stores managed by other NGOs, and 8 percent and 7 percent sold at farm gate and in the urban market. While the NGOs do play a part in crop marketing the results showed that 75 percent of the choice of market outlets farmers made was on their own. Therefore determination of market outlets in Bobi was most likely a development based on the local farming system and local traders. The situation in Palenga was quite different with farm gate and urban markets being the most important market outlets for farmers produce. There has been some intervention to assist farmers with marketing and the

[3] There are other NGOs in the camp that promote agricultural production and market and it is these NGOs that are being referred to.

trend showed that the farmers were willing to travel to the urban centers to secure a good price if they did not get one at farm gate and in the local market.

Mode of transport

Table 4.12: Frequently transport modes and the unit transport cost

Transport modes	Percentage		Cost Ushs/kg/km	
	Bobi	Palenga	Bobi	Palenga
Bicycle	78	31	7	12
Head load	8	20	11	24
Pick-up	5	20	2	2
Truck	3	3	N/a	5

Source REAP II BASELINE (ACDI/VOCA)

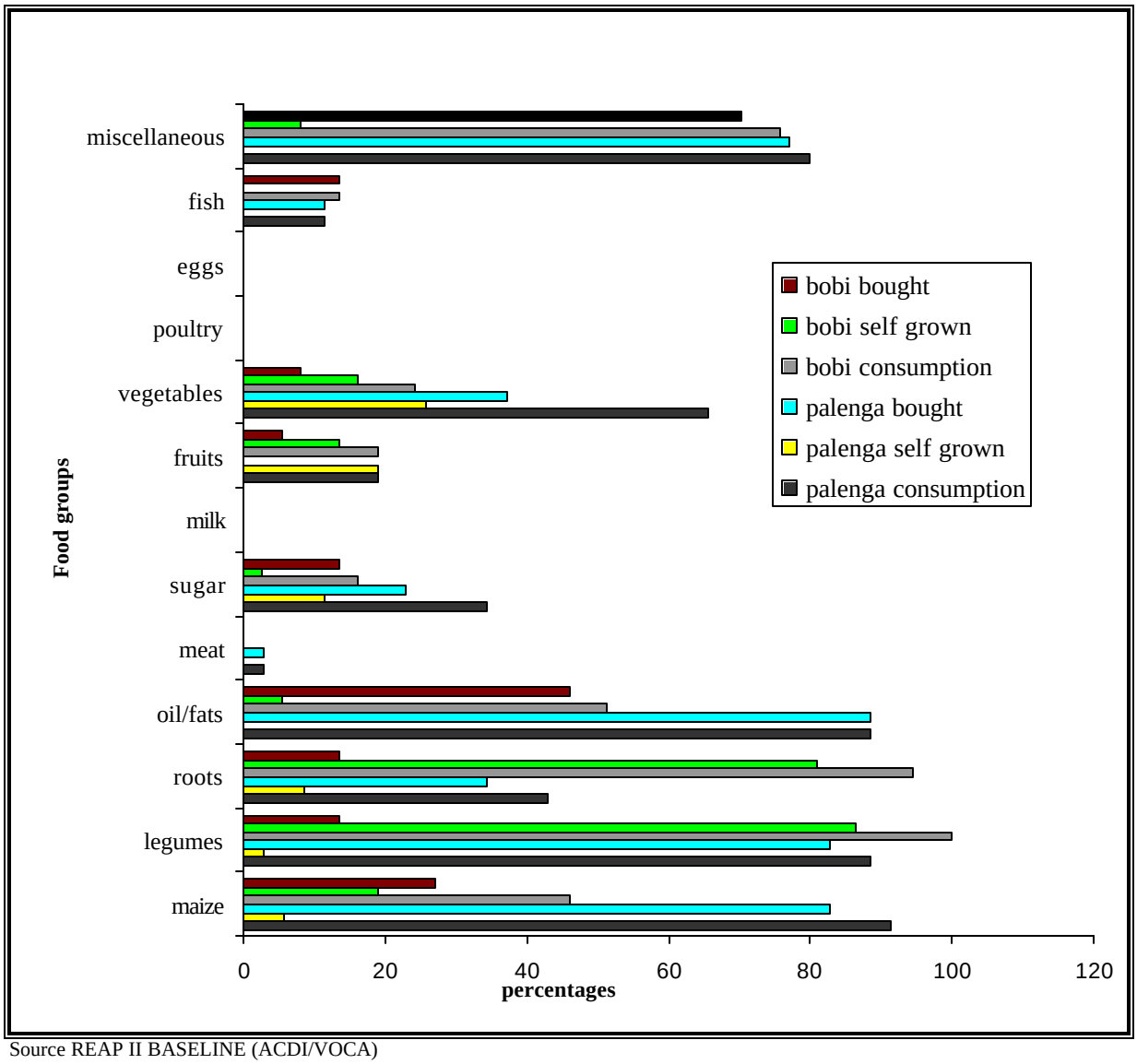
In Bobi bicycle transport is very dominant as over three quarters of the respondents reported that they used it. Less than 10 percent of the respondents used the other modes of head load, pick-up vehicles and trucks. The farmers in Bobi did most of the crop marketing on an individual basis, each farmer decided when it was the right time to sell their produce, while the farmers in Palenga had an opportunity of their produce under a collective marketing mechanism (in REAP I). Palenga is approximately 10 km away from Gulu town, and with the increased number of vehicles moving along the Kampala – Gulu high way it was reasonable to expect many farmers to transport their produce to Gulu town. The likelihood of using bicycles and selling in the local market than in the urban market may also be due to the fact that Bobi (Okwii) on is only 7 km away from the local market in Minakulu and perhaps over 30 km away from Gulu town (the nearest urban centre). Farmers in Okwii therefore ride their produce on bicycles to Minakulu trading centre.

4.8 Dietary Diversity

The dietary diversity score (DDS) of Bobi was 4.4, while the DDS of Palenga was 5.1 for this baseline survey 0f REAP II. The difference in the DDS score obtained for Palenga and Bobi is largely because of the differences in the consumption of oil and fat products, maize and vegetables. The community in Bobi because they can get food from their

gardens eat those the traditional energy and body building foods that are found in most of the traditional diets that is roots, legumes and cereals. The community in Palenga on the other hand had relatively more food insecurity as a result the vegetables were kept for home consumption and they anxiously harvested their maize and kept some of it for home consumption. The IDPs in Palenga were supplemented with oil from WFP, which was not the case for the respondents in Bobi (Okwii) who largely had to purchase the oil they consumed.

