

# EVALUATION REPORT

## THE PLAN FOR THE MODERNISATION OF AGRICULTURE

### ANNEX B

**September 2005**

Oxford Policy Management  
6 St Aldates Courtyard  
38 St Aldates  
Oxford, OX1 1BN  
United Kingdom  
Tel: +44 (0) 1865 207300  
email: admin @opml.co.uk



Oxford  
Policy  
Management

## **CONTENTS**

<b>ANNEX B1</b>	<b>PMA EVALUATION FIELD VISIT REPORT</b>	<b>1</b>
<b>ANNEX B2</b>	<b>HOUSEHOLD SURVEY REPORT</b>	<b>10</b>
<b>ANNEX B3</b>	<b>HOUSEHOLD SURVEY TABLES</b>	<b>32</b>
<b>ANNEX B4</b>	<b>HOUSEHOLD SURVEY QUESTIONNAIRE</b>	<b>59</b>

## Annex B1 PMA Evaluation field visit report

### Introduction

This report presents a synthesis of findings from key informant interviews and focus group discussions undertaken by the evaluation team during their district visits. The team met with elected and appointed district officials, CSO and private sector representatives, and members from communities in eight districts (Kabarole, Kasese, Arua, Moyo, Tororo, Pallisa, Mubende and Kiboga).

The objectives of the field visits were:

- (i) To get insight of people's knowledge and perceptions of the PMA and other related programmes but with particular emphasis on the following;
  - Beneficiaries and stakeholders understanding of the PMA;
  - Contribution by PMA to community participation and empowerment;
  - Contribution by PMA to poverty reduction and rural development.
- (ii) To get information on other programmes and projects that contribute to or compliment PMA implementation;
- (iii) To examine how gender, HIV/AIDS and other cross-cutting issues are integrated in production related activities.

### Methodology

Eight districts were selected from the four regions of Uganda. These comprised four districts that had benefited from the NSCG and/or NAADS, and four districts that had not yet accessed the NSCG and/or NAADS. Arua, Kabarole, Mubende, and Tororo districts had implemented PMA related activities since the inception of the PMA, while Kasese, Kiboga, Moyo and Pallisa were just beginning the rollout of PMA activities. In each sampled district, one sub-county was selected for key informant interviews and group discussions. The team interacted with at least 18 individual respondents and two groups per sub-county.

The following criteria were used to select the sub-counties:

- Variety of agricultural activities – crop, animal and processing activities;
- Existence of farmer groups;
- Availability of technical staff to work with the study team;
- Ability of staff to mobilise groups;
- PMA implementation (for those accessing the NSCG).

While the initial sample targeted only one sub-county per district, the team covered more than one sub-county in Kabarole and Kasese in order to get a wider perspective of programmes in the district, and particularly to include AAMP activities since NAADS and AAMP are not implemented in the same sub-county.

### Information on districts visited

#### **Arua**

Arua is one of the five districts that form the West Nile Region. It is bordered by the Republic of Sudan in the Northwest, Yumbe District in the northeast, the Democratic Republic of Congo in the west, Nebbi District in the south and Gulu District in the East. Arua Town, the administrative and commercial headquarters of the district is about 520 kilometres away from Kampala. The district has a total of 7 counties and 36 sub counties. Agriculture is the main economic activity with 80 percent of the

population involved in subsistence agriculture. The major crops grown in Arua include tobacco, groundnuts, sesame, beans and cassava. The other major economic activity, for people living along the River Nile, is fishing.

The implementation of the PMA started in 2001 with the introduction of the NSCG. LGDP and the Northwest Smallholder Agriculture Development Project (NWSADP) are also being implemented. CARE, ACAV and NUSAF support other interventions that compliment the PMA. The district also has an ARDC at Abi. The main language spoken in the district is Lugbara.

### ***Moyo***

Moyo District, also in the West Nile region, has 2 counties, 8 sub-counties. It has an estimated 36,000 households and 90 percent of the population engaged in agriculture. Cotton and sesame are the major cash crops while sorghum, millet, rice and cassava major are food crops. Moyo town is approximately 570 Km away from Kampala and the main language spoken is Lugbara.

While the district does not access the NSCG, a number of development interventions are supported by NUSAF, NWSADP and the LGDP. The Moyo District Farmers' Association and APEP-Uganda are also key players in supporting agricultural and marketing interventions. At the time of the field study, NAADS was to be introduced in the FY 2005/06.

### ***Kabarole***

Kabarole is in the western extreme of Uganda. It has 3 counties and 14 sub-counties and an estimated population of 356,914. Kabarole town is 430 Km away from Kampala. The district is bordered by Bundibugyo to the north and west, Kamwenge and Kyenjojo to the east and Kasese to the south. The district has hilly terrain with alternating plains. Part of the Rwenzori Mountain is found in the district. Approximately 70 percent of the inhabitants are farmers, of which 10 percent are engaged in tea growing on estates.

Major crops grown include bananas, groundnuts, potatoes, maize and rice which was recently introduced. A number of households keep small livestock and cattle. The district was one of the first one to receive the NSCG, has implemented NAADS and AAMP.

### ***Kasese***

Kasese district located in the western extreme of Uganda has 2 counties and 22 sub-counties and an estimated population of 523,033. Kasese town is approximately 530 Km away from Kampala. A considerable part of the district lies within the Great Rift Valley and the district also encloses part of the Rwenzori Mountain. The biggest Irrigation scheme in the country, Mubuku Irrigation is found in the district.

Small scale agriculture is the main economic activity. Main crops grown include maize, cotton, beans, cassava and groundnuts. Sorghum for beer brewing is a recently introduced crop. Cotton and Coffee remain major cash crops. Kasese is one of the AAMP districts and has a number of NGOs supporting activities that complimenting AAMP.

### ***Kiboga***

Kiboga district has 1 county and 14 sub-counties and an estimated population of 229,472. The District is located in mid-western Uganda with the district headquarters 130 kilometres from Kampala. Agriculture is the main economic activity and the

district is one of the major producers of maize and beans. Other crops grown include bananas, cassava, potatoes.

Cattle are found in the drier parts of the district especially near the border with Mubende District and the district is rated fifth in the country for cattle population. Kiboga is a non-PMA and non-NAADS district and has no other national programmes apart from LGDP. There were apparently no differences between the extension services provided by the government in Kiboga and those in NAADS districts- apart from the scale and amount of funding for extension services available. BUCADEV is a major NGO operating in the district.

### ***Mubende***

Mubende District is in the central region. It is surrounded by Mpigi and Luwero in the East, Kiboga in the north, Ssembabule and Mpigi in the south east, Kabarole and Kibaale in the west. The district headquarters is 144 km west of Kampala and has a population of 689,530. There are 18 sub-counties and 2 town councils. The district receives NSCG funding and NAADS will be introduced into 4 sub-counties later this year. Mubende is a leading producer of goats, beans, bananas and tea. The drier parts of the district are inhabited by pastoralists who keep relatively big herds of cattle.

Action Aid was present in Mubende for several years and was responsible for group formation and the development of savings and credit schemes, but it left the District in December 2004. AIM UPHOLD and APEP are currently implementing projects in Mubende District.

### ***Pallisa***

Pallisa is found in eastern Uganda and is bordered by Kumi in the north, Tororo and Iganga in the south, Kamuli to the west and Mbale in the east. Pallisa has 4 counties and 28 sub-counties and a population of 520,578. Around 90 percent of the population engage in agriculture and main crops include cotton, rice, maize, cassava, millet and potatoes. A few farmers also keep livestock. Agricultural production over the last ten years has been affected by prolonged droughts and increasingly unpredictable weather patterns. Pallisa is a non PMA and non NAADS district; however a number of NGOs are present in the district.

### ***Tororo***

Tororo district is bordered by the Republic of Kenya to the east, Mbale district to the north east, Iganga district to west, Busia to the south and Pallisa to the north. Tororo has 4 counties and 24 sub-counties and a population of 536,888. Tororo headquarters are located approximately 200 KM from Kampala. Tororo is a NAADS district and has also been accessing the PMA NSCG.

The district receives moderate rainfall and high temperatures for most of the year. Major crops grown include maize, potatoes, cassava and rice. The district is still one of the major producers of cotton. The proximity to Kenya provides a big market for food stuffs which are sold and the proceeds used to buy products produced in Kenya.

## **Findings**

### ***Perceptions and understanding***

Perceptions of the PMA vary depending on the category of the respondents. The extent of awareness is also influenced by the packaging of PMA information and the dissemination and communication strategy or approach that was used in districts. The level of awareness decreases further down the LG hierarchy. However in

general there is a more positive attitude to PMA (the NSCG and the principles) among stakeholders at district, sub-county and village level compared to stakeholders at the centre (line ministries and national civil society organisations).

There were few differences in perceptions of the PMA among respondents within similar categories in the “PMA” and “non-PMA” districts or Local Governments. In general, there is a default tendency for PMA to be perceived mainly as an agricultural intervention. However, in districts where PMA awareness raising had been conducted (e.g Kiboga) there is a good understanding of PMA principles and its multi-sectoral approach. There is also a good understanding of PMA amongst both the technical staff (especially the PMA focal point persons) and the political leaders at district level – in both PMA and non-PMA districts - but more confusion and limited knowledge of the vision and principles of PMA among some of the lower ranking officers. The perceptions also influenced institutional nesting of the coordination role, in some districts coordination is reported to be in the planning department while in others it is planted firmly in the production sector.

In Mubende, which is a NSCG district but non-NAADS, the PMA was perceived – among district and sub-county civil servants, and farmers – as a small programme with a limited grant, the NSCG, which is meant for agricultural production. By comparison, the LGDP grant is perceived as an infrastructure grant. The sub-county staff and extension workers - including community development workers - view the NSCG as a welcome supplement and gap-filler in their agricultural extension budgets.

There is growing awareness among stakeholders of the possibilities of utilising the NSCG on investments that are not purely agricultural related. In Mubende, this is attributed to the efforts of the PMA focal person, who has a more than average understanding of NSCG / PMA principles. In Arua, sub-county officials and farmers perceived PMA and NAADS as two different programmes.

### ***Community participation and empowerment***

Community participation in LGs is supposed to occur during the planning, implementation and monitoring of PMA activities. Planning is done using PRA methodologies, the thoroughness of which is dependent on the capacities of the community development workers and the extension workers involved.

Generally there seems to be no targeting of beneficiaries. Where needs and priorities are identified through group discussions, village leaders seem to have the last word when it comes to achieving consensus. As a consequence, annual participatory planning is still top-down. Whether or not women and the poorest benefit from PMA/NSCG is dependent on the extent to which parish, sub-county and district decision-makers are willing to respond to their needs and priorities.

### ***Changes in commercialisation***

The FGD with women farmers in Arua and Moyo districts indicated a considerable change in attitude towards agriculture—*‘we have to treat agriculture as a business’*. However, there remains a need to assist farmers to fully understand and learn how to deal with marketing issues. The situation is further compounded by the limited availability and access to affordable transportation for marketing produce. Interviews with farmers, both men and women, indicated that access to roads is important but still far from adequate to enable farmers market their products independently of traders. With assistance from APEP, farmer groups in Mubende sign contracts with grain exporters assuring them of better prices. The groups also select one of their members to act as an input stockist for the group.

### ***Inclusion of women, youth, the poorest and PLWA***

In general the inclusion of women in PMA activities is evident in mixed groups and more so in some purely women groups seen in the districts. The presence of youth groups was also evident in the districts. There does not seem to be any effort to selectively target the poor under NAADS or other PMA components. However officials are aware of the need to ensure poverty focus in planning.

There is no deliberate effort to form purely HIV/AIDS groups – perhaps due to fears of stigmatisation. However, there are interventions that target HIV/AIDS effected members within existing groups. There also seems to be little awareness of the link between agriculture and HIV/AIDS, or the need to mainstream HIV/AIDS concerns in PMA. Some pre-existing HIV/AIDS groups have been included in NAADS. Generally, support to orphans, widows and HIV/AIDS affected households was perceived as a responsibility under MoH and NGOs. In Kabarole special efforts are made to target the poorest by ensuring that 20 percent of group members belong to this category (defined as those without land, relatives, no food).

Mobilisation of PMA beneficiaries (NAADS and PMA) is the responsibility of sub-county and parish officials. However CDWs are also charged with this responsibility, especially for purposes of planning. CDWs are often overburdened and do not have the necessary resources for full-time support to community organisation or PMA planning and monitoring. In some sub-counties CDWs spend more than 60 percent of their time dealing with land disputes, cases of child neglect, and domestic violence.

The District Vice Chairperson in Arua made an interesting comparison between NAADS and PMA (NSCG). He saw NAADS as being participatory and empowering the farmer groups (who may not necessarily include the poorest) as opposed to the district and sub-county planning processes, which he said worked on traditional practices, and were not participatory. Communities have been encouraged to form and work in groups, and the farmer forum structures under NAADS have strengthened the community voice to demand and access services.<sup>1</sup>

Where NAADS is present, the planning of NAADS activities seem to take place independently of the annual, participatory community development planning process and be concentrated around the NAADS groups. NAADS seem to have come a long way in mobilisation of beneficiaries. Group organisation and training is new to most farmers, and so is the selective targeting of women and introduction of quotas for women in the groups.

### ***Harmonisation and coordination of activities***

The implementation of, and dissemination of information about, the various components under PMA suggest poor or inadequate harmonisation and coordination. NSCG, NAADS, AAMP and the multitude of other donor and CSO supported programmes appear to operate like independent components. Technical staff interviewed did not think that there was adequate or effective coordination even among the government programmes. Well-resourced NAADS district coordinators have been established side by side with PMA Focal Points who have little additional funding to carry out their responsibilities. There is no clearly defined relationship or

<sup>1</sup> The community have gained confidence in the making of choices and expressing their concerns as evidenced in Kabarole where one of the groups rejected vanilla vines that were shorter than specified. In Moyo communities are able to carry out their own livelihood analysis; there are also a number of associations formed at sub county level

reporting protocol for these two positions, which makes the PMA focal point appear inferior and subordinated. The facilities available to the various responsibility holders in NAADS, NSCG and AAMP need to be streamlined. However, In Mubende district there was an effort to harmonise and coordinate PMA activities with other district projects and programmes especially LGDP. Investments under the NSCG are designed to compliment LGDP interventions.

In Mubende the NSCG planning is an integrated part of the annual participatory development planning which takes place in September – although NSCG is planned separately from LGDP activities. Only one day is allocated to the planning in each village, and community development workers observed that there was low attendance of women and poorest households in planning meetings.

Poor coordination and harmonisation (and limited dissemination of information on PMA) in West Nile and Kasese has resulted in projects, such as NWSADP and APEP, being perceived as independent activities, not clearly associated with PMA.

### ***Impact on poverty and well being***

There is an indication that both men and women farmers, who have had the opportunity to participate in either NAADS or NSCG implementation feel they have benefited. Farmers who participated in the focus group discussions displayed confidence and were already reaping results from their participation in the various activities. There were reports of increased yields, more access to the market in spite of the low and frequently fluctuating prices, and a general feeling and perception of improved livelihood among households. In Arua and Tororo wealth-ranking exercises were carried out and it was clear that the farmers (all women) felt that they had improved their wealth status as a result of farmer group activities.

The team noted that even where farmers were able to record increased yields, they are not all able to convert this into increased incomes. This is particularly problematic where many farmers produce the same crop, driving down farm gate prices. This situation is especially bad for those farmers in the same area, but that are not benefiting from the new technologies – i.e. they are not achieving higher yields, and face lower farm gate prices.

### **PMA pillars**

#### ***Agriculture research and development***

NARO has been successful in the production of improved technologies. However, farmer's access to these new technologies remains limited. The procedures used by PMA and NAADS for selecting which farmers get the new technologies and how groups are chosen is not clear and appear adhoc.

Two research organisations were visited, Abi, an ARDC in Arua, and the Livestock Research institute (LIRI) in Tororo. The ARDC was heavily understaffed, with only 6 technical personnel out of a target of 40. LIRI seemed to have poorer relationships with NAADS than they had had with the traditional extension services.

#### ***NAADS***

Most respondents especially the farmers and elected officials were enthusiastic about NAADS as one of the approaches that have actually reached the farmers. This is despite the challenges NAADS faces in targeting and reaching the poor. Farmers expressed a certain level of satisfaction that they had been reached, involved and were seeing tangible results.



There is a fear however, that the new approach to advisory services is dependent on a weak private sector with no clear strategy for institutional development and or quality control. For example, members of a farmers' forum during a focus group discussion observed that the majority of service providers under NAADS are those that have been earlier dismissed from the traditional extension system for inefficiency, while the better ones are retained by government in the civil service.

There are also questions as to whether the level of aggregation of enterprises at sub-county level results in farm groups having to adopt enterprises which were not amongst their first choices, and were, in some respects, not suitable. In Rubongi sub-county in Tororo, NAADS enterprises are poultry, basic support to piggeries, and supply of exotic breeds in piggeries. This has the potential for excluding Muslim farmers, and was not appropriate for the people living with HIV/AIDS due to the labour required in growing fodder for the pigs.

In interviews with service providers, it became clear that there is also a lack of continuity in the relationship between farmers and service providers. Although a number of service providers had multiple contracts with NAADS, and were receiving contracts on a regular basis, these were not necessarily for the same enterprise, or with the same farmer groups.

In Arua in one sub-county, a NAADS group evaluation report prepared by the community development worker showed that NAADS groups suffered from:

- weak group leadership,
- inability to pay membership fees,
- high drop-out rates in groups/ decreasing membership,
- low attendance of members in group meetings,
- poor quality inputs and/or inappropriate services provided,
- Inadequate capacity to cost-share (matching 2%),
- high expectations of credit provision by NAADS, and
- Insufficient monitoring.

### ***Rural finance***

There are few CSOs and private sector initiatives supporting the finance pillar. Where they do exist, the terms and conditions are often perceived by farmers to be unsuitable for agriculture – largely due to the short repayment period (three months). Interest rates were also felt to be too high (although in reality are likely to be a good reflection of market risk).

Some of the better-established groups have mobilised resources through members' savings but the resource base for such activities is small compared to needs. Cotton growers have an arrangement where the ginners or buyer cooperatives provide limited credit to enable farmers to invest in cotton growing, with the understanding that the loan or credit is recovered at the time of sale. This kind of arrangement was also available to apiary farmers in the West Nile region.

In Mubende there are few formal MFIs. However, where Action Aid and other NGOs have worked, there are a number of microfinance activities, particularly amongst women groups. At the district HQ, some 160 farm cooperatives are registered, of which most function as *de facto* rotating savings and credit associations (ROSCA) and have little to do with cooperatives. For the most part, both farmers and extension

services are either unaware of or hostile to collective storage and marketing approaches.

### ***Agro-processing and marketing***

This is still a big challenge in spite of efforts by some programmes and projects to provide farmers with small-scale oil-presses, and hurlers. Bee Natural, a private firm in west Nile engaged in honey production and processing was apparently doing well but the director too expressed difficulty in accessing financial services. There is great need for sensitising farmers to better understand how markets work, so that they have realistic expectations. APEP is performing this role in Mubende District with the formation of groups to collectively sell maize and beans and buy inputs in bulk. It was also noted that there is no systematic way the local governments or the National Bureau of Standards can check quality of inputs (or presumably outputs).

