

ACKNOWLEDGEMENTS

The Reality Check Approach study "TITLE of report" has been made possible by the support of the Transforming the Economy through Climate Smart Agribusiness Market Development (NU-TEC MD) programme team and the work of an enthusiastic team as well as the commitment and support of many others. The Reality Check Approach (RCA) was originally an initiative of the Swedish Embassy in Bangladesh where it was first commissioned in 2007 and has since been adopted in other countries and other contexts. The study was initiated and conceptualised by NU-TEC Programme Uganda. The data collection and analysis were designed and undertaken by a team of local and international researchers (see Annex 1) with technical guidance from the RCA+ Project Technical Advisor. The dedication of the team members in taking part in this study and carrying out their work with professionalism, motivation, and respect for their host communities, is much appreciated.

Most importantly, this study was only possible thanks to the many families, neighbours and communities in Northern Uganda who welcomed our researchers into their homes and shared their lives with them for a short while. We are grateful to them for this opportunity, and for openly sharing their lives, activities, perspectives and aspirations. We hope that the report reflects well their views and experiences and helps to make the programme implemented in their name relevant and meaningful for them.

Disclaimer: The work is a product of the Reality Check Approach plus (RCA+) project team, a project of The Palladium Group. The findings, interpretations and conclusions therein are those of the authors and do not necessarily reflect the views of NU-TEC programme, The Palladium Group or the UK Department for International Development.

Support for this publication has been provided by NU TEC Programme, which is funded by the UK Department for International Development.

You are free to copy, distribute and transmit this work for non-commercial purposes.

To request copies of the report or for more information on the report, please contact NU TEC Programme. The report is also available on the Reality Check Approach website, www.realitycheckapproach.com.

Published by: Palladium

Author: The Reality Check Approach + Project Team

Photographs: The Reality Check Approach + Project Team

Suggested Citation: The Reality Check Approach + Project Team, 2017. "TITLE of report". Jakarta: **Palladium**

Cover Photo: The Reality Check Approach + Project Team

Identifying features have been removed to protect the identities of individuals photographed

CONTENTS

Acknowledgement	2
Contents	3
Glossary	4
Summary	5
1. Introduction	11
2. Methodology	13
2.1 Study Locations	15
2.2 The Study Team	16
2.3 Study Participants	18
2.4 Neighbours and Other Community	TV
Members	18
2.5 Study Process	19
3. Findings	22
3.1 The Setting	23
3.2 How People See Poverty and Their	
Situation	25
3.3 Why People Grow What They Grow	43
3.4 How People Sell Crops	50
3.5 How People Farm	56
3.6 People's View on Programmes,	
Extension Services and Farming Groups	68
3.7 Looking Forward	73
4. Study Implications	76

GLOSSARY

This Reality Check Approach (RCA) study was conducted in February 2017 to support the Department for International Aid (DFID)-funded 'Northern Uganda Transforming the Economy through Climate Smart Agribusiness Market Development (NU-TEC MD)1' programme. NUTEC adopts a 'making markets work for the poor' approach, and works through market actors affording smallholders new or improved access to income-increasing, climate-smart products or services. NUTEC uses both qualitative and quantitative research methodologies to better understand the market, farmer practice and the progress of the programme. The programme supports the RCA longitudinal study with the expectation that the study would add value to this knowledge base by providing (i) a qualitative complement to its quantitative beneficiary surveys;(ii)track household dynamics, constraints, experiences and attitudes over time; (iii) help explain potential (gendered) beneficiary impacts from new or improved access to different market products or services; (iv)provide household-level perspectives for the design and adaptation of NUTEC intervention strategies; (v) support analysis of data collected through other research and diagnostics carried out by NUTEC and (vi) aid in the periodic review, revision or adaptation of the NUTEC Theory of Change². This first RCA study is effectively a qualitative baseline and was timed to feed into the Annual Review in April 2017.

Hereafter referred to throughout the report as NUTEC

2 See NUTEC RCA Concept Note, 2017

RCA is an internationally recognised approach to qualitative research which is regarded as an efficient and effective means to gather insights and perspectives directly from those affected. It involves highly trained and experienced researchers staying in people's homes, joining in their everyday lives and chatting informally with all members of the family, their neighbours and others they come into contact with. This relaxed approach ensures that the power distances between researchers and study participants are minimised and provides enabling conditions for rich insights into people's context and reality to emerge. The immersion approach provides researchers with opportunities to triangulate conversations with their own firsthand experience and observations from the time spent with their study families.

The RCA research team lived with 24 farming families for five days and four nights across eight rural districts in Northern Uganda where NUTEC operates. The study villages were selected based on the following criteria: Uganda's agro-ecological zone and rainfall zones; distance to sub county towns to ensure a mix of 'near' and 'far' locations; and locations from Acholi, West Nile and Lango regions. The research team interacted with over 1,400 people including family members, their neighbours, farmers groups, agricultural market actors, extension workers and village agents. These detailed conversations were supplemented by the

team's own first-hand experience of farming and markets as well as observations thereby increasing the understanding of context and the value of findings augmented by this level of triangulation.

All of the study villages are primarily farming villages with at least one 'trading centre' usually located on the main access road. These are generally small 'centres' comprising two or three shops which typically sell everyday food and household items and at least one selling alcohol and drinks. A few are near larger trading centers, often at the sub-county town, which have dozens of shops and stalls, including shops selling agricultural inputs like pesticides and seeds, a government health clinic and primary school.

Almost all study locations were directly affected by the conflict in Northern Uganda in the 1990s and 2000s with many forced to leave their homes to stay in Internally Displaced Persons (IDP) camps where they stayed between five to over 20 years. Mostly families did not see their homes and their land until they left the camps for good. While initially land conflicts arose for many of these returning, on the whole people shared that they feel settled again and 'secure' now that they have been living in peace for over 7 years.

'Our' families mostly live in mud-brick and grass thatchroofed huts in family compounds on flat, cleared land

with a few families currently building new brick and corrugated iron-roof houses. These compounds are typically a few minutes' walk away from neighbours. Parents, daughters and sons often have their own huts, with the parents sharing theirs with any small children. Most of our families have a door-less mud brick pit toilet hut and a simple thatch-screened bathing area just outside of their compounds. Their farmland comprises land around the compound and scattered plots elsewhere in the village, sometimes as much as 30 minutes' walk from their compound.

All our families described themselves as farming families. Only one of 'our' families did not have children, and all but two families currently had children attending school. Although not all of our families feel that they themselves are 'poor,' overall people described their communities as being poor or 'neglected.' People most typically told us that that feel this way because of government neglect; few opportunities for work; and/or difficulty in accessing services, markets and assistance like NGO programmes. People talked about government neglect in terms of a lack of facilities and being 'ignored' by the sub-county and/ or district governments. Lack of opportunities to access or inability to access different work outside the community made them feel 'left behind' and with no choice but to farm. Families across all study locations repeatedly shared that poverty is 'not having enough food and cash' and described that not being poor meant owning livestock and land. More than anything else, people shared that having 'enough' land for planting crops to feed their family and for passing on to their children provides a sense of security and because of this, many people emphasized that they would not want to sell their land

All of our families shared that their first priority is food crops to ensure the family will have food. A family's relative poverty did not affect this view - our 'better off' families also prioritise growing food crops. Although staple foods take priority, all families were growing a wide variety of different crops and making seasonal, or at the very least yearly, adjustments between the specific crops each planting season. The exact crops varied widely, including within a single

location depending on individual family choices and preferences.

People described not having enough cash particularly in terms of 'not being able to pay school fees' or a 'failure to educate children'. Some people also said that the difficulties for children to attend school makes them feel poor. Parents explained that they view education as the key to 'better lives' with some hoping they 'don't have to end up as farmers'.

Along with the seasonal demands for school fees, generally, people consider bar soap and alcohol (for families that drink) the most essential purchases. Families that drink alcohol spend between UGX 15,500 - 44,000 per week while families that don't drink spend between UGX 5,500 - 19,000.

The need for regular cash means that all of our study families are growing at least one cash crop and own livestock (regarded as easily liquefiable savings). Most also have other small income earning activities such as brewing alcohol, selling honey, making bricks, catching and selling fish, selling milk, petty trade, and artisan work. A smaller number of people are doing some kind of waged-labour, most typically construction and security work but in some cases also including farm labour for large individual landowners or on company farms.

'Our' families across the eight study locations described two planting seasons, one starting around March and ending in July and a second season starting around August and ending in December. Families are busiest during planting and harvest times while they face particular school fee pressures around February, late May, and September. Across all locations people told us that one of the biggest changes in recent years is what they perceive to be the changing weather patterns - 'too much sun,' 'not enough rain,' or 'the rain is unpredictable.'

Overall, people shared that the decisions about which crops to plant are made jointly by mothers and fathers. In many cases, people explained that men tend to be more 'in charge' on the cash crops while

women 'handle' the food crops 'making sure our family has food'.

Although people in a number of study locations told us that they are aware of better prices for crops outside of their area, they tend to sell in their own area because it's easy and they get cash quickly. Additionally, many told us that trying to transport crops outside of the area just doesn't seem feasible, either because it's difficult to do so (because of distance or a lack of options) and/or it is expensive.

Almost all of our families told us that they sell their crops quickly after harvest, primarily because they need the cash so they 'will be happy with whatever price'. People in a number of the locations told us that as long you had at least a few sacks of a particular crop, buyers would come to the house and that farm gate prices would not be any different from selling in the local trading centre or market. Most families feel that overall the prices that they get for their crops are low and that the middlemen/buyers have all of the power.

Most of our families shared that they get most of their information about prices and farming locally from friends, neighbours, and local contacts and are highly influenced by what neighbours are growing. For new varieties of crops, people say they get information through agricultural agents and government/NGO programmes. People are not, however, receiving messages on mobile phones related to market prices or programme information. People told us that they often learn about new programmes in their area through their churches.

With the exception of a very small number of families using tractors and ploughs, most families are preparing land using hoes. Overall this work is done by both men and women, and families are generally doing this work themselves or through reciprocal rota-based family or neighbourhood groups. People described different burning practices but that this is generally only to clear land that is difficult to clear or simply because it's 'quicker and less hard work'.

Generally, people adopt a pragmatic approach to division of labour and chores among a family and farming is done as a family. Women shared that they generally prefer to do weeding (especially if it can be done kneeling down) and like the men to do the heavier work. Researchers observed that household chores such as cooking, cleaning and collecting firewood are generally shared between mothers and their daughters and fetching water is often, but not exclusively, done by women while men take care of animal rearing. Only in our 'least poor' family was the mother told that she should stay at home rather than work in the fields.

Most families explained that they use seeds from their previous harvests for planting and these are generally stored at home for less than six months. Although many people said they like using local seeds which they feel are suited to the area, some families in all locations have used some kind of improved/hybrid seeds. In general families did not know the difference between improved or hybrid/HYV seeds, using the terms interchangeably to refer to any new, nontraditional seeds. Many families told us that they know that these newer seeds should not be planted more than once. People say that improved/hybrid seeds are expensive but in the end some feel that it is worth it because of the higher yields. Some families shared that they use the improved/hybrid seeds twice to save money and that drops in yield in the second year are 'minimal'. People in some locations said that sometimes the local government provides seeds, often for free, but that they have not had good experiences with these programmes. Some have missed out on being informed about the programme or benefits were captured by others, seeds were distributed at the wrong time or seed varieties were not liked.

Crop rotation is a practice that people said they have 'done for years' to keep the land fertile but some indicated it is also to prevent the proliferation of certain pests and/or weeds. Intercropping is done for matters of practicality, mainly to maximize the usage of overall land, to get a cash bonus while planting food crops, to be able to harvest multiple crops at

the same time and/or to use the same pesticide for particular crops.

People did not talk about many particular strategies for dealing with pests although were concerned about witch weed, elephants, termites and a wide variety of diseases that are affecting cassava. Researchers felt that overall people simply accepted that they would experience periodic losses of crops from pests and diseases. Some had tried unsuccessfully to get help from the sub-county. Many families keep cats to keep down rats, while dogs are used in some locations to help deter baboons and squirrels and are used for hunting wild rats. Pesticides are being used by at least some of our families in almost all locations 'to ensure good yields', but others felt they are too expensive. People had little understanding how to apply pesticides and rely on instructions from sellers.

People shared that the use of fertilizer is rare because commercial fertilizer is too expensive, their land is 'fertile enough', they do not know how to use or were confused by programmes suggesting they should not use chemical fertilizer. No one we met is using manure of any kind as a fertilizer.

Almost all of our families store their crops at home in hessian/gunny sacks but cash crops only for short periods as most families want to sell these quickly. People shared a number of traditional practices such as storing the sacks where air can circulate, adding crushed chili or tobacco and storing near the smoke from the kitchen. Nobody was using community storage facilities.

Across locations little post-harvest processing is done. Overall, people did not feel there is added value in milling/grinding for sale, and anyway prefer the ease of selling quickly with minimal processing. The main processing done by our families is related to the production of home-brewed alcohol.

Some locations have very little experience with agricultural programmes or extension services (NAADS was only mentioned in one study location) and those with experience shared largely negative experiences

although they were more hopeful about donor or NGO programmes despite common complaints about the lack of follow-up or a sudden cessation of activities. Overall people were frustrated with farmers' groups because of inflexible regulations, registration costs, the laziness of some group members and lack of fairness in group selection. In many cases people, including selected groups themselves, said they did not understand why certain groups were selected for a project and others were not.

Regarding extension services provided by private companies, people explained that their demands that generally require them to work in groups and to sell harvest directly back to the company limit their flexibility. Many families shared that they preferred to farm alone and to be able to control what they could do with their crops.

Savings and loans groups were mentioned as being present in all of the locations and most of these are local initiatives. While some people have been turned off from using these by bad experiences, perceptions of these savings group are generally positive. People said that they most commonly borrow for school fees, medical costs, food supplies and at 'difficult times,' and rarely borrow money related to agricultural inputs. There is no uptake of other forms of financial services, with banks perceived as far away, imposing impossible conditions (such as evidence of collateral), and are unfair and risky especially as people have heard stories of loan defaulters losing property. Insurance services were not mentioned in any location.

Except in some locations where people discussed their futures primarily in terms of farming, others often shared aspirations related to education, jobs, and starting their own businesses as traders or shop owners. People commonly shared that they feel that farming is hard or getting harder due to the changing weather, food shortages in the previous year and because 'young men have dropped out for quick money'. Parents explained that the difficulty of farming is one reason they are motivated to want 'better' for their children, however researchers felt that on the whole youth have few role models in their area.

The report concludes with a number of study

implications:

- Families', and particularly mothers', primary daily concerns are dominated by food stock and meeting school fee costs. Demands from many schools for crops and other items like sugar and firewood compound this burden. People must have assurance that these needs are met before taking any risks.
- It would seem that women in particular may be less likely to experiment with different crops and/or methods because of their concern over family food stocks. This concern is influenced by a worry that their husbands may not otherwise prioritize this.
- · School fees hit either at times of stress or at times when they encourage the quick selling of crops after harvests. Meaningful change for many families in these communities will not be possible without addressing this issue.
- Alcohol is considered essential for those families that drink. It is also a large enough expense (UGX 10,000 - 25,000/per week) in many of these families that it needs to be considered along with food stock and school fees as a need that must be met before families may be willing to experiment with different crops, improved seeds, improved methods, etc.
- · Although many families complain about the low prices they receive for their crops and their lack of bargaining power, we do not see this as 'forced selling.' Along with school fee demands, convenience is the primary reason why families continue to sell locally and prefer to sell their cash crops quickly.
- Although some people in all of the study locations are using improved/hybrid seeds of some kind, a lack of information/knowledge and often, consistent availability, is limiting their further use and uptake.
- Unlike manual labour which is typically paid

- out at the end of a harvest, renting inputs like ox ploughs requires paying cash up-front, making this a less attractive option particularly as families have less cash at planting times.
- For some families a lack of time, particularly due to water access issues and the need to involve in cash earning activities, is a key constraint which is likely preventing greater farming activity.
- The study location where families are the most 'market-oriented' has the worst access to public services. This poor access to public services may end up encouraging families to move closer to trading centres, potentially reducing their farming activities and/or land to do so, or to simply leave the area.
- Given the contextual differences between the study locations, we feel NUTEC should carefully consider context when choosing areas of Northern Uganda to work in.
- Little post-harvest processing is done beyond drying crops and readying home alcohol base ingredients like cassava for brewing and there is little to no value seen in this.
- Consideration of 'our' study families as consumers of locally-processed goods, such as cooking oil, soap or flour, needs to carefully consider price and packaging.
- There seems to be an opportunity for more/ better information sharing at local trading centres. Currently, people get most of their information about farming from neighbours along with private contacts such as, for specific information like pesticide use, private agricultural agents; or in the case of families in West Nile far, 'expert' acquaintances obtained through their networks.
- Overall, farmers' groups are not viewed very positively. Although many people are still willing to join them because, 'you have to be in a group' to access programmes, people

are frustrated by the lack of flexibility, unfair/ opaque selection, trust issues and inclusion of 'lazy' members.

- · Division of labour and decision making in families is, on the whole, shared and based on practical considerations. Programmes targeting women only may prove difficult given that, at least to some extent, most families 'work together,' and the fact that mothers are most concerned about having enough food for the family.
- Overall, it seems that families have accepted the status quo as mostly subsistence farmers, with the exception of West Nile far. This may be influenced by a lack of a perceived 'middle ground' between people's traditional farming methods and those used on, for example, company farms.



1 \ INTRODUCTION

This report presents the main findings of the Reality Check Approach (RCA) study which was conducted in February-March, 2017. This study is part of a series of both quantitative and qualitative research methodologies conducted for NU-TEC and is intended to provide insights to support the NU-TEC Monitoring and Research Measurement (MRM) Framework by providing household-level perspectives for the design and adaptation of NU-TEC intervention strategies. It is expected also that the in-depth qualitative findings from this study provide rich evidence to complement NU-TEC's quantitative beneficiary surveys.

As noted in the NU-TEC Inception Phase Report (NU TEC Team, 2015:3)³, this programme has the potential to sustainably and significantly improve the livelihoods of over 750,000 poor people in Northern Uganda. It is expected that the programme will deliver the following results:

- At least 750,000 poor people in Northern Uganda, 50% women, will see their resilience to climate change increased and incomes raised by at least 15%;
- At least £55m in new investment supported by the project (excluding loans)
- At least £90m in additional turnover in businesses supported by the project

This study specifically intended to add value to the programme by enriching and extending the earlier secondary data-based research conducted to try to understand the profile of poor farmers as one of the target groups who will receive NU TEC support. This study provides insights for better understanding through:

- i) Understanding farmers' perspectives on poverty (including the perspectives of woman headed household, the elderly and youths).
- ii) Providing deeper understanding of context and

- current situation from the different perspectives of farmers from different locations.
- iii) Providing rich insights on behaviour at family level to understand how and why people make choices.
- iv) Understanding family life cycles and challenges faced due to seasonality.

STRUCTURE OF THIS REPORT

This report begins with an overview of the Reality Check Approach (RCA) methodology, including adaptations made for this study as well as study limitations (Section 2). The following Section 3 presents the main findings and is divided into five subsections beginning with the context of 'our' villages and families; this is followed by a section exploring people's perspectives of poverty and their current situation. The third section details the choices that people make when deciding what to grow; the fourth section presents how people sell their crops and where they get information; the fifth section discusses people's farming practices; a sixth section looks at people's experiences with programmes and farming groups; and a seventh section at people's aspirations related to the future. The report concludes with a number of study implications based on people's perspectives as well as from analysis of the findings.

³ NU TEC MD Team, 2015, Understanding the Profile of the Poor and their context: A Situation Analysis for Northern Uganda, GRM International.



The Reality Check Approach (RCA) is a qualitative research approach involving trained and experienced researchers staying in people's homes for several days and nights, joining in their everyday lives and chatting informally with all members of the family, their neighbours and others they come into contact with. This relaxed approach ensures that power distances between researchers and study participants are diminished and provides the enabling conditions for rich insights into people's context and reality to emerge.

