BASELINE SURVEY REPORT
ACCESS TO LAND AND QUALITY SEEDS ON FOOD SECURITY IN TESO SUB REGION

PREPARED BY
FACILITATION FOR PEACE AND DEVELOPMENT (FAPAD)

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OBJECTIVE OF THE STUDY

The main objectives of the study was to identify how limited access to land and limited access to quality seeds have contributed to food insecurity among the small scale farmer households in Teso sub region. The study targeted specifically; youths, Women and disable persons in the region.

SPECIFIC OBJECTIVES

1- To identify the level at which limited access to land and limited access to quality seeds has contributed to food insecurity among the small farmer households in Teso sub-region, specifically looking at the Youths, women and disabled persons.

2- To assess the roles of women, youth and disable persons in promoting food security at the household level.

3- To assess the challenges small farmer households face in acquiring land and quality seeds, leading to food insecurity in Teso sub region.

This information is intended to help the researchers come up with suggestions that may help policy makers arrive at ways of helping women, youth and disable persons in accessing land and quality seeds which will in turn enable them produce more food and become food secure.

TARGETED PERSONS/RESPONDENTS IN THE RESEARCH:

The respondents targeted were 240 Farmers spread in ten sub counties of Gweri, Arapai, Labor, Bugondo, Asuret, Olio, Kadungulu and Kamuda of Soroti and Serere districts. In each farmer group, the study targeted; one PWDs, one youth, one woman, one woman headed household, and one youth headed household per group. The latter two were chosen depending on their availability in each of the groups.

STRATAGEM USED

A planning meeting was conducted to develop the evaluation tools as well as to agree on the evaluation schedules. This exercise was conducted in the board room of PAG Soroti to ensure that a free and fair environment was created for sound discussions.
DURATION
The exercise was conducted for 10 working days, for quantitative and qualitative survey, and for the actual evaluation, data cleaning, analysis and reporting.

APPROACH AND METHODOLOGY
The study employed both quantitative and qualitative methods. The quantitative method was used to collect data from farmers comprised in farmer groups; which also included Youths, Women and disable persons who are engaged in small scale farming in Teso sub-region. The qualitative approach was used to provide insights of the small scale farmer groups and other stakeholders in regards to their awareness to access to land and quality seeds, leading to food security.

METHODS
The following methods were used in undertaking the study:

i) Key Informant Interviews: Interviews were held with key stakeholders in different sub counties and at district levels, and included; Agro input dealers, technical persons at district and sub-county levels, Regulatory Agencies such as UNBS, Municipal Authorities, Serere Agricultural Research Center and Police. The list of the key informant respondents interviewed is attached in Annex 1.

ii) Focus group Discussions (FGDs): Four FGDs were organized with farmers groups in different sub-counties of; Bugondo, Asuret, Arapai and Olilo, targeting women groups, Youth groups, Disable groups and a group of women, youth and disable combined together. Each FGD was attended to by at least 5 people who were selected by the research team with the help of TEDDO and PAG Soroti. The list of FGDs participants is attached in Annex 2.

iii) Opinion Leaders: Interviews were held with two opinion leaders from different sub-county of Bugondo, Opiyai Village and Soroti municipal. The opinion leaders were selected by the research team to get their views on access to quality seeds and land. The list of the opinion leaders are attached in Annex 3.
iv) Document Review: This included comprehensive literature and statistical review to capture information on legal policy and institutional frameworks on the implementation of quality seeds and access to land. The study made use of policy documents and other publications from Serere Agricultural Research Center and SEATINI. The lists of documents reviewed are listed in the references.

v) Quantitative Survey: In addition to the above, a survey which targeted farmers' groups was conducted in the selected sub-counties of Soroti and Serere. Small farmer groups in the sub-counties of Gweri, Arapai, Labor, Bugondo, Asuret, Olio, Kadungulu and Kamuda of Soroti and Serere districts were selected because of their direct involvement in farming. The list of the main farmer groups interviewed are attached in Annex 4.

**SCOPE AND COVERAGE**

The study was conducted at district level in the sub-counties of Gweri, Arapai, Labor, Bugondo, Asuret, Olio, Kadungulu and Kamuda of Soroti and Serere districts. The selection of Soroti and Serere districts was purposive, based on the following:

- a- The number of farmer groups organized in the ten sub-counties of the two districts
- b- Soroti and Serere are among the districts where farming is practiced in small groups
- c- Record of past active engagements with PAG Soroti and TEDDO

**SURVEY ORGANIZATION**

Survey instruments: A structured key informant interview questionnaire, survey questionnaire and focus group discussion guide were used to collect the relevant data. The draft tools were pre-tested before the actual data collection exercise. After that the chronology and appropriateness of the questions on the first version of the tools was revised in order to collect the rightful information from the respondents.
SAMPLE SIZE
The study conducted interviews from 240 respondents (farmers) in the sub counties of; Gweri, Arapai, Labor, Bugondo, Asuret, Olio, Kadungulu and Kamuda of Soroti and Serere districts. Data was collected during the month of November 2016. A research team composed of eight people gathered data by use of face to face interview (qualitative data) and structured questionnaires (quantitative). The qualitative data was analyzed using the content analysis procedure where verbal data was categorized for purposes of classification and summarization. Qualitative data is presented as text analyses and explanations of the responses. Data from document reviews is also presented as referenced texts. For any cases where tables and graphs from any of the document reviews are presented in the report, the source is duly acknowledged.
PRESENTATION OF RESULTS

SECTION A: BACKGROUND INFORMATION OF THE RESPONDENTS

A total of 240 farmers were interviewed with the participation percentages of 55% females (132) and 45% (108) males for the highest to the lowest respectively. It is shown in the figure below.

*Figure 1: The participation by gender*

The above figure shows the percentage participation by sex of participants in the base line survey, taking into account the 240 respondents interviewed.

As per the indications above, it means that there are more female farmers than male who participated in the survey. It is also an indication that female farmers are more organized in the districts as far as group farming is concerned than the male counterpart.
The distribution of the respondents in the sub counties are summarized in the table below;

**Figure 2: Distribution of Respondents by sub-county**

![Bar chart showing distribution of respondents by sub-county](image)

**Source: Survey data**

The figure above clearly shows that Gweri had more numbers of respondents, followed by Arapai, then Labor, Bugondo, Asuret, Oliolo, Kadungulu, Kamuda and finally Soroti. It is not only about number, but it also indicates how organized farmers groups are in each sub-county. There could be very many farmers in Soroti, for example, but because they were not very organized, only a few could be met and interviewed.