Graph 4: Baseline percentage consumption and sources of food groups



Source REAP II BASELINE (ACDI/VOCA)

4.9 Farmer organizations

Table 4.13: Farmer association characteristics by percentage

Association characteristics (percentage)	Palenga	Bobi
Whether respondent belongs to active farmer group	60	60
Whether respondent pays membership fee	31	14
Whether farmer group has constitution	49	30
Average number of members per group	4	4

Source REAP II BASELINE (ACDI/VOCA)

The level of association in both Palenga and Bobi was similar in several aspects for instance the 60 percent of the respondents said they belonged to groups in both camps. The average size of a group is 4 members. This situation is more as a result of the level of disruption of the lives of the people found during this baseline study. As in Palenga, the people in Bobi also had groups that are not effective because of the low level of economic activity that binds them together. Instead they have opted for farming groups. The farmers in Bobi have been very active in the farming groups, up to 70 percent of the respondents belonged to groups against 54 percent in Palenga, and as we found out the REAP project has encouraged them to do so since the seed for the season came late in helping each other out they can do a lot of work quite quickly.

Table 4.14: Farmer group organizations by activities

Group activities	Palenga	Bobi
Communal cultivation	54	70
Training	46	27
Marketing	29	3
Revolving funds	11	5
Rearing livestock	6	N/a
Charity work	N/a	3

Source REAP II BASELINE (ACDI/VOCA)

Apart from grouping to receive training and for communal cultivation, there was hardly any other form of association to speak of in Bobi. Indeed the only mention of association outside training and communal farming was in revolving funds (5 percent), where some farmers had devised a mechanism of loaning each other money, a marketing (3 percent) and charity work (3 percent). One our respondents spoke of a group of women who help

orphans who are too young to take care of themselves. Even though, this was an interesting finding it was very unique and it was found to be replicated by other farmers in the discussions held instead assistance was given to extended family (members). There are a few farmers in Bobi who kept livestock on an individual basis but this was not found for groups. In Palenga some farmers had received cattle from the REAP project and they received assistance from colleagues with in the small farming groups. It must be noted then that the institution of groups found during the baseline survey were small loose farming groups that are only bound by a common need of supplementing each other for field labor and they come together to receive training from extension officers.

The survey team noted that were large groups linked with NGOs or even those organized under REAP I that were mentioned by some IDPs. Many times these were not groups that carried out activities together it was instead beneficiaries of a program that were characterized on the basis of their benefactor (NGO).

5.0 CONCLUSIONS

Conclusions from the Evaluation of REAP I

1. The traditional crops grown in Palenga are maize, beans, cassava, groundnuts, millet, vegetables (tomatoes, cabbages, cowpeas and eggplant) and simsim.

2. Land was the most limiting factor to agricultural productivity in Palenga. The project provided some land for one selected crop but the farmers still had to negotiate with the landlords for extra land. Many times the agreements (the farmers paid Ushs 10,000 as rent or paid an equivalent amount of their crop produce) with broke down.

3. The level of awareness and practice of farm management showed a general improvement at evaluation, although pest and disease management continued to lag behind the other farm management practices.

4. The crop production and productivity improvement component of the REAP project provided access, for IDPs, to a communal farm, where one crop agreed between the REAP extension staff and the IDPs was grown. The REAP project then provided improved seed, fertilizers, and training in proper farm management practices in addition to supervision of farmers management of their fields.

5. Crop production and productivity was lopsided with the crop prioritized under the communal farm (maize) showing improvements, while the productivity of the second and third or other crops (beans, cassava, vegetables and upland rice) grown on the farmers personal field waned.

6. There evaluation team held discussions with IDPs and REAP project staff and found that three prominent issues seem to explain the disparities in crop productivity found;

7. The IDPs continually mentioned the weak land agreements they had with the landlords in the area and that some of them have been chased away from their plots mid season. Previously the landlords took part of the farmers' crop as rent for the land hired or money (Ushs 10,000). In recent times the landlords have been asking for money and refused to accept part of the farmers crop, a situation which has denied the farmers without this money (at the time its asked for) access to land. The farmers also complained that with many IDPs constructing semi-permanent (huts) dwelling units there was little land left to plant crops.

8. A second issue that emerged during the discussions was time allocation between the communal farm and the personal gardens. Since the farmers grow only one crop on the project farm, it was important to maintain a second field and to allocate adequate time to this field as well. However, the evaluation team found that the IDPs spend the early part of the season in the communal farm and very little time was spared for their personal fields.

9. The evaluation team also found that while the REAP staff provided training and guidance on improving farmers crop production practices, production of other crops outside the communal farm were largely independent of the REAP project. The farmers searched for their own seed and planted at their own discretion. Therefore while they planted improved seed on the communal farm because it was provided, it was more than likely that they planted traditional seed if they had no source of improved seed for the second or third crop and that the other farm management practices were also less strictly followed in the personal fields. This and the other issues mentioned above may have caused a decline in the performance of crops like beans, vegetables, cassava, millet and rice and created an advantage for the communal farm were maize production improved.

10. Crop production contributed the most regular source of income mentioned by the IDPs. Burning and sell of charcoal, small businesses and the sell of local brew were the most common sources of income at evaluation.

11. The percentage of farmers who sold their crop at baseline was higher than those who sold at the evaluation.

12. Cribs were introduced to the IDPs in Palenga in the interval between the baseline and evaluation study.

13. Apart from the maize, which was stored in cribs, all the other crops are still stored the same way they were stored at baseline. Vegetables are still stored in pots and old jerry cans.

14. Practice of sorting, milling and shelling were the most important value addition activities practiced by three quarters, half and one quarter of the respondents respectively.

15. The farmers in Palenga at the evaluation chose urban markets and the collective sale of produce organized by REAP I (at farm gate) over on the local market and other NGOs.

16. Pickup and truck vehicles have replaced bicycles and head load as the most regularly used modes of transport for produce to the market.

17. Nearly all (94 percent) the respondents had access to market information. Farmers were more likely to obtain their market information from extension staff, the radio and fellow farmers at the evaluation over local traders as had been the case at baseline.