By building on conversations, having multiple conversations with different people and having opportunities for direct experience and observation, confidence in the insights gathered is enhanced compared to many other qualitative research methodRCA is often used to understand longitudinal change through staying with the same people at approximately the same time each year over a period of several years.

RCA differs from most other approaches to research. Firstly, it is not theory-based so that there are no preconceived research frameworks or research questions. This is deliberate as the approach seeks to enable emic (insider) perspectives to emerge and to limit etic (outsider) interpretation or validation. The premise for researchers is one of learning directly from people themselves. Secondly, RCA is always carried out in teams in order to minimise researcher bias and to optimise opportunities for triangulation. Thirdly, and importantly, RCA teams are independent and make this explicit with the people who participate in the study. Our objective is to ensure that the views, perspectives and experiences of people are respectfully conveyed to policy and programme stakeholders. The researchers become a conduit rather than an intermediary. This is why RCA studies do not provide recommendations but promote the idea of sharing implications, which are grounded in what people themselves share and show us.

RCA4 has gained international recognition and

Originally developed in 2007 in Bangladesh with the Embassy of Sweden

uptake as an efficient and effective means to gather the insights and perspectives of participants of social change processes. The approach build on and extends the tradition of listening studies (see Salmen 1998 and Anderson, Brown and Jean 2012⁵) and beneficiary assessments (see SDC 20136) by combining elements of these approaches with researchers actually living with people whose views are being sought, usually those who are directly experiencing the issue under study.

RCA is sometimes likened to a 'light touch' participant observation. Participant observation involves entering the lives of the subjects of research and both participating in and observing their normal everyday activities and interactions. It usually entails extensive and detailed research into behaviour with a view to understanding peoples' perceptions and their actions over long periods of time. The Reality Check Approach is similar in that it requires participation in everyday life within people's own environments but differs by being comparatively quick and placing more emphasis on informal, relaxed and insightful conversations than on observing behaviour and the complexities of relationships. It also differs by deriving credibility through multiple interactions in multiple locations and collective pooling of unfiltered insights so that emic perspectives are always privileged.

Important characteristics of the Reality Check Approach for this study include:

Salmen, Lawrence F 1998 'Towards a Listening Bank: Review of best Practices and Efficacy of Beneficiary Assessments' Social Development Papers 23, Washington World Bank; Anderson, Mary B, Dayna Brown, Isabella Jean 2012 'Time to Listen: Hearing People on the Receiving end of International Aid, Cambridge MA: CDA

SDC; Shutt, Cathy and Laurent Ruedin 2013 SDC How-to-Note Beneficiary Assessment; Berne; Swiss Agency for Development Cc-operation.

- **Living with** rather than visiting (thereby meeting the family/people in their own environment, understanding family/ home dynamics and how days and nights are spent);
- Having conversations rather than conducting interviews (there is no note taking thereby putting people at ease and on an equal footing with the outsider);
- **Learning** rather than finding out (suspending judgement, letting people take the lead in defining the agenda and what is important);
- Centring on the household and interacting with families/people rather than users, communities or groups;
- Being experiential in that researchers themselves take part in daily activities (collecting water, cooking, working in the fields, hanging out) and accompany people (to markets, to social activities);
- **Including** all members of households/ living in units;

- Using private space rather than public space for disclosure (an emphasis on normal, ordinary lives);
- Accepting multiple realities rather than public consensus (gathering diversity of opinion, including 'smaller voices');
- Interacting ordinary daily life (accompanying people in their work and social interactions within their usual routines);
- Taking a cross-sectoral view, although each study has a special focus, the enquiry is situated within the context of everyday life rather than simply (and arguably artificially) looking at one aspect of people's lives;
- Understanding longitudinal change and how change happens over time.



2.1 Study Locations

The eight districts were purposefully selected in consultation with the NU-TEC programme where they work with partner businesses. However, further consideration was given in selection to the following criteria to ensure a diverse mix of contexts where NU-TEC operates:

- Areas of high/low and average rainfall
- Different land types based on agro-ecological zones (east, mid and west)
- Mix of Acholi, West Nile and Lango regions
- In each region at least one location located far from sub-county town (see red spot in map)

Table 1 provides information on the study locations.

Table 1: How study locations meet the selection criteria

District	Location		Agro-ecological zones and rainfall	Ethnicity
Nwoya	West Nile	Far*	Northwestern Farm- lands-Wooded SavannaAbove Normal Rainfall	Originally Acholi but now a lot of incomers from west/east Uganda and some Kenyan
Kitgum	Acholi	Far	Northeastern-central Grass- Bush-FarmlandBelow Normal Rainfall	Nilotic Acholi and Luo Acholi
Lamwo	Acholi	Near	Northeastern-central Grass- Bush-FarmlandBelow Normal Rainfall	Acholi
Oyam	West Lango	Near	Northern Moist FarmlandNear Normal Rainfall	Nilotic Langi
Lira	East Lango	Far	Northern Moist FarmlandNear Normal Rainfall	Nilotic Langi and Acholi (few)
Kole	West Lango	Far	Northern Moist FarmlandNear Normal Rainfall	Nilotic Langi
Nebbi	West Nile	Near	Northwestern Farm- lands-Wooded SavannaAbove Normal Rainfall	Majority Alur
Alebtong	East Lango	Near	Northern Moist FarmlandNear Normal Rainfall	Nilotic Langi

^{*&#}x27;Far' and 'Near' designations are based on how people described their villages and poverty in their area. See Section 3.2 for more information about how these designations were made.

The exact study locations will remain confidential for ethical and confidentiality reasons. The assigned labels in Table 1 will be used to refer to the different locations throughout this report.

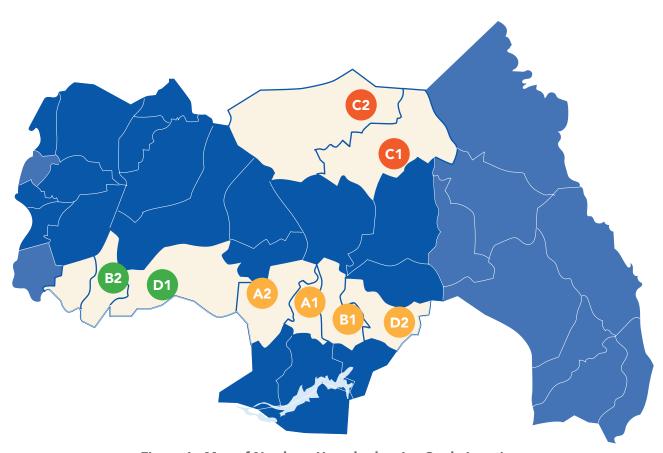


Figure 1: Map of Northern Uganda showing Study Locations

2.2 The Study Team

Recruitment

As this was the first time a RCA study has been undertaken in Uganda a new team had to be formed and trained. During the recruitment process of the RCA team in February 2017, some effort was made to ensure members would have high levels of enthusiasm, appropriate and sensitive attitudes towards people living in poverty and a willingness to suspend judgment and challenge their own biases including readiness to adapt to potentially difficult and quite basic living conditions. This involved two rounds of orientation with candidates including outreach to people with the needed language skills. RCA researchers are specially selected as 'people centered' who can interact with others informally and make them feel at ease. They come from a broad range of academic backgrounds including anthropology, social development, communication,

public health, law, arts and sciences.

RCA Level 1 Training

All new researchers and translators participated in a five-day training on core RCA principles and techniques, led by experienced RCA trainers from Indonesia. The training concentrated on researcher behaviour and subjectivities, enabling team members to recognise and reduce biases, to mitigate power distance and to build a good practice of reflexivity vital to promoting rigour in the execution of a study. The training included a two-night immersion in villages within a two-hour drive from Gulu, where researchers and translators applied this learning. This pilot immersion was followed first by a day of reflection and internalisation of lessons learned and then by another day of briefing to familiarise researchers with the goals and specific processes related to the NU-TEC study. This included clarification of the HHH selection criteria, finalisation of areas of conversation, some overview of agricultural practice and sharing of

any information about NU-TEC essential for the study team. All RCA researchers are required to undergo Child Protection and Data protection training and to sign the required relevant declarations to this effect.

Study Team

The study team consisted of 15 researchers including three international researchers, nine Ugandan researchers and three researcher/translators. Each international researcher was accompanied by a Ugandan researcher/translator. Translators are researchers who have undertaken the RCA Level 1 Training and have sufficient English skills to provide simultaneous translation for the non-Ugandan speaking researchers to bridge communication with the family and other people met during the fieldwork. In addition to Level 1 Training, additional short training was also provided for the translators including how to translate simultaneously, maintain rapport and inclusiveness.

Out of the four sub-teams, for the first round of fieldwork three were led by an international researcher with one led by an Ugandan researcher while in the second round two teams were led by Ugandan researchers. Additional training was also conducted for the Ugandan sub-team leaders.

2.3 Study Participants

As the study sought comprehensive understanding of the perspectives, current context and farmers' behavior including understanding changes in family life cycle and seasonality, where possible the researchers chose to live with households with a view to meeting the following criteria:

- Poorer households
- Produce some cash crops (including soybean, sunflowers, cotton, maize and cassava, rice, sesame and beans)
- Including multiple generations, ideally children, parents, grandparents or other extended family
- Inclusion of households which may be

especially vulnerable e.g. those missing middle generations, women-headed households, with adults who are unable to work⁷.

All study households were selected by individual team members through informal discussions with people in the community e.g. at trading centers, boda-boda (motorcycle taxi) waiting 'stations,' around boreholes in situ. Care was taken to ensure that people understood the nature of the RCA study and the importance of staying with ordinary and modest families and not being afforded 'quest status.'

The households selected were, wherever possible, at least fifteen minutes' walk away from each other, to ensure interaction with a different constellation of neighbour households and other community members and service providers allowing good triangulation. Each team comprised three or four team members so that the study involved living with a total of 24 families.

Each team member discreetly left a 'gift' of basic food items for each host household (i.e. rice, sugar, bar soap, cooking oil, etc.) on leaving, to the value of about UGX 60,000 to compensate for any cost incurred in hosting the team. As team members insist that no special arrangements are made for them, they help in domestic activities and do not disturb income-earning activities, the actual cost to 'hosts' are negligible. The timing of the gifts was important so people did not feel they were expected to provide better food for the researchers or get the impression that they were being paid for their participation.

2.4 Neighbours and Other Community Members

In addition to the twenty four host families, team members also interacted closely with their neighbours (on average about four to five additional households each) and the wider community through opportunistic

⁷ Detailed explanation of the target groups that NU TEC works with is explained comprehensively in NU TEC inception phase report (NU TEC Team, 2015:5-16)

conversation with traders at trading centres, extension workers, member of farmer groups, members of the community, village officials and religious leaders using the same approach of informal conversations (see Annex 3 for List of People met).

The study involved detailed interactions with 1427 people (605 men and boys and 822 women and girls) who participated in the study (see Table 2), although in depth information was mostly gathered through families stayed with.

Table 2: Study Participants

Study Participants	Number	Intention
Host household (HHH) (Produce at least 1 crop for sale)	24 families	Close interactions, observations and conversations with all member of the family get comprehensive understanding of context and understanding choice and behaviour at household level
Neighbours households Focal households (FHH)	210 people	Less detailed interaction than host household, mostly conversations to explore diversity of family experience, perspective, different views, common issue and to triangulate the HHH insights
Farming related	900 people	Opportunistic engagements through informal conversations to explore their role, multiple perspectives,
Service related	234 people	Opportunistic engagements through informal conversations to explore their role, multiple perspectives, and understanding context for triangulation
Village leaders and religious leaders	83 people	Opportunistic engagements through informal conversations to explore their role, multiple perspectives, and understanding context for triangulation

2.5 Study Process

RCA studies are generally implemented in five main phases (see figure below). Phase one and two has been discussed in the previous section.

Immersion (Fieldwork Process)

Entering Community. The RCA study benefits from being low key and unobtrusive. It seeks to provide the best possible conditions to listen, experience and observe ordinary daily lives and deliberately seeks to reduce the biases created by external research presence. Three key principles for entering communities are: (i) being independent, (ii) taking a learning perspective and (iii) not linked to resource

mobilisation) were shared widely on entry. Chatting with people, walking around the village to understand the village context better and explaining the purpose informally to people met usually led them to connecting to the right families for staying with.

RCA is not a theory based research method although it often generates people's theories of change and contributes well to grounded theory approaches. It does not have a pre-determined set of research questions relying as it does on iterations from information gathered in situ and building on progressive series of conversations. However, as part of the briefing process for researchers areas for conversations were developed to act as a guide to ensuring that conversations were purposive. The

Design:

Consultations, finalise study design

Training:

Training and preparation of researchers

Immersion:

Four-night immersion in HHHs

Debriefing:

Debriefing of regional teams with team leader

Analysis:

Analysis of debfiefing notes and report writing

outcome of the deliberations with the research team are provided in Annex 2 - Areas for Conversations. During the immersion, RCA researchers immerse themselves in study locations with their families for four days and nights, living with the host households and engaging in daily activities together with family members. Insights are collected through conversation, experience, participation and observation, with field notes kept discreetly where necessary

To illustrate context and findings, photos were taken, all with consent of the people concerned. These narratives and visual records formed the basis of detailed one day debriefing sessions held with each of the sub-teams as soon as possible after each round of the study was completed. Whenever possible, people including women and children were encouraged to make visuals while they were conversing with the researchers. For example, while conversing about issues of seasonality, some made visuals to help explain which crop is planted in what month, rainfall

patterns, seasonal cash needs and ties of high labour intensity.

Post Fieldwork Process

Debriefing

Each RCA sub-team of three RCA researchers who had lived in the same community but had not interacted during the field work spent a full day sharing their conversations, experiences and insights with the overall team leader immediately after completion of the field immersion. These sessions explored the areas for conversations and expanded on these based on inputs by the study participants. recalled conversations, experiences observations were recorded in detail in written and coded de-brief notes. Detailed notes documenting this debriefing, along with photographs and field notes from the immersion, formed the 'data set' or basis of information from which study findings were drawn. These de-brief sessions were led by the study team leader and provided an important opportunity to further triangulate findings.

Sense Making Workshop

After the fieldwork and all debriefings were completed, the entire team came together for a 'sense-making' workshop to extend and re-visit some of the findings from the fieldwork and to begin the analysis process. This joint reflection process helped to ensure that RCA researchers did not overlay their own interpretations on the findings.

Analysis

The study team leader and sub-team leaders undertook further analysis and prepared preliminary findings for the NU-TEC annual review. In this meta-analysis process the report structure and key narratives were identified. A three stage process derived from conventional framework analysis was undertaken by different team leaders and the technical advisor



independently comprising:

- i. Familiarisation (immersion in the findings)
- ii. Identification of themes (from the de-brief notes and the sense making workshop)
- iii. Charting (finding emerging connections)

The independence of this activity was designed to test if the same themes would emerge. This is a key part of the analysis to add credibility (i.e. different researchers come to the same conclusions from the same written material). These key emerging narratives from this process were used as the basis for report writing. Quality assurance was carried out through internal peer review with special concern to ensure that the research retained positionality of people themselves.

Ethical Considerations

RCA teams take ethical considerations very seriously especially considering the fact that studies involve living with people in their own homes. Like most ethnographic-based research, there is no intervention involved in RCA studies.

At best the study can be viewed as a way to empower the study participants in that they are able to express themselves freely in their own space. Researchers are not covert but become 'detached insiders'. As per American Anthropological Association Code of Ethics, RCA adopts an ethical obligation to people 'which (when necessary) supersedes the goal of seeking new knowledge'. Researchers 'do everything in their power to ensure that research does not harm the safety, dignity or privacy of the people with whom they conduct the research'.

All researchers are briefed on ethical considerations and Child Protection Policies before every field visit (irrespective of whether they have previously gone through this). All researchers sign Code of Conduct and Child Protection Policy declarations as part of their contracts. Additionally, all data (written and visual) was coded to protect the identity of individuals, their families and communities. As a result the exact locations and identities of households and others are not revealed in this report.

Researcher asked people's verbal consent to be able to use their stories and insights, and assured people that they would keep their sharing off the records if they did not give their consent. Researchers then signed a declaration that they had received people's verbal consent to share the insights in the collaborative analysis process.

Study Limitations

As with other research methods, a number of limitations were encountered during the fieldwork:

- In East Lango far, West Lango near and Acholi far, some community leaders and people are particularly suspicious of outsiders which resulted in some slight initial hostilities towards researchers. In some cases this limited the opportunities to have informal and relaxed conversations with certain people.
- In West Nile near and Acholi near locations, villages have high expectations of foreigners as they have experiences with a number of foreignaided projects. For example, there is an Italian organisation in West Nile near who comes and randomly selects children in the village and promises to support their education.
- In West Nile near, a village leader decided to accompany the researcher during much of their time in the village. This limited the opportunities for the researcher to interact with ordinary people and in some cases affected the openness of the villagers.
- For both the international researchers and several Ugandan researchers who were not able to speak local languages, some difficulties were faced especially in understanding small talk, group conversations and chatting amongst families. This meant that sometimes they missed some of the nuances of what was being shared.



3.1 The setting

The NUTEC programme seeks to identify and build on opportunities to improve incentives for market actors to build a more inclusive market in Northern Uganda, one that includes small farmers and is intended to stimulate sustainable, pro-poor growth. To contribute to NUTEC's understanding of small farmers and farming in various communities throughout Northern Uganda, the RCA team purposely sought out and stayed with small farmers and their families to learn directly from them about their lives, how they experience poverty, their farming practices and their role in the market system.

The study team stayed with 24 families across eight rural study locations in Northern Uganda, interacting with the families, their neighbours and others they came into contact with in the village. We have categorized these eight study locations into the three regions:

- (i) 'Acholi' the dominant ethnic group for the two northernmost locations;
- (ii) 'Lango' the dominant ethnic group for the four 'middle' locations, further broken down into East Lango and West Lango;
- (iii) West Nile for the two locations closest to the West Nile river.

Based on how people themselves perceive the remoteness and connectivity of their communities, within each region the locations have been given a 'near' or 'far' (i.e. relatively less or more remote). The map on the following page shows how these locations fit into Uganda's Agro-ecological zones and typical rainfall and gives further details about each of the locations.

We stayed with 'our' families who mostly live in mud-brick and grass thatch roofed huts in family compounds on flat ground which has been cleared of bush and grass. A few of 'our' families have or are in the process of building brick and corrugated iron (CI)

roof 'house' within their compound. Even the smallest single family compound consists of at least two huts, one of which is used as the kitchen. For those with just a few huts, compounds may be as small as 15m² (half a basketball court) while larger compounds of five or six huts may be well over double this size. Parents, daughters and sons often have their own huts, with the parents sharing theirs with any small children. Most families were one nuclear family but sometimes grandparents, other relatives and/or second wives also live in the same compound. 'Our' compounds often had trees (including fruit trees) within and bordering the otherwise cleared area. There is usually an open area for cooking in the centre of the compound, which is used along with the kitchen hut. The compound is also used for drying crops, and animals are often tied up at the edge of compounds when they aren't roaming freely around. Most of our families have a pit toilet hut, usually 10 meters or more away from the compound. These are also made from mud bricks and without a door, but sometimes with a small CI sheet or grass thatch roof. Many families also have a bathing area just outside of the compound, with 'walls' often made from branches, with no roof and no door. In most of our villages the distance from one family compound to another is generally around 1 to 3 minutes walking, but in a two of the villages compounds were much more scattered and about 15 minutes' walk apart.

Surrounding family compounds are the families' farming land, and while a family may have farm land right next to their compound, it is often in another area of the village. Family land is also often split between multiple plots in different areas of the village. A family's furthest plot of land may be more than 30 minutes walking away from home, often described as 'on the other side of the village.' Most villages have trees and bushes scattered across a savannah-type landscape and some of our villages are bordered by swamps. One location has a more undulating landscape with less natural trees and bushes and much larger plots of land (both-owned by individuals and companies). This village (West Nile far) is also the only location with small streams throughout many areas of the villages, and most had flowing water at the time we visited

towards the end of the dry season. Water access for most is from bore holes operated by hand pump. However, people in parts of some villages use small water holes and in one location (West Nile near) many are getting water from a large river.



to use for making alcohol.