**Figure 3: The distribution of respondents by family headed category.**

![Bar chart showing distribution of respondents by family headed category](image)

**Source: Survey data**
The respondents from these farmer groups were sectioned into five categories and the percentage distribution of the respondents were; Male headed household 173 (72.08%), Female headed household 47 (19.58%), Youth headed household 14 (5.83%), PwD headed households 5 (2.08%) and Child headed households 1 (0.42%). It is clearly seen that male headed household dominates the category, followed by female headed, then youth, PWDs and finally child headed. This also indicates that men still dominates control of family and may imply that landownership is mainly in the hands of male adults. The youth, PWDs and child headed households comprise of both male and female. In these categories, the challenges of land ownership and access to quality seeds may be huge, giving rise to food insecurity which leads to inability to feed the members of the families.

*Figure 4: The respondents’ age group distributions were as in the chart below:*

![Bar chart showing age group distributions](image)

*Source: Survey data*

From the above chart, 67.5% of the respondents were 33 years and above, 15% 28-32 years, 9.17% 23-27 years, 7.08% 18-22 years and 1.25% 13-17 years.

Levels of education varied amongst the respondents with those who stopped in primary taking 60.89%, secondary 25.98%, no level of education 8.94%, tertiary institution 3.91%, and a degree 0.28%. According to the results, the issue of food insecurity does not differ between adults and children. All age groups indicated above include youth, male and female adults, and PWDs.
Levels of education varied amongst the respondents with those who stopped in primary taking 59.58% (143), secondary 29.91% (55), no level of education 9.58% (23), tertiary institution 5.41% (13), and a degree 0.42% (1). The figure shows very clearly that most farmers are educated only to primary level, followed by secondary level; followed by those who have not been to school at all, tertiary and finally other levels. It is also a clear indication that people who have attained higher education do not participate much in farming. They could be formally employed, or are doing farming using other resources (money: employ people to dig and pay them).

**Table 1: Marital status of respondents**

<table>
<thead>
<tr>
<th>Number of children range</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 and above</td>
<td>81</td>
<td>33.75%</td>
</tr>
<tr>
<td>3-4</td>
<td>53</td>
<td>22.08%</td>
</tr>
<tr>
<td>5-6</td>
<td>44</td>
<td>18.33%</td>
</tr>
<tr>
<td>1-2</td>
<td>43</td>
<td>17.92%</td>
</tr>
</tbody>
</table>

*Source: Survey data*
Marital status of the 240 respondents was investigated where 85% were married while 15% were not married. 92.08% (221) of the respondents had children while 7.02% (19) were without children. With the number of children that the farmers have, majority having above seven children, it confirms the responses through qualitative survey that land has become small to produce food which is enough to feed the growing number of children each family has. One disable person said that the population has overgrown and cannot be supported by the few land available. Another disable added that “High population growth, i.e. one family having 10 children with only 6 gardens for food production hence food insecurity”. Limitation of land due to high population growth was mentioned many times by the respondents, implying that the number of children per family continues to threaten fight against food insecurity.

Of the 92.08% respondents having children, the distributions are summarized below.

Of the children available in the farming households, 43.75% were farmers, 4.58% were traders, 14.17% were civil servants and 12.5% were teachers, students constituted 17% while 8% were young children. The number of children who are farmers is very high. These children will also produce more children, hence more pressure on the little available land.

<table>
<thead>
<tr>
<th>Years lived in the area</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 12 years</td>
<td>173</td>
<td>71.08%</td>
</tr>
<tr>
<td>9-12</td>
<td>15</td>
<td>6.25%</td>
</tr>
<tr>
<td>6-8</td>
<td>13</td>
<td>5.42%</td>
</tr>
<tr>
<td>1-5</td>
<td>39</td>
<td>16.25%</td>
</tr>
</tbody>
</table>

*Source: Survey data*

The table above shows that over 71.08% (173) have lived in the area for over 12 years, 6.25% (15) 9-12 years, 5.42% (13) 6-8 years and 16.25% (39)1-5 years. This confirms that most participants use traditional land that they inherit. Others could be there as a result of buying the land and settling on. The longer they lived in the area also confirms that more children are born there, giving rise to more people who will need land in future, hence increasing more demand for land for cultivation. Since land is
static, increase in population means more pressure on land and complications in the processes and access.

SECTION B: LAND ACCESS AND OWNERSHIP

84.17% of the land used for farming is owned by the households while 15.83% of land used for farming is not owned by the farming households. Of the 94.69% owning land, 1.25% is owned by CHH, 12.09% by YHH, 10.03% by PWD, 31.6% by FHH and 39.72% by MHH.

Asked how they acquired the land they owned, 81.56% inherited the land, 21.23% purchased the land while 18.99% were given land. The details of how land was acquired by the various categories are summarized in the table below;

<table>
<thead>
<tr>
<th>Land acquisition</th>
<th>Total frequency</th>
<th>Chh</th>
<th>Yhh</th>
<th>Fhh</th>
<th>Pwdhh</th>
<th>Mhh</th>
<th>Total percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inherited</td>
<td>157</td>
<td>0.0%</td>
<td>8.22%</td>
<td>17.19%</td>
<td>2.5%</td>
<td>37.51%</td>
<td>65.42%</td>
</tr>
<tr>
<td>Given</td>
<td>5</td>
<td>0.01%</td>
<td>0.07%</td>
<td>1.03%</td>
<td>0.70%</td>
<td>0.9%</td>
<td>2.71%</td>
</tr>
<tr>
<td>Purchased</td>
<td>50</td>
<td>0</td>
<td>2%</td>
<td>5.79%</td>
<td>2%</td>
<td>11.04%</td>
<td>20.83%</td>
</tr>
</tbody>
</table>

Source: Survey data

For those who do not own land, their terms on how to use the land were assessed in which 6.2% use cash pay for hire, 4.13% use communal rights and 5.5% use free will offer.

Asked whether land is readily available, 80.42% of the 240 respondents answered yes and only 19.58% said land is not readily available. Of the 80.42% that said land is readily available, 1.6% were youth, 2.6% were PWDs, and 16.1% were women while 60.12% were men. The 19.58% that said land is not readily available comprise of 5% youth, 3% PWDs, 4.5% women and 7.08% were men. These are clear indications that land is available, but how to access it is the biggest problem. With more men saying that land is readily available, it shows that men have more access to land than the women, youth or disable persons. The youth have complained bitterly about inability to access and yet they believe to be more energetic to till land. It is also noticed that the youths seem to attract less attention (0.07%) in terms of sympathy and are given little land to cultivate. This could be because of lack of trust or they could be orphans who have no rights over land left after death of their parents.
The available land owned by the farming households interviewed is put into various uses by the farming community as: 72.25% till whole of their land, 12.25% till only part, 1.67% hire part and 3.33% others (keeping animals = 1.49%, given to neighbours = 0.28% and fallow = 1.56%).