### ***Agricultural education***

In Tororo the DATIC was providing a combination of short courses, a year long course for youth, and demonstration sites and services to the local community. They are currently funded by DANIDA, but are ultimately expected to become self-sufficient.

FAL classes funded by NSCG were running in some sub-counties in Mubende, but are hampered by (i) low attendance during agricultural peak seasons by either women or men; (ii) high drop-out of instructors once they realise that they have to work as volunteers; (iii) lack of appropriate teaching material.

NSCG support to agricultural education in primary schools is typified by establishment in Mubende, of four school demonstration fruit gardens financed by the grant. However, sub-county level extension workers complained about low commitment of school teachers which has led to children regarding working in the school demo-garden as punishment rather than education. The primary education syllabus has been expanded to include agricultural education but there is an acute lack of qualified teachers to teach the subject competently and effectively.

### ***NRM***

It emerged from both FGDs and interviews that environmental issues are very important in Uganda – whether it is the destruction of wetlands, or over-exploitation of small plots of land, without appropriate intercropping or fallowing. These are constraining potential increases in productivity. As part of the planning process, sub-counties are supposed to develop SEAPs (sub county environmental action plans) and districts to develop DEAPs (district environmental action plans). In Tororo, this has happened, and implementation is being monitored by the DEO. Here the NSCG has provided funds for sensitisation and capacity building. There are concerns about the ability of NAADS to address cross-cutting environmental issues in their work. Mubende District has also produced a DEAP that is under review.

### ***Rural infrastructure***

Implementation of this pillar appears to be progressing quite well – but not always in coordination with other PMA pillars. Rural infrastructure like roads, water harvesting tanks and market places has been put in place in some of the districts visited. Mubende District is in the Rural Electrification Scheme pilot which will also shortly start in Arua.

Technical officers and politicians mentioned the need for improving extra-district roads although in some instances some farmers did not make a direct linkage between infrastructure with the implementation of the PMA. In one case, members of a farmers' forum expressed disappointment that the NSCG had a low budget and

was being used to fund infrastructure activities which they believe should have been funded by the Ministry of Works or the Works and Technical Services department of Local Government.

In Mubende, the district road engineers seem to work completely independently of PMA and mentioned the only link to PMA in relation to funding available from the NSCG which has been used for culverts on a few community access roads. This reflects the attitude of MWHC at central level which appears to have limited buy-in to the PMA. However, despite the limited interest in PMA by MWHC at district level, the MWHC does support the implementation of PMA principles - implicitly and not intentionally - where it provides community access roads, district roads, construct market places, provides telecom services etc. – and where it take affirmative action to involve women and the poorest in road/transport projects.

## **Summary**

### ***What is working well?***

- The mobilisation and formation of groups under NAADS shows some successes – especially where NAADS has built upon existing farmer groups;
- There is a good level of appreciation of PMA principles and approaches, at all levels;
- Most pillars show evidence that implementation is progressing;
- The introduction of CDWs is improving the integration of cross-cutting issues in planning processes ;
- NARO has been successful in the production of improved technologies.
- Implementation of the FAL programme is in progress in districts and in some places actively targets women;
- Awareness of environment issues is generally high among most stakeholders.

### ***What needs to be done?***

- Expand LG DTPC and SCTPC mandate to provide strategic guidance and overall coordination of PMA implementation;
- The responsibility for PMA coordination should rest with the district Planning Unit;
- There is a need to improve pillar coordination at LG levels;
- Strengthen PMA targeting strategies, especially to focus on the poor, women and other marginalised or vulnerable groups;
- Increase dissemination of practical information on PMA approaches, highlighting positive experiences from the field;
- Strengthen linkages between research and extension, and between marketing and rural finance;
- More systematic monitoring of NSCG investments is required, together with greater transparency in the use of NSCG funds;
- NSCG project management groups at village level need to be better mobilised and strengthened to ensure that NSCG planning process genuinely are participatory;
- FAL instructors should be better trained and be given stronger incentives. Women and men should have separate FAL classes and the timing, content and methodologies of FAL should be tailor-made to needs.

## Annex B2 Household survey report

### 1. INTRODUCTION

#### Background

This report presents findings of a household survey conducted as one of the main activities adopted in evaluating the Plan for Modernisation of Agriculture (PMA) in Uganda. The survey was carried out in four sub-counties in four districts and covered a total of 398 households categorized as in Table 1 below.

**Table 1: Number of households surveyed**

District	Sub-county	Household Head by Sex		Respondents by Sex	
		Male-headed	Female-headed	Male	Female
Moyo	Lefori	60	40	53	47
Arua	Vurra	63	37	61	39
Kabarole	Rwimi	68	31	49	50
Kasese	Kisinga	70	29	60	39
<b>Total</b>		<b>261</b>	<b>137</b>	<b>223</b>	<b>175</b>
<b>As % of Total</b>		<b>66%</b>	<b>34%</b>	<b>56%</b>	<b>44%</b>

The findings are presented in Sections 3 to 8 under the following themes:

- Socio-economic household characteristics (including land ownership, dwelling units, occupation, and income sources)
- PMA perception and implementation (including perceptions and understanding of PMA, community awareness and participation)
- PMA pillars (including a review of each pillar and extent of participation)
- Household characterization along poverty lines (including a comparison of primary occupation, income sources, employment and adoption levels)
- Household characterization based on inclusion (highlighting the differences amongst households along farmer group and savings & credit group membership)
- Validation workshop (outcomes and concerns raised).

#### 1.2 Field survey objectives

The main objective of the household survey was to collect primary data from the households that would help enrich the overall PMA evaluation exercise. Specifically the household survey was intended to:

- Obtain first-hand information about the operations and impact of PMA-supported activities
- Validate and qualify observations and findings emerging from literature review process and field visits
- Fill data gaps that might have been observed during the literature review process
- Compare and contrast “beneficiaries” and “non-beneficiaries”.

### 2. FIELD SURVEY METHODOLOGY

#### Sample size and selection procedure:

Four districts representing two geographic diversities, namely Moyo and Arua in northern Uganda (which is dominated by seasonal crop production) and Kabarole

and Kasese in western Uganda (which has some perennial crops and livestock activities) were selected based on the following considerations:

- Coverage of PMA activities (2 districts are PMA<sup>2</sup> and 2 non-PMA districts).
- Similarity in agricultural activities and agro-ecological zones
- Existence of NSCG, NAADS and other activities such as AAMP in the PMA districts
- Poverty ranking.

One sub-county was selected from each district. For the PMA districts a list frame was developed and the sub-counties ranked on the basis of how long NAADS activities had been in existence and the existence of agricultural diversity. The sub-counties with agricultural diversity (combination of at least two of the following-livestock, fishing, apiary, crop enterprise or other agricultural enterprises) and where NAADS had been in existence longest were then clustered together and one randomly selected. In the case of non-PMA districts, a simple random selection method was employed, bearing in mind the concept of agricultural diversity. In each sub-county a maximum of 4 parishes (in case the sub-county has more than 4 parishes) were randomly selected. In each parish a maximum of three villages were selected based on a sample frame developed in consultation with the LC II executives. For each selected village, 8 or 9 households (with at least 2 households being female-headed) were randomly sampled based on the complete list of households developed by the enumerator in consultation with the LCI officials. This gave a sample of 25 households, with at least 30% of the households being female-headed, in each parish and 100 households in each sub-county and district giving a total of 400 households.

#### **Timing and responsibilities**

The household survey was conducted between 16<sup>th</sup> and 31<sup>st</sup> May 2005 under the supervision of two Ugandan consultants. Eight enumerators were selected and trained on how to administer the questionnaire. A pre-test was conducted with a view to making the questionnaire relevant at the household level. Hysteria Technological Ltd, a Ugandan Consulting Firm, was responsible for data entry, analysis and report preparation.

#### **The survey instrument**

The household questionnaire is provided at Annex B4.

### **3. SOCIO-ECONOMIC HOUSEHOLD CHARACTERISTICS**

This chapter summarizes the key social and economic status of the households interviewed. It highlights household population structures, types of dwelling units, land and asset ownership, household occupation and income sources.

#### **Household characteristics**

Table 2 shows the socio-economic characteristics of the households interviewed. The findings are presented by male and female headed households to allow for gender comparison.

---

<sup>2</sup> The sub-county surveyed in Kabarole received the NSCG, but was not a NAADS sub-county (though Kabarole had been chosen as a NSCG and NAADS district). This is important in interpreting some of the results of this survey.

**Table 2: Average characteristics of households surveyed**

Characteristic	Moyo		Arua		Kabaroile		Kasese	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>No of h/h surveyed</b>	<b>60</b>	<b>40</b>	<b>63</b>	<b>37</b>	<b>68</b>	<b>31</b>	<b>70</b>	<b>29</b>
% of h/h head								
- >30 years	70%	60%	76%	95%	77%	97%	80%	73%
- 18-30 years	28%	40%	24%	5%	23%	3%	20%	24%
- <18 years	2%	0%	0%	0%	0%	0%	0%	3%
No of people living in h/h	7	7	5	6	7	5	8	6
- No females	3	4	2	3	4	3	4	3
- No males	4	3	3	3	3	2	4	3
No of years in education by h/h head (% of total)								
- < 5	35%	40%	13%	22%	37%	32%	31%	10%
- 5 to 10	35%	10%	60%	38%	43%	26%	39%	18%
- > 10	7%	0%	24%	21%	15%	3%	13%	10%
- No response <sup>a</sup>	23%	50%	3%	19%	5%	39%	17%	62%
Type of dwelling units (No of h/h)								
- grass thatched	59	40	63	37	63	28	63	27
- iron roof (with mud wall and floor)	0	1	20	7	66	29	49	15
- iron roof (with brick wall)	0	1	4	1	27	8	21	2
- tiled roof	0	0	3	1	22	7	0	0
% of h/h owning radio	32%	28%	92%	64%	87%	75%	56%	24%
% of h/h owning bicycle	44%	31%	89%	74%	80%	32%	39%	0%
Distance to health facility (% of h/h):								
- < 2km	67%	70%	26%	38%	69%	71%	21%	35%
- 2-5 km	27%	27%	63%	32%	24%	19%	37%	24%
- > 5km	6%	3%	11%	30%	7%	10%	42%	41%
Distance to all-weather road (% of h/h):								
- < 2km	57%	75%	74%	68%	85%	77%	83%	62%
- > 2km	43%	25%	26%	32%	15%	23%	17%	38%
Every h/h member has a blanket:	36%	33%	48%	51%	55%	50%	21%	19%
50 % + have blanket	26%	28%	52%	41%	26%	33%	67%	63%
50% or less have blanket	38%	39%	0%	8%	19%	17%	11%	18%

**Note** a: The high 'no response' rate may reflect respondents' reluctance to admit that they are illiterate.

Table 2 indicates that:

- Over 75% of the household heads are adults aged of over 30 years. Youth headed households account for about 23% of the households. There are hardly any child-headed households.
- The average household size is about 6 persons per household, with a range of 5 to 8 people. The vast majority of the household heads have 10 years or less years of education. Only about 12% have attained education of more than 10 years. Generally female heads of households are less educated than their male counterparts.
- Most of the households in northern Uganda only have grass-thatched houses, while the vast majority of households in western Uganda have iron-roofed houses with mud-wall as their main abode, using grass-thatched houses for ancillary purposes. The survey also showed that over the past 4 years, there was virtually no change in the type of dwelling units.
- Nearly one out every two households owns a radio and a bicycle. More male heads of households own a radio and a bicycle than their female

counterparts. Close to 40% of every member within the households has access to a blanket.

### Land ownership

Table 3 shows the land ownership patterns for the households surveyed. The vast majority of households own less than 2 acres of land. Only 9% own over 5 acres of land, mainly in northern Uganda. More male heads of households possess land of more than 5 acres than their female counterparts. Household heads own most of the land, with the spouse accounting for less than 6%. The survey also indicates that almost one-quarter of households have reported an increase in land holding over the past four years over the past 4 years.

**Table 3: Land ownership**

Particulars	Moyo		Arua		Kabaroole		Kasese	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>No of h/h surveyed</b>	<b>60</b>	<b>40</b>	<b>63</b>	<b>37</b>	<b>68</b>	<b>31</b>	<b>70</b>	<b>29</b>
% with land size								
- < 2 acres	52%	55%	42%	60%	62%	52%	64%	86%
- 2-5 acres	30%	33%	40%	38%	29%	45%	30%	14%
- > 5 acres	18%	12%	18%	2%	9%	3%	6%	0%
No. with land owned <sup>a</sup> by:								
- h/h head								
- spouse	57	29	59	36	56	28	67	26
- other member	1	12	9	0	2	0	0	0
	2	1	0	0	30	15	0	1
% reporting land size:								
- increase	20%	17%	32%	17%	52%	42%	1%	0%
- decrease	2%	3%	2%	0%	3%	6%	3%	0%
- no change	78%	80%	66%	83%	45%	52%	96%	100%

**Note a:** It is difficult to interpret female ownership as it may reflect various situations such as right to use land (e.g. second wives and widows) as well as full ownership.

### Household occupation

Table 4 summarizes the primary occupations of household heads and spouse. The vast majority of the household heads and their spouses are engaged in crop farming, livestock/poultry and trade/business as their main occupations.

**Table 4: Occupation of household head and spouse**

(Mentioned by households as either 1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup>)

Occupation	Moyo		Arua		Kabaroole		Kasese	
	Head	Spouse	Head	Spouse	Head	Spouse	Head	Spouse
No of h/h with following occupation:								
Crop farmer (CF)	76	99	84	99	74	94	67	96
Non crop farmer (NCF)	31	37	30	18	15	19	23	15
Trader/business (T/B)	9	12	26	33	18	14	13	20
Labourer (L)	1	1	18	11	9	1	7	0
Public servant (PS)	10	6	13	7	7	5	10	1
Boda boda (BB)	1	1	9	9	8	5	8	4
Brick making (BM)	0	0	6	2	3	0	4	0
Charcoal burning (CB)	3	0	5	0	0	0	0	0
Retired/aged (R/A)	0	0	1	0	1	1	5	0
Unemployed (UM)	0	0	4	0	0	0	2	1
Other (OT)	2	0	3	1	0	0	0	0
	133	156	199	180	135	139	139	137

In the case of household heads, crop farming is a major occupation for a least 80% of households. Other noticeable occupations include civil servants and

trade/business. In the case of spouses, at least 90% reported crop farming as a main occupation with very few other activities, besides the normal household chores.

Most household have between 1 and 3 members working (Table 5), giving an average dependency ratio of 2. However, 34% of female headed households have only 1 working member.

**Table 5: Number of members working within the household**

Particulars	Moyo		Arua		Kabarole		Kasese	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>No of h/h surveyed</b>	<b>60</b>	<b>40</b>	<b>63</b>	<b>37</b>	<b>68</b>	<b>31</b>	<b>70</b>	<b>29</b>
No. of working members (% of h/h):								
- 0	0%	0%	2%	0%	0%	0%	0%	0%
- 1	10%	48%	7%	13%	7%	39%	7%	38%
- 2	77%	47%	52%	46%	75%	42%	47%	24%
- 3	7%	5%	18%	24%	9%	10%	22%	17%
- 4	5%	0%	15%	8%	3%	6%	17%	7%
- 5 or more	1%	0%	6%	8%	6%	3%	7%	14%

### Sources of household income

Table 6 indicates that food crops are mentioned most frequently as important sources of income. Other major sources of income include livestock and their by-products, traditional cash crops, trade/business and labour. The male heads of households appear to have a wider spread in income sources compared to their female counterparts. Non-farm sources of income such as salary, remittances and gifts were reported mainly by male-headed households.

**Table 6: Sources of income by sex of household head**

(Mentioned by households as either 1st, 2nd, or 3rd)

Income source	Moyo		Arua		Kabarole		Kasese	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>No of h/h surveyed</b>	<b>60</b>	<b>40</b>	<b>63</b>	<b>37</b>	<b>68</b>	<b>31</b>	<b>70</b>	<b>29</b>
Number reporting following sources:								
Food crops	44	27	63	37	66	31	69	29
Cash crops	1	1	14	7	2	0	48	16
Livestock	20	14	37	20	24	13	22	9
Fish	0	0	1	0	0	0	0	0
Labour	25	11	7	1	9	0	3	0
Trade	8	6	26	17	17	9	16	2
Brewing	3	8	1	1	0	0	2	0
Salary	1	0	5	3	9	1	5	1
Remittance	1	1	0	0	2	0	3	2
Gift	1	0	0	1	1	0	1	0
Other	7	7	2	1	8	1	5	0

Table 7 shows the number of mentions of the various reasons given for trends in production, sales and incomes from the various sources cited above<sup>3</sup>. All the reasons cited portray farmers' reliance on agriculture as major source of income. Thus any factor that affects agricultural production and marketing has a direct bearing on household incomes.

<sup>3</sup> There were multiple answers to the question on reasons for production increasing, decreasing or remaining the same. Therefore this table cannot be used to assess overall trends in production or marketing. Information by crop on this is contained in Annex B3, Table A19.