All of our villages have at least one 'trading centre' within/around the village, usually along the main access road. For many of our villages, these trading centres are a small group of two to three shops which typically consist of at least one shop selling small food/ household items and one selling alcohol and drinks. A few of our villages are also nearby larger trading centers, often at the sub-county town. These larger 'centres' have dozens of shops and stalls, including shops selling agricultural inputs like pesticides and seeds, places for recreation like bars and video halls and usually have a dedicated 'market' space. A government health clinic and school are usually near these larger 'centres.'

With the exception of West Nile far, 'our' villages are for the most part ethnically homogenous with almost everyone belonging to one or two clans from a single tribe/ethnic group. The four Lango locations and the two Acholi locations are occupied by Lango and Acholi people, respectively. West Nile near is the only location with majority Alur people. West Nile far, although historically an area for Acholi people, has many people who have migrated from other parts of Uganda and some of the tractor operators are said to be from Kenya. This area is also more sparsely populated compared to the other locations, with a lot of open fertile land that can be had 'for those who get there first' and some large company farms. In our villages people generally speak their local languages.

All but two of our locations (West Lango far and West Nile near) were directly affected by the conflict in Northern Uganda in the 1990s and 2000s. Almost everyone in the affected communities left their homes to stay in Internally Displaced Persons (IDP) camps. Families stayed in these camps between five to over 20 years depending on the location. Mostly families did not see their homes and their land until they left the camps for good. In one village (East Lango far), during their last couple of years in the camp (late '00s) people were able to go to their farms during the day with government troops as escorts, but otherwise families could not do this. While land conflicts arose for many of these returning families, on the whole people shared that they feel settled again and 'secure' now that they have been living in peace for over 7 years.

The Families

All 24 of 'our' families' primary livelihood is farming. All 'our' families described themselves as farming families although most are getting additional income from small work such as alcohol brewing, building huts, fishing, making papyrus mats, buying and selling produce and working on other people's fields. Almost all of the families live and farm on their own land that has been passed down for generations. As shown in the graphic on the following page, 15 of 'our' 24 families have at least 8 people living in their compounds and almost half of the compounds we stayed in consist of three or more generations. Only one of 'our' families did not have children, and all but two families currently had children attending school (includes nursery school). Nine families had at least one child under 18 years of age who was not currently not in school.



A1 West Lango far



A2 West Lango near

- Land space:



Acholi near

Around 50 households in three villages. Two small water reservoirs

- Land space:
 - Work opportunities:
 - Programs in community:
- Proximity to markets



West Nile near

- Land space



D2 East Lango near



D1 West Nile far

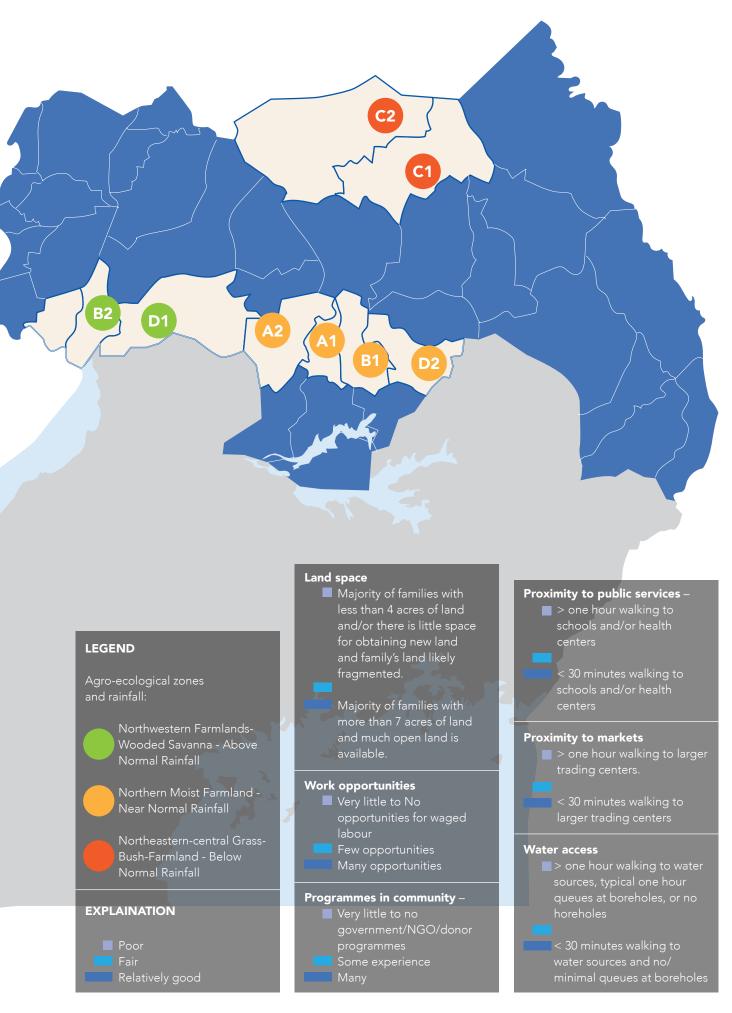
Around 300 households in one large, scattered village. Large plots of land, few trees except those planted. Many small water

- Land space:
- Work opportunities:
- Proximity to public services:
 - Proximity to markets:
 - Water access:









3.2 How people see poverty and their current situation

People's views of their communities

Although not all of our families feel that they themselves are 'poor,' overall people described their communities as being poor or 'neglected.' People most typically told us that that feel this way because of government neglect; few opportunities for work; and/or difficulty in accessing services, markets and assistance like NGO programmes. People talked about government neglect in terms of a lack of facilities and being 'ignored' by the sub-county and/ or district governments. For example, a father in West Nile far said their community feels 'ignored' because they, 'have to travel long distances for medical and other services.' Others described general feelings of being 'less cared for' compared to other areas in

A family dries cassava in the middle of their compound

the sub-county (grandmother, West Nile near), that their sub county is 'always left out' (mother, West Lango near), and quite simply that 'no one from the government comes' (father, West Lango far).

'Government programs stop at the sub county. Here we're poor'

(mother, East Lango far)

Men and teenage boys in particular are aware of different work opportunities that are available outside of the community especially in more urban areas, and they say that a lack of these opportunities in their own area or an inability to access them makes them feel 'left behind'. Some people, like many in West Nile near say they are 'really looking for' companies to come into their area to open factories, big farms, and/or fishing operations. A group of youth here explained that they are looking for opportunities like this because, 'you need a job to not be poor.' In locations like West Lango far, some people admitted that they aren't aware of other opportunities for work. For them, they have to concentrate on farming because, 'that's just the way of life.' Youth in some locations also explained that if you don't have access to assets like smartphones, motorbikes and 'good clothing like jeans' that means that you're poor.

Researchers in West Nile near noted that in addition to people expressing hope that companies would come into the area, they were asked repeatedly if they had 'brought programmes' with them. People here said the researchers 'must be well taken care of' since they were coming from Gulu, where they said there are many NGOs. Meanwhile, although many families in East Lango near were experiencing food shortages at the time we visited they feel less neglected because of what they perceive as good access to programmes - 'we are blessed because all programmes start from our village.'

In West Nile near, severe water access issues affect

to use for making alcohol.



public services in this village was some of the worst.

facing 2-3 hour queues at the only nearby functional borehole well (currently serving five villages). People told us that the borehole pumps frequently break down and the one closest to one of our families here is currently unusable. People told us that children here will sometimes leave school at break time and not return so that they can get in the gueue for water. Mothers here lamented that 'the government never does anything' and that this severely limits their activities during the day. In West Lango near, one of our families lives in a part of this village farther from the borehole where families dig small holes to access ground water which they said 'makes us feel poor.' People here explained that while they are happy when the rains first come, it is still hard because the water will be mixed with clay so 'you have to first scoop the

Least poor



Most poor

dirt out.' This community has also been raising their own money to maintain and repair their borehole because 'the government has forgotten us so we are doing it on our own' (mother).

Some people also said that the difficulty for children to get to school makes them feel poor. This concern was strongly voiced in West Nile far by one father who said that his children are 'vulnerable' because the school is far away. His children have to walk an hour each way to school so the father told us that he is considering moving near the main trading centre in the area so that it will be easier for them to attend.

Although people often talked about the availability of food as an indicator of their own poverty, people are also very aware of how much food families in their community tend to have and serve at meals in comparison with other areas. So for example, the Local Council member (LC) in West Nile near described his village as poor 'because we can only afford two meals and even this is hard.' Likewise, an in-law in one household in East Lango far not originally from this village shared that she was worried about being able to survive in this poor village because 'people only eat once-a-day here.'

During preliminary analysis of the findings, the team ranked the locations from poorest to least poor based on what people told us about their communities and the indicators of poverty they identified. Along

Our pressing water problem

There is only one borehole serving five villages. Collecting water every day is the most complained about chore here. Although the borehole was only a 10 minute walk from one of the homes we stayed in, the queues can take 2-3 hours. place in the queue. Their mothers will then meet them at the well later on to collect the water. Sometimes children leave school at break time and don't come back so they can get in the queue earlier. The kids tell us they get into trouble at school for this. The water from the borehole 'doesn't taste good' and it is difficult to get a lather with unusable borehole and said that it frequently breaks down. The family explained that the sub-county has demanded that people contribute 75% of the cost of repairing the the money to the sub-county so with the transport cost day for water. It takes two hours to get there. They worry about the water 'not being good' and about bilharzia but they take care to boil it especially for the children. One of 'our mothers' said 'it is really hard to balance work at home with fetching water'. And as a research team we cannot imagine how they could be involved in any extra agricultural activity as there simply is not enough time in the day.

with the issues of community poverty noted above, these indicators also include the main things people describe relating to individual/family poverty (discussed in detail below). The ranking focuses primarily on having cash, livestock, children in school, land availability, government neglect, opportunities to make money, and also considers feelings of remoteness/disconnectedness as people described their ability to access things such as NGO programs.

When we conducted this ranking based on our own analysis of the indicators, the only significant change is that West Nile near moves up towards the middle of the ranking while East Lango near moves down. Although people in West Nile near feel neglected, the community has relatively good land availability and fertility, and decent access to towns and markets. East Lango near, meanwhile, has relatively poor land availability and poor access to markets and services although as noted earlier people say that they are proud that many programmes have started there.

How people see their own poverty

With the exception of West Nile far, many of the families we stayed with felt that they are poor although for some they feel they are 'poor sometimes but can be Ok next season' (mother, East Lango far). Other families shared that while they don't have much they 'get by' or still feel 'secure.'

'Money is only a visitor, it comes and goes'

(mother, West Lango far)

As most of our families have not travelled much, when discussing poverty and their current situations people did not make many comparisons with those outside of their area. Often people found it easier to describe what not being poor meant and this included owning livestock and land.

Nevertheless, families across all study locations repeatedly shared that poverty is not having enough food and cash.

Being poor is not having enough food

Our families eat mostly boiled cassava or posho (a boiled mush made from ground maize, millet, or sorghum). During our stay with families this staple dish was most commonly supplemented with pastes made from ground sesame or ground nuts, beans or peas and sometimes borr, the leaves from the mung bean plant. While people said they are able to eat more variety after harvests, eating meat is very rare except in West Nile far and fish is only common in

West Nile near.

'We're doing OK because I make sure we always have food'

(mother, West Lango near)

As discussed later in the section on crop choices (see Section 3.3), all of our families shared that their first priority is planting food crops. Mothers in particular explained that the ability to provide their own food helps them feel secure as a family. A mother in East Lango far shared that although they have been able to build a brick and CI-roof house (often described as an indicator of being better off), 'if there is no food in the house I still feel poor.' People typically described not having enough food in terms of running out of food stock before the next harvest or in terms of the number of meals the family eats in a day. For a grandfather in West Lango far, 'not being able to afford two meals' means that they are doing badly compared to others.

Meanwhile, families in East Lango near said they are particularly concerned this year because of current (February) food shortages. Families here told us that they 'some are even buying cassava stems for UGX 30,000.' They explained that this is very unusual and that it makes them feel insecure to need to do this. A military officer who came by the home of one of our families here said to the researcher who was peeling cassava at the time, 'there's famine but you're peeling cassava,' adding that many families don't have any cassava to be peeling. Our researchers here also noted that although granaries are common in the location, almost all of them were currently empty. Additionally, two out of our three families here are eating only one meal a day, leaving some people to ask the researchers, 'why did you stay in the homes of the poorest?'

Being poor is not being able to pay school fees

People described not having enough cash particularly in terms of 'not being able to pay school fees' (Acholi far) or a 'failure to educate children' (West Lango far). Parents explained that they view education as the key to giving their children more opportunities (e.g. to get jobs, start businesses) so that they can have 'better lives' than themselves or in some cases 'don't have to end up as farmers' (mother, West Nile near). A father in Acholi far wants his children to continue in school so they can become 'important people' like teachers, medical workers, or anyone with a waged salary. Because of this, families told us that they are very motivated to educate their children, including families in study locations with few work opportunities. Some parents shared regrets about not being able to give children this opportunity to have better, and families often expressed hopes to send children who had dropped out of school back to continue their education. This is exemplified by a mother who said, 'I will do anything' to get her 16-year-old boy through school after many of her other children dropped out 'early' (East Lango far). Some parents felt school is so important that school food demands take priority -'certain things are a must to plant because of school demands' (mother, West Lango near).

'We have eight cows but we're doing badly because still no money'

(grandfather, West Lango far)

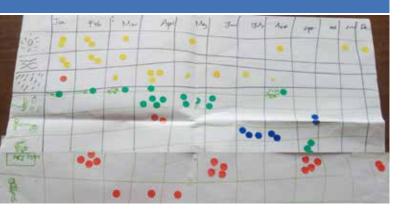


Women in particular strongly expressed a need for cash and school fees are the primary driver behind this. All of our families but two (a newly married couple without children and a young couple with three young children) had children currently in school and the majority of these families had at least three children currently enrolled in school. School fees are around UGX 20,000-30,000/child/term and for many schools also included other contributions (mainly food but in some cases also firewood). Examples of the food contributions needed per term are 3kgs of beans and maize for Primary 7 in West Lango near; 15kg of maize and 20kg of beans for a school at the sub county near West Nile near; and 2kg of sugar, 10kg of maize, and 5kg of beans for lower primary levels in East Lango near. While in many families school fees are paid for

2. Strong motivations for schooling their kids

The family I stayed with 'will do anything for our children - to be better than us.' They said that the Government demands that children go to school and in their Church the pastor reminded them that the Local Chairman will check if children are school going. But anyway they really want their children to do well as 'farming is a struggle' and say they never miss school. Grandma offered to pay for a private school as 'it will open their mind for the future' but they insist they can manage although it isn't easy. Some families insist their children work in the school holidays to pay for their school fees. 'My dad' has bought his son a book on how to pass exams.

Field Notes, East Lango far



3. Mixed feelings about investing in school

After her marriage failed, 'my' family's oldest daughter left the village for the capital last year to become a housekeeper in a 'rich family's home.' Things didn't go well, however. 'My mother' said that this rich family wasn't giving Mary her salary and that they also weren't treating her well. Then Mary got sick and apparently her employer wouldn't help pay for her medical care. 'Instead of sending us money, we had to send money to Mary,' my mother told me. Finally, after Mary recovered 'my mum' convinced her to come back to the village. Mary's experience has worried 'my mother' about continuing the education of her other girls. Mary got pregnant in primary 7, and now with the failed marriage and bad experience in the capital, mother feels like Mary's education didn't help her. She worries that the same thing could happen to her other girls. The family's next two girls, currently age 17 and 14, dropped out at primary level 5 and 4 respectively because of school fee pressures, and mother hasn't seen a reason to push them to continue.

Field Notes, West Lango far

by mothers, on the whole this responsibility is shared between men and women across the study locations. Although almost all of our families shared their priority when planting crops is the family's food needs, two families said that the demands from school for food contributions actually come first when making these decisions. Families explained that school fees are also the primary reason why they might borrow from local savings groups.

People often described the struggle to educate their children in terms of 'pressure each day' (family, East Lango far). Keeping children in school can also be stressful because 'there are regulations that children have to be in school and the LC will check' (mother, East Lango far) and if fees aren't paid yet 'they can chase your children out of school' (West Lango far, Acholi near). In East Lango near, people shared that they are very worried now because 'if sub-county officials find children out of school they can take them back to the sub-county office and you'll have to pay UGX 50,000 to bail them out.' One mother in West

4. Ways to finance school

The youngest in 'my' family of five children includes 7-year-old twins who have been attending school. However, on my 3rd day there the twins weren't getting reading for school so I asked them if they were staying home today. 'We were chased home for school fees,' they told me. Later on as I was chatting with 'mama' I asked about how the family typically earns money. She told me that their money comes from working in other people's gardens along with sales from selling any crops, 'if there's a surplus.' 'What about brewing?' I asked. 'It seems a lot of people are doing that here.' 'My religion [Born Again] doesn't allow it,' mama said. However, she's also not comfortable with

Her 13-year-old daughter, who is Catholic, is going to start brewing. 'I can supervise,' Mama says. 'At least we'll be able to pay for (school for) the twins.'

Field Notes, East Lango near

Lango near also lamented that schools are so focused on collecting fees and yet teachers don't come by to actually check why children aren't in school like she said they used to do.

'If children aren't going to school or no money in the house, you're poor'

(young man, East Lango near)

The difficulty in paying school fees is compounded by the timing of the school terms which start in February (marks a new school year/level), late May, and the middle of September. As a family described to us in making the visual above/below, the start of these terms generally occur at times of particular seasonal stress. In February, for example, people said that food stocks are beginning to be depleted and the dry season is also at its peak in most locations. Exam fees, generally due in November, also occur as families are waiting, or just beginning, to harvest their

crops from the second planting season. Some parents explained that although some leeway is often given for the payment of fees, allowing fees to sometimes be paid later or made in installments (informally) it still worries them greatly.

Being poor is not having cash for daily needs

Along with the seasonal demands for school fees, families shared their other needs for cash and what they feel are essential and what they can manage without. Regular expenses for families are shown in Table 3. Families that drink alcohol spend between UGX 15,500 - 44,000 per week while families who don't drink spend between UGX 5,500 - 19,000. Food costs are much higher for those families purchasing meat (very rare) while for families that drink, costs can be dramatically higher if both parents drink. While women purchase less alcohol than men, women that brew say they usually drink some of this. Generally, people consider soap (a single bar used for cleaning dishes and bathing) and alcohol (for families that drink) the most essential. A father in West Nile far who gets UGX 50,000/month for looking after his landlord's plantation calls this the family's 'soap money' since they always use this money for buying soap. People explained that for other items, like sugar and cooking oil, it depends more on how much cash they have at the time. Since many families said that sugar is expensive for them, some are using a fruit drink powder (Jolly Jas) as a substitute (e.g. in posho) like the eldest daughter in one family who makes daily bread snacks to sell and uses Jolly Jas as a sugar substitute 'since it is cheaper at UGX 200/ sachet' (Acholi near).

Table 3: Family Daily Needs

Item	~Expense (UGX) family*/week	Notes
Soap	750 – 1500	All families (essential)
Food (beans, small fish, vegetables, meat)	3,000 – 12,000	A few times a week. Meat only purchased in West Nile far.
Cooking oil	400-800	Fry 1-2 times per week
Alcohol	10,000 - 25,000	Born Again families and West Nile far not drinking
Mobile phone credit	500 (minimum)	20 out of 24 families
Sugar	1,000 – 3,500	A few families

'I have nothing in the house can't even buy sugar for you to take tea'

(mother, East Lango far)

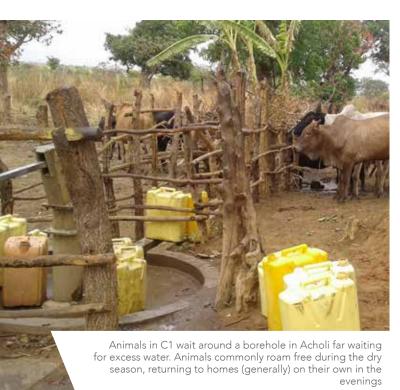
Occasional expenses for families include recreation (paying to watch TV, gambling), snacks (biscuits, soda), toiletries (most commonly petroleum jelly) and medicine which people said they can only afford sometimes. Only one family regularly buying medicine (West Nile far), but in other locations people told us that because the health centres in their area don't usually have medicines in stock they sometimes 'have to buy' (Acholi near). Some families also mentioned also shared that they need to make contributions for funerals. Seasonal expenses include seeds and herbicides (some families), hired labour (rare) and weddings (especially November - December). The purchase of daily foods and supplies is generally taken care of by women. In some cases, mothers will give cash to children for them to go and pick up items.