11% of the youth interviewed till whole of their land, 43% of women interviewed till whole their land, 13% of the PWDs interviewed till whole their land and 14% of the interviewed men also till whole their available land. The high percentage (75.42%) of the interviewed households cultivating all their lands is linked to shortage of available land for production.

There were however complains about land acquisition problem by some farming households where the following challenges were highlighted in the order of their seriousness as in the table bellow:

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>High cost</td>
<td>181</td>
<td>75.42%</td>
</tr>
<tr>
<td>Age</td>
<td>20</td>
<td>8.33%</td>
</tr>
<tr>
<td>Gender bias</td>
<td>52</td>
<td>21.67%</td>
</tr>
<tr>
<td>Disability stereotype</td>
<td>10</td>
<td>4.165%</td>
</tr>
</tbody>
</table>

*Source: Survey data*

According to the survey, only 20.4% of the respondents had challenges in land acquisition with greatest challenge being high cost followed by gender bias, age and disability stereotypes respectively.

Eleven youth out 15 complained mainly about high cost of land, only two PWDs out of 5 complained about disability stereotype and high cost in that order while only thirty women out of 47 complained about high cost, gender bias and age.

22.08% of the respondents admitted to have presented these challenges before local leaders and political actors while 77.92% did not make any presentation to any authority.

Of the 22.08% that presented their challenges to authorities, only 7.08% were satisfied with responses offered by those authorities while 15% were not satisfied with the responses.
received from the authorities. These included 7 youth out of twenty that presented, two out of 5 PWDs that presented and the twenty four female that presented were not satisfied with the responses provided by the authorities.

The 240 respondents were asked if they have the capacity to demand for appropriate action from government authorities, only 59.58% had the capacity to demand for appropriate action. While 40.42% did not have the capacity to demand anything from government authorities among them are the 65% of youth, 24% of PWDs and 50% of women.

The study established that the municipal authority does not have direct authority to monitor access to land. When asked to suggest ways of increasing access to land, the authority had no positive response. One only commented that “Land issue is very tricky because some cultures are still very strong that women, youth and in some cases PWDs do not directly own land thus less control and use”.

However, opinion leaders felt that cultural leaders can play big roles when it comes to the issue of accessing land and distribution. They feel that land must be distributed equitably. Women are not allowed to own land and yet they are more concerned about food availability at household levels than men. It is also felt that local government must enact laws to expedite issues of land within their jurisdiction.

Another opinion leader pointed out that the issue of access to land has reached an alarming rate, and it has led to serious food insecurity in Teso sub-region. Cultural leaders still remain key personalities when it comes to resolving the issue of accessing and distribution of land to family members. “It is true that land must be distributed equitably irrespective of sex or gender, especially to the vulnerable people in society (women, youths and disable persons)”, remarks of one respondent. It is clear through open discussions that women are not allowed to own land their willingness to sacrifice for their households compared to their male counter parts. At the same time, the views that LC1, clan leaders and family heads can play big roles on the issues of land accessibility are important and must be taken note of. These issues raised tend to confirm
that food insecurity is very prevalent in Teso sub-region, and the blames go to failure by government agencies to put in place and effectively implement laws.

Youth are reported to raise a lot of concern on access to land for cultivation. They want land for farming, but unfortunately only very little is given to them by parents. The only land accessible by youth for farming is the one to be inherited, and that depends on the type of elders one has. The Youth therefore are seen to complain that their parents do not have enough land to share with them. “The land is free but it is restricted by men and their brothers”. One youth from Obittio Village-Arapai sub-county remarked.

On the other hand, women say their husbands even have no sufficient land, but still go ahead to sell the little available land out leaving them with nothing to cultivate on. Respondents stated that traditionally clan leaders protected them against land grabbing, but currently they are in the lead committing the same vice. Because of little land available, they keep rotating the same piece of land for cultivation. One woman lamented that “We only have gardens and not land”. This means that they cannot afford to grow enough food because of small pieces of land available for farming. Just like in Lango sub-region, the control of most land in the rural areas is still in the hands of traditional leaders. Clan leaders do try to help when there are land wrangles, but still women, youth and disable persons do not benefit from such attempts. It is an assumption that they are the ones who can prevail on accessibility to land. On the other hand, the local government is expected to enact laws that would allow for easy access to land in its jurisdiction. To women, they believe that it is the only fair way for them to access land. It is also assumed that through that process, youth and disable persons would not face a big challenge in accessing land.

The law enforcement agency agreed that they do receive cases of land. “

Yes we received many land cases in the last six months and these cases were basically land grabbing and denial, where a man denies his own brother a portion of land inheritance given by their late father. While the other nature of cases involves the heirs grabbing land from widows”.

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This confirms the voices of the youth that relatives deny them access to land after the death of their parents. Women were also clear on how they are treated by in-laws after the death of their husbands. The survey realized that sometimes land may be there for all categories of people to use, but some greedy relatives take control over them. As a result, the youths, women and the PWDs are disadvantaged on access to land, therefore leaving with no option but to either borrow or rent for a short time.

Political actors agreed that there are problems of accessing land in Teso sub-region. The fact that people are either hiring land or being given to use for a short time for farming is a very clear testimony. Women are more affected, followed by Youth and finally disable persons. The land for farming in Teso sub-region is mainly acquired through customary tenure. Most people use the customary or traditional land available. Others hire at a lower rate from people who own or it is donated to them to use for a specific period of time (not too long as the survey found out). This shows that such pieces of land are not large enough to provide for production of enough quantities of food for family consumption. Those people who hire land depend on how much money they have, which would limit farming in large scale to remain food insecure. Leave alone the issue of money, sometimes they hire such land very far from where they live, making it difficult to harvest in time as the crops may either be destroyed or stolen. All these make it difficult to achieve food security by the community.
SECTION C: SEEDS AND SEED QUALITY

Source of Seeds
The 240 respondents were asked about where they acquired their seeds from and the responses revealed that 70% acquired from open markets as compared to 11.25% that acquired from registered suppliers. Fifteen point eight percent (15.8%) of farmers got seeds from fellow farmers and 1.56% from government programme (Operation Wealth Creation). Majority of youth acquire seeds from open market, followed by own saved seed and registered input dealers with only 5 that got seed through government programmes. The youths who get seeds through government programmes (operation wealth creation) complained that the seeds do not germinate. “We access the seeds from government programmes but they do not yield”. One youth remarked. This therefore means that the seeds given free through government programmes are not actually quality seeds. No wonder some youths say they don’t report issues on poor quality seeds which do not germinate, simply because they are from the government and given free. “Free things are very expensive” remarked one youth respondent.