**Table 7: Reasons for trend in production, sales and incomes**

Reasons for Increase	Reasons for Decrease	Reasons for No Change
<b>Trends in production</b>		
Use of better inputs and farming practices (1,419)	Lack of use of improved inputs (1,047)	Lack of adequate land (425)
Adequate rains/good weather (571)	Uncontrolled pests/diseases (1,044)	Inadequate farm inputs (251)
Availability of adequate land (360)	Inadequate rainfall (761)	Drought (227)
Soil fertility (278)	Low soil fertility (584)	Pests and diseases (195)
Control of pests/predators (208)	Inadequate land (497)	Expensive labour (167)
<b>Trends in sales</b>		
Availability of attractive markets (502)	Low producer prices (302)	Produce mainly for home consumption (153)
Increased demand (412)	High costs of labour and other inputs (68)	Pests and diseases (99)
Better quality of produce (121)	Low yields (27)	Low yields (55)
Lower costs of production, resulting in increased margins (88)	Pests and diseases (11)	Increase in labour costs (915)
Improved yields	Produce for home consumption (10)	Low market prices/demand (13)
<b>Trends in incomes</b>		
Better farming practice (44)	Drought (88)	Drought (28)
Use of improved inputs (31)	Land exhaustion (71)	Land shortage (26)
Better market/demand (19)	Pests and diseases (62)	Pests and diseases (26)
More land cultivated (17)	High input costs (28)	Lack of farm inputs (12)
Availability of capital (12)	Unreliable weather (14)	Soil exhaustion (11)

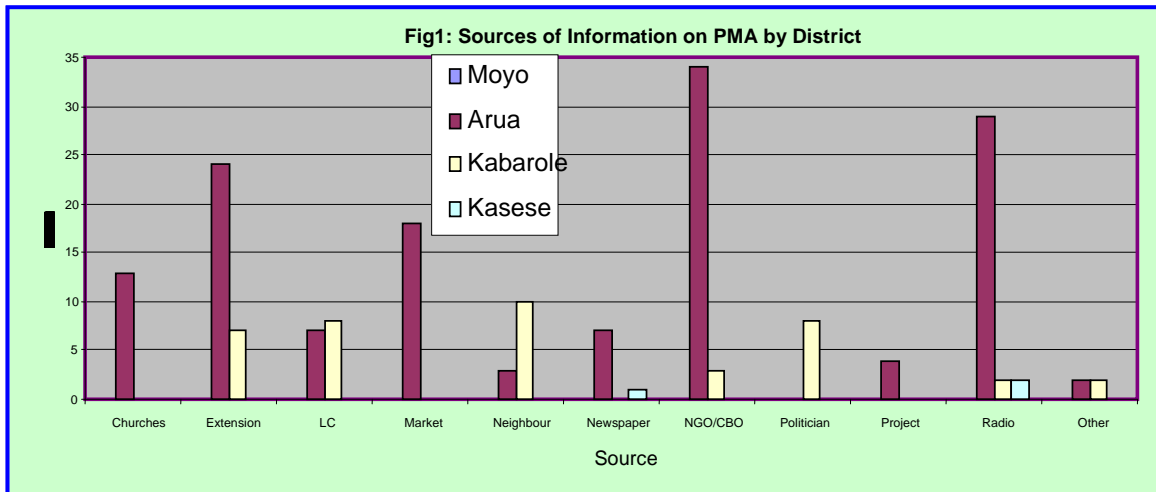
This chapter has illustrated that in terms of socio-economic status, the rural areas are dominated by the production of seasonal food crops, the surplus of which are sold to meet immediate household needs. Although households generally have access to small pieces of land (nearly 60% have less than 2 acres), males usually own the land. Investment in long term perennial and cash crops as well as improved livestock management is limited. For crops, part of the reason may be because the key labour providers (i.e the females) may feel they do not have a secure right to land in case of disagreements with or death of household head

#### 4. PMA PERCEPTIONS AND IMPLEMENTATION

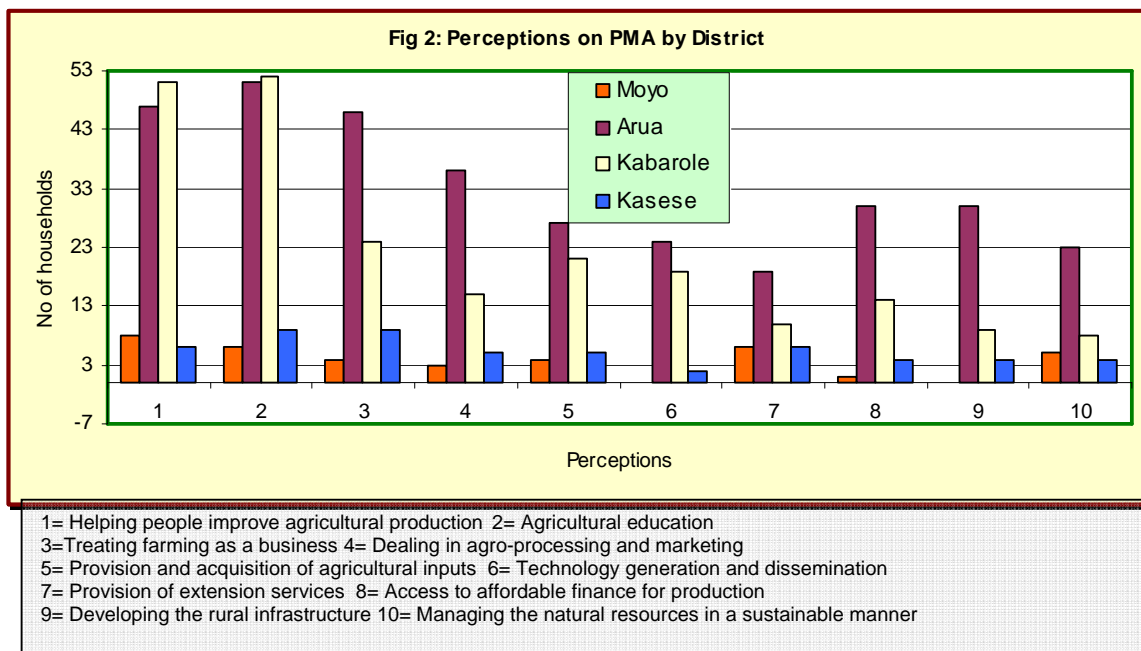
This chapter highlights the perception, understanding and community awareness and participation in regards to PMA-related activities. It compares differences amongst the households that were covered in the “PMA districts” with those in the “non-PMA districts”.

##### Perception and understanding of PMA

Out of the 398 households interviewed 136 (34%) indicated that they had heard about PMA. As expected more households in the PMA districts of Arua (48%) and Kabarole (73%) had heard about PMA, compared to Moyo (10%) and Kasese (6%). Overall, 39% of male-headed households had heard of PMA compared with 26% of female-headed households. NGOs/CBOs, radio, extension workers and markets were identified as the major sources of information about PMA (Figure 1).



To the households, it is not important to understand what PMA in full is or whether it is a programme, policy, etc. To them PMA is all about the following ten areas of focus (Figure 2).



**Community awareness, participation and empowerment**

About 37% of the households in PMA districts were aware of the existence of PMA planning processes, and an even smaller number (28%) had ever participated in them (Table 8). Thus although nearly one out of two households in PMA districts have heard about PMA, only just over one in four had participated in PMA planning. Clearly, involving the community in the planning process remains a key challenge.

However, about 60% of the households in PMA districts had attended training in agriculture as opposed to only 20% in the non-PMA districts. About 50% of the households in the PMA districts were aware of the presence of demonstration

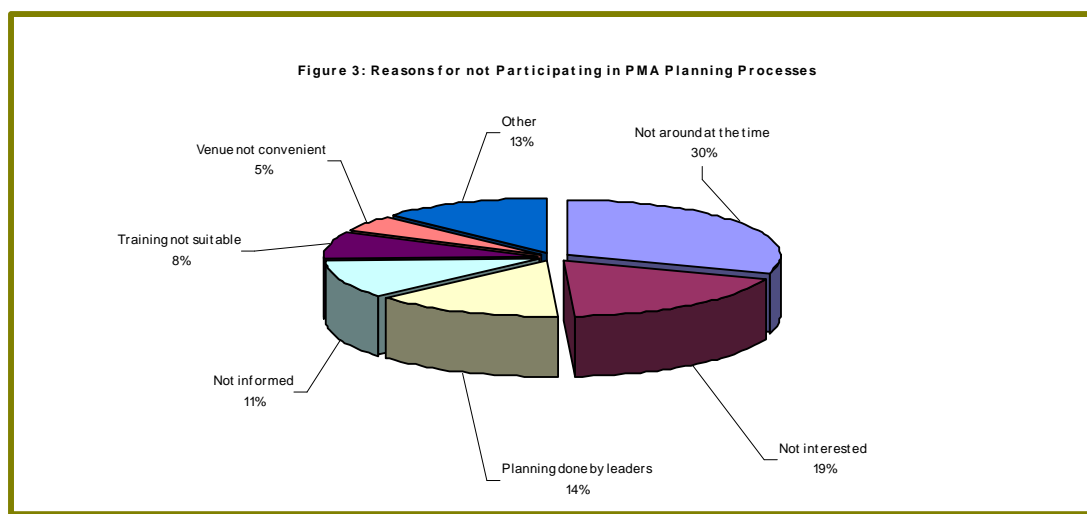
centres as opposed to only 20% in the non-PMA districts. Whereas 75% of those who were aware of the existence of demonstration centres in the PMA districts had visited the sites, only about 50% of the households in the non-PMA districts had visited the demonstration sites. Attendance of FAL in all districts has been limited, with less than 7% of the households attending and completing the classes.(Table 8).

**Table 8: PMA awareness and community participation**

	Moyo		Arua		Kabarole		Kasese	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>No of h/h surveyed</b>	<b>60</b>	<b>40</b>	<b>63</b>	<b>37</b>	<b>68</b>	<b>31</b>	<b>70</b>	<b>29</b>
Heard about PMA	8	2	34	14	53	19	6	0
Aware of PMA planning process	3*	0	26	11	28	9	0	0
Participated:								
- H/h head	1	0	25	12	11	7	0	0
- spouse	1	0	18	7	10	0	0	0
- h/h member	0	0	0	0	1	1	0	0
Feels views taken into account	1	0	10	2	6	4	0	0

*\*It is possible that the households that have responded in affirmative in Moyo could have mistaken the question for any other planning processes/meetings.*

The reasons for not participating in the PMA planning process related to not being around at the time, not interested, planning done by leaders only, not informed and training not suitable as depicted in Figure 3.



### Household inclusion: farmer organizations and saving and credit groups

Table 9 shows that about one out of every four households belong to some kind of farmer group. Membership was significantly higher in the PMA districts, (over 42% of the Arua households and 35% in Kabarole) than in Moyo (6%) and Kasese (39%). In the PMA districts NAADS, other farmer organisations and government agencies/extension workers were cited as key behind formation of farmer groups. Even in Kasese, which is not yet a PMA district, NAADS was mentioned. The formation of farmer groups is clearly one area where the PMA process has helped to add value.

**Table 9: Membership of farmer organizations**

Particulars	Moyo		Arua		Kabarole		Kasese	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>No of h/h surveyed</b>	<b>60</b>	<b>40</b>	<b>63</b>	<b>37</b>	<b>68</b>	<b>31</b>	<b>70</b>	<b>29</b>
Membership of farmer group (no of h/h)	2	4	29	13	23	12	22	2
Row 2 as percent of 1	3%	10%	48%	35%	24%	39%	32%	7%
Who helped form group:								
- NAADS	0%	0%	54%	46%	35%	20%	67%	0%
- Other farmer organization	50%	0%	14%	15%	22%	30%	7%	100%
- Govt agencies	0%	50%	18%	15%	4%	10%	0%	0%
- Private	0%	0%	0%	0%	30%	10%	7%	0%
- NGO	0%	0%	11%	23%	0%	0%	13%	0%
- Donor	0%	0%	4%	0%	9%	20%	7%	0%
- Other	50%	50%	0%	0%	0%	10%	0%	0%

## 5. THE PMA PILLARS

In this chapter, an attempt is made to analyse the extent to which each of the seven PMA pillars are being implemented at the community level and the involvement of the households.

### Agricultural research and technology development

Table 10 shows the households that are involved in the generation of technology mainly as on-farm trials. It is clear from the table that apart from the PMA district of Arua where 20 and 36 of the 100 households are involved as farmers groups and individual households respectively, household involvement in technology generation is minimal (5-17%). Furthermore, participation in research and technology development is dominated by males.

**Table 10: Pillar 1: Agricultural research and technology development**

Particulars	Moyo		Arua		Kabarole		Kasese	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>No of h/h surveyed</b>	<b>60</b>	<b>40</b>	<b>63</b>	<b>37</b>	<b>68</b>	<b>31</b>	<b>70</b>	<b>29</b>
<i>No involved in developing new technologies:</i>								
members of farmer orgn	2	0	17	3	2	1	3	0
h/h head	9	8	26	10	7	0	5	0
spouse	5	2	17	5	5	0	2	0
other h/h members	2	2	2	1	2	0	0	0
<i>No reporting easy availability of inputs:</i>								
improved seed	2	2	49	26	24	17	8	0
improved cuttings	2	0	23	16	17	13	3	1
improved breed	5	3	40	18	18	9	5	3

There is clear evidence that the PMA districts have much more access to basic planting materials and improved animal breeds (30-75% of households), as opposed to those households in non-PMA areas (2-8%) (Table 10). Agricultural research and technology development, spearheaded by NARS and coordinated by the various ARDC/DFI and DATIC centres, is one pillar that appears to thrive well in an environment of information dissemination, training and community mobilization. This is clearly an area that the PMA process has added value to the community.

### Delivery of agricultural advisory services

Table 11 shows that 7-30% of households have received advisory and extension services as individual households and 4-39% have received services as members of farmer groups.

**Table 11: Pillar 2, delivery of agricultural advisory services**

Particulars	Moyo		Arua		Kabarole		Kasese	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>No of h/h surveyed</b>	<b>60</b>	<b>40</b>	<b>63</b>	<b>37</b>	<b>68</b>	<b>31</b>	<b>70</b>	<b>29</b>
No. receiving ag advisory & extension services:								
- individual h/h	10	4	5	2	23	7	7	2
- as member of farmer org	1	3	26	13	16	8	18	2
Main sources of information								
- Churches/mosques	0	0	13	6	1	3	0	0
- Extension	0	0	21	8	21	7	8	2
- Market	0	1	19	8	0	0	0	0
- Neighbour	0	0	5	2	7	6	6	0
- Newspapers	0	0	3	1	1	1	0	1
- NGOs/CBOs	0	1	25	8	17	6	16	2
- Produce buyers	0	0	1	0	0	0	0	0
- Radio	0	0	22	7	7	3	2	1
- Others	1	3	0	0	1	2	1	0
Key organisations providing advisory services:								
- NAADS	0	0	26	11	4	3	0	0
- NGOs	1	1	21	9	1	0	15	1
- Private	1	0	0	0	0	0	3	0
- Others	0	0	0	0	0	2	0	0
No. participating in training:								
- head	1	1	23	9	17	10	12	2
- spouse	0	0	13	2	6	1	4	0
- other h/h member	0	1	0	0	2	1	0	0
No. aware of presence of demonstration sites	8	3	33	17	32	13	25	4
No. that have visited demonstration sites	4	3	27	12	22	9	12	1
No. that have changed ag practices (adoption)	11	8	23	11	21	10	15	2

Whereas there is no significant difference between PMA and non-PMA districts in the extent to which individual households have received advisory and extension services, there are glaring differences in farmer group delivery with only 4-20% of households in non-PMA receiving services as members of farmer groups compared to 24-39% in PMA districts.

Extension workers, NGOs/CBOs and the radio (which are the main avenues used by NAADS) feature prominently in PMA districts as the main sources of information on advisory and extension services. Furthermore the NAADS and NGOs feature prominently as the key organizations involved in advisory services.

More households have attended training, visited demonstration sites and changed their agricultural practices in PMA districts (30-40%) compared to non-PMA districts (10-20%). In virtually all cases though, female participation is significantly less than male participation. This could be attributed to the manner in which information is

disseminated, beneficiaries identified and the extra burden women have regarding household chores.

### Rural financial services

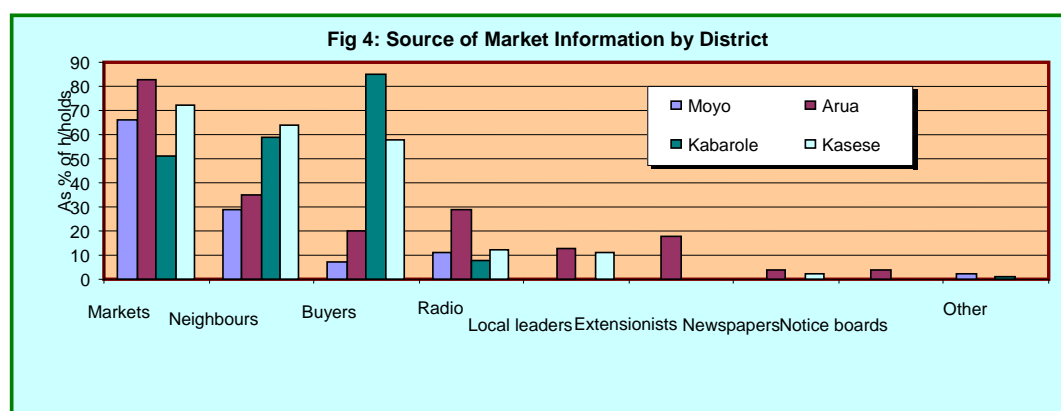
Table 12 shows the extent to which households have borrowed money for agriculture, are members of saving and credit groups and have savings with formal institutions. Access to credit for agriculture is low both in the PMA and non-PMA districts. Apart from Kabarole where about 21% of the households reported borrowing, less than 7% of the households surveyed have had access to credit for agriculture. The reasons could include the limited branch network, stringent loan conditions, limited land for expansion of agricultural activities, insecurity associated with the land tenure systems, and the general feeling that “agriculture does not pay”. Belonging to saving and credit groups is quite high in the west (27-42%) as opposed to the north (10-16%). This diversity cannot be explained in terms of the existence of PMA but rather by other economic, cultural and social factors. At the community level therefore, this pillar has not yet taken a firm root.

**Table 12: Pillar 3, rural financial services**

Particulars	Moyo		Arua		Kabarole		Kasese	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>No of h/h surveyed</b>	<b>60</b>	<b>40</b>	<b>63</b>	<b>37</b>	<b>68</b>	<b>31</b>	<b>70</b>	<b>29</b>
No. having borrowed money for ag use	2	2	2	3	15	6	2	5
No of h/h wishing to borrow but failed	19	15	2	1	4	0	5	0
No in savings and credit groups as:								
- h/h head	2	8	7	9	33	20	19	9
- spouse	2	1	7	0	23	1	25	0
No of h/h with savings	10	7	41	11	48	23	31	8
No of h/h saving with formal institutions	1	1	15	6	6	1	22	7

### Agricultural marketing and processing

The extent and diversity of commodities produced and sold by households is shown in Table 13. By and large the main agricultural commodities produced and marketed are food crops and to a lesser extent poultry and livestock with only a limited involvement in the production and marketing of the traditional cash crops. This commodity mix, which is heavily dependent on food crops, could have a bearing on food security, income generation and the extent to which households are willing to invest. The marketing channels are mainly local markets, the farm gate and district markets. The leading sources of market information include market places, neighbours, radio and buyers as indicated in Figure 4.



**Table 13: Pillar 4, agricultural marketing and processing**

Particulars	Moyo		Arua		Kabarele		Kasese	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>No of h/h surveyed</b>	<b>60</b>	<b>40</b>	<b>63</b>	<b>37</b>	<b>68</b>	<b>31</b>	<b>70</b>	<b>29</b>
Ten leading agricultural commodities produced	Maize (95) Sorghum (82) Groundnuts (81) Sweetpotato (78) Simsim/sesame (70) Goats (60) Cassava (53) Chicken (52) Beans (39) Peas (36)		Groundnuts (84) Beans (79) Cassava (75) Maize (68) Sweetpotato (53) Goats (48) Chicken (45) Cows (36) Vegetables (30) Millet (20)		Maize (98) Beans (88) Matooke (58) Sweetpotato (41) Goats (34) Chicken (33) Groundnuts (25) Eggs (23) Millet (22) Cassava (21)		Beans (91) Maize (71) Cassava (45) Matooke (41) Cotton (34) Coffee (33) Groundnuts (26) Sweetpotato (25) Goats (25) Vanilla (24)	
Ten leading agricultural commodities sold	Simsim (31) Gnuts (23) Cassava (23) Maize (20) Sorghum (19) Chicken (15) Goats (15) Beans (8) Rice (6) Sweetpotato (6)		Gnuts (33) Maize (16) Goats (10) Cows (10) Chicken (9) Beans (8) Sweetpotato (8) Cassava (6) Sheep (6) Vegetables (5)		Maize (90) Beans (43) Matooke (29) Goats (25) Chicken (23) Sweetpotato (15) G.nuts (9) Milk (8) Eggs (8) Sorghum (8)		Maize (48) Cotton (31) Coffee (31) Goats (24) Beans (20) Matooke (12) Vanilla (10) G.nuts (9) Cassava (5) Pigs (3)	
<i>Marketing channels by h/h (counts):</i>								
local market	41	22	61	35	53	25	54	21
farm gate	8	4	23	17	61	30	53	20
district market	1	1	47	18	1	0	2	0
processors	1	0	11	6	1	0	1	0
abattoirs	1	5	7	4	0	0	0	0
contract	0	1	0	1	2	0	0	0
thru farmer orgn	1	3	11	4	1	0	11	2
other	1	0	0	0	9	5	0	0
Five leading constraints	Low producer prices Low output levels Inadequate extension Lack of credit High transport costs		High transport costs Low producer prices Poor storage Over production Poor quality		Low prices Cost of labour Price fluctuation Low output level High tp costs		Low prices High tp costs Poor roads Inadequate and poor storage	

Across all the four districts sampled, there is no distinct difference among the PMA and non-PMA districts. This suggests that this pillar has not had any value added impact on the traditional agricultural marketing and processing systems. However, there has been a marked improvement in roads (Section 5.7) that should be reflected in improved market access. Apart from this, no clear strategy appears to exist to promote marketing and processing. Marketing transactions are typically dominated by trade in surplus of a few raw food items, which are meant to meet pressing household needs at the time.