'If well off, should always have enough cash, feeding kids and send to school'

(Grandfather, West Lango far)

Other indicators of poverty that people talked

about, although less frequently, included being able to get medical attention, issues with connectivity/ awareness, regular physical activity and old age. One mother in East Lango far said that, 'if you can't get medical services when you're sick then you are poor,' explaining that part of the problem for them is that you also need money to be able to pay for the transport. A mother (West Lango far) is also concerned about the type of healthcare they have access to, telling a story about a neighbour who had died because of the poor health care that she received and said, 'this would not have happened if they had money.' Some men talked about being poor if you 'can't access information' and 'don't know what is happening in other places' (man, Acholi far) or simply 'if you don't have knowledge' (man, Acholi near). Another man in this location explained that you're poor if you don't have knowledge because then, 'you can't do things on your own.' Men and a grandmother in Acholi near said that, 'if you're lazy you'll be poor' because then you won't be able to provide for your family. For this grandmother, 'you invite poverty to yourself when you want.' An older man in East Lango near said that you're also poor 'if you're old and can't help yourself.' Although not directly referencing poverty, other people discussed this concern about being unable to take care of yourself when you're older in terms of their aspirations and their family's future in farming (see Section 3.7).





Implications of needing regular cash

The need for regular cash means that all of our families are growing at least one cash crop and along with owning livestock (except for one family in Acholi near who only have a dog), most also have other small income earning activities besides farming such as brewing alcohol (common in all locations but West Nile far and West Nile near), selling honey (not common, but quite profitable), making bricks (good money, but seasonal), catching and selling fish (in West Nile near and on a smaller scale Acholi near); selling milk (not common); petty trade (like a mother reselling cabbage in West Lango far); and artisan work (such as the fathers making hoes and papyrus mats in East Lango far). A smaller number of people are doing some kind of waged labour, most typically construction and security work but in some cases also including farm labour for large individual landowners (West Lango far, West Nile far) or on company farms (West Nile far). About 1/4 of our families depend partially on external family support, such as receiving help with school fees from a separated father (West Lango near), remittances from a son working in Sudan

(Acholi near), and food contributions from sons who have moved out of the family compound (East Lango near).

Changes and Worries

Along with the everyday routines and struggles, over our five days with families people also shared some of the changes they have experienced in recent years and some of their concerns for their communities as a whole. Across all locations people told us that one of the biggest changes in recent years is what they perceive to be the changing weather patterns. People generally referred to these changes as 'too much sun,' 'not enough rain,' or 'the rain is unpredictable.' Some like a mother in Acholi near said that they are looking to deal with this situation by planting crops perceived as being more resistant, typically described in terms of 'can stand dry spells' but in a some cases also in terms of having less pests. A grandmother in East Lango far said she had recently planted some 'timber' trees due to concerns about the unpredictable weather. Mostly though people do not have specific strategies to deal with these changes. People explained that the

5. Returning divorced daughters add to the financial burden.

During my stay in the village, many told us about daughters who had divorced or become separated and had come back to their parent's home to live. I chatted with a Local Council member generally about poverty and we talked about family size. I only have one son and he laughed and told me that there is a family with 17 children in the village. He continued to share his own story, which was like others. 'My daughter returned home with one child after her first marriage failed. I have to accept her and my grandson – he has my blood in him and I just can't simply reject him. Now I have to raise him, I have to be responsible for his school fees, health care cost if he is sick and other costs.' But then despite the advice and fights his daughter and he had, 'she got pregnant again with another man and returned to my home again after the relationship did not work.' He is resentful that he will have to bear all the costs while the biological father lives in Kampala and does nothing. He shared that it would be too much trouble to take him to court and is resigned - 'I must accept her. I can't reject her to teach her a lesson. I will regret it if something happened to her or my grandchildren. Although I have little I need to share.' But he continued, 'it does not stop there, I have my sister who also returned home after her marriage failed. She and her four children. I have also to be responsible for all of the children. At least I need to ensure they eat. Please tell me how can I out from poverty?'

Field Notes West Nile near

weather changes started in 2014/2015, and although they are worried about this they said they are still hopeful that there would be good rain this year.

People in some locations are also very worried about some of the pests and diseases they are now facing. In both West Lango near and West Nile near, people told us that their cassava (their staple food) has been prone to disease the past few years. Although it was rare for people to complain about pests and diseases since most people view these as a normal part of farming, one mother in West Lango near has complained to the sub-county about the disease cassava have had the past three years. In West Nile near people talked about a few different diseases affecting cassava and some felt this was due to the introduction of a new variety. In some locations, people say that there are new pests such as witch weed which they are struggling to deal with (particularly in Acholi near) and new diseases affecting sesame things that other crops have brought in.

Alcohol brewing

'Alcohol only leads to more poverty'

(mother who brews, West Lango far)

Brewing alcohol at home for selling is common in five of the eight study locations. Eight of our 24 families brew alcohol, with a ninth family planning to start brewing soon (see Box 4). Brewing is done almost exclusively by women. The only exception among our families is a woman-headed household in West Lango near, where the second oldest son, the oldest daughter and the mother are all brewing. Women explained to us that the money from selling their brew is often used to pay for school fees. Most of the alcohol families are brewing is cassava-based, using either hand-pounded cassava or cassava flour.



A mother brewing arege, the homebrewed distilled alcohol in East Lango near. Families say that making and selling this provides good money and that there is good demand. These families try to balance cassava stock for consumption and stock for using in their homebrew.



For those using hand-pounded cassava, mothers told us that the entire brewing process takes about one week. Most also said that during the dry season they are doing this as a continuous process, so that as one batch is finishing they will begin to ready the ingredients for a new one. Particularly during times when these families do not have crops to sell, like when we visited towards the end of the dry season, this local alcohol is often their primary source of cash. A bar owner in West Lango near explained that it takes about UGX 30,000 worth of ingredients to make one 10 litre jerry can of brew and then you will be able to sell this for UGX 50,000. The mother who was with the researcher agreed that this sounded right and

Those who are less poor have livestock

that it's 'worth it.'

'If you have a lot of animals then you will be rich'

(mother, West Nile near)

Families described animals providing both financial and psychological security for their lives. One family summed this up as, 'important source of income, needed for marriage, and a man should own livestock because otherwise he has no respect' (Acholi far). In particular, families shared that they feel poor if they don't own any cattle. One family said that they are 'desperate to replace their bulls' and that these are a big help for ploughing (Acholi far). Similarly, a mother (in Acholi near) said that she values animals and 'wants to work really hard this year so that she can buy another bull.' Cows are also used for dowries (generally at least two) and are given to the bride's family. One family mentioned that because of this, they feel that having girls is an asset. On the other hand, they explained, boys tend to stay around the home/village and 'look after them' (West Lango far).

People told us that livestock act as savings and said that smaller animals like chickens and goats can also be served to visitors, although they rarely eat these themselves. Some explained that these 'savings' can then be easily sold for cash to pay for expenses like school fees and family emergencies like unexpected health costs. In the case of a family in East Lango far, they shared that they had sold some of their cows to help construct a brick and CI-roof house. Animals are also needed in some areas as compensation for local misconduct, such as in West Lango near where an unmarried young man said he had to give up one of his cows after being caught with a woman sleeping in his hut.

Those who are less poor have land

'I feel rich when I have a lot of land'

(father, Acholi near)

As mentioned above, land is an important factor in how people perceive poverty for themselves and others. More than anything else, people shared that having 'enough' land for planting crops to feed their family and for passing on to their children provides a sense of security for one's family and its future.

6. Land issues - insights from a clan meeting

While staying in the village I went to a clan meeting where the agenda was mainly to discuss land grabbing and land disputes. The clan leader came with a number of lawyers and copies of the Land Act translated into the local language, Luo. He talked about the problem of the Government gazetting land for public services such as schools and hospitals but also about game reserves. 'Customary land does not have titles but you find people getting titles for this land and then come out of the blue and evict people on a large scale even at times using the police'. He said Northern Uganda was very vulnerable to this and cited many examples of 'land grabbing' for mining, oil extraction and ranches - 'It has never been there in previous regimes. Before people might be looted of their watches, money and property, cars, but now in the current regime, it is land that is being looted'. The meeting went has been denied inheritance, polygamous wives who had been passed over or large families where the land had not been divided. The committee presided over each case and made a decision which they said was to be enacted within two weeks. Men were told to refund money to buyers who had bought customary land from them as this could not be done without consultation. Customary land was important, the clan leader told them, as insurance in case of emergency or to pay large sums of money, for example for university fees. He told people they should not sell land to get married or 'for merry making' or for small expenses. He insisted that land wrongfully taken should be handed back immediately to the rightful owners, 'lest you get punished with flogging, of over 100 strokes in public, and sent to jail without compromise'. He said that the population keeps increasing and the land remains constant and so there was a need to stop grabbing. 'If you have any land disputes, you should come and have them settled by the clan leaders committee because it is most efficient, effective and at no cost. And I discourage you from rushing to take your cases to Lira high court because it is very costly and most cases take a very long time to be heard.'

Field Notes, B2

Because of this, many people emphasized that they would not want to sell their land. One motivation for this is ensuring that their children will have some land of their own. In some cases, such as in West Lango near, Acholi far, and East Lango near people said that their clans also encourage people not to sell their land. During a clan meeting in West Lango near, the clan leader told people that they shouldn't sell their land away 'because then you'll be a slave.' A few mothers shared that they have inherited land back in their home villages, and although both are not using this land (left fallow) they said it gives them extra security - 'I could rent it out if I needed to.'

You can get out of poverty by owning good land, allows you to buy stuff like a city person'

(father, West Nile far).

As shown in the household profile graphic on page ____, most of our families have at least 3 acres of land. While some people described the amount of land they have in terms of 'acres,' some referred simply to 'plots' while others to 'talas,' (~25 talas = 1 acre). Our researchers felt that a 'plot' and 'acre' are considered by most people to be about the same size, around the size of a football pitch (*most football pitches are slightly larger than one acre). With the exception of West Nile far where large landowners and companies dominate and one family in Acholi far, families told us their land is ancestral land that has been passed down for generations. While no one mentioned having official land titles, a few people talked about having land certificates which are provided by one's clan. All of the land that people are using for crops is rainfed and the possibility of irrigation was only mentioned by one of our relatively better-off families (East Lango near). Here a father said that because of the lack of rain in recent years, if he had extra cash he would want to try making irrigation channels from the nearby swamp. Generally, people told us that all of their land is suitable for planting crops. While many

families said that they were using all of their land for planting, some families said they are unable to use all of their land because they simply don't have enough people in their family to work on the land and it is rare for families to be able to afford hire labour.

Land pressure is most acute in West Lango far, East Lango far, and East Lango near. As mentioned earlier, West Lango far is one of the two poorest areas where people did not leave for IDP camps during the conflict in the '90s and '00s. East Lango far and East Lango near are the two locations where people were in camps for the shortest period of time (around 5 to 10 years). These two locations also described the highest levels of land fragmentation. A mother in East Lango far explained that with land pressure high in their area, they will only be able to pass down land to their boys, whereas in the past her parents had given land to all of her siblings (8 girls and 2 boys). She said that she would like to do this but that, 'it's just not possible.' It would seem that families have farmed more intensively in areas which were either not abandoned or abandoned for the least number of years such as one family in East Lango near who

7 • Clan leader's advice on inheritance of land by girls

You people, the world has now changed even the girl child is able to be given the opportunity of being an heir and take over inheritance from her parents, and in most cases these girls can even do much better than the boys in terms of taking good care and being responsible for their homes and property, so let us embrace the girls and not under look them', the clan leader urged the members at a meeting I attended. He cited a case where a family had only girl children and when the father died the relatives of the man wanted to take over their land and property claiming that there were no boys. 'But we settled the matter by allowing the widow and the girls be given their rightful ownership over their late dad's property. They will not give this up when they get married- the land was given to the girls and their mother by their father.'

Field Notes, West Lango near

8. Farming at the 'park line'

One evening, 'my' brother took me for a walk to one of the nearby trading centres (a 45-minute walk from 'my' house). Once there, he pointed north and said that the 'park line' is that direction. 'What's the park line?' I asked. 'My' brother's friend joined us as 'my' brother explained that the term 'park line' refers to the area between the national park and the local community's land. While no community members are allowed to settle or farm within the park line, people have started to farm around the boundary area. They told me the park line has very fertile soil, particularly good for farming soya beans and sesame, although you have to watch for wild animals like elephants and lions. No one owns the land but you can pay the game rangers UGX 20,000 for using one plot of land for farming. They said that some farmers farming at the park line. They told me that people usually go for farming at the start of a school term and return (after harvesting) at the end of the term.

As we were chatting, a group of people riding bicycles and carrying sacks and hoes passed, saying that they were 'going to school.' 'Going to school like that?' I said. 'School is the park line,' my brother explained. He said people call it that because the farmers who go there usually follow the school term.'Some children have even dropped out of school to farm there because the cash is good there for soya and sesame,' he told me. 'It is their school now.'

Later during my time in this community a retired headmaster mentioned the 'park line' while we were chatting about generational change. He told me that due to high levels of youth unemployment, many have taken up lucrative farming at the park line. 'Did you notice all of the tyre tracks headed in that direction?' he asked. I said I had, but that I thought they were heading to the auction market. He laughed. 'Those are people from the neighbouring districts heading to the park line.'

Field Notes, West Lango near

said that, 'the land is not as good as it used to be' so they can't get as good a bean yield as they used to. Where 'open land' is most limited (West Lango far and East Lango far), some families are renting land by the season 'in Gulu side' or in Nwoya district. This is sometimes done in groups and people said that one could get a plot of a few acres for around UGX 50-60,000 for the season. These families also believed the land in these other areas is more fertile compared to the land in their own villages.

Although people in West Lango near and West Nile near shared that land availability is still quite good in their areas, some said that they felt that polygamy which continues particularly in these two locations is leading to splitting land into smaller and smaller plots for children.

Some families in other locations also told us about renting land elsewhere. For example, a mother (in Acholi near) is interested to rent land in a neighbouring sub county because she feels that area is particularly well suited for planting sesame because it is 'virgin' land. While families in West Lango near mentioned that overall the land in their villages is still fertile, some said there are some people growing sesame in a neighbouring district because the land there has been fallow for a long time. Additionally, some families here are starting to use land near the national park boundary for a small concession fee because it is felt to be very fertile, with some people from both inside and outside of the community building second homes around this 'park line.'

Many of the communities we stayed in are bordering swampland or have swamps nearby. Generally, people told us that the swampland is communal land and can be used by anyone in the village. In two locations, people have been using the swamps in their area for regular planting (West Lango far and East Lango near). Others, like some families in West Lango near, are using the swamp for fishing for home consumption and as a water source for their animals (also East Lango far, Acholi far, East Lango near). In West Lango far, some families have been planting rice and cabbage in the swamp and one family said

9. Farming in the swamp to be outlawed

It was the fourth day when the LC visited us again. We had just finished lunch with a sub-county official who had already visited. They were talking about how the weather is changing and were worried that rain will come late again this season. Then the official said, 'we are going to clear up the swamp area, too many people are farming there.' My father was also there and said that he didn't know about this and had just planted vegetables in the nearby swamp. The sub-county official said that they will allow one last harvest, but afterwards my father will be punished if he farms there.

The LC's house and land are also located around the swamp though. When I had visited her house on my first day in the village, she told me that she is happy there because the swampy land is fertile and good for farming. Now to the sub-county official, she said 'If I'm not allowed to farm in swamp area, where will I live? That's the only land I have.' The official simply responded by saying, 'It's not allowed. You have to move because the swamp area has to be

After the official left, I asked people why the swamp will now be protected but no one is really sure. Some said that, 'farming in swamp area makes the rain late' while others said that 'if you farm there, the cattle won't be able to drink the water in the swamp.' I asked whether the government will really enforce this regulation or not. 'Yes, of course. If government said no, then you are no longer allowed to do that. The LC house will probably be bulldozed.'

Field Notes, East Lango near

they are excited to try planting chilis there as well for the upcoming planting season. Many people in East Lango near were also planting rice in the swamp, but people said that they are worried about this because the government has told them that it will be illegal to do this for the upcoming season. One of our fathers, who had planted millet there in the previous season, said that the government told him that after harvesting he's not allowed to go back. The LC's house in one of the villages here is actually located partially on the swamp and she said she was told by a

government official that 'we are coming' and that they said they would bulldoze her house. One father in West Lango far told us that he heard the government wants to make using the swamp illegal to conserve water, but he is not convinced that it is necessary and most families in these locations did not understand the reason for prohibiting swamp use.

Although all six of the study locations where people had moved to IDP camps at some point talked about some land conflict issues upon returning, people said that most had been resolved although 'old conflicts do surface from time to time' (LC, East Lango far). People said that when they came back from the camps they relied on natural tree boundaries, if possible, to be able to find their land. People said that for land issues that did occur, most were resolved by local clan leaders with families in one location telling us that the local government also encouraged them to settle land disputes at the village level. In West Lango near, the clan leader at a meeting told people to use the Local Council to resolve issues because if you go to court 'you will just struggle for years.' Two of our families shared that they had eventually gone to court in cases where the disputes could not be resolved at the local level. A grandmother (East Lango far) said her connection to some 'big people' helped her quickly win her case while in Acholi near a grandfather said he had local land agreement papers and that this helped him to also win his case. In Acholi near a father shared that people are starting to struggle more for land now because they 'have realized that there is money in land.'

3.3 Why people grow what they grow

'Our' families across the eight study locations described two planting seasons, one starting around March and ending in July and a second season starting around August and ending in December. Some researchers made seasonality drawings with their families where the researcher asked the family about their different activities, and the intensity of these activities, at different points of the year. These drawings also provided a natural opportunity to

explore for families and researchers to explore the ups-and-downs that occur during a year and what influences these. As can be seen in one/multiple of these visuals graphic below/above/superimposed, families are busiest during planting and harvest times while they face particular school fee pressures around February, late May, and September as noted in section 3.2. Although the exact length of each season differed slightly across locations, many people explained that the first planting season has bigger rains compared to the second planting season.

'They will sleep hungry if I go for cash crops

(mother, West Lango far)

People said overwhelmingly that the priority when deciding what to plant is ensuring that the family will have food. A family's relative poverty did not affect this - our 'richest' families also prioritise having food crops. Although staple foods take priority, all families were growing a wide variety of different crops and making seasonal, or at the very least yearly, adjustments between the specific crops being grown for each planting season. The exact crops varied widely, including within a single location depending on individual family choices and preferences. Beyond providing food, people discussed key factors in crop choices being price, yield, effort required (including planting, weeding, and harvesting), seasonality, time to crop maturity, and the presence of a 'ready' market for a particular crop.



Table 4 – Staple Crops and Main Crops Sold

Location	Staple food	Food Security	Top selling
West Lango far	Cassava		Sesame, Soya, Cassava
West Nile near	Cassava		Cassava, Soya
East Lango far	Cassava		Soya, cotton, sunflower, sesame
West Lango near	Cassava, beans		Soya, cotton, sunflower, sesame
East Lango near	Sorghum, cassava, beans		Cassava, soya, cotton, sunflower
Acholi far	Sorghum, cassava		Cotton, sesame
Acholi near	Sorghum, millet		Sunflower, sesame
West Nile far	Cassava		Maize, Rice, Ground nut

Cassava is typically harvested on an as-needs basis for food, such as this family in West Nile far.