18. The dietary diversity score was marginally unchanged between baseline and the evaluation stage.

19. Organized farmer groups with registered members and constitutions have been in active since the farmers moved to the camps. Small farming groups of 4 people help each other in the field. The foursome sometimes contributed money and hired labor.

Conclusions from the Baseline survey of REAP II in Bobi and Palenga

1. The Project farm was set up in Okwii Bobi Sub County and serves the IDPs settled at Minakulu St. Thomas primary school. 150 plots had been demarcated for the second season of 2004.

2. There are three IDPs groups one settled at Bobi for people who have moved from distant areas with in Gulu district and from Kitgum and Apac Districts. The settlement at Minakulu St. Thomas was made up people mostly from within Bobi sub county Palwo Parish.

3. Only 8 and 14 percent of the household were female-headed in Bobi and Palenga respectively. Ownership of bicycles was higher in Bobi than in Palenga. However, record keeping was much higher in Palenga than in Bobi as a result of the early intervention in Palenga.

4. As in Palenga in Bobi the most important crops found are beans, groundnuts, millet, cassava, maize, sweet potatoes, simsim and sunflower.

5. Fast maturing crop varieties were preferred over late maturing ones because of the fear that the late crop might be disrupted by rebel activity in the area.

6. The level of awareness of agronomic farm practices was high in both Bobi and Palenga. However, soil fertility management, use of improved seed and recommended spacing was practiced by just about half of the respondents in Bobi, while in Palenga nearly all the farmers practiced use of these technologies.

7. The practice of pest and disease management in both Palenga and Bobi was limited to one fifth or less of the respondents interviewed. Use of ox-ploughing technology was being introduced in the area although a farmer in Bobi had oxen and an ox-plough that he used with a few other farmers.

8. Production in Bobi was higher in all crops except maize than in Palenga, although the yield of vegetables was lower in Bobi than in Palenga. Cassava and millet were largely kept for domestic production at both sites.

9. The farmers in Bobi as payment for schools dues used the bean crop produce, and as was in Palenga some were sold and the rest kept for home consumption

10. The farmers in Bobi produced and sold several crops, while those in Palenga produced fewer alternate crops.

11. Crop farming, charcoal burning and sale, sale of local brew and small businesses were the dominant income generating activities in both Bobi and Palenga.

12. Over 50 percent of the farmers in Bobi considered buying cattle as a worthwhile investment to 26 percent in Palenga. However, both camps agreed equally that educating their children (49 percent) was a worthy investment.

13. Sorting was the most commonly practiced vale addition activity. Milling and threshing where also frequently practiced. Grading, shelling and winnowing were not frequently practiced,

14. Nearly all the farmers in Bobi and Palenga had access to market information. Fellow farmers and the radio were the most regular sources of market information. Extension agents were the most important source of market information in Palenga, although they were virtually absent in Bobi.

15. The local market was the leading market outlet in Bobi, while selling at farm gate was more common in Palenga. The farmers in Palenga were more likely to take their produce to the urban market than sell to the local market or other NGOs.

16. The bicycle is the dominant mode of transport in Bobi, while in Palenga produce transportation is split between use of bicycles, pickup vehicles and head lead.

17. The dietary diversity score of Bobi was lower than that of Palenga as a result of the traditional diet in Bobi, while the situation in Palenga meant the IDPs ended up having a higher DDS score.

18. The farmers were organized to receive training and for communal farming. The groups were made up of 4 members. Organized groups and associations were present in the past but have been inactive since rebel activity intensified a few years ago.

19. The large groups were too few and unknown the majority of farmers and were based on the NGO that has offered a particular type of support.

6.0 RECOMMENDATIONS

1. The success of the farm projects in both Bobi and Palenga hinges on the relationship between the project, project staff, the IDPs and the landlords. At the evaluation some of the landlords in Palenga were unhappy with the agreement they had under REAP I. An evaluation team should be set up to determine the likely effects this dissenting group could have on project activities. There may be a need to review the memorandum of understanding that ACDI/VOCA-REAP I has with the landlords. A reward system could be put in place that recognizes the contribution landlords make by allowing their land to be used by the project.

2. The REAP project staff should develop a schedule for the communal farm activities that enables IDPs to have more time for the other fields they maintain. REAP staff may also have to increase their participation in monitoring, training and supervising the other farming activities of REAP beneficiaries outside the communal farm. The imp project may consider meeting in adequate supply of improved seed and fertilizers for at least two other crops grown by farmers on their personal fields.

3. The evaluation team found the state of the IDP camp at Bobi to be worse than Palenga and Okwii. While the rationale for locating the farm at Okwii is understandable. One half of all the IDPs in Bobi will not be catered for. The best solution therefore is to find means of establishing yet another farm closer to the camp at Bobi to cater for the farming requirement of this settlement as well.

4. It was shown that there could indeed be improvements in practice of farm management technologies if intervention is directed properly. Therefore the poor performance in pest and disease management in both camps, use of improved seed and poor record keeping in Bobi can be turned round if effort is directed to these particular problems. REAP II has to consider pest and disease control as well the findings of Palenga showed that it was a limiting factor for beans at least. In the case of the bean leaf miners observed for the bean crop, two inorganic

pesticide alternatives can be used either Dithane M45, 60grams of the chemical mixed to a 15 litres solution with water, or Dimethoate, 30 millilitres for a 15 litre solution with water. (The measurements are got from the standard Dithane M45 and Dimethoate pesticides sold in Uganda). The pesticide should be applied when the crop is 3 weeks and 6 weeks old.

5. The low level of non-agricultural enterprise underscored the importance of agriculture to these communities. The next set of intervention should not only emphasize farming as a business (skills) but should look at entrepreneurship training for the farmers and local business people. This will ensure even the section of the community that is not engaged in agriculture contributes to the economy of the community.

6. The farmers showed a willingness to pursue means of improving the price they get from their produce. The loose groupings in the camps cannot enable the farmers to carryout collective marketing on their own. This finding therefore presents an opportunity to organize groups and start training and mobilization for farming, trainings, produce marketing, savings and credits and other activities.

7. The radio, fellow farmers and extension staff offer the most regular communication channel for market information that should be further strengthened.