### Agricultural education

Table 14 does not show any marked difference between PMA and non-PMA districts in extent to which the community is involved in agricultural education. Attendance at functional adult literacy (FAL) classes is relatively low and even fewer households have attended DATIC. However, almost half of those completing FAL and DATIC courses state that they have used the knowledge gained from the training. One question arising from the table is “How can the high level of recognition about teaching of agriculture in schools be translated to the benefit of the households?”

**Table 14: Pillar 5, agricultural education**

Particulars	Moyo		Arua		Kabarole		Kasese	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>No of h/h surveyed</b>	<b>60</b>	<b>40</b>	<b>63</b>	<b>37</b>	<b>68</b>	<b>31</b>	<b>70</b>	<b>29</b>
Attended/finished DATIC:								
- h/h head	2/2	2/1	0	0	1/1	0	0	0
- spouse	0	2	0	0	0	0	0	0
Attended/finished FAL:								
- h/h head	0	2/2	0	5/4	4/3	3/1	2/2	3/0
- spouse	0	2/1	1/1	3/3	6/3	1/0	6/3	1/0
- -h/h member	0	1/0	0	0	0	1	1	0
No that have used knowledge from training	1	4	0	3	4	1	1	0
No aware of teaching agriculture in schools	20	19	30	10	40	18	36	9
No whose children tell them what they learn	14	14	27	6	14	8	13	0

### Sustainable natural resource management

Table 15 shows community participation and benefits regarding the sustainable use and management of natural resources.

**Table 15: Pillar 6, sustainable natural resource management**

Particulars	Moyo		Arua		Kabarole		Kasese	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>No of h/h surveyed</b>	<b>60</b>	<b>40</b>	<b>63</b>	<b>37</b>	<b>68</b>	<b>31</b>	<b>70</b>	<b>29</b>
No with access to controlled water for agriculture	2	1	0	0	1	0	0	0
No receiving assistance in:								
i. soil erosion control								
- h/h head	2	1	11	7	8	3	16	4
- as member of farmer org	0	0	10	6	0	0	8	0
ii. pest control								
- h/h head	1	1	11	4	4	3	17	2
- as member of farmer org	0	1	7	2	0	0	9	0
iii. afforestation								
- h/h head	0	0	16	10	5	1	9	6
- as member of farmer org	0	0	9	5	0	0	0	0
iv. wetland conservation								
- h/h head	0	0	2	0	4	0	8	0
- as member of farmer org	0	0	1	0	0	0	5	0



Clearly there is very limited community exposure to controlled water for agriculture (at best, 3% of households). Only 8-15% of households reported receiving assistance in managing soil erosion, pest control and wetland conservation. A few households (6-25%) have been assisted in the area of afforestation. Thus this pillar has had limited impact in assisting the communities manage their natural resources in a sustainable manner. Perhaps an intensified use of farmer groups in advocating and assisting communities in proper and sustainable use and management of the natural resources would go a long way in adding value to existing farming practices.

### Supportive physical infrastructure

There is overwhelming agreement both within and outside PMA areas that the district roads (50-95%) and to a large extent the community roads (30-70%) have improved over the past four years (Table 16). A large percentage of households, particularly in the PMA areas, also acknowledge the existence of rural electrification and are expecting to utilise it. For this pillar to have the desired effect, there is a need to coordinate it closely with the agricultural marketing and processing and rural finance pillars.

**Table 16: Pillar 7, supportive physical infrastructure**

Particulars	Moyo		Arua		Kabarole		Kasese	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>No of h/h surveyed</b>	<b>60</b>	<b>40</b>	<b>63</b>	<b>37</b>	<b>68</b>	<b>31</b>	<b>70</b>	<b>29</b>
No reporting improvement in district roads	34	20	61	37	57	23	67	27
No reporting improvement in community roads	17	11	26	15	43	14	50	14
No reporting existence of rural electrification	9	4	63	37	40	13	11	3
No expecting to have access to rural electricity	3	1	33	15	2	5	5	2

This chapter has shown that some of the PMA pillars have indeed taken root and have added value to the rural communities in the way they manage their agriculture. This is particularly true of advisory and extension services (where the focus has been on farmer group formation and provision of technical support), agricultural research (particularly seed and improved breeds) and to some extent supportive physical infrastructure (notably the improved road infrastructure). Other pillars are either yet to take off or have not added value amongst the rural communities.

## 6. HOUSEHOLD CHARACTERISATION ALONG POVERTY LINES

With a view to ascertaining any differences, if any, across households due to economic factors, households were characterised and compared along poverty lines. A household was considered “poor” if not all members had access to a blanket, if the head of household has less than 5 years of education, if household members live in grass thatched houses, if the household has no radio and if the household has an economic dependency ratio<sup>4</sup> of more than 3. A household was categorized as “poorer” if it had three or more of the five indicators<sup>5</sup>.

<sup>4</sup> Economic dependency ratio is obtained by dividing the number of members in a household by the number of people in the same household who work

<sup>5</sup> The choice of indicators was informed by analysis of the 1999/2000 National Household Survey by A. McKay, to develop a poverty correlates model (MFPED, June 2001). Later work used this to identify the best poverty indicators to use in light surveys.

### Categorisation of households by poverty status

The results of the categorization shows a significantly higher level of “poorer” households in Moyo (74%) compared to the other districts, Kasese (27%), Arua (10%) and Kabarole (7%)<sup>6</sup>. In all districts, there was a higher percentage of female-header households than male-headed households (Table 17).

**Table 17: Categorisation of households by poverty status**

Indicator	Moyo		Arua		Kabarole		Kasese	
	Male	Female	Male	Female	Male	Female	Male	Female
<b>No of h/h surveyed</b>	<b>60</b>	<b>40</b>	<b>63</b>	<b>37</b>	<b>68</b>	<b>31</b>	<b>70</b>	<b>29</b>
H/h with no blanket	21	14	0	3	12	5	8	5
H/h heads with less than 5 years of education <sup>a</sup>	21	16	8	8	25	10	22	3
H/h with grass thatched mud houses as primary dwelling	59	39	60	36	3	2	39	15
H/h without a radio	41	29	5		8	7	31	22
H/h with EDR equal to or greater than 3	30	26	6	3	22	13	27	10
H/h categorised as “poorer” <sup>b</sup>	42	32	2	8	4	3	19	8
“poorer” h/h as % of h/h surveyed	70%	80%	3%	22%	6%	10%	27%	28%
“poorer” h/h as % of district h/h surveyed	74%		10%		7%		27%	

Note: a. This excludes non-respondents (see Table 2)

b. These are households with 3 or more of the 5 indicators cited above.

### Primary occupation, income sources and employment by poverty status

Table 18 shows no clear distinction between the poorer households and the rest regarding primary occupation. Poorer households tend to have a narrower spread in income sources than the rest, which may offer the latter a cushion in case of calamity in agriculture (especially salaries). Employment data shows no clear differences between poorer and the rest of the households.

<sup>6</sup> Although Arua and Kabarole districts show very low levels of poverty, this should be treated with caution as the two sub-counties surveyed, namely Vurra and Rwimi are fairly wealthy sub-counties.

**Table 18: Primary Occupation, Income and Employment of Household Heads by Poverty Category**

Indicator	Moyo		Arua		Kabarole		Kasese	
	Poorer	Rest	Poorer	Rest	Poorer	Rest	Poorer	Rest
<b>No of h/h surveyed</b>	<b>74</b>	<b>26</b>	<b>10</b>	<b>90</b>	<b>7</b>	<b>92</b>	<b>27</b>	<b>72</b>
<b>Primary occupation</b>								
% of h/h reporting following activities:								
Crop farmer	85%	88%	80%	81%	86%	78%	85%	79%
Non-crop farmer	0%	0%	0%	0%	0%	0%	4%	10%
Public servant	1%	4%	10%	8%	0%	10%	0%	7%
Trader/business	8%	0%	0%	1%	0%	7%	0%	1%
House worker	0%	0%	10%	1%	0%	1%	0%	0%
Retired/aged	0%	0%	0%	1%	0%	0%	0%	1%
Boda boda	0%	0%	0%	2%	0%	2%	4%	1%
Unemployed	4%	0%	0%	0%	14%	1%	7%	2%
Other	1%	8%	0%	3%	0%	1%	0%	4%
<b>Source of income</b>								
Food crops	58%	62%	80%	81%	86%	86%	85%	69%
Cash crops	0%	4%	10%	2%	0%	2%	15%	18%
Trade/business	9%	8%	0%	4%	0%	3%	0%	4%
Brewing	1%	0%	0%	0%	0%	0%	0%	0%
Gift	1%	0%	0%	0%	0%	0%	0%	0%
Labour	15%	12%	0%	3%	14%	2%	0%	0%
Livestock	0%	0%	10%	6%	0%	2%	7%	3%
Remittance	3%	0%	0%	0%	0%	0%	0%	1%
Salary	0%	4%	0%	7%	0%	8%	0%	6%
Other	11%	4%	10%	0%	0%	3%	0%	4%
<b>Employment</b>								
no of members working (% of h/h):								
0	0%	0%	0%	1%	0%	0%	0%	0%
1	31%	8%	20%	8%	14%	18%	26%	13%
2	58%	85%	50%	50%	58%	65%	41%	39%
3	4%	4%	20%	20%	14%	9%	19%	22%
4	6%	3%	10%	12%	0%	4%	7%	17%
5	1%	0%	0%	2%	14%	2%	4%	7%
6	0%	0%	0%	3%	0%	2%	3%	1%
7	0%	0%	0%	4%	0%	0%	0%	1%
Average h/h size	7	7	6	6	7	6	8	7
% of h/h with up to 3 members working	93%	97%	90%	78%	86%	92%	86%	74%

**Inclusion by poverty status**

Generally households that are poorer have higher level of association regarding farmer groups but rather lower level of inclusion regarding areas of saving and credit groups, savings and general economic considerations (Table 19).

**Table 19: Household inclusion by poverty category**

Indicator	Moyo		Arua		Kabarole		Kasese	
	Poorer	Rest	Poorer	Rest	Poorer	Rest	Poorer	Rest
<b>No of h/h surveyed</b>	<b>74</b>	<b>26</b>	<b>10</b>	<b>90</b>	<b>7</b>	<b>92</b>	<b>27</b>	<b>72</b>
Have heard about PMA	4%	27%	40%	49%	43%	75%	0%	8%
Farmer group member	8%	0%	50%	41%	29%	36%	30%	22%
Received agric services:								
- Individual h/h	19%	0%	0%	8%	0%	33%	7%	10%
- as FG member	5%	0%	50%	38%	0%	26%	30%	17%
Visited demo sites	9%	0%	60%	40%	29%	32%	15%	13%
Changed agric. practices	20%	15%	20%	36%	29%	32%	15%	18%
Borrowed money for agric.	5%	0%	0%	6%	14%	22%	0%	10%
Saving & credit group member	11%	8%	0%	18%	43%	54%	19%	32%
Spouse as member of saving & credit group	3%	4%	0%	8%	14%	25%	26%	25%
With savings	16%	19%	10%	57%	43%	74%	30%	43%
Save with formal institution	1%	4%	10%	22%	0%	8%	19%	33%
Sell through FG	3%	8%	0%	17%	0%	1%	7%	14%
Access to controlled water for agriculture	3%	4%	0%	0%	0%	1%	0%	0%
Affected by HIV/AIDS	8%	8%	0%	2%	71%	13%	0%	11%

The analysis also indicates that there are no marked differences between poorer and other households in reasons for adopting/not adopting changes in agricultural practices.

## 7. HOUSEHOLD CHARACTERISATION BASED ON INCLUSION

This chapter highlights the differences amongst household that are members of farmer organisations or savings and credit groups.

### Comparison of households in relation to farmer group membership

Households belonging to farmer groups generally have an older household head, larger farm sizes and are faster adopters than those not belonging to farm groups (Table 20). The first two characteristics may influence the decision to join a farm group. It is to be hoped that the faster adoption is a consequence or effect of group membership.

**Table 20: Comparison of households by farmer group membership**

Indicator	Moyo		Arua		Kabarole		Kasese	
	FG	Non-FG	FG	Non-FG	FG	Non-FG	FG	Non-FG
<b>No of h/h</b>	<b>18</b>	<b>82</b>	<b>65</b>	<b>35</b>	<b>14</b>	<b>85</b>	<b>41</b>	<b>58</b>
Affected by HIV/AIDS	11%	7%	2%	3%	14%	18%	5%	10%
Age of h/h head:								
- < 18 years	5%	0%	0%	0%	0%	0%	2%	0%
- 18-30 years	17%	34%	15%	20%	7%	19%	22%	21%
- > 30 years	78%	66%	85%	80%	93%	81%	76%	79%
Farm size:								
- < 2 acres	11%	62%	35%	71%	36%	62%	71%	69%
- 2-5 acres	39%	29%	51%	17%	57%	31%	24%	26%
- > 5 acres	50%	9%	14%	12%	7%	7%	5%	5%
Sell through FG	17%	1%	22%	3%	7%	0%	17%	10%
Changed ag practices	83%	5%	43%	17%	86%	22%	20%	16%
Nearest health centre:								
- < 2 km	78%	66%	29%	31%	71%	69%	20%	29%
- 2-5 km	11%	30%	51%	51%	29%	21%	34%	33%
- > 5 km	11%	4%	20%	18%	0%	10%	46%	38%
All weather road:								
- < 2 km	89%	59%	69%	74%	93%	80%	80%	74%
- 2 km and above	11%	41%	31%	26%	7%	20%	20%	26%

**Comparison of households in relation to saving and credit group membership**

Households that are members of saving and credit groups have more land, tend to sell through farmer groups, are better adopters, have better access to agricultural credit and have savings with formal financial institutions (Table 21). Again, these features are probably characteristics that determine the propensity to join savings groups, rather than outcomes of membership.

**Table 21: Comparison of households by levels of association: savings and credit group membership**

Indicator	Moyo		Arua		Kabarole		Kasese	
	Saving Group	Non Saving Group	Saving Group	Non Saving Group	Saving Group	Non Saving Group	Saving Group	Non Saving Group
<b>No of h/h</b>	<b>10</b>	<b>90</b>	<b>16</b>	<b>84</b>	<b>53</b>	<b>46</b>	<b>29</b>	<b>70</b>
Affected by HIV/AIDS	10%	8%	0%	2%	15%	20%	3%	10%
Age of h/h head:								
- < 18 years	0%	1%	0%	0%	0%	0%	0%	1%
- 18-30 years	30%	31%	13%	18%	17%	17%	14%	23%
- > 30 years	70%	68%	87%	82%	83%	83%	86%	76%
Farm size:								
- < 2 acres	30%	54%	44%	49%	53%	65%	62%	73%
- 2-5 acres	40%	30%	56%	36%	40%	28%	31%	21%
- > 5 acres	30%	16%	0%	15%	7%	7%	7%	6%
Sell through FG	10%	3%	38%	11%	0%	2%	14%	13%
Changed ag practices	40%	17%	69%	27%	43%	17%	38%	9%
Borrowed money for ag	30%	1%	13%	4%	28%	13%	14%	4%
With savings	70%	11%	69%	49%	100%	39%	86%	20%
Nearest health centre:								
- < 2 km	50%	70%	50%	26%	81%	57%	28%	24%
- 2-5 km	30%	26%	25%	56%	17%	28%	24%	37%
- > 5 km	20%	4%	25%	18%	3%	15%	48%	39%
All weather road:								
- < 2 km	80%	61%	69%	71%	83%	80%	66%	81%
- 2 km and above	20%	39%	31%	29%	17%	20%	34%	19%

## 8. KEY ISSUES AND CONCERNS RAISED AT VALIDATION WORKSHOPS

Validation workshops were held in the four sub-counties where the household survey was conducted to present key survey findings and obtaining reactions of the community. At each workshop there were about 30 participants drawn from within the sub-county. The participants, who comprised mainly those not interviewed during the household survey included representatives of local organisations, technical staff, women's and other interest groups. At each workshop, the survey methodology was highlighted and key findings presented.

Overall, the findings of the household survey (presented in earlier chapters) were accepted as a true reflection of what was pertaining in the sub-counties. For instance, the workshops agreed that the main occupation (time spent) was crop farming, with public service, trade and labourer also important. A trader was taken as someone who buys and sells on a regular basis, but not someone who sells his or her own produce on the local market. Discussions took place about the relative importance of food crops and cash crops as a source of income. It was agreed that food crops (maize, cassava, groundnuts, matooke, beans) are the major sources of income with cash crops (cotton and coffee) and livestock as the second or third.

Clarifications were made on "other" categories of occupation (which included traditional healers/herbalist, pot making, handicrafts) and unemployed was defined to imply someone suffering from a long illness, an accident or disability.

As expected Kasese and Moyo had very low recognition of PMA. One area where the survey did not seem to reflect reality was in relative numbers of men and women belonging to farmer groups. Although the survey showed many more men belonging to farmer groups, the participants at the validation workshops were of the opinion that about 60-75% of farmer group members were women. This was attributed to women's greater interest in farming, and the fact that women see groups as a way of developing.

Relatively few people in the survey had access to improved inputs (beans, millet, maize, cassava cuttings and groundnuts), particularly in non-PMA areas. Seed distribution varied by district. In one sub-county seeds were provided mainly through the LGDP. Men have better access to seeds because when seed comes, they leave women doing other activities and collect the seeds on behalf of the family. In one sub-county it was observed that no stockists were available at the sub-county level but in another, close to a main road, there were stockists at sub-county level. During the discussion of production, the participants noted that the production of most crops was not improving because of drought, lack of improved seeds and lack of land. This leads to intercropping (beans), no crop rotation with the same crop being grown on land for up to five years and no fallow. Stores for crops, both cash and food, are mainly in the trading centres, and not so much on individual farms.

Many savings and credit groups have collapsed over time, so the workshops felt that the survey figures for this were too high, and also there was a discrepancy between the number of men and women found to belong to these groups. It was thought that people would only have bank accounts as groups. Private money lenders are frequent in at least one sub-county.

The issue of land needs to be addressed in order to involve women fully in participation and commitment to medium and long term production strategies including the growing of cash crops and rearing of improved livestock breeds.

Overall the results of the survey were validated without much dissent. A number of issues arose in the discussion, which have relevance to the work of the evaluation.