Most of the PWDs interviewed acquire seed from open market, own saved seeds and registered input dealers respectively. They also access seeds from other people who have had good harvest. As one PwD respondent said “I get from other farmers after hearing and observing performance from their gardens”. Another one added that they also get seeds through the distribution from government, NGOs and research stations. They however could not say which NGOs and research stations, or whether they are given free or they buy. Much as such organizations are mentioned it is important to know so that follow-ups can be made in case of any query.

The women interviewed acquired most seeds according to majority from open market, peer farmers, own saved seeds with only few obtaining seeds from registered input dealers respectively. Quoting from what some say, “We buy from the research institute (NASAARI) and the seed suppliers e.g. Acila enterprises”. They did not know if such open market seed dealers are registered or not. It looks as if they only buy what they find being sold as seeds.
These issues of how to access quality seeds as expressed by the different participants above show that they all do not have stable places of accessing quality seeds. They actually do not know where to acquire quality seeds. This is a danger to food security as most farmers will be getting poor quality seeds, leading to low yields or production of crops for feeding the community. In short, the seeds they acquire are actually not recommended quality seeds.

**Understanding of Quality Seeds**

Farming households were asked about their understanding of the word quality seeds where, 55% of the youth interviewed did not understand what quality seed is while the remaining percentage understood it in terms of good harvest and germinability. Some had the following to say “I also understand good quality seeds as seeds that do not rot; are medicated seeds; are always parked and well sealed; take a short time of germination; are high yielding; and resistant to diseases”. All these responses varied from one person to another, meaning that they all do not have a uniform understanding of what good quality seeds are.

The majority of the PWDs interviewed understand quality seed by high price, high germinability, and good harvest respectively with only a few without any knowledge of quality seeds. Some different understanding of quality seeds were stated as follows. “One uniform color, size, advertised seeds on radio and appealing to eyes; From good harvest; Uniform germination, growth, must not be mixed varieties and harvest; Must be able to mature within one season and mature in time; Good germinability of about 90%; Having packing date and expiry date valid up to date labels; Having seed variety name and manufacturer’s name.”
For the majority of women, quality seeds are those seeds which have high prices; good packaging and good harvest respectively. Eleven (11) of the interviewed have no knowledge of what quality seed is all about. Equally noted is the fact that up to 11% of the households do not know what quality seed is meaning that they are mainly planting grains instead of seeds hence low productivity and household and household income.

It is agreed by one District Agricultural Officer of Serere that poor quality seeds are everywhere. He said that he has been screening seeds supplied to farmers in Government programs and he had cases where poor quality seeds were rejected by the supplier and reported to the relevant political offices like Chairperson LC V.

The seeds given free to farmers are believed to be of poor quality. That makes it to be common in every community. The question which then comes to many minds is that who authorizes such people or organization to give free unregulated seeds? So the problems of poor quality seeds are being compounded by the people who disguise as having sympathy with the poor and innocent farmers. Because the poor quality seeds are being given free, no one seems to care to report such cases. This normally affects their productivity and household income, leading to food insecurity and low standard of living. It is clear indications that small scale farmers;
comprising of women, youths and disable persons are not aware of where to access quality seeds from.

The respondents were asked if they have any forum/platform to raise the problem of poor quality seeds supplied to them and their responses were;

- Majority of youth said through community meetings and local council meetings while only two of them did not know where to report.
- For the PWDs, all the respondents reported through community meetings and local council meetings.
- For women, majority reported community meetings, followed by those who do not know where to report with only six cases of local council meetings.

Important to note is that up to 35.83% of the overall respondents did not know where to raise the problems of poor quality seeds supplied to them. It therefore means that many of these small scale farmers are either not aware of their rights or are ignorant of the laws. The 35.83% indicated above is not a small number, and their having knowledge of what to do when they buy poor quality seeds would make a big difference when they acquire good quality seeds and plant, then eventually get good yields, hence improve on food security.

One opinion leader from Soroti Municipal Council said “We have always reported such cases to higher authorities and they have promised to handle the situation. We have also asked the government to be sending seeds at the right time of planting. We have also caused meetings to sensitize our people on good quality seeds”. According to this opinion leader, it looks as if the government authorities are informed, despite not taking any action. This really frustrates the committed small scale farmers.

When asked if they would be willing to join other fora to articulate farmers concerns, 11% said they are willing. This is a small number, and it shows that the farmers have not appreciated the strength of collective efforts and to learn more from others. This therefore remains a factor contributing to food insecurity in the region. They probably do not understand the importance
of joining such forum, a thing that needs to be encouraged. Worse still, only 2% of the respondents have knowledge on how to advocate for improved seeds.

**What Political Actors Say**

The different political actors who were interviewed agreed that there are challenges in accessing quality seeds in Teso sub-region, (both Soroti and Serere districts). Many farmers are still borrowing seeds from friends or using seeds that are stored locally for planting. Avery few are buying from recommended seed dealers. The survey learnt that women in particular are more affected, followed by Youth and finally disable persons. Women are believed to depend more on donated seeds, and are also considered to be harder working, and therefore need to access quality seeds. One councilor LC3 of Labor sub-county felt sympathetic with and said that they should be empowered to acquire quality seeds faster than men. A secretary to youths in Labor sub-county suggested that both youth and women should be considered first when it comes to seed distribution. The disable persons are said to have ability to do farming, but unfortunately, they have no access to quality seeds. The responses above need to be taken note of, otherwise it becomes very difficult to attain food security.

Some political actors agree that there are some by-laws put in place at local levels to ensure that there is food security in the community. At LC1 level (Owolo village-Asuret sub-county), it is stated that the by-law is quite effective except that it is dependent on natural occurrences i.e. natural rainfall and sunshine. This means that if no such occurrences take place the by-law will not be implemented! In addition to the above, the survey noted that the by-laws are not being effectively implemented by LC1 offices. However, the survey also discovered that the political actors made contradicting statements, with some denying any by-law in place. At LC3 level, it is recognized that the by-law is in place and it prohibits farmers from selling food. At LC1 levels, many do not know about the by-laws and yet they are supposed to be the implementers and first contacts with the community. This means that LC1 offices may need more sensitization on such by-laws.

Many suggestions were put forward by different political actors, and all seem to be valid, but the will to implement them is what needs to be focused on. It is true that suggestions such as;
growing of both commercial and food crops separately, sensitization of men on the importance of women owning land, giving women rights to access land with little difficulty, a need for the government to source and register the qualified farmers to supply seeds to fellow farmer, and many others are very valid, but the success will depend most on the processes leading to access to land and quality seeds. The farmers themselves must accept to change their mindset. Because of such unresolved issues: the issues on access to land and quality seeds will remain a barrier to attain food security in Teso sub-region.