Crops for Food

While mothers told us that they take it upon themselves to ensure that food crops are planted, fathers often acknowledge the need for this as well. 'Cassava is number 1; it will feed the family' (man, West Lango far). 'Soya brings money only so puts family at risk for food stock' (father, Acholi far). As noted in the discussion on poverty, some families also pointed out that, 'certain things are a must to plant because of school demands' (mother, West Lango near) or that it is 'difficult now because you're not only paying fees but also need to provide crops even though you don't have enough at home' (mother, East Lango near).

As shown in Table 4, cassava is the most ubiquitous crop across locations and in places like West Nile near and East Lango near, it also functions like a cash crop for many families. Along with cassava, people in most locations said that beans and peas are very important

to overall food security. These crops provide an When water sources are available, mothers mentioned that



'assured bit of food' (mother, West Lango near) as 'you can't sell things if you don't have food' (mother, East Lango near). In a few locations mothers told us about other foods that help ensure their supply food, such as cabbage and kale in Acholi near which 'can provide food guickly' and mangos in East Lango far which are ripe around April, right when food stocks are typically lowest. People here said that everyone has mango trees and that during this time they, 'rely on it for food and only cook in the evenings.'

The most typical crops which are stored for consumption include maize, beans (not including soya beans), peas, sorghum, sesame, and ground nuts. The type of beans varies across locations but most families are growing at least two types such as mung bean and yellow lentils. People typically harvest cassava on a needs basis, digging up at the most two sacks at a time and more often simply a large 'bundle'. From our observations and meals with families, stocks of beans and peas last the longest, along with cassava, while most other crops were already finished or nearing finished at the time of the fieldwork.

Some families told us about seasons where they had planted many cash crops or sold too many of their food crops only to run out of food. For those some families who relied heavily on selling some of their staple crops for cash (particularly in West Nile near and East Lango near), balancing food supply with the need for cash is particularly difficult (see also Box _). In East Lango near where families sell a lot of arege, a home-brewed distilled alcohol, families would typically dig a sack or two of cassava at a time then separate some for food and some for grinding into flour for brewing. Although people said that they try to prioritize having enough cassava for food, particularly since they have the option to purchase the cassava flour from the local trading centre, they sometimes run out. One of our families here said that they want to rent more land next year so that they can plant more cassava since the family doesn't have enough this year. One family in Acholi far said that they don't have enough sorghum for consumption at home because they ended up selling too much. Since families' and particularly mothers' primary concern

is food for their families, not having enough of one's own food stock, even for those who can afford to buy food, is viewed somewhat negatively both in and outside of the home. A single mother in West Nile near said that she 'felt bad' about not being able to rely on their own crops for food and that she would adjust her planting for the next season to try and ensure more food.

Crops for Selling

Families made matrix rankings with our researchers to explore the trade-offs that different crops have. Using the factors people said they consider when planting a crop, most commonly price, yield and the effort/ease in planting, families graded different crops that

10. Selling too much cassava

People in 'my' village are growing a lot of cassava so I was surprised when I met some ladies at the local market who said that they foresee hunger this year. 'Why do you think that?' I asked, curious. They told me that the problem is that people are selling their cassava at a faster rate than they are growing it. 'Lots of people are already needing to buy cassava,' they said. 'Why don't people sell less of their cassava then?' I asked. 'How can we not sell it when we need the money?' they responded.

Field Notes, West Nile near









they plant according to these factors. As some of the images of these rankings made by families show, different crops often do better for different factors. This may help explain why for example, a father in West Lango far told a researcher who asked him which crops should he should plant first if he moved to the village that, 'you should be plant all of them.'

'Men prefer crops that make money but women like food crops'

(17-year-old girl, West Lango far)

Across all locations people expressed that they do consider market prices when deciding what to plant. Although families are selling many of the crops that they plant, most are not purely cash crops and people explained that they liked the versatility of particular crops. This was true for cassava in some areas (such as West Lango near, West Nile near, West Nile far and East Lango near) as it could be sold for 'good money' along with providing a fairly stable food supply for the family. Mothers also like that cassava, 'can stay in the garden for a long time' (mother, Acholi near). One single mother in West Lango far said she likes soya bean because she can sell it, make porridge or make milk although overall not many families are using soya bean for food. In East Lango near they were only eating soya bean because of the food shortages in the area and complained that these beans 'take forever to boil.' Maize, ground nuts, and sesame meanwhile are both regularly eaten and sold in many locations - 'ground nuts are good because profitable and can eat' (mother, Acholi far).

The primary crop that families are selling varied varied widely as the above Table 4 showed. In West Nile near, buyers from outside of the district come to buy large amounts of chopped, fermented cassava. In East Lango near, most families told us that the primary way they earn cash is through the making and selling of 'arege,' a local alcohol brew which is made using cassava flour. Because of this, many people here said that a lot of the cassava they grow is used to make

cassava flour for the production of arege.

Compared to other crops, sunflower is unique in that it was most often being grown in groups (as a requirement from either a company or a programme). Like cotton, people said that sunflower is usually sold to the company or programme that provided the seeds and that this company/programme often comes directly to homes to buy. Where sunflower is most dominant (Acholi near and East Lango near), people told us that it had been introduced by programmes (Restoration of Agricultural Livelihoods in Northern Uganda, RALNUC, in Acholi near and a NGO in East Lango near). People in these locations also shared that they have generally positive feelings about working in groups, a marked contrast to most families in other locations (see section 3.6). People in many locations explained that sunflower does better if planted in the second planting season because there is less intense rain in this season. Cotton is viewed most positively in both of the Acholi locations and some families in Acholi far have also started to sell their cotton collectively, which is the only collective selling happening through people's own initiative rather than due to a particular programme demand.

Soya bean was consistently said to be relatively easy to grow and that it gives good yields. Even in areas where people mentioned the price not being good at the moment (such as West Lango far) many still liked planting this. A distinct exception is Acholi far where people told us that their variety of soya bean 'has a scent which attracts rabbits and squirrels so never grows.' Still, one family in this location is interested in trying other varieties of soya bean but they 'don't know where to get the seeds and do not know how to grow it.' While some people said they like sesame because of its good (high) market price (West Lango far, West Nile near, Acholi far, Acholi near), others like it because it requires little weeding and many pointed out that they felt harvests would be particularly good if it is planted on idle or 'virgin' land. Mothers in particular say they also like crops which are easy to sell in smaller amounts for cash to meet every day small cash needs such as pigeon peas (Acholi near) and tomatoes and eggplant (Acholi near, East Lango

near). For crops like pigeon peas, along with other beans, sesame and ground nuts, mothers shared that they take small amounts from their food storage for selling at the local trading centre.

There were wide variations between locations as well for which crops fetch good prices along with the current readiness of different markets. For example, while people in West Lango far told us that the price of soya bean was currently not good (UGX 800/kg), people in West Lango near, East Lango far, and East Lango near felt that soya bean was fetching a good price. There were also sometimes variations between

A father and son sort chilies. They are planning to plant chilies in the upcoming season because they have heard there is a good market for these.



perceived market readiness within one location, such as West Nile near where a woman headed household had recently tried soya bean and felt there was a good opportunity for growing this although our other two households said that soya bean did not have a 'ready market' there. A father (in West Lango near) said that although sunflower seeds are expensive, because of the ready market, 'it is assured to get a profit.' While most families that grew leafy vegetables said they did so to provide some variety in their diets, one father (in West Nile far) was growing these because 'others don't grow and don't know how to grow properly' and he felt that with the development of the area demand would soon be very good.

A few of our mothers also did some buying and selling

of crops which are not readily available in their areas. In West Lango far, one of our mothers buys cabbage from a neighbouring district town and sells to provide some much needed cash as the family neared the end of its food stocks. She shared that 'it's hard to get cabbage in the village during the dry season so there is good demand for it.' A mother (in West Lango near) shared that she also felt there was a good market for cabbage in her area, along with tomatoes, and is planning to start buying and selling these.

Due to current concerns about the weather, and in locations where people are particularly concerned about certain pests/diseases (such as Acholi near), some people said they like crops that are more resistant. While people in many of the locations explained that cotton requires a lot of work, many said that the price of it is good and that it has other advantages such as 'withstanding a dry spell' (father, East Lango near).

People are also highly influenced by positive or negative experiences with a certain crop. Some people in West Lango far and East Lango far said they are excited to try planting chilies because others have been 'successful' doing this. Many people in East Lango far and Acholi near talked about neighbours copying each other after perceived successful harvests. This included sunflower, sesame, soya beans, chili, cotton and maize (last year) in East Lango far and sunflower and pigeon peas in Acholi near. Meanwhile, a father in West Nile near said he does not like sesame because he feels this has brought some weeds that he hasn't been able to get rid of. A father (in West Lango far) had tried sunflower but said that it, 'spoiled the soil,' explaining that the next time he planted something on that land it did not yield well so blamed this on 'the Mukwano.'

Who makes cropping decisions

Overall, people shared that the decisions about which crops to plant are made jointly by mothers and fathers. In many cases, people explained that men tend to be more 'in charge' on the cash crops while women 'handle' the food crops. Some mothers described this more as men wanting to focus on the

where the money is at while they have to make sure the family has food. Some women in East Lango far said that growing sunflower and soya 'must be the men's decision because they get the cash and spend it on alcohol.' Women here and in some in other locations also voiced frustration that they 'never see the money' from the main cash crops. However, in East Lango far one family said that they discuss what to plant together but that it's mainly the mother's decision while in another polygamous family here the father said that he decides who will use what land but that, 'what crop to grow is the mothers' and kids' decision.' Some families said that the father takes the lead in decisions but that they agree on it together,

such as a family in Acholi far. Only in two families did mothers say that they didn't have much influence in planting decisions, 'I put cotton because my husband said' (mother, Acholi far). In families where fathers made the final decisions, mothers told us that they can usually still ask to plant a specific crop and, 'he can allow it' (mother, East Lango near). Women also often shared that men like to focus on cash crops while they focus on crops that can provide food. The father in one family in West Nile far explained that he has his wife cultivate on a third plot of land, 'so she cannot touch my and my brother's plots' where they are focusing on cash crops. While this means that the mother generally does not have access to money from

11. A new start and optimism in farming

'My father' returned to his village twenty years after the occupation by the Lord Resistance Army. He was just 7 years old in 1990 when his family had to flee to a refugee camp about three hours walk from their village. For the first five years they were able to sneak back home at dawn or, when they thought the rebels were not about, to cultivate the land and harvest food. But life became harder and rebel activities intensified with their ancestral village becoming a battle field. When he was just 13 years old his father joined the Government army and he remembers hearing him say to his grandparents and his mother 'I want to join the army to bring peace to our region. I am tired of running everyday as if I am not a man.' Two days later, he disappeared...for ten years. His mother and siblings moved and he was able to attend primary school, 'I was very intelligent and all my maternal uncles wanted me to be educated but they also had no money as they were only farmers'. He went to College but could not finish because of lack of funds and got a job with G4S security guards. He was a fast learner taking only four months for the six-month training course and he was 'much loved by instructors.' He travelled widely for his work, supervising twelve others and guarding farms, estates and banks. He heard in 2004 that his father had returned and that his family was resettling in their village. He took leave and joined them during which time his father acquired the land title on 940 acres of ancestral land, the land which had been unoccupied for over 10 years.

'My father' joined a new security company and worked in Kampala. He shared he was inspired by people who used even small pieces of land wisely to plant matooke - plantain, coffee, beans and yams at the same time as rearing cattle and goats. 'These people would make money and I could see them earning a daily income though not a lot.' He met many others working in construction and mining and decided he wanted to become self-employed. Guarding a warehouse one night, three robbers entered, one of whom was armed. He tackled the one with the gun and shot the other two. His reputation was much enhanced by this act of bravery and he got good references for another job. This new company had just imported new telecommunication masts and he took the initiative to assemble them overnight using the instruction manuals. The owners came next morning and seemed angry. He apologized profusely but when they connected the masts everything worked perfectly. 'You have done a wonderful job...one that takes an expert five hours.' They rewarded him with UGX 1 million. With these savings he returned to the family land, married and started small scale farming on a small part of the 940 acres of ancestral land he co-owns with his brothers. I feel I met a true entrepreneurial farmer who is willing to try different crops. gradually mechanize his farm.

Field Notes, West Lango far

those crops, she does get the money from any selling on her third plot of land. This split between access to money from harvests is present in many of our families.

'We look at the potential market and make the decision together'

(family, East Lango far)

In West Lango near, in two of our three families all of the family members involved in farming had their own plots of land that they controlled and could make their own decisions about what to plant. Still, the mother in one of these families explained that they still discuss their decisions first together. Although often not explicitly separated out as the mother's land, in all but one location (East Lango near) mothers shared that they have

12. Providing while husband is away

Caroline is a mother of two who has moved back to the village from town after her husband was transferred to work in a different school in another district. For now she is taking care of her children on her own in a small compound with two huts that she also built. On their land she grows crops like soya, sesame, millet, and sorghum, selling some of these for cash. She said she likes soya because it's very versatile - you can sell it and make porridge or milk with it. Besides farming, she also earns cash from tailoring, which she does from home. When I asked Caroline how she learned tailoring, she told me that she grew up as an orphan. She said that she was eventually taken in by a mission and given work there. When asked by the mission priest what she wanted to do with the money she had a tailoring course. Caroline said that she was interested in this and felt that tailors are always needed by people. Now each afternoon Caroline finds time to tailor people's clothes, that is of course after taking her children to school in the early morning and going to work on her farmland.

Field Notes, West Lango far

at least some part of their family's land that they have control over. Additionally, in all of these cases mothers said that they would get the money from selling any crops in these areas.

3.4 How people sell crops

Some of the smaller trading centres within our communities have small outdoor 'markets' (these may be daily or a couple of times a week) where people can sell small items to other locals and/or small-scale buyers. Once a month at least one of the larger trading centers in an area has an 'auction' day which aims to gather multiple nearby communities and buyers from outside of the area.

'They [buyers] play with the price because they know there is nothing we can do about it?

(mother, Acholi far)

Although people in a number of study locations told us that they are aware of better prices for crops outside of their area, it is rare for them to actually attempt selling crops elsewhere. People explained that the main reason they sell in their own area is because it's easy and they get cash quickly. Additionally, many told us that trying to transport crops outside of the area just doesn't seem feasible, either because it's difficult to do so (because of distance or a lack of options) and/or its expensive. In West Lango near for example, one mother said that beans can be sold for twice the price in a neighbouring sub-county town while a young man in another house said the same about cassava but that getting to these markets 'is just too difficult.'

All but two of our families told us that they sell their crops quickly after harvest, primarily because they need the cash. People described the need for cash being so great that they 'will be happy with whatever price' (woman, East Lango far). People explained that holding onto crops presents a lot of uncertainties - price fluctuations aren't consistent













In order to avoid the fee for selling inside the market, some families are using a partially constructed building to sell to their pounded cassava to buyers from outside of the district

or easy to understand, storing crops may reduce its weight and affect the price and market demand is always changing. Given the convenience of selling quickly to buyers in their own area and with demands like school fees, people said that it's just easier to do this. Similar to how planting decisions are made, some families said that the father will often decide and handle selling larger amounts of crop while for smaller amounts the mother 'can do this on her own' (father, Acholi near).

While buyers tend to come directly to people's homes for cash crops like sunflower and cotton, this is also the case for a whole range of other crops as well. People in a number of the locations told us that as long you had at least a few sacks of a particular crop, you could get buyers to come directly to you. People said that the farm gate price for a buyer coming directly to one's home would not be any different from selling in the local trading centre or market. The only family regularly holding on to crops with the intention of waiting until prices rose was what we felt to be the least poor family we stayed with who also lives in the least poor location (West Nile far).

In just a few instances families mentioned transporting crops as a group. Some families in West Lango far have recently began to group hire a truck to take their rice to the neighbouring district for husking because they said the price is lower and then you can immediately

13. Cassava black market

In 'my village', there was a group of five cassava buyers from Arua district who would come every Tuesday to buy cassava from farmers. They used to buy cassava from the big market in the area that runs every Tuesday as well but made a deal with 'my mum' to organize a different way to sell. So we accompanied 'mum' on Monday evening as she went round to the neighbours, 'Get your cassava ready, the buyer from Arua arrived tonight and will buy our cassava tomorrow'. Apparently the buyers come on Monday evening and spend a night in the village so that they are able to start buying cassava from the farmers very early in the morning. They set up in a partly constructed building about two hundred metres from the main road. On Tuesday morning we took our cassava along with other women and children to this spot. The buyers weighed the cassava up using a small plastic bowls so it took quite a long time for our turn. I chatted with others waiting their turn. Some had sold most of their cassava because they need the cash now. 'we heard there will be a famine in June but we do not have another option, we need the cash now'.

This illegal market avoids the market fees (UGX 1000 per basin of cassava) and the buyers hoped to get a better price as a result. But the sellers had to pay the usual market price. They complained, 'we should let you walk the long distance to the market and make you pay your market fees' but they bought the cassava anyway until they ran short of money because many people kept coming to sell their cassava. The buyers were scared of being caught by the government workers who collect market fees and made to pay fines. They told people not to crowd the place and passers-by on the road couldn't see what was going on. They loaded their lorry the next day to head to Arua to sell at the market there and told everyone they would be back the following Tuesday.

Field Notes, West Nile near

sell the rice there as well which fetches a better price than it would locally. Selling was still being done as individual families, however. Collective selling is being done for cotton in Acholi far. Here some families said they group their cotton harvest together

and then inform the ginnery in the district town who will then come to buy/collect it. These families said they started doing this two years ago because the price was lower if they sold as individuals at the local trading centre (at least UGX 200 lower/kg). However, other families in this location said they prefer to work alone. One father said he 'fears relatives will cheat him' if they bulk their cotton together so he goes to the ginnery on his own and 'feels safe' about this. In some locations like East Lango far, people shared bad experiences with programmes where there was no follow-up after groups were formed with the intention of selling together and this has left some feeling cynical about future attempts - 'never believe in government programme since [that bad experience]; we will do what we need to do to better our situation' (father, East Lango far).

'In the future I hope I can deal directly with big buyers rather than the middlemen'

(father, West Lango near)

Most families feel that overall the prices that they get for selling their crops are low and that the middlemen/ buyers have all the power. 'We don't have a say in the price' (mother, West Lango near). People told us that they are aware of the fluctuation in prices throughout

14. Middlemen have the power

A lot of people in 'my' village were complaining about the prices that they get in the local markets, and that they don't have any bargaining power with the buyers. 'My' father gave me one example of this: he said there was a company that had built a store at the local trading centre so that you could sell directly to the company. 'But the middlemen were jealous,' (my) dad said. He explained that these middlemen complained to the local authorities and

Field Notes, West Lango near

15. Company promises broken

A huge company has been operating here for several years and particularly specialises in rice, maize and soybean the area to grow these crops but at harvest time they refused to buy maize and only wanted soybeans. 'Even their own employees could not sell their maize to the company because they said they had a large stock'. But 'my father' felt very let down. He managed to sell some to another company and stored the rest but is frustrated by rumours that the first company has actually got privileged arrangements with farmers in the north.

Field Notes, West Nile far

a season and in some cases this influences people's preference for selling their crops quickly. For example, a father in West Lango near said that he is aware of price fluctuation but still prefers to just sell things quickly because he 'feels good about being able to sell it off' so doesn't really mind the low prices. Families in Acholi near said that you never know how the price of a particular crop is going to fluctuate so it's better just to sell right away. A father here also shared that he doesn't like the price fluctuations and that this, 'discourages me and other farmers from planting things like sunflower.' He mentioned that part of the problem is that as soon as one crop is perceived to have really good demand, 'everyone else will plant it and the price will just end up low.' Researchers talked to a local buyer in one location who said that people there prefer to sell to outsiders because they, 'assume they will be cheated so prefer it is an outsider.'