8. The IDPs base their meals (diet) on traditional eating habits and the low dietary diversity was out of norm rather than scarcity especially in Bobi. Although the absence of milk, eggs, meat and fish in the diet is appreciated. Some of the extension training should be devoted to teaching farmers about the importance of eating a variety of foodstuffs.

APPENDIX I: FOOD CONSUMPTION IN PALENGA AND BOBI

Percentage consumption by food groups between baseline and FY 2004

Food Groups	Cereals	Legumes	Roots	Oil	Meat	Milk	Fruits	Sugar	Poultry	Eggs	Vegetables	Fish
FY 2004	91	89	43	89	3	0	19	34	0	0	66	11
Baseline	83	77	53	33	10	7	17	33	7	3	67	17

Source: REAP I EVALUATION SURVEY 2004

Food consumption by percentage for different groups

Food consumption by IDP camp	Cereals	Legumes	Roots	Oil	Meat	Sugar	Milk	Fruits	Vegetables	Poultry	Eggs	Fish
Palenga	91	89	43	89	3	34	0	19	66	0	0	11
Bobi	46	100	95	51	0	16	0	19	24	0	0	14

Source REAP II BASELINE (ACDI/VOCA)

APPENDIX II: REPORT ON FOCUS GROUP DISCUSSIONS HELD IN PALENGA IDP CAMP

DURATION IN THE CAMP

The biggest group came in 1996 from Koch.

Some came 6 years ago from Atiang, some had gone to Bweyaale but came back to join the came. The last influx came last year from Koro.

PARTICIPATION IN PLANNING OF PROJECT ACTIVITIES

Seemed to be passing on of information, or helping them to farm there was no participatory sessions with farmers. They seem to use more of contact farmers who were their link. These were chosen at a later stage after gathering people and telling them about project. They left responsibility of choosing beneficiaries to a small administrative group Rwot Kwere (loosely translated as chief of the hoe) a small unit smaller than LC I. The local leaders were involved in local leaders were called to convince the landowners that the land was being used for a genuine purpose and not bring foreigners (Zimbabwe). They got 200 acres of land and apportioned **100 households each household was meant to get 2.5 acres.

PLANNING THE PROJECT

Planning the farm activities when they were still in homes.

They survey and find out the status of the garden when the grass is healthy, where you find beetles, its an indicator that the soil is fertile.

They know seasons, first sorghum cassava, maize, beans (small brown beans) and groundnuts and millet and sweet potatoes
Second season crops Simsim, beans (yellow beans), groundnuts and millets, cassava and sweet potatoes
After checking fertility they get the tools and then go to the field to do the cultivation. They plan post harvest activities and marketing when the crop is ready field in t and they sure of the harvest. Marketing is based on the yelds of the season and is planned after harvesting. The plans for the next season depend on the performance of the previous season crop.

RECORD KEEPING

Before coming to the camp the cultural ways of keeping records. The appearance of the moon was indication that they start cultivation. Storage of seed under post harvest handling the seed is stored in the kitchen roof or wrapped and placed on a raised pole.

RECORD KEEPING AT PRESENT
Only 4/10 of the FGD participant kept records although they acknowledge they know the importance and the need for record keeping. There were also issues of illiteracy. Some one said that it is a bad omen to make estimates of yields or keep records in the tradition. The member of the project say it is mandatory to keep a record and those out of the project attach the importance to only those who belong to the project.

When they were in their homes they had their plans. They don't plan now because of the uncertainty of security in the camp. When one wants hire land the normally the charge is 10,000 per plot, which is less than an acre. A good person can allow you to give them part of your harvest.

Choosing seed
How fast the crops mature (because the land is not theirs), of the different crops and also of the seed, esp. millet, profitability, performance of the crop, the season.

GROUPS/ASSOCIATIONS

They have no groups presently but they had groups previously. The groups that exist now are based on the NGOs they are affiliated to. *There are also loose groupings (Rwot Kweri) of about 15 or less people assisting each other in the gardens, ACDI/VOCA encourages these groups. They also form groups that enable them to access aid.

NGO	What they do
ACDI/VOCA REAP	Promotes crop production/ agriculture, employment road for road maintenance
World Vision	Tree planting/ agro forestry Planting plots Toilet slabs (sanitation) AIDS/HIV training, food items and counseling
CPAR	Drill boreholes Agro-forestry moringa, pineapples Hygiene and sanitation (training) Pay school fees for children Fuel saving stoves
Save the children	They renovated schools

	Pay school fees Construct latrines in schools
UNICEF	Immunization Daycare services (2-5 years) Provide water (water points), water is pumped from under ground and they 200/= per month for fuel for the diesel engine.
CARE	HIV/AIDS awareness, latrine construction, malaria control (smart nets), employment road for road maintenance
AMREF	Boreholes drill and hygiene
GUSCO	Rehabilitation of the returnees from rebel hands, drunkards and counseling
ACTION FAIM	Boreholes and water wells, sanitation and hygiene
ACCORD	Education of children and take care of returnees, capacity building for camp leaders
CRS/CARITAS	Training camp leaders, religious leaders and traditional leaders for fostering peace missions
TASO	Assists those who are living with HIV, promote awareness, offer testing, provide ARVs
ADDRESS	Family planning, reproductive health for the youth
WFP	Food for work and tree planting
HUNGER ALERT	Training on agricultural production, provide seeds

SOIL FERTILITY

Leave land under fallow for atleast a year, they carryout shifting cultivation, to control fires that may burn a fallow you dig around a plot (fire gaurds).
Trees in the garden help keep moisture, the leaves add fertility, the importance of trees in the garden. Now they are being cut for charcoals. The problem of deforestation will lead to less rainfall in future.
They feel that the introduction of fertilizers was a waste. Those who applied fertilizers got good vegetative growth but the yields were not much different from those who did not use the fertilizers. The land was quite fertile.

CROP PRODUCTION

Before coming to the camps they did a lot of intercropping (maize, cassava and groundnuts) but after growing pure stand crops in the project the yields were higher yields. And even when they go to their homes they will split their field and do pure stands. However for cassava and groundnuts (cassava and beans) they will go a head with an intercrop because it is easy to weed and it also ensure food security.

LAND TENURE

From 1996 to 2001 the landlords used to give them land for free but when the population increased landlords started renting out land. Sometimes the landlord chased them away and interrupted their production. The landlords are now asking for compensation from the project because the people who are using their land under the project are receiving inputs (benefits). Some people were stopped from ploughing because the landlords had refused to allow access to the land as the arrangement had stopped in March 2004. Some District politicians have also supported compensation of landlords.