These include:

- **PMA awareness:** People had no way of finding out about PMA, if they did not go to meetings, which were only held at the sub-county headquarters. PMA was not going down to the villages, and extension officers were not spreading the information. If a household did not belong to a farmer group, there was limited opportunity of accessing knowledge or getting training. Local leaders rarely organize awareness meetings or training. On the other hand, extension has very limited funding with limited staffing and focuses mainly on organized groups. This was contrasted with AAMP, which was seen as more participatory working at grass root levels through the parish chiefs. There was considerable discussion as to whether PMA worked mainly with groups, or with individuals (PMA being the NSCG grant). Seed appeared to be given out to individuals for multiplication, though not everyone was clear about this.
- **Changing practices (adoption):** When asked what has changed over the last few years, people said that crop husbandry and agronomic practices had improved, particularly through the use of improved seed. There had been increases in income and the general standard of living. However, there are issues of overproduction and poor market prices for some crops. The soil is decreasing in fertility and becoming exhausted. Because they have small land holdings, they do not allow the soil to rest, but grow crops in every season. Some would like to use fertiliser, but have been told that it weakens the soil. In any case, it is expensive. They think that there should be more emphasis on mechanisation in PMA (mechanisation = modernisation). Tractors could open up more land, and mechanisation would help with agro-processing, e.g. rice hullers.
- **Sustaining commercial agriculture:** Apart from structural transformation, for example, tackling the issue of limited land and how to enable females have rights to land, the use of farmer groups offer a real opportunity of transforming the agricultural sector into commercially-oriented enterprises.
- **Integrated commodity systems approach:** An integrated commodity systems approach is required to tackle the lack of inputs, finance and markets.

## 9. SUMMARY OF FINDINGS AND CONCLUSIONS

This chapter presents a summary of findings and general conclusions that can be drawn from the entire household survey process.

### Production

Crop production patterns exhibit lack of specialisation with all surveyed households growing various types of crops on many small plots. However, some emphasis is put on crops where free inputs are distributed like improved seeds of groundnuts, improved cuttings and better animal breeds. There are no proper records for any farming activity at farmer level. If farming is to be operated as business then record keeping, as a skill, is required. Furthermore, production based on comparative advantage analysis would help speed up the rate of agricultural modernisation. Agricultural education as a pillar would help change farmers' attitudes, production practices and make them think commercial.

**Agricultural inputs supply**

In the sub-counties visited, while inputs are available at the district/urban centres, there were no input stockists at the sub-county level. Even farmers who would have liked to adopt new technologies are not sure where to get quality inputs due lack of knowledge of good input suppliers. It is important that a rural stockist network is promoted at the sub-county level.

Farmers expect free inputs hence do not save for inputs procurement especially when they crops they want to grow have no market. This is further fuelled by the tendency of politicians to promise farmers the supply of free improved seeds. In most cases farmers go ahead to clear land only to be let down by these politicians. Sustainable commercial agriculture should not be based on “hand-outs” of inputs

**Adoption**

Inputs supplied through some projects are too little to make any impact. During the distribution it is not clearly stated that the inputs are for demonstration because every farmer in a given locality expects to get his/her share. Adoption is low in some cases because farmers who first received the inputs (such as breeding goats) have decided to recover costs of treatment and labour for the animal's care before it is given to the next beneficiary. Furthermore, farmers cannot crossbreed the goats because they expect the first beneficiary not to charge a fee for that service. There are limited funds to procure inputs by both the sub-county and farmers, hence farmers resort to local improved cuttings and seeds. The market is also a major factor in determining the rate and extent of adoption.

**Production and marketing credit**

It appears there are no organisations actively involved in giving loans for production and crop marketing. Those MFIs visited indicated that investing in farming was a risky business and has very low returns. Furthermore the repayment period of at least 6 months is considered too long by these micro-finance institutions. This can not be sustained when the capital is small. The major sources of agricultural credit include commercial banks (notably Centenary Rural Development Bank (CERUDEB), STANBIC, etc); microfinance enterprises/institutions; NGOs; Savings and Credit Societies; and private individuals.

**Agricultural processing**

Processing of agricultural products is limited to milling small amounts of maize, rice, millet and sorghum at the sub-county level using diesel generators. At Vurra sub-county, the local council III has acquired a machine to shell groundnuts but is not yet in use due to lack of power. There is a general lack of appropriate processing technologies both on-farm and off farm.

**Produce marketing**

Produce marketing is mainly at the rural markets. There is general lack of organised/bulk marketing in the surveyed areas. The need for establishing an effective marketing system in the rural areas to reduce transaction costs cannot be over-emphasized.

**Producer organisation / farmer groups**

Under NAADS a number of groups have been formed. Those that already existed have been strengthened to meet the requirements of service providers. However, without organised group marketing and the supply of inputs at the sub-county level, the indication is that these groups cannot sustain themselves. These groups lack managerial capabilities and funds to operate effectively while most members are



illiterate and therefore have difficulty in appreciating services to be provided especially if required to pay for them.

Many up-coming associations and NGOs focus on existing farmer groups for their activities, hence lose members to them because they offer better services. It is difficult to monitor and supervise both quality and volumes for increased marketing in the absence of an apex body for these groups.

### **Extension services**

Extension services target only the organised groups but the majority of the poor are outside this arrangement. The general feeling is that it is difficult to organise people who do not know what they want. On the other hand, extension workers are reluctant to organise farmers for knowledge dissemination because farmers expect lunch and some facilitation. Field workers have little funding and in most cases the money is not released in line with farming activities.

### **Food security**

Although there is an indication that the areas visited could produce enough food for home consumption and have surplus for markets most of the rural poor, though not starving, looked poorly fed. The majority especially in Moyo could only depend on one meal a day, while the poorest of the poor were not sure even of the one meal. In order to comprehensively address the issues of food security and income, the reasons for trends in production, sales and incomes (Table 7) need to be analysed more fully.

### **General comments:**

A few areas of concern that require refinement in the overall PMA process include:

- Timely supply of planting materials (seeds and cuttings) and livestock breeds
- More farmer training both by government and NGOs
- Community awareness on PMA should be done at the grassroots level
- Education of modern farming methods and the management of natural resources is still limited (soil conservation, water harvest techniques, etc)
- Develop and improve the basic rural infrastructures such as feeder roads, and storage
- Promotion of rural stockist network
- Development of a farmer loan programme.

## Annex B3 Household survey tables

**Table A.1 Primary Occupation of Household Head (Question 2.1)**

	District and Sex of Household Head																			
	Moyo				Arua				Kabarole				Kasese				Total			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Crop farmer	51	85.0%	35	87.5%	50	79.4%	31	86.1%	51	75.0%	27	87.1%	53	75.7%	27	93.1%	205	78.5%	120	88.2%
Public servant	1	1.7%	1	2.5%	6	9.5%	2	5.6%	8	11.8%	1	3.2%	4	5.7%	1	3.4%	19	7.3%	5	3.7%
Trader business	2	3.3%	4	10.0%	1	1.6%	0	0.0%	4	5.9%	2	6.5%	0	0.0%	1	3.4%	7	2.7%	7	5.1%
Other	3	5.0%	0	0.0%	2	3.2%	1	2.8%	1	1.5%	0	0.0%	4	5.7%	0	0.0%	10	3.8%	1	0.7%
Labourer	0	0.0%	0	0.0%	0	0.0%	1	2.8%	2	2.9%	0	0.0%	4	5.7%	0	0.0%	6	2.3%	1	0.7%
Boda boda	0	0.0%	0	0.0%	2	3.2%	0	0.0%	2	2.9%	0	0.0%	2	2.9%	0	0.0%	6	2.3%	0	0.0%
Unemployed	3	5.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	1.1%	0	0.0%
House Worker	0	0.0%	0	0.0%	1	1.6%	1	2.8%	0	0.0%	1	3.2%	0	0.0%	0	0.0%	1	0.4%	2	1.5%
Retired / Aged	0	0.0%	0	0.0%	1	1.6%	0	0.0%	0	0.0%	0	0.0%	1	1.4%	0	0.0%	2	0.8%	0	0.0%
Non crop farmer	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	2.9%	0	0.0%	2	0.8%	0	0.0%
No. of respondents	60	100.0%	40	100.0%	63	100.0%	36	100.0%	68	100.0%	31	100.0%	70	100.0%	29	100.0%	261	100.0%	136	100.0%

\*\* Includes ONLY those that mentioned the occupation as their primary occupation

**Table A.2. Primary occupation of spouse (Question 2.1)**

	District and Sex of Household Head																			
	Moyo				Arua				Kabarole				Kasese				Total			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Crop farmer	56	94.9%	17	73.9%	55	93.2%	19	95.0%	59	93.7%	7	87.5%	64	94.1%	1	50.0%	234	94.0%	44	83.0%
Trader business	2	3.4%	4	17.4%	0	0.0%	0	0.0%	1	1.6%	1	12.5%	1	1.5%	0	0.0%	4	1.6%	5	9.4%
Public servant	0	0.0%	0	0.0%	2	3.4%	0	0.0%	2	3.2%	0	0.0%	2	2.9%	1	50.0%	6	2.4%	1	1.9%
House Worker	0	0.0%	0	0.0%	2	3.4%	1	5.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	0.8%	1	1.9%
Other	1	1.7%	1	4.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.4%	1	1.9%
Retired / Aged	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	1.5%	0	0.0%	1	0.4%	0	0.0%
Labourer	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	1.6%	0	0.0%	0	0.0%	0	0.0%	1	0.4%	0	0.0%
Non crop farmer	0	0.0%	1	4.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	1.9%
No. of respondents	59	100.0%	23	100.0%	59	100.0%	20	100.0%	63	100.0%	8	100.0%	68	100.0%	2	100.0%	249	100.0%	53	100.0%

\*\* Includes ONLY those that mentioned the occupation as their primary occupation

**Table A.3 Second Occupation of Household head (Question 2.1)**

	District and Sex of Household Head																			
	Moyo				Arua				Kabarole				Kasese				Total			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Non crop farmer	24	68.6%	14	53.8%	20	31.7%	6	17.1%	10	22.7%	6	20.0%	16	26.7%	4	15.4%	70	34.7%	30	25.6%
Crop farmer	4	11.4%	5	19.2%	11	17.5%	6	17.1%	15	34.1%	3	10.0%	11	18.3%	2	7.7%	41	20.3%	16	13.7%
House Worker	0	0.0%	0	0.0%	0	0.0%	9	25.7%	1	2.3%	13	43.3%	8	13.3%	16	61.5%	9	4.5%	38	32.5%
Trader business	1	2.9%	4	15.4%	8	12.7%	4	11.4%	10	22.7%	6	20.0%	11	18.3%	3	11.5%	30	14.9%	17	14.5%
Labourer	1	2.9%	0	0.0%	5	7.9%	2	5.7%	6	13.6%	0	0.0%	3	5.0%	0	0.0%	15	7.4%	2	1.7%
Other	3	8.6%	3	11.5%	3	4.8%	1	2.9%	1	2.3%	1	3.3%	4	6.7%	0	0.0%	11	5.4%	5	4.3%
Public servant	0	0.0%	0	0.0%	3	4.8%	4	11.4%	0	0.0%	1	3.3%	3	5.0%	1	3.8%	6	3.0%	6	5.1%
Boda boda	0	0.0%	0	0.0%	4	6.3%	2	5.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	4	2.0%	2	1.7%
Brick making	0	0.0%	0	0.0%	1	1.6%	0	0.0%	1	2.3%	0	0.0%	3	5.0%	0	0.0%	5	2.5%	0	0.0%
Charcoal burning	2	5.7%	0	0.0%	2	3.2%	1	2.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	4	2.0%	1	0.9%
Unemployed	0	0.0%	0	0.0%	5	7.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	5	2.5%	0	0.0%
Retired / Aged	0	0.0%	0	0.0%	1	1.6%	0	0.0%	0	0.0%	0	0.0%	1	1.7%	0	0.0%	2	1.0%	0	0.0%
No. of respondents	35	100.0%	26	100.0%	63	100.0%	35	100.0%	44	100.0%	30	100.0%	60	100.0%	26	100.0%	202	100.0%	117	100.0%

\*\* Includes ONLY those that mentioned the occupation as their second occupation

**Table A.4 Second occupation of spouse (Question 2.1)**

	District and Sex of Household Head																			
	Moyo				Arua				Kabarole				Kasese				Total			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
House Worker	0	0.0%	0	0.0%	44	74.6%	13	65.0%	46	76.7%	3	60.0%	47	72.3%	0	0.0%	137	64.0%	16	41.0%
Non crop farmer	23	76.7%	6	46.2%	1	1.7%	0	0.0%	4	6.7%	1	20.0%	3	4.6%	1	100.0%	31	14.5%	8	20.5%
Trader business	2	6.7%	1	7.7%	8	13.6%	6	30.0%	4	6.7%	0	0.0%	12	18.5%	0	0.0%	26	12.1%	7	17.9%
Crop farmer	3	10.0%	3	23.1%	4	6.8%	0	0.0%	3	5.0%	0	0.0%	2	3.1%	0	0.0%	12	5.6%	3	7.7%
Other	1	3.3%	3	23.1%	0	0.0%	1	5.0%	2	3.3%	1	20.0%	1	1.5%	0	0.0%	4	1.9%	5	12.8%
Labourer	1	3.3%	0	0.0%	1	1.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	0.9%	0	0.0%
Brick making	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	1.7%	0	0.0%	0	0.0%	0	0.0%	1	0.5%	0	0.0%
Public servant	0	0.0%	0	0.0%	1	1.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	0.5%	0	0.0%
No. of respondents	30	100.0%	13	100.0%	59	100.0%	20	100.0%	60	100.0%	5	100.0%	65	100.0%	1	100.0%	214	100.0%	39	100.0%

\*\* Includes ONLY those that mentioned the occupation as their second occupation

**Table A.5 Major occupation of BOTH household head and spouse (Question 2.1)**

	District and Sex of Household Head									
	Moyo		Arua		Kabarole		Kasese		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Crop farmer	115	60	130	64	130	38	133	30	508	192
House Worker	0	0	57	31	56	26	89	23	202	80
Non crop farmer	47	21	34	14	22	12	30	8	133	55
Trader business	8	13	37	22	22	10	29	4	96	49
Other	9	7	13	7	9	3	11	0	42	17
Labourer	2	0	22	7	10	0	7	0	41	7
Public servant	1	1	12	6	11	2	9	3	33	12
Boda boda	0	0	6	2	3	0	4	0	13	2
Unemployed	3	0	5	0	0	0	0	0	8	0
Brick making	0	0	1	0	2	0	5	0	8	0
Charcoal burning	2	0	2	2	0	0	0	0	4	2
Retired / Aged	0	0	4	0	0	0	3	0	7	0
No. of respondents	187	102	323	155	265	91	320	68	1,095	416

\*\*\* Includes all those that mentioned the occupation for BOTH household heads and spouses

**Table A.6 Major sources of income (in cash and kind) and trend over past four years.(Question 2.3)**

Source of income - NOW		District and Sex of Household Head									
		Moyo		Arua		Kabarole		Kasese		All	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Food crop	Is a source of income	44	27	63	37	66	31	69	29	242	124
Trend-Food crop	Increased	5	5	28	12	27	11	7	3	67	31
	Same	1	1	16	13	7	1	36	14	60	29
	Decreased	38	21	19	12	32	19	26	12	115	64
Cash crop trade	Is a source of income	1	1	14	7	2	0	48	16	65	24
Trend - Cash crop trade	Increased	1	1	4	2	1	0	6	1	12	4
	Same	0	0	3	1	0	0	22	5	25	6
	Decreased	0	0	7	4	1	0	20	10	28	14
Livestock	Is a source of income	20	14	37	20	24	13	22	9	103	56
Trend - Livestock	Increased	3	1	16	8	14	5	5	0	38	14
	Same	7	4	3	4	6	0	12	5	28	13
	Decreased	10	9	18	8	4	8	5	4	37	29
Fish	Is a source of income	0	0	1	0	0	0	0	0	1	0
Trend - Fish	Increased	0	0	0	0	0	0	0	0	0	0
	Same	0	0	0	0	0	0	0	0	0	0
	Decreased	0	0	1	0	0	0	0	0	1	0
Labour	Is a source of income	25	11	7	1	9	0	3	0	44	12
Trend - Labour	Increased	11	6	1	1	1	0	0	0	13	7
	Same	6	2	3	0	3	0	3	0	15	2
	Decreased	8	3	3	0	5	0	0	0	16	3
Trade	Is a source of income	8	6	26	17	17	9	16	2	67	34
Trend - Trade	Increased	5	0	10	4	4	6	3	0	22	10
	Same	0	0	10	8	3	1	10	1	23	10
	Decreased	3	6	6	5	7	2	2	1	18	14

(continued)

Table A.6 (continued)

## Source of income - NOW

		District and Sex of Household Head									
		Moyo		Arua		Kabarole		Kasese		All	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Brewing	Is a source of income	3	8	1	1	1	0	2	0	7	9
Trend - Brewing	Increased	1	2	0	1	1	0	0	0	2	3
	Same	0	2	1	0	0	0	1	0	2	2
	Decreased	2	4	0	0	0	0	0	0	2	4
Salary	Is a source of income	1	0	5	3	9	1	5	1	20	5
Trend - Salary	Increased	0	0	4	1	6	0	1	1	11	2
	Same	1	0	1	2	2	0	3	0	7	2
	Decreased	0	0	0	0	1	1	1	0	2	1
Remittance	Is a source of income	1	1	0	0	2	0	3	2	6	3
Trend - Remittance	Increased	0	0	0	0	0	0	1	0	1	0
	Same	1	0	0	0	1	0	2	0	4	0
	Decreased	0	1	0	0	1	0	0	2	1	3
Gift	Is a source of income	1	0	0	1	1	0	1	0	3	1
Trend - Gift	Increased	0	0	0	0	1	0	0	0	1	0
	Same	0	0	0	0	0	0	0	0	0	0
	Decreased	1	0	0	1	0	0	1	0	2	1
Other	Is a source of income	7	7	2	1	8	1	5	0	22	9
Trend - Other	Increased	1	3	0	0	2	0	1	0	4	3
	Same	0	2	2	1	2	0	3	0	7	3
	Decreased	5	2	0	0	3	1	1	0	9	3

**Table A.7 Ranking of sources of income, 1 = highest (Question 2.3)**

	Rank	District and Sex of Household Head									
		Moyo		Arua		Kabarole		Kasese		All	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Food crop	1	35	24	48	33	56	29	51	22	190	108
	2	8	3	13	3	10	2	15	6	46	14
	3	1	0	2	1	0	0	1	1	4	2
	4	0	0	0	0	0	0	2	0	2	0
Cash crop	1	0	1	2	1	2	0	12	5	16	7
	2	1	0	6	3	0	0	28	9	35	12
	3	0	0	6	3	0	0	8	2	14	5
Livestock	1	0	0	4	2	2	0	2	2	8	4
	2	15	10	26	12	14	12	6	3	61	37
	3	5	3	6	5	8	1	10	4	29	13
	4	0	1	1	1	0	0	4	0	5	2
Fish	3	0	0	1	0	0	0	0	0	1	0
Labour	1	10	4	2	1	3	0	0	0	15	5
	2	9	4	4	0	4	0	0	0	17	4
	3	6	3	0	0	2	0	3	0	11	3
	4	0	0	1	0	0	0	0	0	1	0
Trade	1	6	5	4	0	0	3	2	1	12	9
	2	2	0	10	9	14	6	4	0	30	15
	3	0	0	10	6	2	0	7	0	19	6
	4	0	1	2	2	1	0	3	1	6	4
Brewing	1	0	1	0	0	0	0	0	0	0	1
	2	1	4	0	1	0	0	1	0	2	5
	3	2	3	1	0	0	0	0	0	3	3
	4	0	0	0	0	1	0	1	0	2	0