People were particularly frustrated in instances where buyers (typically companies) had 'promised' a particular price before harvest time (e.g. cotton in Acholi far) or interest in buying a particular crop (e.g. maize in West Nile far) only to change at harvest time. In West Nile far, one father shared that last year a company in the area had told people that they planned to buy a lot of maize from them but that when it came to harvest time they were only interested in

soya bean. Apparently no one had planted soya bean that season so 'people were pretty annoyed about it.'

Another issue preventing selling in bulk are food needs at home. It was typical for many families to need to buy some of their food towards the end of the dry season because food stocks are depleted. One family mentioned that one reason they sew up their sacks of crops is because it prevents them from 'dipping into' their food/seed stock (Acholi far). A father in Acholi far said that he mixes their beans with sand 'so I will not eat it' while one of the reasons the single mother in West Nile near brought her crops to her mother's town for storage (see Box ____) was to avoid the 'temptation' of eating it.

Another source of frustration in many study locations are the cups with which buyers use to measure the amount of a farmer's crop. These cups are referred to in most locations as the 'nice' ('Nice' is actually the brand name) and/or 'mug' (a larger 'Nice' brand cup) cups. The 'nice' cup size was generally thought to be around 300g so that three of these would make 1kg whereas the 'mug' is said to be ½ kg. People in many locations had doubts about these cups actually providing appropriate and consistent measurements, with one woman telling us that 'buyers are always using their own cups so how do we really know [if

16. 'Stupid farmer' cups

The farmers here don't know kilograms and only use cup measures to sell their produce. A 'Nice' brand cup is used by buyers when they come to the village to buy sunflower and soybean. It is referred to in their local language as a 'stupid farmer' cup. People shared that the size of the cup makes people think they are not getting a good price-they are not sure if it is 1/2kg or not and cannot compare with market prices they hear. But everyone gets the same price for the cup. There is no bargaining; farmers accept what is being offered and 'prefer to sell from home because we need the cash urgently for school fees.'

Field Notes, East Lango near

they are the same size]?' (Acholi far). In West Nile near, the pounded fermented cassava was sold using small bowls for the measurements. People here said that they like using the bowls because they felt the kilogram weight scales 'can cheat people.'

Access to markets

While local trading centres (sometimes consisting of just a few shops) are typically 15 to 45 minutes walking distance from homes, larger trading centres and those with auction days are often an hour or more away. Most people ride bicycles or walk to markets while some take boda-boda when carrying more sacks and/ or heading to larger trading centres. People in many of our locations talked about the main buyers coming from 'outside,' typically a larger district town. These buyers would go to the larger/auction markets and in some cases, particularly for cash crops, they would also come directly to people's homes. Sometimes these outside buyers also had small storage sites located in a village which they use for collecting crops before transporting them out of the area. People explained that many of the vendors at larger markets are also from outside the area, and that if they want to sell at these markets they could do so in designated open air areas on the ground. Traders at these markets include men and women, although women often dominated

A building where outside buyers temporarily store seeds before transporting out of the area



17. Storing at mom's house for better prices

Talking with the single mother in 'my' family about storage, she said that after taking out a portion for consumption at home, she normally takes the remaining harvest to her own mom's house in town. 'Within two months, prices will go up in the nearby districts so that is the best time for selling," she said. When I asked why she doesn't store her produce in her own house she said, 'I fear that if it's around it will be too easy to pick small amounts for selling or for having more food at meals.'

middlemen in her mom's town compared to the local markets – 'the produce dealers mostly stop there [compared to the villagel.' She said that from town there are also better transport options to other big markets. 'I can hop on any passenger lorry and go for the day."

Field Notes, West Nile near

the cassava trade such as in West Nile near which had many women buyers coming to buy large amounts of cassava from a neighbouring district. Vendors and buyers at small local trading centres with markets are generally also local people. Smaller scale selling at both larger markets and local ones is done by women.

Based on what people told us about public transportation across locations, this seems most easily accessed in Acholi near where small car taxis leave regularly from the local trading centre to the neighbouring district town for UGX 5000-7000 and regular buses to Kampala also pick up passengers. These small car taxis are also available in the morning at one of the trading centres in East Lango near and head to a neighbouring district town for UGX 6000. In Acholi far, sporadic pick-up trucks can be caught on the main road and head to the district town. In West Lango far, larger trucks can be hailed along the main road twice a week on the bigger market days at the sub-county trading centre.

Access to Market Information

18. A Boom Village

No one here had heard of sunflower, until it boomed, one of the families in this area told the team. The research team felt that everyone in this village is looking for these 'booms,' when something is said to be doing very well in the market. 'If there is a boom, like for chili or cotton, we'll rent land in Gulu side,' another family here shared. Others said for people here to explain why they were planting certain crops for selling. 'We exploit the booms,' a family that had planted cotton, sesame, and chili for selling shared. 'How do you know what's booming,' one of the researchers here asked, 'We know the prices from the trading centre, and we look at what our neighbours have been successful with.'

Field Notes, East Lango far

Most of our families shared that they get most of their information about prices and farming information locally from friends, neighbours, and local contacts. People in West Nile far are the only ones to say that they get most of their information from private agricultural agents. While many of our families have radios, people are mostly listening to music, often using SD cards. In general, people shared that they prefer their local radio stations which broadcast in their local language and have some localized content like discussion programmes and dramas. However, people said they didn't often listen to these shows with the exception of East Lango far and to some extent West Lango far where the radio dramas in particular are popular. In many locations people said you can also get market prices on the radio during harvest season, but this was noted to be mostly for cotton. One father in East Lango near said that although the radio station would mention market prices it didn't really influence how he sold his crops. In some locations like West Lango near, people said that Mukwano (sunflower) and Equator (maize) ran ads before they would be coming into the village for selling seeds.

This father is growing vegetables because he says they are not commonly grown by people in this location and that people don't know how to grow properly. He also feels that with the development in the area there will be increasing demand for vegetables, such as from hotels.





(father, Acholi far)

Information related to growing

As noted previously, people are highly influenced by what neighbours are growing particularly in East Lango far and Acholi near. For new varieties of crops though, people say they get a lot of their initial information through agricultural agents and government/NGO programmes. People are not, however, receiving messages on mobile phones related to market prices or programme information. People told us that they often learn about new programmes in their area through their churches. While people described a lot of trust issues with programmes due to bad experiences in the past, churches themselves are trusted sources of information for communities. In West Nile near though, the community's Born Again church is also using its influence to encourage families to grow more cash crops so they can give a 10% tithe





far, the only location where families regularly use tractors for ploughing, can also be hired for work on private land if you a connection with the drivers.

for church building.

19. Born Again in this village have very strong influence

I went with 'my mother' to the Born Again church on Sunday. I was welcomed publicly by the Pastor, before he started to preach. During the sermon he encouraged his congregation to grow more cash crops. His main intention was to encourage them to contribute more cash to the construction of the Church and to supporting his own family and 'show your love for God'. 'My mother' told me that the church leaders 'have a lot of power and their words are final and respected'. Later on in the long service a Deacon stood up and asking for quiet he challenged them, 'how many people here are using family planning drugs or want to use? Kindly raise your hands before the Lord!', he added. About five women raised their hands, and he promised to pray for them after he told his story. He said family planning has ruined his wife's future and that God had to intervene by directing him to air this with the congregation. It took my wife to one of the good local clinics where she had birth control injection. After three three years, and to my surprise, she conceived this year. The clinician had said she would never conceive. So I realised this was God's power. He was showing his superiority and that no one can control his plans. I prayed for two days and he even showed me many faces from this church and later I will ask you to kneel before God and ask you to seek forgiveness and for you to leave the practice forever'. He added that the Government is introducing 'demonic and worldly evils to the community in the name of population control' and said God has power to control birth only if you pray to him. 'I personally can command God that, please don't let me produce children now and he accepts.... no matter how many children one has, God has a plan and a capacity to help you keep them even if you have nothing. Family planning and even circumcision is demonic! From now onwards, desist and don't let anyone deceive you about birth control because only God can control birth'. After Church I talked with two ladies who said, 'but we need family planning here- we have too many children.... The pastor does not know the pain we go through with so many. Some go secretly into town to get family planning.' The same church leader blamed the poor harvest last year on the congregation for not praying sufficiently and distrusts fertilizers and pesticides saying the Government is 'always deceiving people.'

Field Notes, East Lango far

20. Keeping well connected

'My father' is thoughtful. When I asked him what he would do if given 10 acres more land , without hesitation he said. 'grow maize on five acres because people eat maize here, there is a market in South Africa for maize ... I saw lots of buyers at the trading centre last August'. He'd grow vegetables on the rest because he knows others don't grow , don't know how to grow or use pesticides properly. He feels things are changing here fast as many 'investors are coming' which means there will be hotels and 'I can supply the hotels'. He has heard that a German company is planning to open twenty factories. He is well informed and uses his networks to access information whenever he needs it. He often calls a private agricultural salesperson he has befriended for advice. This man has offered to find him a market if he grows tomatoes. 'I can call him anytime when I have a problem, for example he will come to see a disease and tell me what to do'. But my father also really appreciates that the man comes to give him practical advice.

Field notes, East Lango near

3.5 How people farm

Land preparation

With the exception of West Nile far (the only location where people are commonly using tractors) and Acholi near (where all families have used ploughs), most families are preparing land using hoes. Overall this work is done by both men and women, and families are generally doing this work themselves or through reciprocal rota-based family or neighbourhood groups. The most common type of hoe that people use is the draw hoe type with the blade at a right angle to the shaft. However, in some locations people are also using some straight-blade hoes (i.e. no angle to the blade) and in the two Acholi locations many families had what they referred to as 'Acholi hoes.' These are similar to draw hoes but have longer handles which people said that these 'need less force' and are 'easier to use.'

People described different burning practices both across and within locations. The practice is most commonly used for clearing land that is 'too bushy' (East Lango near), with 'a lot of branches you can collect' (East Lango near), with 'difficult weeds' (East Lango far), or simply because it's 'quicker and less hard work' (West Lango far). Some talked about burning for particular crops such as sesame where, 'you leave the old grasses and burn the whole field' (Father, Acholi near); sunflower, soya bean, and cotton which are burned after hoeing (East Lango near); or sorghum where you remove the bushes, collect the piles and then burn these (Acholi far and West Lango near). In Acholi far people told us that they can use the ash from burned bushes from a sesame garden to make traditional salt. Still, in a number of locations some people explained that they felt that burning is not a good practice because it negatively affects the fertility of the soil.

Overall, eight of our 24 families prepare some of their land using a plough (a further three regularly use a tractor - see below). In West Lango near, all of our families were interested in renting ploughs but said

21. We have the resources but don't know how to plough with oxen

'Did you see our cattle on your way to the Nile when you went to fetch water? They are just sitting there doing nothing waiting to be fed while we are working hard ploughing,' a Local Council One (LC 1) chairman told us and continued to explain that the community wants to be taught how to plough with the cattle which are strong and well-fed. He chatted more about the workload for farmers but said that preparing and harvesting are the hardest. He questioned why people still hand dig and don't use bulls especially as the land is relatively flat. He had tried to lobby local government to provide training but promises had never been kept. 'We have the resources, both cattle and human, we just need someone to teach us directly and give practical training on how to use ox-ploughs in our village. I have tried several routes to request such training...I even has asked the MP but they just kept promising for a long time. I do not know where to go.'

Field Notes West Nile near

that it is 'hard to get because too many people waiting.' In West Nile near some of our families have bulls but they do not have any ploughs or know how to use them. People here shared that they are very interested in getting training from the government on how to use ploughs. Another issue with renting ploughs is that payment needs to be made upfront. Because of this, although the price to pay people to manually clear your land is more or less the same as the cost to rent an ox plough (UGX 50,000-75,000/ acre), most people told us that they preferred to use manual labour since the payment for this could be made at harvest time.

Only West Nile far (all families) and one family in West Nile near have experience renting a tractor to clear their land. Like renting an ox plough, the payment for this service (UGX 80,000) includes the operator and needs to be made upfront. Although there are many tractors operating in West Nile far, people explained that connections are important to using these, a) due to the upfront cost and b) because there is usually



22. Women's roles

My first attempt digging cassava out of 'my' family's garden did not go so well. After insisting that 'my' sister let me try digging, I proceeded to accidentally chop many of the large cassava into smaller pieces as I tried to dig them up. The next day I was determined to do a better job. Again I had to insist to 'my' sister to let me try. She laughed. 'You're trying to take over the women's role,' she said. 'Why do you say that?' I asked. 'It's women that dig the cassava here,' she responded.

Field Notes, West Lango far

feel out of reach for them.

Labour

Generally, people are practical in their approaches to dividing labour and chores among the family. Most labour on people's farm land is done as a family, although particularly for clearing land many families also participate in rota-based groups. Four out of 'our' 24 families are paying other locals to do work in their fields, mostly for weeding or land clearing. Five families are sometimes doing this kind of smallscale hired labour themselves. People told us that this work would be paid out at harvest time. People explained that there are also often opportunities for older children and young adults in particular to work in the fields of elderly people, in which case they will receive a portion of the harvest.

Only in two locations, West Lango far and West Nile far, are there opportunities around the villages to work on larger farms. In West Lango far people said that this is at one large farm owned by a man referred to be some as 'the professor' because he apparently has contacts with universities in California while in West Nile far there are a number of large companies and large individual landowners.

Women shared that they generally prefer to do weeding and have men handle the heavier work, particularly if the weeding can be done kneeling down. Some mothers said that for weeding crops like sunflower, maize and cassava they 'leave it for men who do it with a hoe' (mother, Acholi far). Men were also commonly doing weeding for cassava in Acholi near and East Lango near. People in some locations said that the harvesting of cassava is (or 'should be') done by women (West Lango far, West Nile near, East Lango near) but in others like fathers in West Nile far and West Lango near men may also do this.

'My daughters are also my sons so they do everything⁷

(mother, Acholi far)

Researchers observed that household chores such as cooking and cleaning are generally shared between mothers and their daughters, although one father in West Nile far said that he cooks food if he has anyone working in his fields. A mother in Acholi near said that if she's sick the father will help cook. Fetching water and sweeping is often, but not exclusively, done by women. In West Lango far and Acholi near, researchers noted that water is also being fetched by boys and/or men. While bathing children is often done by mothers and older daughters, one researcher observed that the father in 'her' family is in charge of bathing their kids. For making bricks, people say





One of the older sons in this family helps sweep the compound



including making bricks.



Seeds

Most families explained that they use seeds from their previous harvests for planting and these are generally stored for less than six months. Sunflower and cotton are the only seeds to be commonly purchased from a specific supplier who will also come to buy the harvest.

In general families did not know the difference between improved or hybrid/HYV seeds, using the terms interchangeably to refer to any new, nontraditional seeds, or as one mother put it, 'something we don't have' (Acholi far). While many families told

the actual brick making process is usually done by men while women fetch the water needed for this. However, in Acholi far one family which has mostly girls are also making bricks. We observed that women are generally responsible for bringing firewood back to their homes, while men take care of animal rearing. Only in our 'least poor' family was the mother told that she should stay at home rather than work in the fields. This is also an aspiration for one father in Acholi far, who said that he wanted to be better off so that his wife would not have to 'go looking for ways to make cash.'

us that they know that these newer seeds should not be planted more than once (particularly in the case of sunflower), some admitted that with improved/hybrid seeds they are 'not sure if can keep for next planting season so will buy local' (East Lango far). In West Lango far where there is little use of improved/hybrid seeds, one family that had tried improved soya bean said that it took longer to mature which affected their next planting season and therefore they aren't planning to use this again. Another father who had tried Mukwano sunflower seeds said that it 'spoiled the soil' and that the next crop he planted there did not have a good yield. One family in Acholi far complained that you 'have to go and buy time and again' so prefer local seeds. In East Lango far meanwhile people said that they prefer local seeds because they 'like to see what they're buying.'

Table 5 - Using improved seeds and hybrids

Location	Crop	Name/Company	Comments
West Lango far	Maize	Victoria	Few using
West Nile near	Cassava	N/A (possibly through NUSAF programme)	Unhappy (disease)
East Lango far	Cotton	N/A	Few using
West Lango near	Maize, sunflower, sesame, cassava, cotton (organic)	Equator (maize), Mukwano (sunflower)	Unhappy with the cassava (taste) and sesame (pests)
East Lango near	Maize, sunflower, cassava	LONGE 5 (maize), Mukwano (sunflower). NASE 14 (cassava)	
Acholi far	Sunflower	Mukwano	Few using
Acholi near	Sunflower	RALNAC/Mukwano	Many using
West Nile far	Maize, rice, cassava	LONGE 10 (maize), NERICA 10 (rice), Sindy (rice),	Many using

Note: Some cotton in the two Acholi locations, particularly Acholi near, may be improved varieties but the information is unclear.

Although many people said they like using local seeds, as shown in Table 5 some families in all locations have used some kind of improved/hybrid seeds. People say that improved/hybrid seeds are expensive (e.g. people in West Lango far feel they cannot afford sunflower) but in the end some feel that it is worth it because of the expected (and what many people say are in fact) higher yields. To deal with the cost of buying the seeds, some families shared that they are actually planting the improved/hybrid seeds twice because in the second year the yield reduction is still minor. This was discussed for maize in West Lango far and West Nile far.

Problems with seed availability were discussed in a number of the locations. Due to food shortages for families in East Lango near, people are having to buy food and seeds where they would normally be able to use from the previous harvest. Additionally, people in both this location and Acholi near said that there has also been a shortage of Mukwano sunflower seeds (see Box ____). In Acholi far where people told us that the local variety of soya bean is prone to pests due to its 'nice scent,' one of our households was hoping to be able to buy a different variety but, 'doesn't know where to get the seeds.' The only family growing soya bean in West Nile near said that she got her seeds in

23. Sunflower seed shortage

The family uses seeds saved from the previous season for most crops but not sunflower or maize. 'My father' always buys Mukwano sunflower seeds and Longe 5 maize seeds (promoted for its high yield and he 'likes this one'). He told me they buy the sunflower seeds as a group and sell the crop as a group too. 'There is another company which sells sunflower called Mount Meru but the problem with them is that when they come by usually people have already bought their seeds'. But this year (in February 2017), 'my which usually stock Mukwano seeds have none and he cannot find them elsewhere. So he thinks he will have to wait until next season and is really disappointed about this.

Field Notes, East Lango near

the neighbouring district because they are rare in her own area. There is some general interest in planting sunflower in this location as well, particularly because it is apparently being planted in some neighbouring villages, but that 'people here don't have knowledge about it' (father, West Nile near).

'If you are lucky to hear about it then you can

(brother, West Lango far)

People in some locations said that sometimes the local government provides seeds, often for free, but that they have not had good experiences with these programmes. In West Lango far, people said that you can register for seeds at the sub-county but that agents use megaphones to advise on the timing of this and that they generally won't hear about it. In East Lango far, people told us that the government sometimes 'drops' a variety of free seeds at the subcounty such as soybeans, onions, cabbage, maize, and cotton but that is usually the wrong time of the year, that they often don't like the particular variety available, or that there are only poor quality seeds left

for them. 'Those at the sub-county with power grab the best stuff' (mother, East Lango far). One family in West Lango near was unhappy about governmentprovided sesame seeds they had received, telling us that they 'have pests which covers the pod and keeps it from sprouting.' This location had also recently received some cassava stems from the government and people said that while these matured quickly you also 'have to eat them quickly otherwise they become bitter.' Because of this, most were not planning to continue with this type of cassava. People in East Lango near said that there was a programme called Operation Wealth Creation from the government which they were expecting to get seeds from this year. However, a private extension officer working here who has worked with NAADS in the past told our researcher that, 'the seeds for programmes like this just get stuck at the sub-county and don't reach the people.'