**Municipal Authority**

The authority does not have any direct by-law on quality seeds and access to land, but only relies on the ordinance prepared by the district, of which Serere does not have one. However, the office tries to educate the farmers on matters regarding food security and also use the radio to cover the entire community sharing food security issues and also encouraging them to take farming as a business. The office does not have any idea about the seed dealers being issued with trading license. It is also not clear if the office has any mandate in addressing poor quality seeds sold in the market. The district commercial officer said “It’s not clear because my office does not have any guiding document to execute such duties”.

This is already a sign of frustration or lack of will to allow farmers to access quality seeds and eventually reduce on food insecurity. But by trying to sensitize farmers on food security, is an indication of some positive move. But what is not clear is the outcome of such sensitization. There is a need to be specific on how the farmers benefit from such sensitization and its impact on the community. The fact that the commercial office at the district does not have direct authority to monitor access to quality seed supplies becomes a great concern. The district has come up with an ordinance to regulate access to quality seeds. This means that the authority has almost no power over the issue of quality seeds sold by seed dealers in its jurisdiction.

The survey however learnt that NASAARI-Serere came up with another measure to promote access to quality seeds. Much as they do not have any direct support, they play a role by promoting seed multiplication in the communities through identification of farmers who already have enough land then they use their land for seed multiplication that can benefit other
farmers in the community with quality seed or variety. What is not known however is whether these seeds are tested to confirm the level of their quality?

**Law enforcement authority**

The study confirmed that cases of counterfeit seeds have not been reported to police. Incase this kind of case is reported, the police only play the role of maintaining peace and order, hence protecting the people and their property. The police however have Acts that help farmers against exploitation. But what is not clear is how and when the police play the role maintaining peace. The question to ask could be; when farmers are fighting for land? Or when farmers are fighting fake seed sellers/traders?

The fact that the police have no records about counterfeit seeds indicates that the small scale farmers do not know where to go in case they buy poor quality seeds. It could also imply that they are not aware of their rights as farmers on access to quality seeds. But in all, it could also mean that the police have not sensitized the farmers on what to do when they are sold poor quality seeds. They are expected to work with local leaders and reach the community, in this case small scale farmers.

**Opinion Leaders**

Opinion leaders agreed that the issues of poor quality seeds are common occurrence in Teso sub-region. The survey learnt that reports have been made to the respective government authorities about complains on poor quality seeds but unfortunately no action has been taken. One opinion leader explained “We have always reported such cases to higher authorities and they have promised to handle the situation; we have also asked the government to be sending seeds at the right time of planting; we have also caused meetings to sensitize our people on good quality seeds”. It is actually stated by three opinion leaders the survey met that poor quality seed issues are very serious in the region. This has led to poor yields of crops and lack of food for domestic consumption, hence food insecurity. The whole blame, the farmers say goes to responsible authority assigned to work with farmers.
SECTION D: FOOD AVAILABILITY

The respondents were asked about the number of bags per crop produced per household per year and the responses in the table below were provided by the farming households interviewed.

**Table 5: Number of bags produced per household**

<table>
<thead>
<tr>
<th>Bags ranges per year</th>
<th>Percentages of farmers producing various crops per year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maize</td>
</tr>
<tr>
<td>9 and above</td>
<td>16.25</td>
</tr>
<tr>
<td>7-8</td>
<td>6.67</td>
</tr>
<tr>
<td>5-6</td>
<td>8.33</td>
</tr>
<tr>
<td>3-4</td>
<td>11.67</td>
</tr>
<tr>
<td>1-2</td>
<td>22.5</td>
</tr>
<tr>
<td>Less than 1</td>
<td>34.58</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Survey data*

From the table above, 65.42% of millet farmers produce less than one bag per year as compared to the 34.58% of maize and 4.58% of cassava farmers respectively. This is contrary to the 2.5% of millet farmers, 16.25% of maize farmers’ and 52.92% of cassava farmers producing nine bags and above. This means that more focus is needed on cassava production to increase number of bags produce per year per household not forgetting improving on maize and millet production which is already at some level but still below average. Farmers also need to be sensitized on what are food crops and cash crops. They are concentrating on production of cash crops that food crops. At the same time, the food crops they produce is sold and not kept for consumption.
It is also noted with concern that some of the households do sell some/whole of what is produced per year and the following responses were obtained from respondents;

43.75 % of maize farmers, 51.25% of millet farmers and 40.42% of Cassava farmers did not sell what they produced while the remaining percentages sold some of what they produced.

It was positive to note that some of the households do reserve some/whole of what they produce per year for household consumption as seen below;

Only 23% of maize farmers, 20.42% of millet farmers and 37.5% of Cassava farmers leave whatever they produce for home consumption while the remaining percentages at least sell some quantity of whatever they produced. This kind of attitude must be encouraged as the trend could lead to more farmers retaining what they produce for home consumption than for selling. The more food is kept or stored for domestic consumption, the more food secure the community becomes.

An attempt was made to know how often respondents buy food from the market to feed their homes and their responses were;

- Majority of youth said they often buy food from the market.
- All the five PWDs interviewed said they sometime buy food.
- Majority of women said they that often buy, followed by those that rarely buy and those with only one woman buying food most often and four who do not buy food completely.
- All the PWDs interviewed were buying food from the market unlike the youth and women where some do not buy food from the market.

The reason why majority of youth and PWDS buy food is because they cannot access land for cultivation. One youth said “Most of us have little food for our families because many households cultivate in small pieces of land”.
To sum it all, most farmers buy food but at different intervals. Though women do buy food at times, the research confirmed that they are the ones who make a lot of efforts to produce food and save for domestic consumption, irrespective of the size of the available land for cultivation. Interesting to note is that, the food produced by the households cannot meet household food demand that is why there is a lot of buying of food from the market by the households that participated in the survey. The major reason for this is either due to limited access to land or lack of access to quality seeds.

**FIGURE 1.6: SOURCES OF FOOD CONSUMED BY HOUSEHOLDS**

![Figure 1.6: Sources of Food Consumed by Households](image)

Source: Survey data

Food consumed by the households was obtained from different sources and presented in the figure above and also explained below.

213 (88.75%) from harvest, 145 (60.42%) from markets, 19 (42%) from donations, 3 (7.9%) trade labour and 1 (1.25%) from others sources respectively. The fact that there are still certain percentages of people obtaining food through labour, donation and other sources, and not from their own harvest, is a clear indication that food security is farfetched from reality. The above category of people mentioned above must be got rid of.
In line with food security problems in the communities, farmers were asked about the number of person(s) who approached them because they had no food in the last six months and the responses were:

- All the youth reported that they were approached 7 and above times.
- PWDs reported that they were approached mostly 4-6 times with only one reporting not being approached
- Women reported that that they were mostly approached 1-3 times while some were not approached completely.