(continued)

**Table A.7 (continued)**

	Rank	District and Sex of Household Head									
		Moyo		Arua		Kabarole		Kasese		All	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Salary	1	1	0	5	1	7	0	3	1	16	2
	2	0	0	0	1	1	1	0	0	1	2
	3	0	0	0	0	1	0	1	0	2	0
	4	0	0	0	1	0	0	1	0	1	1
Remittance	1	1	1	0	0	0	0	1	0	2	1
	2	0	0	0	0	1	0	2	1	3	1
	3	0	0	0	0	1	0	0	1	1	1
Gift	1	1	0	0	0	0	0	0	0	1	0
	2	0	0	0	1	0	0	1	0	1	1
	3	0	0	0	0	1	0	0	0	1	0
Other	1	5	4	1	0	3	0	3	0	12	4
	2	2	1	1	1	2	1	0	0	5	3
	3	0	2	0	0	2	0	1	0	3	2
	4	0	0	0	0	1	0	1	0	2	0

**Table A.8 Change in farm size between 2000 and 2005 (Question 2.5)**

	District and Sex of Household Head																			
	Moyo		Arua		Kabarole		Kasese		All											
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female										
Increased	12	20.0%	7	17.5%	20	32.3%	6	16.7%	34	51.5%	13	41.9%	1	1.4%	0	0.0%	67	26.1%	26	19.1%
Same	47	78.3%	32	80.0%	41	66.1%	30	83.3%	30	45.5%	16	51.6%	66	95.7%	29	100.0%	184	71.6%	107	78.7%
Decreased	1	1.7%	1	2.5%	1	1.6%	0	0.0%	2	3.0%	2	6.5%	2	2.9%	0	0.0%	6	2.3%	3	2.2%
No. respondents	60	100.0%	40	100.0%	62	100.0%	36	100.0%	66	100.0%	31	100.0%	69	100.0%	29	100.0%	257	100.0%	136	100.0%



**Table A.9 Source of land used by household (Question 2.6)**

	District and Sex of Household Head																			
	Moyo				Arua				Kabarole				Kasese				No. of Respondents			
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<b>Farm Size Owned</b>																				
Less than 2 acres	30	51.7%	21	53.8%	29	46.0%	23	62.2%	46	79.3%	22	75.9%	54	80.6%	22	84.6%	159	64.6%	88	67.2%
2 to 5 acres	18	31.0%	12	30.8%	29	46.0%	14	37.8%	8	13.8%	6	20.7%	9	13.4%	4	15.4%	64	26.0%	36	27.5%
More than 5 acres	10	17.2%	6	15.4%	5	7.9%	0	0.0%	4	6.9%	1	3.4%	4	6.0%	0	0.0%	23	9.3%	7	5.3%
No. Respondents	58	100.0%	39	100.0%	63	100.0%	37	100.0%	58	100.0%	29	100.0%	67	100.0%	26	100.0%	246	100.0%	131	100.0%
<b>Farm Size Borrowed</b>																				
Less than 2 acres	7	100.0%	2	100.0%	17	89.5%	6	85.7%	11	68.8%	6	85.7%	8	100.0%	1	100.0%	43	86.0%	15	88.2%
2 to 5 acres	0	0.0%	0	0.0%	1	5.3%	1	14.3%	4	25.0%	1	14.3%	0	0.0%	0	0.0%	5	10.0%	2	11.8%
More than 5 acres	0	0.0%	0	0.0%	1	5.3%	0	0.0%	1	6.3%	0	0.0%	0	0.0%	0	0.0%	2	4.0%	0	0.0%
No. Respondents	7	100.0%	2	100.0%	19	100.0%	7	100.0%	16	100.0%	7	100.0%	8	100.0%	1	100.0%	50	100.0%	17	100.0%
<b>Farm Size Rented Out</b>																				
Less than 2 acres	0	0.0%	0	0.0%	1	100.0%	0	0.0%	10	83.3%	2	100.0%	1	100.0%	0	0.0%	12	85.7%	2	100.0%
2 to 5 acres	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	8.3%	0	0.0%	0	0.0%	0	0.0%	1	7.1%	0	0.0%
More than 5 acres	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	8.3%	0	0.0%	0	0.0%	0	0.0%	1	7.1%	0	0.0%
No. Respondents	0	0.0%	0	0.0%	1	100.0%	0	0.0%	12	100.0%	2	100.0%	1	100.0%	0	0.0%	14	100.0%	2	100.0%
<b>Farm Size Rented In</b>																				
Less than 2 acres	0	0.0%	0	0.0%	1	100.0%	0	0.0%	31	88.6%	13	100.0%	6	85.7%	3	100.0%	38	88.4%	16	100.0%
2 to 5 acres	0	0.0%	0	0.0%	0	0.0%	0	0.0%	4	11.4%	0	0.0%	1	14.3%	0	0.0%	5	11.6%	0	0.0%
No. Respondents	0	0.0%	0	0.0%	1	100.0%	0	0.0%	35	100.0%	13	100.0%	7	100.0%	3	100.0%	43	100.0%	16	100.0%
<b>Farm Size Lent</b>																				
Less than 2 acres	4	80.0%	1	100.0%	3	75.0%	0	0.0%	10	100.0%	2	100.0%	0	0.0%	0	0.0%	17	89.5%	3	100.0%
2 to 5 acres	1	20.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	5.3%	0	0.0%
More than 5 acres	0	0.0%	0	0.0%	1	25.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	5.3%	0	0.0%
No. Respondents	5	100.0%	1	100.0%	4	100.0%	0	0.0%	10	100.0%	2	100.0%	0	0.0%	0	0.0%	19	100.0%	3	100.0%

**Table A.10. Education of household (Questions 2.8 and 2.9)**

	District and Sex of Household Head																			
	Moyo				Arua				Kabarole				Kasese				All			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
No. years in education completed by household head																				
Less than 5	21	35.0%	16	40.0%	8	12.7%	8	21.6%	25	36.8%	10	32.3%	22	31.4%	3	10.3%	76	29.1%	37	27.0%
5 to 10	21	35.0%	4	10.0%	38	60.3%	14	37.8%	29	42.6%	8	25.8%	27	38.6%	5	17.2%	115	44.1%	31	22.6%
More than 10	4	6.7%	0	0.0%	15	23.8%	8	21.6%	10	14.7%	1	3.2%	9	12.9%	3	10.3%	38	14.6%	12	8.8%
No response	14	23.3%	20	50.0%	2	3.2%	7	18.9%	4	5.9%	12	38.7%	12	17.1%	18	62.1%	32	12.3%	57	41.6%
Average	5.9		4.4		9.1		8		6.7		5.5		6.5		7.8		7.1		6.5	
No. of respondents	60	100.0%	40	100.0%	63	100.0%	37	100.0%	68	100.0%	31	100.0%	70	100.0%	29	100.0%	261	100.0%	137	100.0%
No. years in education completed by spouse																				
Less than 5	23	38.3%	10	25.0%	30	47.6%	4	10.8%	27	39.7%	2	6.5%	18	25.7%	0	0.0%	98	37.5%	16	11.7%
5 to 10	6	10.0%	7	17.5%	22	34.9%	10	27.0%	18	26.5%	3	9.7%	19	27.1%	0	0.0%	65	24.9%	20	14.6%
More than 10	0	0.0%	3	7.5%	4	6.3%	1	2.7%	2	2.9%	0	0.0%	3	4.3%	2	6.9%	9	3.4%	6	4.4%
No response	31	51.7%	20	50.0%	7	11.1%	22	59.5%	21	30.9%	26	83.9%	30	42.9%	27	93.1%	89	34.1%	95	69.3%
Average	3.4		6.3		5.6		6.9		5.1		4.8		5.8		11		5.1		6.5	
No. of respondents	60	100.0%	40	100.0%	63	100.0%	37	100.0%	68	100.0%	31	100.0%	70	100.0%	29	100.0%	261	100.0%	137	100.0%

**Table A.11 Type of primary dwelling unit used by the household (Question 2.10)**

	District and Sex of Household Head																			
	Moyo				Arua				Kabarole				Kasese				Total			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Grass Thatched																				
Less than 2 units	43	71.7%	30	75.0%	46	73.0%	27	73.0%	63	92.6%	28	90.3%	51	72.9%	22	75.9%	203	77.8%	107	78.1%
2 to 5 units	15	25.0%	10	25.0%	17	27.0%	10	27.0%	0	0.0%	0	0.0%	11	15.7%	5	17.2%	43	16.5%	25	18.2%
More than 5 units	1	1.7%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	1.4%	0	0.0%	2	0.8%	0	0.0%
No. Respondents	59	98.3%	40	100.0%	63	100.0%	37	100.0%	63	92.6%	28	90.3%	63	90.0%	27	93.1%	248	95.0%	132	96.4%
Iron roofed (mud wall & floor)																				
Less than 2 units	0	0.0%	1	2.5%	20	31.7%	7	18.9%	66	97.1%	29	93.5%	46	65.7%	15	51.7%	132	50.6%	52	38.0%
2 to 5 units	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	4.3%	0	0.0%	3	1.1%	0	0.0%
No. Respondents	0	0.0%	1	2.5%	20	31.7%	7	18.9%	66	97.1%	29	93.5%	49	70.0%	15	51.7%	135	51.7%	52	38.0%
Iron roofed (brick wall & cemented floor)																				
Less than 2 units	0	0.0%	1	2.5%	4	6.3%	1	2.7%	27	39.7%	8	25.8%	18	25.7%	2	6.9%	49	18.8%	12	8.8%
2 to 5 units	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	3	4.3%	0	0.0%	3	1.1%	0	0.0%
No. Respondents	0	0.0%	1	2.5%	4	6.3%	1	2.7%	27	39.7%	8	25.8%	21	30.0%	2	6.9%	52	19.9%	12	8.8%
Tiled roof and Cemented Floor																				
Less than 2 units	0	0.0%	0	0.0%	3	4.8%	1	2.7%	22	32.4%	7	22.6%	0	0.0%	0	0.0%	25	9.6%	8	5.8%
No Respondents	0	0.0%	0	0.0%	3	4.8%	1	2.7%	22	32.4%	7	22.6%	0	0.0%	0	0.0%	25	9.6%	8	5.8%
Other dwelling type																				
Less than 2 units	0	0.0%	0	0.0%	2	3.2%	1	2.7%	22	32.4%	7	22.6%	0	0.0%	0	0.0%	24	9.2%	8	5.8%
No. Respondents	0	0.0%	0	0.0%	2	3.2%	1	2.7%	22	32.4%	7	22.6%	0	0.0%	0	0.0%	24	9.2%	8	5.8%
Total respondents	60		40		63		37		68		31		70		29		261		137	

Households may have more than one type of dwelling. Percentages relate to total number of male or female respondents in a district.

**Table A.12. Change in dwelling unit of household between 2000 and 2005 (Question 2.10)**

Change in:	District and Sex of Household Head																			
	Moyo		Arua		Kabarole		Kasese		All											
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female										
	No.	%	No.	%	No.	%	No.	%	No.	%										
<b>Grass Thatched</b>																				
Increased	8	13.6%	2	5.1%	34	56.7%	14	38.9%	0	0.0%	1	14.3%	5	13.2%	0	0.0%	47	25.8%	17	17.5%
Same	43	72.9%	32	82.1%	21	35.0%	20	55.6%	19	76.0%	6	85.7%	26	68.4%	12	80.0%	109	59.9%	70	72.2%
Decreased	8	13.6%	5	12.8%	5	8.3%	2	5.6%	6	24.0%	0	0.0%	7	18.4%	3	20.0%	26	14.3%	10	10.3%
No. of respondents	59	100.0%	39	100.0%	60	100.0%	36	100.0%	25	100.0%	7	100.0%	38	100.0%	15	100.0%	182	100.0%	97	100.0%
<b>Iron roofed (mud wall &amp; floor)</b>																				
Increased	0	0.0%	0	0.0%	6	37.5%	2	28.6%	8	13.8%	1	4.3%	2	7.4%	0	0.0%	16	15.8%	3	7.5%
Same	0	0.0%	0	0.0%	10	62.5%	4	57.1%	50	86.2%	22	95.7%	25	92.6%	10	100.0%	85	84.2%	36	90.0%
Decreased	0	0.0%	0	0.0%	0	0.0%	1	14.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	2.5%
No. of respondents	0	0.0%	0	0.0%	16	100.0%	7	100.0%	58	100.0%	23	100.0%	27	100.0%	10	100.0%	101	100.0%	40	100.0%
<b>Iron roofed (brick wall &amp; cemented floor)</b>																				
Increased	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	7.7%	0	0.0%	1	8.3%	0	0.0%	3	7.1%	0	0.0%
Same	0	0.0%	0	0.0%	4	100.0%	1	100.0%	24	92.3%	8	100.0%	11	91.7%	2	100.0%	39	92.9%	11	100.0%
No. of respondents	0	0.0%	0	0.0%	4	100.0%	1	100.0%	26	100.0%	8	100.0%	12	100.0%	2	100.0%	42	100.0%	11	100.0%
<b>Tile roof and cemented floor</b>																				
Same	0	0.0%	0	0.0%	3	100.0%	1	100.0%	22	100.0%	6	100.0%	0	0.0%	0	0.0%	25	100.0%	7	100.0%
No. of respondents	0	0.0%	0	0.0%	3	100.0%	1	100.0%	22	100.0%	6	100.0%	0	0.0%	0	0.0%	25	100.0%	7	100.0%
<b>Other dwelling type</b>																				
Same	0	0.0%	0	0.0%	2	100.0%	1	100.0%	22	100.0%	6	100.0%	0	0.0%	0	0.0%	24	100.0%	7	100.0%
No. of respondents	0	0.0%	0	0.0%	2	100.0%	1	100.0%	22	100.0%	6	100.0%	0	0.0%	0	0.0%	24	100.0%	7	100.0%

**Table A.13. Change in ownership of radio and/or bicycle between 2000 and 2005 (Question 2.11)**

	District and Sex of Household Head																			
	Moyo		Arua		Kabarole		Kasese		All											
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Change in radio ownership																				
Increased	1	1.7%	2	5.0%	9	14.3%	4	11.1%	8	13.8%	3	10.7%	3	4.3%	0	0.0%	21	8.4%	9	6.8%
Same	55	91.7%	38	95.0%	51	81.0%	28	77.8%	45	77.6%	24	85.7%	65	92.9%	28	96.6%	216	86.1%	118	88.7%
Decreased	4	6.7%	0	0.0%	3	4.8%	4	11.1%	5	8.6%	1	3.6%	2	2.9%	1	3.4%	14	5.6%	6	4.5%
No. of respondents	60	100.0%	40	100.0%	63	100.0%	36	100.0%	58	100.0%	28	100.0%	70	100.0%	29	100.0%	251	100.0%	133	100.0%
Change in bicycle ownership																				
Increased	3	5.1%	4	10.3%	11	17.5%	8	22.9%	9	17.3%	0	0.0%	2	2.9%	0	0.0%	25	10.3%	12	9.7%
Same	53	89.8%	33	84.6%	50	79.4%	25	71.4%	40	76.9%	20	95.2%	63	91.3%	29	100.0%	206	84.8%	107	86.3%
Decreased	3	5.1%	2	5.1%	2	3.2%	2	5.7%	3	5.8%	1	4.8%	4	5.8%	0	0.0%	12	4.9%	5	4.0%
No. of respondents	59	100.0%	39	100.0%	63	100.0%	35	100.0%	52	100.0%	21	100.0%	69	100.0%	29	100.0%	243	100.0%	124	100.0%

**Table A.14. Is anyone else a member of a farmer organisation? (Question 4.3)**

		District and Sex of H/Head									
		Moyo		Arua		Kabarole		Kasese		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Spouse	Yes	0	0	20	6	9	0	9	0	38	6
Other male	Yes	1	0	0	2	4	1	0	0	6	3
Other female	Yes	0	1	2	1	3	2	0	0	5	4
No	Yes	56	37	39	27	47	25	56	27	198	116

**Table A.15. Reasons for changing or not changing practice after training or demonstrations (Questions 4.15 and 4.16)**

		District and Sex of H/Head									
		Moyo		Arua		Kabarole		Kasese		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Reason for Changing practice	Increased yield	5	4	16	9	7	2	12	2	40	17
	Easily understood	4	3	13	9	4	3	9	1	30	16
	Relevant information	3	2	16	6	7	5	3	0	29	13
	Inputs available	2	1	14	4	2	0	4	0	22	5
	Little extra work	4	4	9	4	1	0	2	1	16	9
	Good Price	0	0	9	7	1	0	0	0	10	7
	Low cost	1	2	6	3	0	0	0	1	7	6
	Other	5	4	0	0	1	0	2	0	8	4
Reason for not Changing practice	Did not understand	17	15	21	14	0	1	2	0	40	30
	Too much work	17	5	21	15	1	0	0	0	39	20
	Not relevant	6	3	18	12	1	0	0	0	25	15
	Too expensive	3	4	19	11	1	0	1	0	24	15
	Other	6	5	0	0	0	2	10	2	16	9
	Inputs too expensive	1	2	12	9	0	0	0	0	13	11
	Could not find inputs	1	0	10	5	0	0	2	0	13	5
	Poor prices	0	0	3	1	0	0	0	0	3	1
Other crops better	0	0	1	0	0	0	0	0	1	0	

**Table A.16 Amount of money borrowed for agriculture and interest charged (Question 4.18)**

		District and Sex of H/Head									
		Moyo		Arua		Kabarole		Kasese		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Amount Borrowed	Less than 100,000	0	1	1	1	5	3	0	4	6	9
	100,000 to 500,000	0	0	2	2	7	2	0	1	9	5
	More than 500,000	0	0	0	0	4	1	1	0	5	1
Interest Charged on loan	Less than 10%	0	0	0	1	10	4	0	3	10	8
	10% to 20%	0	1	2	2	1	1	0	1	3	5
	20% to 40%	0	0	0	0	4	0	1	1	5	1

**Table A.17. Reason for borrowing (Question 4.20)**

Reason for trying to get a loan	District and Sex of H/Head									
	Moyo		Arua		Kabarole		Kasese		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
To buy inputs	16	15	2	2	2	0	3	0	23	17
To buy equipment	11	9	2	0	1	0	3	0	17	9
To buy livestock	10	4	1	0	1	0	1	0	13	4
To pay for labour	3	2	1	1	0	0	5	3	9	6
To buy food	6	7	1	0	0	0	0	0	7	7
Other reason	1	3	0	0	2	0	0	0	3	3
To build	0	0	1	0	0	0	1	0	2	0

**Table A.18. Do you know someone or organisation that can help you get credit? (Question 4.25)**

	District and Sex of H/Head										
	Moyo		Arua		Kabarole		Kasese		Total		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
None		28	21	29	20	2	0	24	9	83	50
Savings group		3	6	15	8	31	18	19	5	68	37
Private individual		12	5	6	2	16	6	0	1	34	14
Project		1	0	11	3	18	8	0	0	30	11
Farmer group		0	0	11	5	7	4	2	1	20	10
Other		1	0	0	0	3	2	3	0	7	2
Financial extension worker		0	0	0	1	2	0	0	0	2	1