As noted above and in the section on crop choices, people often say they are turned off from planting a certain crop after a bad experience. Many of these bad experiences have been with improved/hybrid seeds and it seems there may be some issues related to the proper knowledge about growing these. Although people themselves talked about issues of general

24. Problems getting seeds

Mukwano contacted 'my father's' friend and told him to contact the marketing manager once he had collected 150 names of farmers who want to grow sunflower this year. Basically they want him to work as 'their agent... but this is not profitable for him... it will take too long'. Meanwhile there is a shortage of seeds and Mukwano might be the thinking he might have to use the seeds from last season even though he knows the yield will be low. But there does not seem to be another option. In 2016 he had to buy seed from Lira and it cost him UGX 40,000 just for transport and he is not willing to do this again. He tells me 'I am always worried about where I will get seed.'

Field Notes West Nile far

25. Left out from seed distribution

'My' mother told me about a recent government program to distribute seeds where she wasn't listed as a recipient even though she was interested and lives close to the LC. To deal with this, she said that on the day when the seeds will be distributed she will go early to the distribution spot. 'If some of the LC's relatives don't show up, then I can take some of the seeds.'

Field Notes, Acholi far

awareness related to improved/hybrid seeds, they did not mention issues with growing practices. An agricultural agent in Acholi near, however, said that, 'sometimes the cotton yield not so good because people don't follow the right spacing.'

Seeds are often stored at home in small sacks, kept in saucepans (usually not lidded), placed near or hung from the ceiling in the kitchen hut or from trees (particularly for maize, sometimes sorghum). People explained that for seeds stored in the kitchen hut this is done because the smoke helps to keep away pests. To help prevent weevils, some families in Acholi far, East Lango far, and East Lango near mix beans with dried chilis or mix rice with tobacco (West Lango far). In West Lango far, some families hang the small plastic bags they are keeping seeds in on a stick 'to avoid moisture from the floor.' For those storing their seeds in sacks, many families (West Lango near, West Nile near, Acholi near, and West Nile far) put these sacks on top of bricks or small wooden platforms. One family in West Lango near said they do this because of worries about termites and ants while a father in West Nile far said that he heard from a company extension officer you should 'elevate the seed with air flowing from below to prevent rotting."

Planting practices

When chatting about how families plant their crops, people described planting certain crops together and not planting a crop on the same land the next season. Crop rotation, referred to as 'changing' or 'moving' crops to different plots, is a practice that people said they have 'done for years.' People explained that this is mostly to keep the land fertile because 'if you put the same crop the soil won't heal' (father, Acholi far) but in some cases is also to prevent the proliferation of certain pests and/or weeds (such as planting sweet potatoes after cassava in West Nile near). Although there are wide variations, some people told us about particular crops which should go before/after one another. In Acholi far, one father said that sesame grows very well after planting cotton. A father in Acholi near said that millet grows well after cotton while maize is good after cassava. Two locations talked about a crop's roots influencing rotation. People in Acholi far explained that sunflower and maize both have big root masses and therefore should not be planted one after the other while a family in East Lango near said that they wouldn't intercrop peas 'because of its branches and roots.'

'If you plant maize one season, next season you need to change'

(father, West Lango far)

Some people said that soya bean and cassava do not require the same kind of rotation. One woman in West Lango near said that soya bean can be planted twice on the same plot (also heard in East Lango far) while one woman in West Nile near said that you could plant cassava on the same plot for 10 years before needing to rotate it. However, others such as a man in East Lango near said you should not plant cassava on the same plot. Many people in a number of the locations shared that sesame does particularly well on land which has been left fallow for at least one season. The opportunity to plant sesame on 'virgin' land people

Generally, intercropping is done for matters of practicality. People talked about this in terms of:

maximizing overall land (East Lango near)

- planting cassava with maize to help maximize space (West Nile near)
- planting beans alongside cotton to provide an 'assured bit of food' while waiting for the cotton to mature (West Lango far)
- planting peas with sesame as a 'bonus' (East Lango far)
- 'getting variety from the same garden' (East Lango far)
- planting maize with soya bean because 'you get food with cash' (East Lango far) and can harvest at the same time (also mentioned in East Lango near), and
- being able to use the same pesticide (for soya bean and cotton in Acholi near).

People explained that they would plant some crops in rows for ease and practicality reasons as well. People said that maize, sunflower, and cotton are planted in rows to make weeding easier. People in West Lango far pointed out that they put two rows of beans in between a row of cassava to make sure that the beans 'aren't shadowed by the cassava because the dew from cassava isn't good for the beans.' For small seeds like sesame, sorghum, and millet, some people told us that these can just be scattered in the garden.

Pests and Pesticides

Besides crop rotation, people did not talk about many particular strategies for dealing with pests. Researchers felt that overall people simply accepted that they would experience periodic losses of crops from pests and diseases. The pest issues which people said they are really worried about are witch weed (mentioned by name in Acholi near) and elephants (a big problem in West Nile far, a concern in West Lango near). One father in Acholi near said he was really hoping to get help with the witch weed and asked the researcher if he knew of any ways to deal with this. Another family's mother here is looking to plant more 'resistant' crops like sunflower, soya bean, and sesame because she feels they aren't affected by the





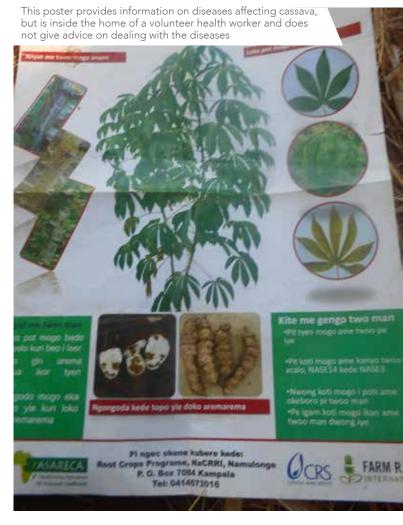
witch weed. People in West Nile near and East Lango near talked about a weed that causes problems for a lot of crops but did not mention a specific name. Particularly in East Lango near, researchers felt that this is likely to be witch weed. One family in West Lango near people felt that sesame seeds provided by the government are being affected by a new pest which makes 'cobwebs' that cover up the seeds, and another family here said that this pest is affecting their beans. Both families said that you need to spray pesticide to get rid of this.

'Every crop has different insects so that's why you rotate the crops'

(father, East Lango near)

People told us about a wide variety of pests and diseases affecting cassava. In West Lango far, a 'strange disease' has been affecting some of their cassava for the past three years, making the cassava small with black rot inside. One mother said she has actually reported this to the sub-county but that 'nothing has happened.' Cassava was being affected by multiple diseases in West Nile near. One of the volunteer health officers in this community had a poster from Uganda National Agricultural Research Organization (NARO) inside their house about one of these. While the poster indicated ways of identifying the disease, it did not give any advice on how to deal with it. People mentioned another disease with cassava here which 'makes it rot and go all black' and one family said if this happens you need to plant a new crop (they mentioned sweet potatoes in particular for this purpose). Termites are said to affect cassava in many locations. One mother in East Lango far said in this case you 'just throw away, nothing to do' but another mother here said that you need to cover the stems with soil well to prevent this. Covering with soil was also said to help protect cassava from squirrels. In West Nile near, meanwhile, people explained that when they plant cassava they 'stand the stems up' rather than burying so that the termites don't get them. In East Lango near, one family said they didn't worry about the termites because 'they will be harvesting at the same time the termites start to go after them.' Many families keep cats to help with rats around their huts, while dogs are used in some locations to help deter baboons (West Nile near), squirrels (East Lango near), and are used for hunting wild rats in West Lango near.

Pesticides are being used by at least some of our families in all locations but Acholi far, where pests were mentioned very little overall. Some families explained that, 'if you want good yields, you need to



spray' (father, East Lango near) although others felt they are too expensive. In East Lango far, two families shared that they don't like to use pesticides with the father in one of these homes saying that, 'people tell us to do this but it affects us, can make us ill.' In West Lango near, people were using a powder for helping deal with weevils which they mix with the seeds. The daughter in one of our households here said that this powder is washable 'so okay for eating.' People shared a wide range of different practices for which crops they feel need to be sprayed and how many times they would be sprayed throughout a season. For instance, people in West Nile near talked about spraying 'Ambush' 3 times for cotton, while in East Lango near one family said they use 'Trigger' for their cotton and spray six times. People in West Nile near are also using Ambush around their huts to protect

A pesticide which this family say they use for cotton. The father told us that 'if you want good yields, you need to spray.' They hire a man to do this with a knapsack sprayer



from termites. Most families did not have their own knapsack sprayer so would hire someone to do the spraying (~UGX 2000/day, one acre in 2 days).

People often admitted that they had little understanding about the details of applying pesticides, explaining that they rely on those selling the pesticides for this. In West Nile far, one father had developed a friendship with a village agent after 'he found me in the field two years ago.' He referred to this friend as an 'expert' and said he relies on him for what to do if any of his crops have a problem, 'he will come and know what it is and what to do about it.' One mother in West Lango near who had also heard about organic farming from an organization said she was confused when some people from the government came to spray DDT around some homes because, 'then you can't do organic farming.' The need to use pesticides is worrisome for some such as a family in Acholi near who said that, 'we never sprayed before but had good yields' but that now they have to spray to get better yields.

Fertilizer

While people told us about the increasing use of pesticides, overall they explained that the use of fertilizer is not common. People said that some of the reasons for this are because commercial fertilizer is too expensive (East Lango near), that their land is fertile enough (West Nile near, Acholi near), and that there is a lack of knowledge about it (Acholi near). Although 18 of our 24 families have at least one cow, no one we met is using manure of any kind as a fertilizer. Although one family in West Nile far acknowledges the possibility of doing so, they said that, 'it is too labour intensive and takes six months to be ready.' People said that manure is often used in building their huts on floors and walls as a sealant and to help keep pests away. Some people in East Lango near said that another reason they aren't using fertilizer is that a NGO promoting organic farming had visited and told them that they shouldn't use fertilizer.

Crop Storage

With the exception of one family in West Nile near who stores some of their crops at the grandmother's house in a nearby town, all of our families store their crops at home. Most are kept in hessian/gunny sacks inside one or more of the family's regular huts. Families in Acholi far and West Nile far mentioned that their sacks have a lining of some kind. In Acholi far, one family said their lined sacks have a two-layer poly lining with a strip at the top for sealing and that they had purchased these (along with tarpaulin) for UGX 55,000. They said that they liked these bags because having the seal prevents them from dipping into the stock. As mentioned for seed storage, many also place their sacks on top of bricks or a small

Seeds for the next planting season and some food stock stored in a family's hut. They are placed on top of bricks to helprevent termites.





wooden platform. A father in West Nile far explained that this is, 'to allow the air to circulate' while some families said they did this to help keep away pests like termites and rats.

Since most families are looking to sell their main cash crops quickly, these crops are generally not being stored for long periods of time except for portions saved for consumption. Cotton is often stored openly inside a hut and so one family shared that one reason they like to sell it quickly is because they are 'afraid the kids will set it on fire' (West Nile near). Although in Acholi far some people are storing sorghum and pigeon peas unshelled in granaries, generally families explained that peas, beans and ground nuts are kept in their shells to avoid pests. Maize is usually kept dried on the cob, but in East Lango far is often ground first and then packed into sacks which are sewn to 'stop it fermenting or rotting.'

Granaries are only common in East Lango near, although in most locations a few families have them. In West Lango near, people told us that some are building a new type of granary for their homes that they like because it is larger than the traditional ones. People explained to one researcher here that the idea behind these bigger granaries is not only that you can store more crops but also that you can sleep inside. They said this is to protect your crops during times of scarcity because there had been some instances of

crops being stolen from the smaller granaries.

Small shops in villages are often used by buyers/ middlemen for the temporary storage of purchased crops before transporting these out of the area, or for crops they are planning to sell on local market days. Collective storage facilities are not being used in any of the locations. There was mention that people used to do this for soya bean in West Nile near but that the farmer's group which coordinated this had 'died.' In East Lango far, people told us that around 10 years ago it was common to store in bulk as a village at the sub county town. They explained that they would put their name on their own sacks and that buyers would to the storage facility, but they had to pay UGX 10,000 in advance for the storage and said it's easier now that buyers come directly to the village. People in West Nile far shared that one of the German companies in the area allows you to store your crops at their facility for free but that 'you would have to sell to them anyway.' We were told that there is also a storage facility in the town closest to this village that was set up by a USAID project, but one father said that you would have to pay 10% of your sales so he hasn't been interested in trying this.

Post-Harvest Processing

Across locations little post-harvest processing is done apart from drying crops and preparing certain crops for home consumption or brewing. Overall, people did not feel there is added value in milling/grinding for sale, and anyway prefer the ease of selling quickly with minimal processing. While small mills are generally available (though not always, such as West Nile near) around villages and/or local trading centres, the closest facilities for processing cotton and turning crops like sunflower into oil are often away in district towns. In some cases such as East Lango near, larger milling facilities had been available at the sub county town but have stopped operating. In West Nile near, a ginnery nearby the village has also been abandoned.

Please explained that you 'have to keep drying' sesame because otherwise it will mould. One family described the process: 'cut the stems, tie upright in

the sun for 2 weeks, then place in bedsheets and hit these with sticks, winnow and put the seeds in sacks' (Acholi far). Besides drying crops crops The main post processing of crops done by our families is related to the production of home-brewed alcohol. In most locations this is done by fermenting/drying cassava in/ on large tarps and then pounding it into small pieces, although particularly in East Lango near the cassava is often ground first for brewing their arege. People in West Nile near sell their pounded, fermented cassava to buyers from outside of the area in large quantities. As mentioned earlier, many of the families growing rice in said that are transporting their rice to the neighbouring district town for husking because it is cheaper to do there compared to the sub county town and the rice also fetches a better price at the district. There are small mills of some kind in most villages (and a mobile one in West Lango near that looks like a tractor) but people explained that most of the milling/grinding they do is for their family's own food, generally for making different types of posho. Crops are most often simply pounded using stones or morters, such as is typically done for preparing sesame or ground nuts as a paste. A family in West Lango near has their own grinder for ground nuts but this is also for their own consumption. In both of the Acholi locations people said that they are aware of the possibility to grind sunflower into oil and that you can do this in 'town,' but only in Acholi near did one family feel this would add value. This particular family, however, said that they are being held back from doing this because the sunflower is being grown in groups.

3.6 People's view on **Programmes, Extension** Services and Farming Groups

It was generally quite easy to talk with people about programmes and groups as many had stories to share or simply needed to share frustrations about these. Some locations, such as West Lango far, West Nile near (the two poorest according to people) and Acholi far have very little experience with programmes or

26. NGO support was appreciated but then they

During a conversation with a shop keeper about farming and the provision of extension services in the village, he explained that a NGO used to organize farmers into groups. At that time he was one of the farmers' group leaders. The NGO provided training on modern farming (crop rotation, intercropping and use of fertilizer). They provided maize and sunflower seeds, fertilizer, loans for preparing for cultivation and after harvesting they would buy all the produce. Farmers liked this as the market was

Then suddenly two years ago, the NGO abruptly left. 'Everything collapsed... because most of us do not have money for seeds, fertilizer and preparing the garden'. as individuals. He felt that it would be good if another NGO or the Government could offer a similar programme.

Field Notes West Lango far

extension services. Some like East Lango far, have a lot of experience with programmes but almost exclusively negative experiences which have left them pessimistic about future possibilities, 'never believe in government programme as - we will do what we need to do to better for our situation' (father, East Lango far talking about a rice programme promoted by National Agricultural Advisory Services (NAADS)). Although East Lango near is noted as one of the poorest locations in our own analysis of the locations (see Annex XX) and was experiencing food shortages at the time of our visit, some people here told us that they felt proud that many programmes had been to their area, 'we are blessed because all programmes start from our village.'

As noted in section 3.2, government neglect is a feeling shared by many families across locations, and this is reflected in their perceptions and experiences with government agricultural initiatives as well. People in some study locations told us that they know about agricultural officers at the sub-county but commonly said things like, 'they only come when they want to

sensitize on something' (mother, West Nile near); that the government only comes 'when there is an outbreak like with chickens' (father, Acholi near); or simply that 'no one from the government comes' (father, West Lango far). NAADS was only mentioned in East Lango far where people told us they had come in 2013 and gave dry paddy rice seeds. One of our fathers was in charge of forming the farmers' groups that were required for this and explained that they had harvested one season but that NAADS never came back to help with the marketing. Subsequently they had no one to sell to so this initiative collapsed. People also shared that information sharing doesn't work well with government programmes because they usually 'realize that a few people are getting something before we even know about it' (mother, East Lango near). A grandmother in East Lango far said that you can try to go to the sub county to register for any upcoming assistance, but 'the computer can delete your name.'

'Give us a hook not the fish because the fish will be finished today but with the hook we can get a fish today, then tomorrow, then tomorrow'

(LC, West Nile near)

Overall people are hopeful, if sometimes cautious, about donor or NGO programmes in their areas. A common complaint, however, is the lack of follow-up or in some cases, a sudden end to activities. Some people also discussed that they don't like when programmes impose certain financial constraints, such as for the Northern Uganda Social Action Fund (NUSAF), programme (see Box XX) and with the RALNUC groups in Acholi near. Although there was a lot of overall interest in the RALNUC groups, echoing others a father complained that, 'they will put the money in a bank account for the groups and then it's difficult to get your own money out.' The NUSAF programme was also mentioned in West Nile near, A demonstration plot from a NGO for a 'new' variety of cassava in West Nile near, although people in this village say it was a farming group from 'outside' that prepared the plot. People told us that after harvesting these some of the stems will be offered for sale to locals



where one father said the programme had brought in some new cassava stems which the mother in this household felt had introduced a new crop disease in the area. Some young men here also shared that a NGO had leased a big plot of land near the trading centre last year where they planted sesame but that the community didn't get any benefit from this.

Despite all of the bad experiences with programmes in East Lango far, some people shared that they are still excited about a NARO-led demonstration and training that was taking place in a neighbouring village (see Box XX). In West Nile near meanwhile, the NGO which leased a large plot of land in the village for sesame last year now has a new large demonstration plot for a new type of cassava. While one mother told us that the NGO is working with a farmers' group from a different sub-county for this, another family here only knew that this demonstration plot was 'some group.' They had heard, however, that the plan was that the harvest from this will be sold to locals and said that some people were interested to try these different cassava stems.

27. Government extension services

'My' family told me that the National Agricultural Research Organization (NARO) in Lira district have responded to the recent poor harvests by introducing new maize seeds. They started by mobilizing 30 farmers across different villages. Some immediately liked the idea but others had their own reservations saying they were busy with other activities; others expressed their frustrations about these sorts of extension services and others were unaware of the activity. Those who were interested attended a one-week training at the NARO office and then supported a demonstration plot early this year. This was intended to train lead farmers who would in turn train others before the rains started. The work involved digging deep pit trenches in lines in the upper land and a series of small square holes below. The idea, it was explained to me, is to reduce soil erosion during the heavy rains 'because the trenches will store rain water for a number of days. This water will slowly go underground to reach the maize.' They said the members can also fetch water from other water sources like the dam or the swamp nearby that was gazzetted by the government or even boreholes and 'pour in this into the trenches if the rain is sparse.' Another noted, 'We have been told that if we drop just three seeds of this maize in the ground we will harvest over a kilogram of maize.' The doubters are waiting to see if this really works.

Field Notes, East Lango far

'They tell you to join groups but at the end of the day they only take one group'

(father, West Lango near)

Overall people shared that they felt a lot of frustration with farmers' groups. Some common issues people explained are a lack of flexibility, registration costs, the laziness of particular group members, and unfairness in access or group selection. In most cases, people said that farmers' groups in their area had been established specifically to access a particular

programme or with the intention of 'being ready for programmes.' People everywhere told us things like, 'you need to have a group to access programmes' (West Nile far), 'you must be registered in a group at the sub-county to benefit from sub-county programmes' (East Lango far), or that it's good to be in a group 'just in case NGOs come' (Acholi far). On the other hand, people mentioned a more positive interest in groups in Acholi near and in East Lango near, the two locations with the most recent donor/ NGO programmes.

Flexibility is a big concern for some families when considering participation in farmers' groups. A father in Acholi near is hoping to be able to plant sunflower individually rather than in the RALNUC groups because he wants the option to take it to a neighbouring sub-county and have it ground into oil.