The landlords stated that they had not got any recognition from the project after them lending out land to the project. This has caused some bitterness.

The local leaders state that they discussed with the camp people about the crops to grow but the people say they were not consulted. Initially the project had come with cassava, which was changed to maize according to the leaders. The crops that are preferable for farmers in the area groundnuts and beans and maize. They get the seeds late and therefore the planting season is not properly utilized. They do not want being dictated too what seasons to plant some particular crops, because they have better knowledge of when the crops do well.

The women were happy with the strategy of selling everything at ago, because selling in parts would lead to wasting of proceeds. But the delayed money was problem for the men.

If the 2.5 acres isn't sufficient you hire but if it too much you hire some one to cultivate it for you.
2001-2004 lands became scare and hiring came in.

POST HARVEST

Tarpaulins they borrow from friends for drying. The cribs are used for project maize not allowed for anything else. Even if it were allowed it wouldn't be suitable for beans or other small grains. For the other crops they store in their houses. Those who stay at extreme points bring it to their friends near the road to keep for them. They lacked areas to build cribs.

Vegetables in pots, old jerry cans. The major problem of storing in the house was the pests. The polythene on which they put the vegetables encourages mould growth and moisture, rotting of the produce.

MARKETING

The most common marketing system is the Awalo women they take mostly crop produce beans, maize, gnuts. The men usually take charcoal. Some farmers are agents for the Awalos. When asked why the sell to the agents they think the individual transport costs and market dues make is more profitable to sell to agents who can handle these costs.
G.nuts, simsim and cassava were mentioned as the most profitable crops when sold. The seed for groundnuts is expensive. The contact farmers for the agents get some commicion based on the number of people they connect.

The maize has the advantage it requires less care and it has a high rate of survival.

VALUE ADDITION ACTIVITIES

They keep their crop and sell it after 4 to 5 months as seed then it can fetch a higher price. They sell some also in between the storage when they have storage problems.

Mobile units of soldiers, rebels and thieves come and steal their food. The mobile army soldiers have been sited as most notorious for stealing stored food.

NUTRITION

Sell some of their food and buy small fish Lacere.

They not allowed to eat any thing from their garden, so they have steal from their field to have something when there is no food. Most farmers eat beans on a daily basis, at the least 8 out of 10 days they eat beans but the other members of the FGD ate beans every day. The only change is for the second meal of the day when they eat vegetables.
The newcomers do not get donations they buy from the markets. The millet is normally not sold its kept for food.

FOOD DONATIONS

3kg of beans, 7kg of maize flour, 1.7 litre oil, 2 kg of soya flour.

INCOME GENERATING ACTIVITIES

	Sources of income
Women	Make pancakes, brew, sell small amount of crop produce, food stuffs, fish, 20L jerrycan of malwa (lachoi), waragi is 12,000/=, Some gather passion fruits, you have be a local person to have permission to collect passion fruits
Men	Road construction up to 600 men have worked although turnover is high, casual labour in construction of buildings, bodaboda, charcoal burning and firewood, and selling, passionfruits, small businesses (paraffin)
All	They do not get assistance from relatives, they instead provide support for their relatives who are in a more adverse area where they cannot access food.

BUSINESS TREND

In 2003 the businesses were making profits from selling food to NGOs, but in this year more food sellers have entered the market and the number of NGOs have reduced these two factors have led to a decline in profits. The insecurity and increased transport costs for traditional wholesale businessmen have increased the cost of trading in the area and low purchasing power. Then the entry of more competitors selling the same commodity has also reduced profitability.

PROPERTY THEY HAD BEFORE CAMP LIFE

They had cattle, chicken goats, pigs, granaries, bicycles, hoes etc
They lost all their livestock; they retained the big saucepans, bicycles, radios

HOW DO MOST SPEND THEIR MONEY?

The men usually prefer to sell food produce in small amount so that they can spend it in drinking, however, they feel that they spend a lot of money on drink because it is cheap. Women feel the men spend the money on concubines and older women also get money by getting young boys (15 year old).

THE CHANGES IN THEIR LIFE SINCE THEY CAME TO THE CAMPS

Advantages

Helped them how to budget for their resources and planning their expenditure. They have learnt to market their produce. They have received a lot of training in different things from Ngos, training on HIV/AIDS, educations, the schools are more accessible, healthcare services are nearer, they have increased access to water than they had before. There is more knowledge about the use of latrines and personal hygiene has improved. It has saved a lot of people from being killed, it has brought about more unity. The women feel they are more empowered now than before. They have received exposure to an outside environment, to business opportunities.

Disadvantages

There is widespread HIV/AIDS and other diseases, tuberculosis, malaria. There is a lot of defilement of children by soldiers and other people in the camps. There is increased promiscuity both in men and women. Reduced interaction of parents and children and there is a lot of separation of couples. There are a lot people who have died. They have lost their property and field.

RECOMMENDATION

If the project is expanded and more people are employed, it will allow more people things to do and they will have less time to develop bad camp life habits.

NGOs should have a more strict M&E policy to follow up problems in implementation.

They would prefer having participatory planning with VOCA instead of passing through their leaders.

GENERAL VIEWS ABOUT THE PROJECT

They think they should have a secondary school, adult education, vocational education, and increased transparency from REAP staff

Bicycles were given to very few people and that has created divisions among recipients and those who didn't receive (e.g. 4/22).

Local leaders say they last had a consultative meeting with the project people in June 2003.

Late delivery of seed, and very little consideration of their views in the project activities

ACHIEVEMENTS

Many people were able to access land for farming because of their involvement in the project. After selling their maize the lump sum amount got helped with fees, buying household items. People were kept busy working and there was little idleness.

APPENDIX II: FOCUS GROUP DISCUSSION HELD IN BOBI- MINAKULU 7TH/10/2004

There are two camps ¼ are in bobi (Gulu) and ¼ in Minakulu (Apac) and ½ at St. Thomas, Minakulu.

PROBLEMS IN THE CAMPS

Because there are a lot of diseases scabies, Tb, diarhoea, and HIV
In adequate food supply, where they have plots to cultivate. There is a lot of moral degradation in the camps that makes them none attractive. Most of them went to the camp or are residing near the road in June this year. When the conditions became adverse.