**Table A.19 Total number of respondents producing and selling various products and trends over last four years (Question 4.27)**

Promotion of Agricultural Marketing & Processing - OVERALL	Produce					Sale						
	No. producing	Trend				New	No. selling	Trend				New
		Increased	Same	Decreased	Increased			Same	Decreased			
Matooke	104	25	28	56	3	43	24	6	17	0		
Maize	332	97	69	163	0	174	75	34	63	0		
Beans	297	57	97	137	0	79	34	12	34	0		
Groundnuts	216	86	42	86	0	74	44	15	13	0		
Cassava	194	41	63	79	1	38	20	8	11	0		
Rice	27	13	1	8	3	8	5	0	4	0		
Simsim	74	37	4	33	0	32	14	8	10	0		
Millet	56	15	13	26	0	17	11	3	3	0		
Sweet potato	197	53	30	106	1	32	13	7	10	0		
Irish potato	23	4	5	12	0	4	2	2	1	0		
Sorghum	116	35	18	58	3	29	9	10	8	0		
Peas	38	16	2	19	0	5	5	0	0	0		
Vegetables	62	8	31	21	0	17	8	2	7	0		
Coffee	42	4	14	22	2	37	8	15	12	1		
Vanilla	34	1	9	0	25	11	0	0	0	12		
Tea	0	0	0	0	0	0	0	0	0	0		
Tobacco	4	4	0	0	0	2	2	0	0	0		
Cotton	40	4	9	22	3	34	2	12	19	0		
Cocoa	2	0	0	0	2	2	0	0	0	2		
Chickens	137	38	15	78	1	50	23	7	18	0		
Eggs	54	28	4	21	0	13	6	3	4	0		
Cows	64	33	6	24	1	26	15	5	6	1		
Milk	22	11	4	7	0	16	5	6	4	0		
Goats	167	71	31	53	9	74	43	14	14	2		
Pigs	26	16	6	6	5	13	8	3	3	0		
Sheep	22	14	1	7	0	10	8	0	1	0		
Honey	6	2	1	3	0	5	3	0	2	0		
Fish	0	0	0	0	0	1	1	0	0	0		



Promotion of Agricultural Marketing & Processing - OVERALL	Produce					Sale				
	Trend					Trend				
	No. producing	Increased	Same	Decreased	New	No. selling	Increased	Same	Decreased	New
Other (name)	6	3	1	2	0	4	2	1	1	0

**Table A.20. Reasons for trends in production (Question 4.27)**

<b>Reasons for increase in production</b>		<b>Reasons why production remain the same</b>		<b>Reasons for decrease in production</b>	
Availability of adequate land	360	Lack of adequate land	425	Lack of knowledge about the crop	106
Soil fertility	278	Soil exhaustion and loss of soil fertility	108	Unreliable / inadequate rainfall / bad weather or climate patterns	761
Controlled pests/diseases/ticks/predators	208	Disease/pest/and predator attacks on the produce	195	Low soil fertility / soil exhaustion	584
Better inputs/equipment/farming practices e.g. proper weeding, timely planting, improved seeds	1,419	Inadequate rains and poor weather patterns	82	Uncontrolled pests/diseases/ticks/predators	1,044
Adequate rains and good weather/climate	571	Drought	227	Drought	416
Availability of capital and labour	119	Expensive labour and lack of capital	167	Lack of /expensive farm inputs/equip.	1,047
		Inadequate farm inputs/equip/poor practices	251	Lack / inadequate land	497
				Lack of / expensive labour and/or capital	107

**Table A.21. Reasons for trends in sales (Question 4.27)**

<b>Reasons for increase in sales</b>		<b>Reasons for decrease in sales</b>		<b>Reasons why sales remain the same</b>	
Available/adequate market and good prices	502	Lack of market / low prices / lack of demand	302	Produce used for home consumption	153
Better quality produce	121	Pests / diseases	11	Low yields	55
Higher output/yields	16	Produce used for home consumption	10	Lower market / demand	13
Increased demand	412	Increase in labour, capital costs	68	Pests / diseases	99
Better transportation facilities				Lower prices	32

**Table A.22. Who decides on the following activities? (Question 4.28)**

	District and Sex of H/Head									
	Moyo		Arua		Kabarole		Kasese		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
	No	No	No	No	No	No	No	No	No	No
Decides what to grow/produce										
Household Head	9	4	9	1	0	0	0	0	18	5
Spouse	2	4	14	1	5	0	3	0	24	5
Both	25	8	49	12	26	1	16	3	116	24
Decides what to market/sell										
Household Head	0	0	0	0	0	0	0	0	0	0
Spouse	3	0	8	3	3	0	0	0	14	3
Both	12	4	38	12	27	1	22	3	99	20
Decides what to buy for home use										
Household Head	0	0	0	0	0	0	0	0	0	0
Spouse	4	6	4	1	3	0	2	1	13	8
Both	18	2	40	14	28	1	20	2	106	19
How income should be used										
Household Head	6	4	9	1	0	0	0	0	15	5
Spouse	4	5	3	3	5	0	0	1	12	9
Both	11	5	40	12	25	1	23	2	99	20
Who should receive farm income										
Household Head	0	1	9	1	0	0	0	0	9	2
Spouse	13	1	31	6	4	0	5	1	53	8
Both	4	4	7	6	24	0	16	2	51	12

**Table A.23. Do you sell through a farmer organization? (Question 4.30)**

	District and Sex of Household Head																			
	Moyo		Arua		Kabarole		Kasese		Total											
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female										
Yes	1	2.7%	3	14.3%	11	23.9%	4	12.9%	1	1.7%	0	0.0%	11	18.6%	2	8.7%	24	11.9%	9	8.9%
No	36	97.3%	18	85.7%	35	76.1%	27	87.1%	59	98.3%	26	100.0%	48	81.4%	21	91.3%	178	88.1%	92	91.1%
No. of respondents	37	100.0%	21	100.0%	46	100.0%	31	100.0%	60	100.0%	26	100.0%	59	100.0%	23	100.0%	202	100.0%	101	100.0%

**Table A.24. Weighted and aggregated rankings of major constraints affecting marketing of agricultural produce (Question 4.32)**

	District				Overall
	Moyo	Arua	Kabarole	Kasese	
Low produce prices	505	369	453	703	2030
Poor means of transport	243	431	336	657	1667
Poor road network	25	205	334	414	978
High cost of transport	103	355	130	357	945
Inadequate and poor storage	36	369	274	351	1030
Wide price fluctuations	75	140	410	270	895
Insecurity	13	8	16	212	249
Poor quality of inputs	193	136	60	184	573
Weak farmer mobilisation /Organisation	0	10	24	104	138
Inadequate market information	53	118	72	63	306
Lack of buyers/unscrupulous buyers	64	121	76	60	321
Labour constraints	197	105	413	54	769
Weak market organisation	7	35	52	49	143
Low quality and quantity of production	364	277	362	45	1048
Poor market infrastructure/network	74	68	23	26	191
Over production	109	292	168	21	590
Inadequate extension service	265	79	54	21	419
Inaccessibility of credit	265	79	54	21	419
Inadequate processing facilities	0	47	8	14	69
Unscrupulous middlemen	165	188	202	0	555
Other	133	10	72	0	215
Lack of /or high cost of inputs	77	91	15	0	183

**Table A.25. Top 5 ranked constraints – OVERALL (Question 4.32)**

Low produce prices	2030
Poor means of transport	1667
Low quality and quantity of production	1048
Inadequate and poor storage	1030
Poor road network	978

**Table A.26 What kind of water for agricultural production facility do you have access to? (Question 4.42)**

	District and Sex of H/Head									
	Moyo		Arua		Kabarole		Kasese		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Government irrigation	4	2	0	0	0	0	0	0	4	2

**Table A.27. What are your comments on the PMA? (Question 4.47)**

Access to/ provision of inputs	63
more training/ education	66
Access to credit	40
Need for more information about PMA	32
Animal traction and equipment	15
roads and infrastructure	22
more activity/ information at village level	13
having positive impact	14
negative about PMA	5
other	35
Total number of respondents	70

**Table A.28. The HIV/AIDS situation (Question 5.1 to 5.3)**

	District and Sex of Household Head																			
	Moyo		Arua		Kabarole		Kasese		Total											
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female										
HIV/AIDS in the area																				
Not very much	44	93.6%	25	83.3%	42	66.7%	23	62.2%	32	47.8%	19	63.3%	56	80.0%	26	89.7%	174	70.4%	93	73.8%
The same as most villages	0	0.0%	1	3.3%	12	19.0%	8	21.6%	23	34.3%	8	26.7%	11	15.7%	3	10.3%	46	18.6%	20	15.9%
Worse than other villages	3	6.4%	4	13.3%	9	14.3%	6	16.2%	12	17.9%	3	10.0%	3	4.3%	0	0.0%	27	10.9%	13	10.3%
No. of respondents	47	100.0%	30	100.0%	63	100.0%	37	100.0%	67	100.0%	30	100.0%	70	100.0%	29	100.0%	247	100.0%	126	100.0%
Feel HIV/AIDS affect level of agriculture in the area																				
Yes	42	71.2%	31	86.1%	52	83.9%	30	81.1%	53	77.9%	24	77.4%	53	76.8%	21	75.0%	200	77.5%	106	80.3%
No	17	28.8%	5	13.9%	10	16.1%	7	18.9%	15	22.1%	7	22.6%	16	23.2%	7	25.0%	58	22.5%	26	19.7%
No. of respondents	59	100.0%	36	100.0%	62	100.0%	37	100.0%	68	100.0%	31	100.0%	69	100.0%	28	100.0%	258	100.0%	132	100.0%
Own household affected by																				

HIV/AIDS																				
Yes	4	7.0%	4	10.8%	2	3.2%	0	0.0%	12	19.7%	5	17.2%	3	4.3%	5	17.9%	21	8.4%	14	10.9%
No	52	91.2%	33	89.2%	61	96.8%	35	100.0%	49	80.3%	24	82.8%	67	95.7%	23	82.1%	229	91.2%	115	89.1%
No. of respondents	57	100.0%	37	100.0%	63	100.0%	35	100.0%	61	100.0%	29	100.0%	70	100.0%	28	100.0%	251	100.0%	129	100.0%

**Table A.29. How is your household affected by HIV/AIDS (Question 5.4)**

	District and Sex of Household Head																			
	Moyo				Arua				Kabarole				Kasese				Total			
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female				
Adult male - Ill																				
Yes	5	100.0%	3	100.0%	0	0.0%	0	0.0%	1	100.0%	3	100.0%	1	100.0%	1	100.0%	7	100.0%	7	100.0%
No. respondents	5	100.0%	3	100.0%	0	0.0%	0	0.0%	1	100.0%	3	100.0%	1	100.0%	1	100.0%	7	100.0%	7	100.0%
Adult male - Death																				
Yes	0	0.0%	0	0.0%	0	0.0%	0	0.0%	5	100.0%	2	100.0%	1	100.0%	4	100.0%	6	100.0%	6	100.0%
No. respondents	0	0.0%	0	0.0%	0	0.0%	0	0.0%	5	100.0%	2	100.0%	1	100.0%	4	100.0%	6	100.0%	6	100.0%
Adult female - Ill																				
Yes	3	100.0%	3	100.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	1	100.0%	1	100.0%	4	50.0%	5	100.0%
No	0	0.0%	0	0.0%	0	0.0%	0	0.0%	4	100.0%	0	0.0%	0	0.0%	0	0.0%	4	50.0%	0	0.0%
No. respondents	3	100.0%	3	100.0%	0	0.0%	0	0.0%	4	100.0%	1	100.0%	1	100.0%	1	100.0%	8	100.0%	5	100.0%
Adult female - Death																				
Yes	0	0.0%	0	0.0%	2	100.0%	0	0.0%	2	28.6%	2	66.7%	2	100.0%	3	100.0%	6	54.5%	5	83.3%
No	0	0.0%	0	0.0%	0	0.0%	0	0.0%	5	71.4%	1	33.3%	0	0.0%	0	0.0%	5	45.5%	1	16.7%
No. respondents	0	0.0%	0	0.0%	2	100.0%	0	0.0%	7	100.0%	3	100.0%	2	100.0%	3	100.0%	11	100.0%	6	100.0%
Child - Ill																				
Yes	4	100.0%	4	100.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	2	100.0%	6	85.7%	6	100.0%
No	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	1	14.3%	0	0.0%
No. respondents	4	100.0%	4	100.0%	1	100.0%	0	0.0%	1	100.0%	0	0.0%	1	100.0%	2	100.0%	7	100.0%	6	100.0%
Child - Death																				
Yes	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%
No	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	0	0.0%
No. respondents	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	100.0%	1	100.0%	0	0.0%	0	0.0%	1	100.0%	1	100.0%

## Poverty Analysis

Table A.30 Source of Income (Question 2.3)

	District, Sex of Household Head and Poverty Category															
	Moyo				Arua				Kabarole				Kasese			
	Male		Female		Male		Female		Male		Female		Male		Female	
	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest
Brewing	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Cash crop trade	0	0	0	1	0	2	1	0	0	2	0	0	2	10	2	3
Fish	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Food crop	24	11	19	5	2	46	6	27	3	53	3	26	17	34	6	16
Gift	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Labour	8	2	3	1	0	2	0	1	1	2	0	0	0	0	0	0
Livestock	0	0	0	0	0	4	1	1	0	2	0	0	1	1	1	1
Other	4	1	4	0	1	0	0	0	0	3	0	0	0	3	0	0
Remittance	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0
Salary	0	1	0	0	0	5	0	1	0	7	0	0	0	3	0	1
Trade	4	2	5	0	0	4	0	0	0	0	0	3	0	2	0	1

**Table A.31. (part 1 of 2) No of working members in household (Question 2.4)**

	District, Sex of Household Head and Poverty Category															
	Moyo								Arua							
	Male				Female				Male				Female			
	Poorer		The Rest		Poorer		The Rest		Poorer		The Rest		Poorer		The Rest	
0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	1.7%	0	0.0%	0	0.0%
1	6	14.3%	0	0.0%	17	53.1%	2	25.0%	0	0.0%	4	6.7%	2	25.0%	3	10.3%
2	29	69.0%	17	94.4%	14	43.8%	5	62.5%	1	100.0%	31	51.7%	3	37.5%	14	48.3%
3	3	7.1%	1	5.6%	0	0.0%	0	0.0%	0	0.0%	11	18.3%	2	25.0%	7	24.1%
4	3	7.1%	0	0.0%	1	3.1%	1	12.5%	0	0.0%	9	15.0%	1	12.5%	2	6.9%
5	1	2.4%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	3.3%	0	0.0%	0	0.0%
6	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	1.7%	0	0.0%	1	3.4%
7	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	1.7%	0	0.0%	2	6.9%
No. of respondents	42	100.0%	18	100.0%	32	100.0%	8	100.0%	1	100.0%	60	100.0%	8	100.0%	29	100.0%

**Table A.31. (part 1 of 2) No of working members in household (Question 2.4)**

	District, Sex of Household Head and Poverty Category															
	Kabarele								Kasese							
	Male				Female				Male				Female			
	Poorer		The Rest		Poorer		The Rest		Poorer		The Rest		Poorer		The Rest	
0	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
1	0	0.0%	5	7.8%	1	33.3%	11	39.3%	2	10.5%	3	6.0%	5	62.5%	6	28.6%
2	2	50.0%	49	76.6%	2	66.7%	11	39.3%	9	47.4%	23	46.0%	2	25.0%	5	23.8%
3	1	25.0%	5	7.8%	0	0.0%	3	10.7%	4	21.1%	11	22.0%	1	12.5%	4	19.0%
4	0	0.0%	2	3.1%	0	0.0%	2	7.1%	2	10.5%	10	20.0%	0	0.0%	2	9.5%
5	1	25.0%	1	1.6%	0	0.0%	1	3.6%	1	5.3%	2	4.0%	0	0.0%	3	14.3%
6	0	0.0%	2	3.1%	0	0.0%	0	0.0%	1	5.3%	1	2.0%	0	0.0%	0	0.0%
7	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	4.8%
No. of respondents	4	100.0%	64	100.0%	3	100.0%	28	100.0%	19	100.0%	50	100.0%	8	100.0%	21	100.0%



**Table A.32 Membership of Farmer group (Questions 4.1 and 4.3)**

	District, Sex of Household Head and Poverty Category															
	Moyo				Arua				Kabarole				Kasese			
	Male		Female		Male		Female		Male		Female		Male		Female	
	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest
No one	25	16	21	7	1	1	0	0	1	9	2	6	11	32	6	12
Spouse	0	0	0	0	0	20	1	5	0	9	0	0	3	6	0	0
Other Male	1	0	0	0	0	0	0	2	0	4	0	1	0	0	0	0
Other female	0	0	1	0	0	2	1	0	0	3	0	2	0	0	0	0

**Table A.33 Has anyone else in your family been involved in developing new technologies? (Question 4.4)**

	District, Sex of Household Head and Poverty Category															
	Moyo				Arua				Kabarole				Kasese			
	Male		Female		Male		Female		Male		Female		Male		Female	
	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest
Household head	8	1	6	2	0	26	2	8	0	7	0	0	2	3	0	0
Spouse	4	1	1	1	0	17	1	4	0	5	0	0	1	1	0	0
Other member	1	1	2	0	0	2	0	1	0	2	0	0	0	0	0	0
Farmer group	2	0	0	0	1	16	0	3	0	2	0	1	1	2	0	0

**Table A. 34. Easy local availability of inputs (Question 4.5)**

	District, Sex of Household Head and Poverty Category															
	Moyo				Arua				Kabarole				Kasese			
	Male		Female		Male		Female		Male		Female		Male		Female	
	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest
Improved seeds	2	0	2	0	2	47	6	20	0	24	0	17	1	7	0	0
Improved cuttings	2	0	0	0	0	23	2	14	0	17	0	13	0	3	0	1
Improved breeds	3	2	2	1	0	40	3	15	0	18	0	9	1	4	1	2

**Table A.35. Access and use of agricultural training (Questions 4.10, 4.11, 4.15, 4.16)**

	District, Sex of Household Head and Poverty Category															
	Moyo				Arua				Kabarole				Kasese			
	Male		Female		Male		Female		Male		Female		Male		Female	
	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest
Invited to attend training -																
Agricultural advisory service																
Household head	1	0	3	0	1	23	3	7	0	17	1	10	1	9	0	1
Other member	0	0	1	0	0	0	0	0	0	3	0	1	0	0	0	0
Spouse	0	0	0	0	0	14	1	2	0	7	0	1	2	2	0	0
Participated in training -																
Agricultural advisory service																
Household head	1	0	1	0	1	22	2	7	0	17	1	9	1	11	1	1
Other member	0	0	1	0	0	0	0	0	0	2	0	1	0	0	0	0
Spouse	0	0	0	0	0	13	0	2	0	6	0	1	2	2	0	0
Reason for Changing practice																
Easily understood	3	1	3	0	0	13	2	7	1	3	1	2	3	6	0	1
Good Price	0	0	0	0	0	9	2	5	0	1	0	0	0	0	0	0
Increased yeild	5	0	3	1	0	16	1	8	0	7	0	2	4	8	0	2
Inputs available	2	0	1	0	0	14	1	3	1	1	0	0	1	3	0	0
Little extra work	3	1	3	1	0	9	1	3	0	1	0	0	1	1	0	1
Low cost	1	0	2	0	0	6	1	2	0	0	0	0	0	0	0	1
Other	3	2	2	2	0	0	0	0	0	1	0	0	1	1	0	0
Relevant information	2	1	2	0	0	16	0	6	0	7	1	4	1	2	0	0
Reason for not changing																
Could not find inputs	0	1	0	0	0	10	1	4	0	0	0	0	1	1	0	0
Did not understand	10	7	9	6	0	21	3	11	0	0	1	0	1	1	0	0
Inputs too expensive	1	0	2	0	1	11	2	7	0	0	0	0	0	0	0	0
Not relelvant	5	1	3	0	1	17	1	11	0	1	0	0	0	0	0	0
Other crops better	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Other	5	1	5	0	0	0	0	0	0	0	0	2	1	9	0	2
Poor prices	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0
Too much work	10	7	5	0	0	21	3	12	0	1	0	0	0	0	0	0
Too expensive	2	1	3	1	1	18	1	10	0	1	0	0	0	1	0	0