From the frequency of approach it’s clear that majority of the farming households are food insecure and something needs to be done urgently with attention drawn to the relevant authorities. Being approached seven times for food is an alarming rate for a village community. Not only that, by approaching youths or disable persons for food is a clear desperation of the community for food need. These are evident enough for gaps that have been left out to be filled as a way forward to achieving food security in the sub-region.

Asked whether they have registered official complains to the relevant authorities to address the issues of food insecurity.

Majority of the youth did not raise the issue to any relevant authorities with only very few raising their concerns. This is also true for the PWDs while for women, about 70% did not raise this issue to any relevant authorities as opposed the 30% that raised the issue. This may explain the fact that most respondents were only educated to primary level. At this level of education, experience may work best without knowledge of one’s rights. It also confirms that women may comprise the biggest percentages of respondents who have not attained any level of education.

About 40% of youth that raised the issues to relevant authorities were unsatisfied with responses provided by those authorities. The PWDs that raised the issue were unsatisfied with responses provided by those authorities while about 19.7% were completely unsatisfied with the responses got from the authorities with only two youth reporting that the responses were satisfactory. These responses explain that the offices delegated to help the small scale farmers’
access to land and quality seeds are not doing their best to meet their expectations. One youth said “We have been left alone with our problems and nothing has been done to help us out of our challenges”. With this kind of attitude, it will take long for food security to be attained in the sub-region.

An attempt was made to know if the households are satisfied with the services/support received from extension workers in the last six months where only 1 (0.42% said they are very satisfied compared to the 2.08% who were completely unsatisfied as in the table below;

<table>
<thead>
<tr>
<th>Satisfactory level</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsatisfied</td>
<td>61</td>
<td>25.42%</td>
</tr>
<tr>
<td>Moderately satisfied</td>
<td>36</td>
<td>15.0%</td>
</tr>
<tr>
<td>Completely unsatisfied</td>
<td>5</td>
<td>2.08%</td>
</tr>
<tr>
<td>Very satisfied</td>
<td>1</td>
<td>0.42%</td>
</tr>
</tbody>
</table>

Source: Survey data

Above 60% of youth interviewed were very satisfied with extension services provided to them while the balance is shared among those that moderately satisfied, unsatisfied and completely unsatisfied.

32% of the PWDs were very satisfied with extension services while 28% were moderately satisfied and the rest were either unsatisfied or completely unsatisfied.

49% of women were very satisfied, 22% were moderately satisfied, 18.3% were unsatisfied and the rest completely unsatisfied.

It is interesting to note that 83.33% of the farming households think they have a role to play in order to provide food for their people while only 16.67% think they do not have a role to play to provide food for their people.

All the youth interviewed think they have a role to play to provide food for their people. 70% of PWDs interviewed think they have a role to play to provide food for their people while 30% think they do not have a role to play.
85% of women interviewed think they have a role to play to provide food for their people while 15% think they do not have a role to play.

The roles that these people said they can play are summarized in the table below:

<table>
<thead>
<tr>
<th>Roles</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct production</td>
<td>197</td>
<td>82.08%</td>
</tr>
<tr>
<td>Others</td>
<td>72</td>
<td>30.0%</td>
</tr>
<tr>
<td>Access to credit</td>
<td>31</td>
<td>12.92%</td>
</tr>
<tr>
<td>Marketing</td>
<td>14</td>
<td>5.83%</td>
</tr>
</tbody>
</table>

*Source: Survey data*

All the youth interviewed think they can directly be involved in production and marketing of produce to provide food for their people.

82% of the PWDs interviewed think they can directly be involved in production to provide food for their people, 5% think access to credit can help them provide food for their people while 13% think they can do marketing of produce to provide food for their people.

78% of the women interviewed think they can directly be involved in production to provide food for their people while 19% think access to credit can help them provide food for their people while they can do marketing of produce to provide food for their people while 3% think they can do marketing of produce to provide food for their people. The most encouraging thing here is that, the majority of the respondents are willing to be involved in production of food. This is a positive move that should be supported by the concerned offices, particularly the government so that the fight on food insecurity is intensified and positive outcome is realized.

The respondents were asked if their local governments have accepted any proposals on food security to be included in their plan at the sub county or district level:

- 80.83% said no proposal was accepted
- 19.17% said their proposals were accepted and included in the local government plan.
40% of youth said their proposals were not accepted by the local governments while 60% had their proposals accepted by the local governments.

36% of PWDs had their proposals accepted by the local governments while 64% said their proposals were not accepted by the local governments.

78% of women said their proposals were not accepted by the local governments while only 22% had their proposals accepted by the local governments.

In trying to respond to shortage of food in the communities, they agreed the following mechanisms in the table below should be adopted to improve food production.

### Table 8: Mechanism to improve situation

<table>
<thead>
<tr>
<th>Copying mechanism</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planting improved variety of seeds</td>
<td>229</td>
<td>95.42%</td>
</tr>
<tr>
<td>Training on best agronomic practices</td>
<td>178</td>
<td>74.17%</td>
</tr>
<tr>
<td>Pest and disease management</td>
<td>178</td>
<td>74.17%</td>
</tr>
<tr>
<td>Access to land for production</td>
<td>125</td>
<td>52.08%</td>
</tr>
<tr>
<td>Others</td>
<td>104</td>
<td>43.33%</td>
</tr>
<tr>
<td>Practice conservation farming</td>
<td>87</td>
<td>36.25%</td>
</tr>
</tbody>
</table>

*Source: Survey data*

In the other category, we have access to credit, agro inputs and improved post harvest handling technologies.

From the above table, it can be noticed that the biggest number of respondents 229 (95.42%) seem to propose that planting improved variety of seeds is the best mechanism, and the survey sees it as a must if food insecurity is to be reduced or got rid of. This actually confirms that the challenge of accessing quality seeds is real and every farmer wants things put right about it. It also looks as if farmers want issues of quality seeds accessibility sorted out first before the issue of access to land. Their argument could be that they would rather rent and plant the right seeds and get good yield that having land that poor seeds are planted and output is poor. Therefore, access to quality seeds takes precedence to them.
However, they (respondents) noted and suggested the following according to the importance of need to be undertaken if food production is to be improved and food security achieved in their communities.