PLANNING

They slash the fields they normally slash before the rains, burn then cultivate the land and plant depending on the season. The 1st season crops are g.nuts, maize beans s. potatoes, some plant a simsim that can grow in the ist season. 2nd season crops cotton, beans (bam- smallsize), sunflower, simsim, millet, g.nuts.

SEED SELECTION

Profitability esp. cash crops cotton, sunflower, simsim, g.nuts, and beans, beans are also grown to supplement school requirements. The war has affected thr selection of crops they now grow early maturing crops. E.g. bum beans only yield well in june/july, when this period is disturbed by the war. They will not plant it for the season. There is a variety of cassava they are able to eat after 3 months.

Choice of seed may depend on the importance of crop for food security purposes.

STORAGE PLANS

Plan depending on the harvest obtained, then apportion produce for school fees(the greatest portion), for home consumption and for sale for domestic requirements.

They plant early to prevent squirrels from coming to eat the seed. Most crops(1st season) 1st week of April should have finished planting. 1st week of October for season latest planting date. If the crop doesn't do well in one season it adjusted by planting earlier in the proceeding season in order to improve harvest. The rain patterns are less reliable these days therefore timing early planting is not as easy.

RECORD KEEPING

They usually keep a memory of their activities but do not usually keep written records. There some of them have been taught by NGOs on how to keep written records.

Worldvision: building houses for PLWHA, widows, and old people.
(Others copy from above). CARE isn't in the area any more.

CROP PRODUCTION

Maize Longe 5 (VOCA), they planted maize because the seedbed isn't fine the next season the seedbed will be fine they have been promised groundnuts. Maize is used for opening land and yields well in the second season. They will not accept rice. They have been allocated 1 acre because of the lateness of the season. The next season they will open more land. The land belongs to the community; therefore land is not a big issue at the moment.

VEGETABLE SEED

They don't keep it for long. (Boo) cowpea seed cannot be stored for more than 2 months they only kept seed for the next season only. If not you grow it near a swampy place and only get the seed for the season that you want to plant it.

Eggplant it is sliced in pieces and keep it above the fire place.

They also buy seed from seed stockists for sunflower, cabbage, tomatoes and eggplants.

LAND TENURE

Land belongs to the community, there are no limitations at the moment. The project sought their views and they suggested the place chosen.

FERTILITY MANAGEMENT

They were given fertilizers, they planted with maize, however, the land has been in fallow for 19 years they do not see the necessity of fertilizers.

POST HARVEST HANDLING

They do not show people where they keep their food. The rebels will come and carry it, so the rebels can only carry a little. Some keep their food in Gulu town with relatives.

They dry on the bare ground and store in polythene bags, vegetables in old jerry cans pots. The boo is first boiled and then dried. Eggplant sliced first then stored.

MARKETING

Awaros, they sell to them to save on transport costs and market dues. There is a free market system. The g.nut price is determined by the Awaros. The gnuts are sold in kilograms. Most do not sell unshelled gnuts. But when sold it is in cups. They do not do it commonly because they get cheated. The Awaros come with their own cups and insist of using them.

Some times the produce is sold of immediate because they can avoid storage costs and it is easier to run from rebels with money. And the collective selling arrangement by VOCA will keep the awaros away and they wont be cheated, they have been told about

Value addition

Shelling, threshing,

GROUPS

They have well formed groups with a constitution, bank accounts, they pay membership fees, they supported by several NGOs (world vision, CRS/ Caritas), they carry out tree planting, livestock production, communal farming

NUTRITION

They normally eat cassava and beans. In addition they eat pigeon peas, vegetables, simsim paste, s. potatoes, from own fields.

About 90% of their food is grown and only about 10% is got from the market.

INCOME

Women group brewing. There is little cassava and maize so the scale is small, casual labour, fetching water, weeding in others gardens.

They used to make tablecloth, Fish mongering from Apac, this is no longer ther because it risks life. Charcoal burning, brick making, repair radios, bodaboda, selling small fishes. The ones who operate businesses are in fear of rebels because the rebels come looking for them and kill them.

FARMING IS THE PRINCIPLE SOURCE OF INCOME.

Achievements some have bought land near the roadside which is safer. They help relatives in the camps with food. They have some relatives in other areas that bring some money for them for ploughing, salt and soap. When they looking for food especially during the insecure times they go to the nearest garden.
Vegetables are grown in the swamp during the dry season.

BUSINESS

The businesses are not growing because they are fear of rebels and the good businessmen have left and gone to other towns.

They also suffer a problem of mixed identity, they are considered to be Langis by the Acholis and Acholis by Langis they are segregated on this basis when they try to operate businesses.

APPENDIX III: WOMEN'S AGRO-FORESTRY GROUP IN BOBI CAMP

MAIN ISSUES

Started in 2001, they were originally traditional dancers. They came together with the support of ACDI/VOCA. The biggest group came 3 years age the latecomers came 4 months ago. The camp population is increasing and no one is leaving. They cultivate their land as a individuals.

They cultivate based on profitability, land availability and indidvidual strength. They plant maize, g.nuts, beans. In August 2004. They have prepared the seed bed for the nursery and they waiting for the fence for their nursery and to receive seed, they will start.

The agroforestry project will mostly include fruit bearing trees and will teach business skills to women farmers.

The project has not yet taken off.

APPENDIX IV: DISCUSSION WITH PROJECT STAFF MAIN POINTS

The project has tow major components

The production component
The road construction component

Under the production component the interventions include

Improvement of production through training, crop production demonstrations and agro-forestry and block farming.

Improvement of agricultural productivity through communal farms currently in Okwii (Bobi) and Atega (Palenga)

Improving access to farmers and to markets for farmers through feeder road rehabilitation.

Communal block farms consider households only. In the beginning households In Palenga were given 2.5 acres of the 200 acres that was agreed under REAP I with the landlords a memorandum of understanding was signed between the landlords in the area and ACDI/VOCA clarifying the status of the block farm in Atega.

REAP II mentioned rewarding/ compensation of landlords.

THE MAIZE FOR 2003B

The project also provided warehousing and collective marketing for farmers maize for the output of the second season of 2003.

9.5 MT was collected from farmers and the total revenue from the sale was approximately 3 million shillings. The highest earnings by a single farmer from the sale of maize was Ushs335,000.