**Table A.36. Attendance at training courses (Questions 4.33, 4.34, 4.36, 4.37, 4.38)**

		District, Sex of Household Head and Poverty Category															
		Moyo				Arua				Kabarole				Kasese			
		Male		Female		Male		Female		Male		Female		Male		Female	
		Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest
Attended FAL																	
	Household head	0	0	2	0	0	0	1	4	0	4	1	2	0	2	0	3
	Other member	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0
	Spouse	0	0	2	0	0	1	0	3	0	6	1	0	3	3	1	0
Finished FAL																	
	Household head	0	0	2	0	0	0	1	3	0	3	0	1	0	2	0	0
	Other member	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
	Spouse	0	0	1	0	0	1	0	3	0	3	0	0	1	2	0	0
Attended DATIC / DFI / ARDC																	
	Household head	2	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0
	Other member	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Spouse	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Finished DATIC / DFI / ARDC																	
	Household head	2	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0
	Other member	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Spouse	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Has used knowledge obtained from training																	
	Yes	1	0	3	1	0	0	0	3	0	4	0	1	0	1	0	0
	No	3	0	3	0	1	8	2	5	3	22	1	5	9	26	3	14
	No. of Respondents	4	0	6	1	1	8	2	8	3	26	1	6	9	27	3	14

**Table A.37. Agricultural education in schools and HIV/AIDS situation (Questions 4.39, 4.40 and 5.3)**

	District, Sex of Household Head and Poverty Category															
	Moyo				Arua				Kabarole				Kasese			
	Male		Female		Male		Female		Male		Female		Male		Female	
	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest	Poorer	The Rest
Young people in household learn about agriculture in schools																
Yes	14	6	14	5	0	30	3	7	3	37	1	17	9	27	1	8
No	17	10	14	3	2	29	5	19	0	5	0	2	1	13	3	5
Don't know	9	2	4	0	0	2	0	2	1	16	2	4	8	9	4	8
No. of Respondents	40	18	32	8	2	61	8	28	4	58	3	23	18	49	8	21
Young people tell/teach about what they learn in schools																
Yes	9	5	9	5	0	27	1	5	1	13	1	7	3	10	0	0
No	10	1	5	0	1	16	4	9	3	36	2	15	12	29	4	17
Don't know	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
No. of Respondents	19	6	14	5	1	43	5	14	4	50	3	22	15	39	4	17
Own household affected by HIV/AIDS																
Yes	3	1	3	1	0	2	0	0	2	10	3	2	0	3	0	5
No	36	16	26	7	2	59	7	28	1	48	0	24	19	48	8	15
No. of Respondents	40	17	29	8	2	61	7	28	3	58	3	26	19	51	8	20

## Annex B4 Household survey questionnaire

Good morning/afternoon. My name is \_\_\_\_\_. I am one of the enumerators recruited to discuss with you your activities and livelihoods, particularly in agriculture and to find out what, if any, agricultural services and support have reached you. You have been randomly selected to represent other households in your sub-county and your participation in this interview is completely voluntary. We shall greatly appreciate your cooperation. You may ask for clarifications at any time in the course of the interview. All the information that you provide will be kept confidential and used only for the purpose of the PMA evaluation. So do you agree to participate? If yes, thank the respondent for the cooperation and proceed with the interview.

### 1.0 HOUSEHOLD IDENTIFICATION

Region	District	Sub-county	Parish	Village

Enumerator's Name  Date

Supervisor's Name

1.1 Name of head of h/hold  1.2 Sex of household head

1.3 Name of interviewee  1.4 Sex of person interviewed

1.5 Relationship to head of household   
 (Holder = 1; Wife/Husband = 2; Son/Daughter = 3; Father/Mother = 4;  
 Other Relation = 5; No Relation = 6) 1.6 Age of household head (yrs)

1.7 Number of people living in household  1.8 Number of females  1.9 Number of males

### 2.0 ECONOMIC AND SOCIAL STATUS

2.1 Primary and two next most important occupations of household head Primary  second  third

2.2 Primary and two next most important occupations of spouse (identified by time spent on the occupation) Primary  second  third

Occupation Codes					
Crop Farmer = 1	Non-crop farmer = 2	Public servant = 3	Trader/business = 4	House worker = 5	Labourer=6
Unemployed = 7	Retired/ aged = 8	Charcoal burning = 9	Brick making = 10	Boda boda = 11	Other = 12

2.3 What are your major sources of income, in cash and kind, (rank with 1 as highest). Have they increased, decreased or remained constant over the last four years, and why?

	Source of income, now (Rank with 1 as highest)	Trend (increase =1 Same=2 Decreased = 3)	Reason
	Food crops		
	Cash crops (traditional)		
	Livestock		
	Fish		
	Labour		
	Trade		
	Brewing		
	Salary		
	Remittance		
	Gift		
	Other		

2.4 How many members of your household work?   
 (this does not include unpaid work in the house, but does include agricultural work on the family farm)

2.5 What is your total farm size? Now and in 2000 (In acres)

2000	2005

If zero, skip to 2.8

2.6 Of this, how much is (give acres)

	owned	
	borrowed	
	rented out	

Rented in	
Lent	

2.7 Who owns the land belonging to the household? Give amount (in acres) if possible

Owner	Yes /No	Acres owned
H/hold head		
Spouse		
Other		

2.8 Number of years in education completed by household head

2.9 Number of years in education completed by spouse

2.10 What is the type of your primary dwelling unit used by the h/hold? Indicate number in 2000 and 2005

Type of dwelling unit	2000	2005
Grass thatched (mud wall & floor)		
Iron roofed (mud wall & floor)		
Iron roofed (brick wall & cemented floor)		
Tiled roof and cemented floor		
Other (specify)		

2.11 Do you own the following in 2000 and now?

	2000	2005	
Radio			Yes = 1, No = 2
Bicycle			

2.12 How many kms. from your household is it to the nearest health facility?

2.13 How many kms. from your household is it to an all-weather road?

2.14 Does each member of your household have a blanket? (Yes = 1, No =2, At least 50% have =3)

### 3.0 PMA AWARENESS AND PARTICIPATION

**We would like to find out how and when you found out about PMA, and what you think it is supposed to do**

3.1 Have you heard about PMA? (Yes=1; No=2)  *If no, go to section 4*

3.2 When did you first hear about it? (Tick the appropriate response)

Last month	<input type="checkbox"/>
This year	<input type="checkbox"/>
Last year	<input type="checkbox"/>
Earlier	<input type="checkbox"/>

3.3 What was your source of information about PMA? (Multiple response, tick as appropriate)

Friend	Neighbour	Local council	Market place	Extension workers	Churches/ mosque	NGOs/ CBOs	Newspapers	Projects	Politician	Radio	Other
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.4 What do you think PMA is all about? (Multiple response. Read out all responses and tick only the ones identified by respondent)

Helping people improve production	<input type="checkbox"/>	Extension services	<input type="checkbox"/>	Training people in politics	<input type="checkbox"/>
Constructing offices for civil servants	<input type="checkbox"/>	Constructing health centres	<input type="checkbox"/>	Managing our natural resources	<input type="checkbox"/>
Agricultural education	<input type="checkbox"/>	Agricultural inputs	<input type="checkbox"/>	Developing the rural infrastructure	<input type="checkbox"/>
Agro-processing and marketing	<input type="checkbox"/>	NSCG (funds availed for developing infrastructures)	<input type="checkbox"/>	Building houses for farmers	<input type="checkbox"/>
Technology generation and dissemination	<input type="checkbox"/>	Access to finance	<input type="checkbox"/>	Promoting UPE	<input type="checkbox"/>
Treating farming as a business	<input type="checkbox"/>				

3.5 Are there any PMA planning processes in your parish? (Yes = 1; No = 2; Don't know = 3)

(These could be meetings to discuss planning, agricultural services, how to spend grant money) **If the answer is No or Don't know, go directly to section 4**

3.6 Have you, your spouse or any other family member participated in any of these planning processes? (Yes = 1; No = 2)  
**Provide a response for each of the three categories. If the answer is yes for everyone, go to 3.8**

H/h head	Spouse	Other

3.7 If no, why not? (Multiple response. Provide response for each column by ticking as appropriate)

	H/H head	Spouse	Other
Was not around at the time			
Was not interested			
Planning is done by leaders			
Not informed about the project			
Venue was not convenient			
Timing was not right			
Use of English only			
No allowance given			
Other (specify)			

**Go to Section 4**

3.8 Do you feel your views, that of your spouse or any other member of your household were taken into account? (Yes=1, No = 2)

#### 4.0 PROVISION OF SERVICES AND PUBLIC GOODS UNDER PMA

**We would like to find out if you have benefited from some of the programmes that have been put in place in your sub-county**

4.1 Are you a member of a farmer organisation? (Yes=1, No =2)  **If No, go to 4.3**

4.2 Who helped you form the farmer organisation? (tick one only)

NAADS	Donor Project	Government Agency	Farmer Organisation	Private	NGO	Other	No-one	Don't know

4.3 Is anyone else in your household a member of a farmer organisation? (Tick as appropriate)

Yes, spouse	
Yes, other male	
Yes, other female	
No	

#### 4A Agricultural Research and Technology Development

4.4 Have you, anyone in your family or your farmer group been involved in developing new technologies such as on-farm research trials?  
 (Yes = 1, No =2, Don't know = 3)

Household head	Spouse	Other family member	Farmer Group

4.5 Are the following easily available locally?

Improved seeds	
Improved cuttings	
Improved breeds	

Yes =1, No = 2

#### 4B Delivery of Agricultural Advisory Services

4.6 Have you received any agricultural extension/ advisory services as an individual?  Yes = 1, No = 2

4.7 Have you received any agricultural extension/ advisory services as part of a farmer group?  Yes = 1, No = 2 **If no, go to 4.12**

4.8 What are your main sources of agricultural technical information? (Rank, with 1 as the most common source)

Radio	Village meets	Neighbours	Market place	Extension workers	Churches/ mosques	NGOs/ CBOs	Newspaper	Produce buyers	Other

4.9 Which are the main organisations which have provided advisory services to you or your farmer group? (Multiple answers, tick as appropriate)

NAADS	Donor Project	Government Agency	Farmer Organisation	Private	NGO	Other	Don't Know

4.10 Have you or any member of your h/hold been invited to attend any training by any of these organisations?

H/h head	
spouse	
Other	

Yes = 1, No = 2  
**If no go to 4.12**

4.11 Has any member of your h/hold attended any training by any of these organisations?

H/h head	
spouse	
Other	

Yes = 1, No = 2

4.12 Are there any demonstration sites in your sub-county?

Yes = 1, No = 2, Don't know = 3  
**If no, or don't know, go to 4.14**

4.13 Have you visited any of the demonstrations?  Yes = 1, No = 2

4.14 Have you changed your agricultural practices because of anything you have been shown in training, or at a demonstration?  Yes = 1, No = 2  
*If yes, go to 4.15, if no, go to 4.16*

4.15 What were the reasons you changed practices? (Multiple response. Tick as appropriate)

Relevant Information	Easily Understood	Inputs Available	Low cost	Little extra work	Increase in yield	Good price	Other (specify)

*Go to 4.17*

4.16 What were the reasons you did not change practices? (Multiple response. Tick as appropriate)

Not relevant	Did not understand	Too much work	Too expensive	Could not find inputs	Inputs too expensive	Poor prices	Other crops better	Other (specify)

**4C Rural Financial Services**

4.17 Have you borrowed money for agriculture in the last 4 years? (Yes = 1; No = 2)  *If no, go to 4.19*

4.18 Indicate amount borrowed, purpose and the source of credit

Amount borrowed	Year	Credit source	Interest charged	Loan Purpose

4.19 Have you ever tried to get credit and failed?  Yes =1, No=2 *If no, go to 4.21*

4.20 Why did you want a loan? (Tick as appropriate)

To buy inputs	
To pay for labour	
To buy food	
To buy livestock	
To buy equipment	
To build	
Other	

4.21 Do you belong to a savings and credit group?  Yes =1, No=2

4.22 Does your spouse belong to a savings and credit group?  Yes =1, No=2

4.23 Do you have any savings?  Yes =1, No=2 *If no, go to 4.25*

4.24 Are they with a formal financial institution?  Yes =1, No=2

4.25 Do you know any person or organisation that can help you get credit? (Tick as appropriate)

Farmer group	
Savings group	
Financial extension worker	
Project	
Private individual	
Other	
None	

4.26 How far is it in kms. to your nearest financial institution?

**4D Promotion of Agricultural Marketing and Processing**

4.27 Which of the following commodities do you produce? Do you sell any of the output? Has the amount gone up or down over the last 4 years?

Give brief reason for changes

	Produce (tick which apply)	Trend in produce (increase=1, Same=2, Decreased=3, Newly planted=4)	Reasons for trend in produce	Sell (tick which apply)	Trend in sale (increase =1, Same=2, Decreased = 3)	Reasons for trend in sale
Matooke						
Maize						
Beans						
Groundnuts						
Cassava						
Rice						
Simsim						
Millet						
Sweet potato						
Irish potato						
Sorghum						
Peas						
Vegetables						
Coffee						
Vanilla						
Tea						
Tobacco						



	Produce (tick which apply)	Trend in produce (increase=1, Same=2, Decreased=3, Newly planted=4)	Reasons for trend in produce	Sell (tick which apply)	Trend in sale (increase =1, Same=2, Decreased = 3)	Reasons for trend in sale
Cotton						
Cocoa						
Chickens						
Eggs						
Cows						
Milk						
Goats						
Pigs						
Sheep						
Honey						
Fish						
Other (name)						

4.28 Who decides on the following activities? Tick as appropriate

Activity	H/h head	Spouse	Both
What to grow/produce			
What to market/sell			
What to buy for home use			
How income should be used			
Who should receive farm income			

4.29 What channels do you use to market your produce? Read out and rank them in order of importance as provided by respondent

Marketing channel/avenue	Ranking	Marketing channel/avenue	Ranking
Sell at farm gate		Sell to abattoir	
Sell in local market		Sell to contractor under production contract	
Sell to processing company		Other (specify)	
Transport to district market and sell there			

4.30 Do you sell through a farmer organisation?

Yes = 1, No = 2

4.31 How do you find out what market prices are? (Multiple response. Tick as appropriate)

Neighbours	<input type="checkbox"/>	Markets	<input type="checkbox"/>	Local leaders	<input type="checkbox"/>
Radio	<input type="checkbox"/>	Buyers/agents	<input type="checkbox"/>	Extension workers	<input type="checkbox"/>
Newspapers	<input type="checkbox"/>	SMS	<input type="checkbox"/>	Notice Board	<input type="checkbox"/>
				Other (specify)	<input type="checkbox"/>

4.32 Out of the following list, rank the 5 major constraints affecting the marketing of agricultural produce in your area (Read through and assign 1 to 5 as provided by respondent)

Constraint	Rank	Constraint	Rank
Poor road network		Weak farmer organisations/mobilization	
Inadequate market information		Lack of buyers/unscrupulous buyers	
Poor means of transport		Weak market organization	
Low quality and quantity of production		Inadequate extension services	
Inaccessibility of credit		Wide price fluctuations	
Lack and/or high cost of inputs		Labour constraints	
Inadequate and poor storage		Inadequate processing facilities	
Poor market infrastructure/network		Insecurity	
High cost of transport		Over-production	
Low produce prices		Poor quality of inputs	
Unscrupulous middlemen		Other	

**4E Agricultural Education**

4.33 Have you or a member of your household ever attended Functional Adult Literacy (FAL) classes?

If no skip to 4.36

4.34 Did you finish the course?

Yes =1, No = 2

	Attended	Finished
H/h head		
Spouse		
Other		

4.35 If yes, what were the main topics and who were the organizers?

Main topics	Year attended	Organisers

4.36 Have you or a member of your household ever attended training at a DATIC/ DFI/ARDC?

If no skip to 4.39

4.37 Did you finish the course?

Yes =1, No = 2

	Attended	Finished
H/h head		
Spouse		
Other		

4.38 Have you used anything you learned in this training?

Yes=1, No=2

4.39 Do the young people in the household learn about agriculture at school?

Yes=1, No=2, Don't know=3

If no or don't know, skip to 4.41

4.40 Do they ever tell you/ teach you what they are taught about agriculture?

Yes=1, No=2

**4F Sustainable Natural Resource Management and Use**

4.41 Do you have access to controlled water for agricultural production?  Yes=1, No=2 *If no, skip to 4.43*

4.42 What kind of facility, and when was it developed?

	Tick those that apply	When developed
Small-scale irrigation		
Government irrigation		
Dam		
Valley Tank		
Rainwater harvesting		
Stream diversion		
Fish pond		
Other		

Code to "when developed"  
In the last 12 months=1  
Between 2000-2003=2;  
Before 2000=3

4.43 Have you, or members of your household, or farmer group received any assistance to help with the following issues, and, if so, from whom? (tick where applicable)

	H/h head	H/h member	Farmer group	Name of organisation that provided assistance
Soil erosion				
Poor soil fertility				
Pest control				
Poor grazing				
Deforestation				
Wetlands preservation				

**4G Physical Infrastructure**

4.44 Do you think the roads in your area have improved, or not over the last 4 years? (Tick as appropriate)

	Improved	Same	Worse
District roads			
Community roads			

4.45 Is there a rural electrification scheme in your sub-county?  (Yes=1, No=2, Don't know=3) *If no, or don't know, skip to 4.47*

4.46 Do you expect to have access to it?  (Yes=1, No=2, Don't know=3)

**4H Other comments**

4.47 Do you have any other comments on the PMA?

**5.0 HIV/AIDS AND AGRICULTURE**

Finally, we would like to discuss with you how HIV/AIDS has affected agricultural activity in your area.

5.1 How is the HIV/AIDS problem in this village? (tick one as appropriate)

Not very much	About the same as most villages	Worse than other villages
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5.2 Do you feel it affects how much agricultural activity there is in the village?  Yes =1, No=2

5.3 Is your own household affected by HIV/AIDS?  Yes =1, No=2 *If yes, go to 5.4  
If no, go to end of questionnaire*

5.4 How? (tick as appropriate)

Illness			Death		
Adult male	Adult female	Child	Adult male	Adult female	child
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**THANK YOU FOR YOUR TIME AND THE INFORMATION GIVEN.  
THANK YOU VERY MUCH INDEED.**