A: Youth
- Plant improved varieties of seeds
- Improved postharvest handling technologies
- Proper handling of pests and disease
- Practice conservation farming
- Training on best agronomic practices
- Stop selling of food
- Hire more land for cultivation

B: PWDs
- All category of people must cultivates irrespective of age, gender and physical status
- Plant improved varieties of seed
- Training on best agronomic practices
- Practice conservation farming

C: Women
- Plant improved varieties of seeds
- Training on best agronomic practices
- Pests and disease management
- Access to land for production
- Access to credit

The following comments were made by the respondents;

A: Youth
- More extension services needed
B: PWDs

- Community awareness on land use is needed
- Linkage to quality seed for ease of access
- Proper settling of land disputes is important to increasing production
- For government programme, there is need for timely input delivery

C: Women

- Climate change is to blame for food shortages in our communities
- Rationing of the available food
- There is need for more extension services
- Linkage to financial institution to increase production

Technical persons

In view of the above suggested different ways by different respondents, technical persons also had their own views as roles of reducing access to poor quality seeds by farmers thus; Government or the district should formulate and strengthen the ordinance on registration of all seed suppliers operating in the district and those that are contracted to supply seeds to the farmers in the district under some programs either by Government of NGOs, rooting assessment of seed quality in the shop suppliers available in the district, Licensing all the seed suppliers to ensure there are no fake suppliers.

It was also proposed that certified seed suppliers need to be identified and given authority to supply seed to farmers with supervision by relevant expertise of a particular seed. The land issue was considered to be very tricky because some cultures are still very strong that women, youth and in some cases PWDs do not directly own land thus less control and use. In this case, even if certified seeds are supplied and supervised, as long as land is an issue, the efforts are diluted and have no impact. The technical persons are believed to be on the ground and understand well what farmers go through, hence such comments.

There were also additional information such as; Formation and strengthening of existing farmer groups to be promoted as this will enhance farmer advocacy and lobbying for quality seed and
land ownership, Involving institute (NASAARI) to play a role in supplying quality seed to farmers if the variety falls within the breeding varieties. Others included identification, training and involving the local farmers to carry out seed multiplication that will later be replicated to other farmers. Through this, relativity of seed resistance to pests and the climate of the area would have been established. Agencies like NASAARI be utilised as a supervisory body to farmer projects implemented by Government and other implementing partners involved with food security projects in the sub-region. All these comments are clear indications that there is concern about food security which arise for limited access to land and quality seeds.

General recommendations to ensure food security in Teso sub region

- Increase awareness on the causes of food insecurity e.g. rapid population growth, climate change, pests and diseases among others.
- Strengthen household resource capacity to produce and utilize food through improved technologies and extension information
- Introduce support services for food security e.g. extension services and financial services
- Address inequalities in land access and utilization by different sub groups
- Reduce predisposing factors e.g. gender inequality and discrimination among others
- Advocate for policies and programmes that enhance food security
- Integrate tree planting into the cropping systems to reduce on the effect of climate change.

Challenges faced by Government that need to be addressed

1. Absence of a facilitative regulatory framework: Limited regulation of inputs trade which has made markets to be flooded with substandard and counterfeit seeds.

2. Inadequate government interventions to address issues of poor quality seeds and inequality in accessing land.

3. Limited information dissemination and capacity building from the national level to the local government level to facilitate enforcement and monitoring of access to quality seeds and land by small scale farmers.
4. Absence of a mechanism for pricing in line with grades of seeds, this hinders rewards/incentives for compliance to recommended quality and discourage farmers from incurring both time and financial cost related to ensuring quality production.

5. Absence of legislations such as ordinances and by-laws on ensuring quality of seeds at the local levels has provided a lee way for value chain actors to engage in malpractices like spraying seeds to speed up drying which affect both quality and safety, hence poor production.

6. Inadequate policy interventions on addressing climate change effects; farmers note that timely planting and proper postharvest handling is becoming more challenging due to inability to predict seasonal changes and the volatility of onset and cessation of rain because of climate change.
CONCLUSION AND RECOMMENDATIONS

Conclusion

From the evaluation, it’s clear that access to land has a very big role on food security problems in our communities but also how land is put into use is an additional challenge. It was also realized that access to quality seed is responsible for food security problems in the communities in Teso sub region as 70% of the respondents still buy seeds from the open markets. Food availability is also a big challenge as 58.1% of households reported that many household approached them in the last six months between one to three times asking for food. 80.06% of household reported that most food consumed in their households come from harvest. They also however expressed a need for adequate extension services and availability of climate smart seed varieties and high yielding varieties as means of curbing food security problems in the sub region.

These food security problems are common and real in Teso sub region needs urgent attention.

The study found implementation of policies/ by-laws or ordinances on access to quality seeds and access to land very weak. In addition, offices or institutions mandated to handle issues about quality seeds and access to land for farming are not meeting the expectations of those to benefit from such policies/by-laws and ordinances. There are not enough resources (human) for inspections and monitoring services provided, as well as programmes put in place for farmers. For example, UNBS whose major task is to make sure that quality for goods and services provided to the consumers are adhered to, has no office in the sub-region. The small scale farmers do not even know about UNBS and its existence. On the other hand the office of the commercial officer has no clear law on food security; neither do they have by-laws or ordinances on food security. It was also realized that the office has nothing to do with seed dealers and does not even check for trading licenses. All these leave a wide gap in the fight against food insecurity.

The level of awareness of quality seeds and access to land was very low. Many small scale farmers from different farmer groups did do not know where to buy quality seeds and what to do if they failed to access land. They also did not know how to identify quality seeds from poor
quality seeds. The same applied to some local leaders. After buying poor quality seeds, the study found out that the farmers do not know where to report to. The reason for this was stated that, most of the seeds are give free so no need to report in case it is found to be of poor quality. For those farmers who buy from the local markets, they lose everything when the seeds they have bought are found to be of poor quality.

In case of limited access to land, the study found out that many farmers who have no access to land, end up renting/hiring small pieces of land which are expensive and cannot allow for enough cultivation of food to feed their families as these small farmers have large families (Ref. table 1.1, 81 (33.75%) have seven children and above, 53 (22.08%) having between 3-4 children and 44 (18.33) having 5-6 children. The study also confirmed that 92.08% of the farmers interviewed have children, and that out these children, 43.75% are engaged in actual farming. This makes it very challenging to avert food insecurity as these children will also produce more children who will also demand for land, and yet land is static.

A good number of stakeholders such as; Serere Agricultural Research Center, MAAIF, WFP, are trying hard to make sure that small farmer groups are supplied with quality seeds. They even go as far as sensitizing the farmers on the need for quality seeds and access to land. They also try to send the voices of the affected farmers to the respective offices. The police have been trying and making sure that the community is sensitized (community policing sensitization). They also do counseling on succession act, Will writing and gender policy issues. The study also noted that the police teach the community about the present laws, Bills through media, such as radio. Police do not deal with seed dealers direct.