28. NGO groups

Last season was the first time the NGO came to the village. They hired an acre of land and set up a group to manage it. In total, 'my father' said some eight groups were set up across 16 villages but 'I have no idea how they got selected'. He volunteered to be part of his village group of twenty members. They were further subdivided into four sub groups. The NGO provided them seeds; different seeds to different groups. 'My father's' group was given soya bean. They were provided a plough, fertiliser and pesticide but in the second season the crop 'failed' and they got little income. He thinks it was because of the lack of rain. They had intended to jointly buy a plough with the proceeds from the harvest but the amount was so little that they just split the money. There are 12 more members in the savings and loan part of the group now. Their motivation to join is 'because they are hoping for additional programmes from other organisations and the Government'. I talked with a woman from another group supported by this NGO and she said that she did not like these farming groups because some people were lazy. But 'my father' will continue in his group because 'they are my friends'. But others had formed groups and then were not selected by the NGO so they have since dissolved their groups.

Field notes, East Lango near

He believes that you can make more money selling the oil versus simply selling the seeds and would like to have the option to do this. Registration costs are also discouraging people from forming groups, or making them 'official.' In West Nile near, a widows farmers group wanted to register at the sub-county so they could access any programmes but said it was going to costs UGX 30,000/person for registration and UGX 60,000 for the sub-county chief so they decided not to do this. Some also told us that, anyway, local leaders are those who often get priority for the subcounty programmes.

In many cases people also said they did not understand why certain groups were selected for a project and others were not, such as in East Lango near where even those groups chosen did not understand why they were chosen. For one of the groups in this location that was not chosen, they said they dissolved the group after this, 'because we weren't getting any benefit.' As mentioned in Box ____, some people in West Lango near are frustrated that they had set up groups and opened up bank accounts 'but never got anything.'

Like some of the donor and NGO programmes, some farmers' groups have also suffered quick collapses or disappearances. At one of the small trading centres in West Nile near there is a building with three classrooms which people said was used by a big farmers' group. They explained that this group used

This building was used by a farming cooperative but was abandoned around 10 years ago when the cooperative abruptly stopped running.



29. Men might take the project over

Chatting to members of a farmers' group involved in a new maize demonstration, women told me they were worried that men might take over this project. One woman shared quietly, 'this project is intended for us women as we do most of the work in the gardens and we also take care of our homes, but these men want to take over. We are waiting to see what happens,' and she shook her head. I asked some men how they felt about this project being for the women and they just laughed it off. Only a few said they would be a part of supporting the women and working together but some women shook their heads in disbelief.

Field Notes, East Lango far

30. Distrust on projects and forming groups

People shared with me their frustration of a large-scale livelihoods programme. 'It does not reach enough people especially in this village. They said that group leaders tell people to join groups and write proposals for funding such as pig keeping, bee keeping, goat and cattle rearing, fruits and vegetable cultivation, brick baking among others but that, 'We put in all our time only to be disappointed when only 1-2 proposals at most or none are picked'. Another woman said 'there is nothing we have benefited from this programme in our village, nothing, nothing at all'. A man by officials to open up bank accounts into which monies will be deposited to proceed with the nominated project proposals that have been approved. 'But some approved projects never received a single coin. Or if the money came, it come late, came in bits or much less than what was budgeted,' he said. Another woman said, 'we waste a lot of our little saving trying to deposit and maintain these bank accounts, which other group members do not cooperate in, and that is what also causes strife in these groups'. groups for no purpose 'people have decided and I think it is now better to do your own thing.' He said that for him personally, he feels he can do his own business gardening, selling milk, bee keeping and making beds rather than wait for projects. 'I mean if they come along well and good, if not, life continues.'

Field Notes, West Lango near

to train farmers at the start of a planting season on a given crop and then at the end people would collect their harvests and sell together. However, people said that the group had stopped running in 2012 and that they didn't know what happened.

People's main comments about extension services being provided from private companies, particularly sunflower through Mukwano, related to the price of seeds and to the conditions put in place. As mentioned previously, although almost all families said that they feel packaged improved/hybrid seeds are expensive (sunflower and others), the expected higher yields have made people willing to try these. However, people explained that the demands by companies like Mukwano which generally require them to work in groups and to sell harvest directly

31. In our group we're all friends

We had just come back from a savings and loan group meeting with 'my' father. This activity is part of his farming group. 'When there is an announcement that a programme will come and distribute seed, they asked us to submit our proposal in group. So we submitted and were selected. But we never knew the reason why.'

He told me that he liked farming in this group and that his group actually plans to save some money to but an ox that they will use together. The programme already gave them a plough 'to motivate us to buy the ox, but unfortunately last year's harvest was bad so we had to distribute out our savings just to survive.' I told him that I heard from a member of another farming group who doesn't like her group. This mother said that, 'some members are lazy and don't contribute and we also have to rent extra land.'

'My' father agreed that probably some people don't like the groups, but he said he likes his group because it was already his 'old group.' His wife then told us that, 'before the war and before we went to camp, another NGO asked us to form a group for an education program. So we've known each other for a long time.' The father added, 'So when the new program came, we applied with the old group. We like to gather and chat together, so it's not just work.'

back to the company limit their flexibility. After all, many families shared that they 'preferred to farm alone' (Acholi far) and they like being able to control what they could do with their crops. People did not like specific contractual arrangements for buying seeds or selling crops, referring to issues of trust and that 'you might not get a good price' (father, West Nile far). In contrast however, those families working with agents and/or directly with ginneries for cotton talked about few specific complaints or concerns.

We met one village agent in West Nile far who has been to a number of what are intended as cascade trainings. This man said he is a connector between one of the companies in the area and the LC and that while the location of the three trainings he has been to has changed, the content has been more or

32. Funny funny small small grasses

My father told me a story about NARO coming to the village in the past and their failed attempt to try to get people to plant herbs and small trees. 'Why did it fail?' asked. 'We are not used to these funny funny small small grasses,' he said, laughing. He told me that people here don't understand these kind of crops. 'It's not our thing,' he said, calling the initiative 'taka taka' (rubbish).

Field Notes, West Lango near

less the same. He also shared that the idea for these trainings is that 'you're supposed to train others but those who go don't share the knowledge - nobody will check if you do or not.'

Savings and loans groups were mentioned as being present in all of the locations. Most of these are local initiatives. While some people have been turned off from using these by bad experiences such as a father who had to pay a fine after exceeding the repayment period (Acholi far) and a mother where the treasurer of her group tried to run away with the money (Acholi near), perceptions of these savings group are generally positive. People said that they most commonly borrow for school fees (mentioned in

6 of the 8 locations), medical costs, food supplies and 'difficult times,' and rarely borrow money related to agricultural inputs.

Besides these savings groups, there is essentially no uptake of financial services (including farmer credit programmes, microfinance or agriculture loans, and insurance services). People said that bank services are far, 'not for us' and that the conditions imposed such as collateral are difficult and often perceived as 'unfair' and risky (e.g. keeping land titles). People have heard bad stories from others such as people losing their property. In some locations people said that there are microfinance organisations in nearby towns, but they were not using these. Insurance services were not mentioned in any location.

3.7 Looking forward

While in some locations like West Lango far and West Lango near both parents and children discussed their futures primarily in terms of farming, others often shared aspirations related to education, jobs, and starting their own businesses as traders or shop owners. One of 'our' mothers in West Nile near said that she 'admires' the women cassava buyers that come to her village and that she also wants to become a trader. Another mother here said that she wants to finish vocational school to be able to do tailoring and plans to use money from selling soya beans to do this. A young man in Acholi far said that he wants to open a general store 'because it gives money all year not just at harvest.'

'All farmers are poor. If you can't go to school and just left to dig then you are

(teenage boy, West Nile near).

People also commonly shared that they feel that, 'farming is hard' (mother, East Lango far) or even that 'farming is getting harder' (mother, West Lango far) due to the changing weather, food shortages in the previous year and because 'young men have dropped out for guick money' (mother, West Lango far). Parents explained that the difficulty of farming is one reason they are motivated to want 'better' for their children.

In most locations (West Nile far the obvious exception) people said they are not aware of waged labour opportunities in or nearby their villages. Only in East Lango far and West Nile near did people specifically mention wanting to work on large farms or in factories, and and in most cases it was local leaders who told us that they are hoping factories come to their areas such as a headmaster in West Lango near and one of the LCs in West Nile near. It would seem that exposure to other work opportunities is a major factor related to people's aspirations. In East Lango far, for example, people told us that the sub-county used to have a large mill which is now closed while there is an abandoned ginnery in West Nile near.

33. Not giving up on school

The fourth son in 'my' family has had to drop out of school at senior level 4 because the family doesn't have enough money to pay for the fees. He wants to be a doctor, but his parents don't feel this is possible. His uncle has told him that he should forget about that, that if he ever gets back to school he should just try to become a teacher. But he's not ready to give up just yet, and has been saving money to get back to school. The boy is using two acres of the family's land to grow ground nuts and cassava for selling and lets 'mom' use some of the cassava for brewing alcohol. During the dry season, he buys and sells cassava to outside buyers that come into the area. He told me that the prices he gets for selling the cassava aren't great. 'But I won't go any lower than UGX 800/kg,' he said. 'In the neighbouring sub counties I could sell for 2000, but it's just too difficult to go there.' He told me hes trying to find some way to transport his crops to these bigger towns. 'If only'I would expand my farming activities and go straight back to school,' still

Field Notes, West Lango near

'There are no opportunities so you'll have to farm anyway'

(youth, West Nile near)

Women in particular voiced concerns about the lack of opportunities for youth and young men and how this leads some to just look for 'quick money.' In West Lango far, people talked about teenage boys dropping out of school to go to larger trading centres or cities to work at video halls or music shops for 'quick money.' In West Nile near where fishing at the river has picked up, mothers said that men and boys are increasingly looking at fishing as a way to get quick cash - 'they go fishing and end up drinking all of the money away before they get back home.' Some of these mothers explained that they are also frustrated about this because there is less help around the house with the men always gone. In East Lango far and West Lango near, mothers said they are worried that boys that have dropped out of school will 'just start drinking.' One mother insists that her son does small jobs at the primary school during holidays to

34. The land my father gave me won't be enough

I was talking with 'my' father's son who lives in separate hut. He was working in the capital as a construction worker and has come back to help his wife and his family for this planting season. After the planting season is over, he will go back to the city and continue working on a construction

He told me that he planned to rent land nearby his house in order to be able to plant more cassava for making arege. Then hopefully he could buy a bike for his wife and rent a bigger plot of land. He explained to me that 'land fragmentation, where the younger generation have less land than their parents, is a big problem. My only way is to rent some land because my father only gave me a small plot and that will not be enough."

Field Notes, East Lango near

keep him busy. She says that there aren't any other opportunities for work and the money also helps pay for his school.

Mothers in some locations shared that it's also particularly difficult with children nowadays because now 'if you try to guide them too much they will just disappear' (mother, West Lango near) or that, 'if you refuse a girl's desire to be with a certain guy she might just run away' (mother, West Lango near).

Still some families, like many of those in Acholi far, said they like farming because they can 'work for themselves,' it makes them 'feel secure,' and that even though it's hard they believe the 'biggest amount of money will come from farming.'

Youth aspirations for employment were strongest in East Lango far and Acholi near, 'if you stay in the village you're just fading' (teenage boy, Acholi near). This aspiration often involves moving to an urban centre, but some youth like in East Lango far also said that they would be interested to work on a large farm as well. Only West Nile far has a variety of waged work opportunities available. In West Nile near, there is a ginnery in the sub county town and some teenage boys said that, 'it pays UGX 57,000 per month but it's not worth it because you'd use all of that for transport.' They said that this work is also only available towards to the end of the year. 'We can dig for cassava for UGX 10,000/week so why bother working in the ginnery?'

'All farmers are poor. If you can't go to school and just left to dig then you are poor'

(teenage boy, West Nile near)

Researchers felt that on the whole youth have few role models in their area. One exception was East Lango near, where one family has two uncles who often work outside the area doing construction. The oldest son in this family went with the uncle last year to Kampala for

a construction job and said that he was thinking about doing this again although he complained that he only made UGX 100,000 for one month's work. Youth often also shared feelings about the difficulties of farming such as it being, 'only OK when you're strong, when you're old it's a problem' (Acholi far) or that you 'feel sick after digging in the rainy season' (East Lango far). Children and youth rarely said that they wanted to become farmers, although some teenage boys in West Lango near said that they planned to farm for the money.



4 \ STUDY IMPLICATIONS

The following implications emerge from the in-depth conversations and interactions with people across the study locations. The implications are mostly presented from people's perspectives rather than with the interpretation of the research team unless explicitly noted:

Families', and particularly mothers', primary daily concerns are dominated by food stock and meeting school fee costs. Demands from many schools for crops and other items like sugar and firewood compound this burden. People must have assurance that these needs are met before taking any risks. The market demand in some locations for cassava (either pounded or as local alcohol brew) is also putting families in what they feel is a precarious position of trying to meet cash needs while not exhausting their food supply. Additionally, in many locations people told us that staple crops like cassava are currently suffering from diseases which is likely to put additional stresses on families (and mothers in particular) to provide food. In the two locations where these diseases seemed to be most problematic, government response thus far has been limited to posters in one location about a disease inside the homes of some volunteer health workers.

It would seem that women in particular may be less likely to experiment with different crops and/ or methods because of their concern over family food stocks. This concern is influenced by a worry that their husbands may not otherwise prioritize this. However, 'our' single mothers with smaller and/or young families show a greater tendency to experiment/ orientation towards growing crops for selling.

Families' struggles in meeting school cost demands are highly influenced by seasonality - i.e. the timing of these demands in relation to their planting seasons. As is visible from some of the seasonality matrices that many families drew with our researchers, school fees hit either at times of stress or at times when they encourage the quick selling of crops after harvests. Meaningful change for many families in these communities will not be possible without addressing this issue.

Alcohol is considered essential for those families that drink. It is also a large enough expense (UGX 10,000 - 25,000/per week) in many of these families that it needs to be considered along with food stock and school fees as a need that must be met before families may be willing to experiment with different crops, improved seeds, improved methods, etc. Alcohol brewing also provides key cash for families in between harvests (including for school fees).

Although many families complain about the low prices they receive for their crops and their lack of bargaining power, we do not see this as 'forced selling.' Along with school fee demands, convenience is the primary reason why families continue to sell locally and prefer to sell their cash crops quickly. People also told us that farm gate prices tend to be uniform around their communities regardless of whether they sell to buyers coming to homes or at local trading centres. Collective transportation is rare although the families that are doing this feel positive about it. The convenience of different options for undertaking collective transportation, along with its affordability, needs to be considered for any related interventions.

Although some people in all of the study locations are using improved/hybrid seeds of some kind, a lack of information/knowledge and often, consistent availability, is limiting their further use and uptake. Many people say that they prefer their local seeds because they know these and they are suited to their local conditions. Along with the cost and suitability of improved/hybrid seeds, people are concerned about the need to purchase yearly. Bad experiences trying improved/hybrid seeds (e.g. failed crops, the appearance of new pests/diseases) also have a huge influence on people's likelihood to continue using them.

Unlike manual labour which is typically paid out at the end of a harvest, renting inputs like ox ploughs requires paying cash up-front, making this a less attractive option particularly as families have less cash at planting times. Additionally, people in some locations (including West Nile far where there are

4 \ STUDY IMPLICATIONS

tractors) say that there are typically long waiting times for too few resources when these inputs are most needed, which risks missing planting windows. This suggests that options which allow some payment flexibility along with an increase in the available options/competition may make people much more likely to use these types of farming inputs.

For some families a lack of time, particularly due to water access issues and the need to involve in cash earning activities, is a key constraint which is likely preventing greater farming activity. All families in West Nile near are regularly needing more than two hours to collect water. While in some locations these water issues are seasonal, others (like West Nile near and parts of West Lango near) are year-round. Because water access issues like these severely limit a woman's time around the home, there are indications these also add stress to husband-wife relationships as the division of labour in households is forced to adjust.

The study location where families are the most 'market-oriented' has the worst access to public services. In West Nile far our families are using tractors, relatively oriented towards cash crops, experimenting with a wide variety of improved seeds or crops like vegetables, and making conscious decisions when selling in the interest of getting better prices. There are also multiple large companies in the area along with large individual landowners, both employing local people for waged work. However, the primary level school, health centre and trading centre are all over an hour's walk away. Additionally, two of our three families here are getting their water from natural watering holes or small streams. This poor access to public services may end up encouraging families to move closer to trading centres, potentially reducing their farming activities and/or land to do so, or to simply leave the area as indicated as a real possibility by the father of the family selling the most crops here who told us that he is worried about his children's access to school and may consider moving to change this. Meanwhile, the mother in another household has plans to move back to her home district.

Given the contextual differences between the study

locations, we feel NUTEC should carefully consider context when choosing areas of Northern Uganda to work in. Some locations such as West Nile far, with its optimistic newcomers and good market connections seem to offer much potential. Others however, such as East Lango far, where people have become skeptical of programmes and where the Born Again Church holds strong influence, are likely to prove quite challenging.

Little post-harvest processing is done beyond drying crops and readying home alcohol base ingredients like cassava for brewing and there is little to no value seen in this. When crops are ground/ milled this is generally for a family's own consumption which saves them time and effort later on.

Consideration of 'our' study families as consumers of locally-processed goods, such as cooking oil, soap or flour, needs to carefully consider price and packaging. For example, families are buying cooking oil but usually the cheapest option available and in very low quantities (typically single-use) so for Ugandan products to succeed, affordability and convenience need to be carefully considered.

There seems to be an opportunity for more/better information sharing at local trading centres. Currently, people get most of their information about farming from neighbours along with private contacts such as, for specific information like pesticide use, private agricultural agents; or in the case of families in West Nile far, 'expert' acquaintances obtained through their networks. Based on some of the issues encountered during this fieldwork, public information at trading centres (particularly if done in an engaging way such as the use of video screens) could be used to provide information on crop prices outside at the district markets, improved farming methods such as ploughing, the use and appropriateness of improved/ hybrid seeds, and ways of dealing with pests and diseases. Such information may also help to provide alternative possibilities and opportunities for what seems to be an acceptance of the status quo in families (see below).

4 \ STUDY IMPLICATIONS

Overall, farmers' groups are not viewed very positively. Although many people are still willing to join them because, 'you have to be in a group' to access programmes, people are frustrated by the lack of flexibility, unfair/opaque selection, trust issues and inclusion of 'lazy' members. This frustration is compounded by many bad experiences with groups, such as the sudden withdrawal of support (by the government, project, or NGO) or group leaders taking group assets for themselves (e.g. money, farming equipment). Some people also say that they simply prefer farming on their own and making their own choices. This suggests that new ways of working with farmers may need to be explored beyond the conventional farmers' groups.

Division of labour and decision making in families is, on the whole, shared and based on practical considerations. While most labour for household and farming-based activities are divided along conventional gender lines, people shared many examples where this deviates such as men collecting water (West Lango far, Acholi near), weeding (Acholi near, East Lango near), brewing and cooking (West Nile far, Acholi near). While fathers often lead decisions on planting/selling cash crops, in many cases mothers still have influence on this. Most of 'our' mothers in this study also have decision-making control over at least some part of the family's land, although they generally feel obligated to use this to concentrate on food crops. Programmes targeting women only may prove difficult given that, at least to some extent, most families 'work together,' and the fact that mothers are most concerned about having enough food for the family.

Overall, it seems that families have accepted the status quo as mostly subsistence farmers, with the exception of West Nile far. This may be influenced by a lack of a perceived 'middle ground' between people's traditional farming methods and those used on, for example, company farms. Researchers often noted that it was difficult for people to imagine possibilities such as implementing new technologies or having much greater bargaining power/access to major markets. This situation appears to be influencing how many youth (particularly boys/young men) are looking at their future aspirations - as a choice between status quo farming ('the way it is') or looking for small jobs in an urban centre, and less often, in factories or company farms. Still, parents' motivations for providing education for their children so that they can have 'better lives' than them shows that they are still interested in change, particularly if opportunities are visible, clearly demonstrated and accessible.