The farmers were stopped from selling off their maize to middlemen because the project staff wanted to established the amount that had been produced. Initially there had been an intention of seed recovery and part of the income from the maize crop was supposed to cover for the cost of warehousing. However, all thr income got from the maize was returned to the farmers.

SHORTCOMING OF THE SEASON

The groundnuts seed bought for the season of 2004, were of a poor quality. There were some delays in procurement of seed, which led to late planting, including the groundnut seed for 2004B. The seed procured was of a poor quality, the germination rate was very poor,

WHY OKWII WAS CHOOSEN OVER BOBI

The land selected in Okwii after discussions held with the leaders in four parishes in Bobi subcounty. Okwi is located in Palwo parish, the other parishes are Patek, Paidwe and Paido.

Participatory planning meetings were held with farmers before the beginning of the season and they indicated their preference for groundnuts as the crop to be grown for the second season.

When they were looking for land for the REAP II block farm the number of people in Bobi camp were very few the number of IDPs surged a round May to July of 2004.

In the past when peoples food was stolen the project gave some relief for the affected farmers so that they would not starve.

SIGNS OF IMPROVEMENT IN LIVELIHOOD

Some farmers have purchased sewing machines, paid school fees for their children about 6 farmers opened up Bank accounts (for example Acero Consy and Odwoch Patrick). Some farmers have bought bicycles (Adong Evelyn).

Some local business people started off selling their food in semi-permanent huts some (2) have built themselves permanent structures with an iron sheet roof where they operate their businesses from.

There is a savings and credit scheme organized for the road construction workers where 25% of their income in retained and given to them in a lump sum at the end of their contract. The idea is it would enable carry out some sort of investment.

GENDER NUTRITION AND HEALTH

Agro-forestry project was being initiated for women in Bobi but it had not fully taken off. There was some training and selection project site up to this time. It was expected that mostly fruit trees would be planted.

25 (pairs) oxen and 25 heifers were given out to the IDPs in Palenga and it was hoped these would contribute to consumption of milk in the camps, after the heifers (then cows) have calved.

Some of the women who have come from the rural areas showed low self confidence and preferred to leave decision making to their husbands or just the men in the community. There were some special cases also. These had set up businesses and some of them are contact farmers such as Christine Aporu.

APPENDIX VI

DISCUSSION WITH MR. OMONA VINCENT OYOO FROM THE PRODUCTION DEPARTMENT OF GULU DISTRICT IN CHARGE OF AGRICULTURAL EXTENSION STAFF FOR BOBI SUBCOUNTY

PARTICIPATION IN REAP PROJECTACTIVITIES

During the planting season carryout farm training visits for the block farm and farmers private fields and advise on the proper agronomic practices such as correct spacing and subsequent management of the planted plot.

SEED RECOMMENDED TO PROJECT

Has recommended K132 for beans, Longe 5 for maize, Nase 10 and 12 for cassava, Suparica for rice. Also advised for inclusion of groundnuts as target crop. However, the decision of selecting seed was carried out independently by project.

The poor quality of groundnut seed may be because the seed producer stored the seed for a longtime usually the groundnut seed is stored for 5 to 6 months and then disposed of.

The farm in Okwii doesnto serve the IDPs in the Bobi camp who are in a dire condition.

ACHIEVEMENTS OF THE PROJECT

There was a lot of famine in Palenga, which seems to have reduced

The provision of equipment for the construction of cribs has handling of crop produce in the camp

Provision of oxen and ox ploughs will increase the size of land which is opened up and the heifers will provide milk and increase the number of cattle in the area

The life of the people in Palenga is much better than those in Bobi, which is an indication of improvement of the welfare of IDPs.

APPENDIX V: QUESTIONNAIRE

Serial No._____

ACDI/VOCA REAP PROJECT

BASELINE AND EVALUATION SURVEY QUESTIONNAIRE 2004 GULU DISTRICT (PALENGA AND BOBI CAMPS)

1. Interviewer code				
2. Date of interview				
3. Time started				
4. Time ended				

5. Name of respondent _____

1.0 BIO-DATA

101.	What is the name of the household head?	
102.	What is the sex of the household head?	1= M
		2= F
103.	What is the age of the household head?	_____(years)

2.0 FARM PLANNING PRODUCTION AND PRODUCTIVITY

201.	What is the household's source of income (*multiple answers, rank in order of importance*)		Rank
		1= Crop farming	
		2= Livestock farming	
		3= Fishing	
		4= Casual labour	
		5= Employment	
		6= Business	
		7= Other (specify)	
202.	Do you engage in any farming activities now?	1. Yes (Go to 203)	2. No
203	If yes, what activities do you plan for?	1= Write down costs of production and expected income	
		2= Secure market	
		3= Plan the above (1) and (2) but do not write	
		4= No planning just farm	
		5= Others (specify)	

204.	What determines the crops you grow in a particular season? (More than one answer is possible)	1=Seed availability	
		2=Crop profitability	
		3=Amount of that particular crop I have in store	
		4=Market availability	
		5=Historical performance of the crop	
		6=Land availability	
205.	Do you own a bicycle?	1= Yes	2= No
206	Do you own a radio?	1= Yes	2= No

207. Which of the following are you aware of and have practiced in your past and/or current farming operations. (*Tick where appropriate*)

2004A (1st season of year 2004)

	Have knowledge of		**Practice**	
Farm practice	**Yes**	**No**	**Yes**	**No**
Line planting				
Recommended spacing				
Timely planting				
Soil fertility				
Weed management				
Crop rotation				
Pest and disease control				
Planting improved seed				
Intercropping				
Ox-ploughing				
Use of selected local seeds				

208. Output and productivity (*Please state the area of land under various crops for the second season of 2003 and the first season of 2004. Where there was intercropping please show acreage and output for both intercropped and pure stand*)

2003B season (Second season of 2003)

		Acreage planted	Kgs planted
Maize	Pure stand		
	Mixed stand		
Beans	Pure stand		
	Mixed stand		
Rice	Pure stand		
	Mixed stand		
Vegetables	Pure stand		
	Mixed stand		
Millet	Pure stand		
	Mixed stand		
Cassava	Pure stand		
	Mixed stand		

2004A (1st season of the year 2004)