**Recommendations**

i. The government should ensure that the mandate of UNBS and MAAIF enforces implementation and monitoring of access to quality seeds.

ii. Address inequalities in accessing land for agricultural purposes by different sub farmer groups as well as categories of people living in the community. E.g. women, youth and disable persons. Issues of predisposing factors such as; gender inequality and discrimination among others must be stopped.
iii. There is need for adequate extension services and availability of climate smart seed varieties and high yielding varieties as means of curbing food security problems in the sub region.

iv. There is need for increased awareness on the causes of food insecurity and take pro-action measures.

v. There is need to strengthen household resource capacity to produce and utilize food through improved technologies and extension information. This can be done through the support from the government by introducing good agricultural programmes that are easy to adopt, especially by small scale farmers.

vi. Introduce support services for food security e.g. extension services and financial services.

vii. Stakeholders such as NGOs and human rights should advocate for policies/by-laws and programmes that enhance food security in the whole region.

viii. The Local Government should sensitize the public, especially the small scale farmers on proper post harvest handling. The agricultural extension workers should focus on dissemination of information on how the small scale farmers can be empowered to handle post harvest challenges, especially on grains.

ix. There is need to put more efforts on awareness of quality seeds and how to acquire them. The study found out that awareness on quality seeds and how to acquire them is narrowed to urban areas only and the rural poor small scale farmers are left out.

x. The local Government should enact by-laws that would empower the district commercial officers to enforce access to quality seeds. At the moment the role lies with central government who has the technical persons in districts with only job descriptions and no power to act on the ground.

xi. UNBS office should be established in Soroti and should also have the central laboratory/or mobile testing equipments that can be used to test seeds from the suspected dealers. This can only be done by the central government by more funding to UNBS. Otherwise farmers in Teso sub-region will lose out from the presence of UNBS in the country.

xii. Non implementation of existing policies: The pace at which polices are implemented is very slow. For example, the draft seed and plant regulation 2009 which were developed
to guide the effective implementation and enforcement of the seed and plant act 2006 have never been passed. Similarly, the Uganda Grain trade policy is still a draft and has yet to be tabled for cabinet consideration. Responsible persons/offices should fast track this policy development so that the intended purposes of such policies reach the beneficiaries.

xiii. Lack of Capacity by implementing agencies: The national seed certification service is under-capacitated to perform its official mandate of enforcing and regulating seed quality control mechanism, as a result counterfeits are rampant on the market. The study found out that because UNBS does not have an office in Teso sub-region, it cannot therefore conduct this exercise in Soroti and Serere districts. UNBS is a key institution responsible for enforcement of government programmes (on quality) to farmers. The government therefore should make sure that UNBS have offices in all sub-regions and is equipped to implement its programmes.
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ii. National Semi Arid Agricultural Research Institute (NASAARI)- Serere


vi. UNBS (2013). Policies and regulatory frameworks on quality seeds

vii. ZARDI/ISSD- Uganda seed quality standards

viii. SEATINI (2015). Upgrading standards in agriculture for Uganda maize and Sesame in Lira District


## Annexes

### Annex 1: Key informants Respondents

<table>
<thead>
<tr>
<th>Names</th>
<th>Position</th>
<th>Sub-county/District</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Not mentioned</td>
<td>LC3</td>
<td>Labor/Serere</td>
</tr>
<tr>
<td>2. Not mentioned</td>
<td>Secretary Youth</td>
<td>Labor/Serere</td>
</tr>
<tr>
<td>3. Not mentioned</td>
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<td>Labor/Serere</td>
</tr>
<tr>
<td>4. Not mentioned</td>
<td>LC1</td>
<td>Asuret/Soroti</td>
</tr>
<tr>
<td>5. Not mentioned</td>
<td>LC1</td>
<td>Gweri/Soroti</td>
</tr>
<tr>
<td>6. Not mentioned</td>
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<tr>
<td>7. Not mentioned</td>
<td>Police Officer</td>
<td>Serere CPS</td>
</tr>
</tbody>
</table>

### Annex 2: Focus Groups

<table>
<thead>
<tr>
<th>Name of group</th>
<th>Location/ sub-county</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Women savings</td>
<td>Serere</td>
</tr>
<tr>
<td>2- Disable farmers’ group</td>
<td>Bugondo/ Serere</td>
</tr>
<tr>
<td>3- Youth Farmers</td>
<td>Obittio, Arapai-Soroti</td>
</tr>
<tr>
<td>4- Mujaga Disable Farmers</td>
<td>Olio- Serere</td>
</tr>
<tr>
<td>5- Young women farmers</td>
<td>Owolo, Asuret-Soroti</td>
</tr>
</tbody>
</table>

### Annex 3: Opinion Leaders Respondents

<table>
<thead>
<tr>
<th>Names</th>
<th>Village</th>
<th>Institutions/District</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Not mentioned</td>
<td>Opiyai</td>
<td>Serere</td>
</tr>
<tr>
<td>2. Not mentioned</td>
<td>Soroti Municipal officer</td>
<td>Soroti</td>
</tr>
<tr>
<td>3. Not mentioned</td>
<td>Agule (Bugondo Sub-county)</td>
<td>Serere</td>
</tr>
</tbody>
</table>
# Annex 4: Farmer Groups Participants

<table>
<thead>
<tr>
<th>Name of group</th>
<th>Location/parish/sub-county</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. OSAMITOEMORIKIKIOS</td>
<td>Labori Parish</td>
</tr>
<tr>
<td>2. EBUMAINOS FARMERS GROUP</td>
<td>Labori Parish</td>
</tr>
<tr>
<td>3. EKEUNOS OBANGIN FARMERS GROUP</td>
<td>Labori Parish</td>
</tr>
<tr>
<td>4. AJOKIS EDEKE OTOBAFARMERS GROUP</td>
<td>Labori Parish</td>
</tr>
<tr>
<td>5. EMORIKIKINOS FG</td>
<td>Labori Parish</td>
</tr>
<tr>
<td>6. OPUNOI EBUMAINOS FARMERS GROUP</td>
<td>Labori Parish</td>
</tr>
<tr>
<td>7. LABORI FARMERS GROUP</td>
<td>Labori Parish</td>
</tr>
<tr>
<td>8. AARAPO EKEUNOS</td>
<td>Aarapo Parish</td>
</tr>
<tr>
<td>9. OMAM TEKER (MULONDO)</td>
<td>Aarapo Parish</td>
</tr>
<tr>
<td>10. AIPECITOIFARMERS GROUP</td>
<td>Aarapo Parish</td>
</tr>
<tr>
<td>11. ETIJIOT ICAN OMANJU</td>
<td>Aswii Parish</td>
</tr>
<tr>
<td>12. EMORIKIKINOS ASWII DRR</td>
<td>Aswii Parish</td>
</tr>
<tr>
<td>13. AKWUORO ETIJIOTO ICAN GROUP</td>
<td>Aswii Parish</td>
</tr>
</tbody>
</table>