		Acreage planted	Kgs produced
Maize	Pure stand		
	Mixed stand		
Beans	Pure stand		
	Mixed stand		
Rice	Pure stand		
	Mixed stand		
Vegetables	Pure stand		
	Mixed stand		
Millet	Pure stand		
	Mixed stand		
Cassava	Pure stand		
	Mixed stand		

3.0 POST HARVEST HANDLING, TRANSPORT AND MARKETING

301.	Indicate the value added activities carried out on your farm and the methods used	Activity	Method *1= hand operated* *2=motorised electric* *3= motorised fuel* *4= other, specify*
		1= grading	
		2= sorting	
		3=milling	
		4=packaging	
		5=other	
302	Do you belong to an active farmer group cooperative or association?	1= Yes	
		2= No	
303.	How many members belong to the group?	_____	
304.	Does your group/association have a constitution (governing laws)?	1= Yes	
		2= No	
305.	Do you pay a membership fee?	1= Yes	
		2= No	
306.	If yes, how much?		
307.	What activities do you carryout as a group?	1= Training	
		2= Procurement of inputs	
		3= Marketing	
		4= Communal cultivation	
		5= Savings and credit	
		6= Revolving	
		7= Receive free inputs	
		8= Others (specify)	
308.	Where do you sell your produce? (*Tick against selling point and indicate whether its sold to the destination mentioned on an individual basis or as a group)*		Individual / As a group
		1= Farm gate	
		2= Local market	
		3= Urban market	
		4= Local store	
		5= Other (specify)	
309.	At what stage do you sell your produce?	1= Still fresh (specify crop)	
		2= immediately after drying (specify crop)	
		3= within two months after drying (specify crop)	
		4= other (specify)	

310.	If you have to sell away from the farm, what mode of transport do you use to deliver the produce to the selling point (*please fill in the table below where appropriate*)	Mode	Rate (Ushs/kg/km)
		1= Head load	
		2= Donkey/oxen	
		3= Pick-up	

		4= Truck	
		5= Wheel barrow	
		6= Bicycle	
		7=Tractor	

311.	Do you keep and records on your farm activities	1= Yes (Go to 312) 2= No (Go to 313)
312	If yes, specify the type of information recorded (*multiple answers are possible, Tick where applicable*)	1= Fixed capital purchases
		2= Input purchases
		3= Field operations
		4= Post-harvest operations
		5= Marketing activities
		6= Output quantities
		7= Pest/disease attack
		8= Natural disasters
		9= Other
313.	If No, why don't you keep records?	_____ _____
314.	Do you have access to market information?	1= yes (Go to 315)
		2= No (Go to 401)
315.	If yes, how do you access market information?	1= Local market
		2= Radio
		3= Newspapers
		4= Extension agent
		5= Group/association contacts
		6= Fellow farmers
		7= Other (specify)
316.	What type of information do you access?	1= Price information
		2= Market outlets
		3= Quality control
		4= Other (specify)
317.	How is market information useful to your farming activities (*Tick where mentioned*)	1= Decide minimum and acceptable price
		2= Decide what to grow
		3= Decide when to sell
		4= Decide when to plant
		5= Decide where to sell
		6= Other (specify)

4.0 HOUSEHOLD INCOME FROM TARGET CROPS AND OTHER ECONOMIC ACTIVITIES

401. Indicate incomes from all household sales of target crops harvested in second season of 2003

	Amount stored as seed (kgs)	Amount consumed (kgs)	Amount sold (kgs)	Selling points	Unit prices (Ushs/kg)
1. Maize					
Fresh					
Dry					
Flour					
2. Beans					
Fresh					
Dry					
3. Vegetables					
4. Upland rice					
Dry					
5. Millet					
Dry					
Flour					
6. Cassava					
Fresh					
Dry					
Flour					
Cuttings					

*Amount consumed also includes output still in store for future consumption, amount already consumed and donations to neighbours, social functions etc. Codes for selling points 1= Farm gate 2= Local market 3= Urban market 4= Local market

402. Indicate the amount of income earned from other economic activities during last year 2003? E.g. Brick making, Charcoal burning, Livestock, Poultry, Other crops e.t.c.

Activity	Quantities sold (kgs)	Unit price (Ushs)

403a. What are the household's main sources of income currently?

_____

403b. Do you save part of your income? 1. Yes 2. No

403c. Did you carryout any investments in the last year? 1. Yes 2. No

404. If yes, what were the sources of capital for investment?

Source of capital	Investment/ income generating activity

5 &6 NUTRITION AND DIETARY DIVERSITY

501A. Does your household have a vegetable garden?

_____

501B. If yes, when was the vegetable garden established?

_____

502. What vegetables do you grow?

_____

_____

600. (*Instructions for question 6.1 – 7.3*). Did your household consume any of the following foods and what were there sources during the last 24 hours?

Food groups	Code	Source of food	Food groups	Code	Source of food
Cereals Millet, maize, sorghum. Rice, wheat	601 1=Yes 2=No	1=self grown 2= bought / donated	**Legumes** Peas, beans, g.nuts, soya, pigeon peas	602 1=Yes 2=No	1=self grown 2= bought / donated
Root/Tuber Cassava, yams, Irish/sweet potatoes	603 1=Yes 2=No	1=self grown 2= bought / donated	**Oil/fat** Sunflower, simsim, ghee	604 1=Yes 2=No	1=self grown 2= bought / donated
Meat Beef, mutton, bacon, liver, pork	605 1=Yes 2=No	1=self grown 2= bought / donated	**Sugar/ Honey**	606 1=Yes 2=No	1=self grown 2= bought / donated
Milk/ milk products	607 1=Yes 2=No	1=self grown 2= bought / donated	**Fruits** Water melon, pineapple, mango, paw paw, guava	608 1=Yes 2=No	1=self grown 2= bought / donated
Vegetables Avocado, carrots, greens, eggplant, tomatoes	609 1=Yes 2=No	1=self grown 2= bought / donated	**Poultry** Chicken, duck, guinea fowl	700 1=Yes 2=No	1=self grown 2= bought / donated
Eggs	701 1=Yes 2=No	1=self grown 2= bought / donated	**Fish**	712 1=Yes 2=No	1=self grown 2= bought / donated
Miscellaneous Spices, salt, curry powder	703 1=Yes 2=No	1=self grown 2= bought / donated			