



QuIP Report on Loan Financing Programme in Uganda January 2020

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Glossary of terms and abbreviations

QuIP studies employ the following terms as described below:

Attribution: Evidence that an action (X) causes change in an outcome (Y), which is the same as saying that action (X) is a necessary *condition* for change in an *outcome* (Y) in the presence of a package of other *drivers of change* (Z). The causal package (X, Z) is sufficient to cause the change in Y, but need not be necessary, because there may be other causal packages that are also sufficient to do so. Some authors define attribution more narrowly as a quantifiable effect of X on Y, but here the term is used more generally and in a way that is synonymous with contribution.¹

Attribution code: a code that indicates whether a *driver of change* (a) is having either a positive, negative or neutral effect on a specified *outcome*, and (b) identifies a selected organisation by mentioning the organisation or its activities by name (i.e. explicitly); mentions activities consistent with the organisation's *theory of change* (i.e. implicitly), or does not make either explicit or implicit mention of the organisation (i.e. are unrelated/incidental to it).

Blindfolding: The process of deliberately restricting what interviewers and/or interviewees know about an activity or actor in order to reduce the potential bias in favour of emphasising the importance of this activity or actor relative to other drivers of change.

Causal claim: A proposition that a specified *outcome* (Y) was a direct consequence of a specified action (X) or (Z). Note that an outcome in one causal claim can be a driver in another causal claim. Consider one narrative where X leads to Y_1 and another narrative where Y_1 leads to Y_2 . Then Y_1 is an outcome in the first claim, but a driver in the second.

Causal chain: A series of connected causal claims, for example where X leads to Y_1 leading to Y_2 leading to Y_3 .

Causal driver: See *driver of change*.

Commissioner: The organisation contracting a QuIP study, and the primary user of the evidence to be collected. Responsibility rests with the Commissioner to decide what sort of evidence they want and why, as well as when, where, and how to collect it.

Credibility: How believable a particular finding or conclusion is to a particular person or audience. It acknowledges that their capacity to assess the validity and reliability of findings depends upon their own independent knowledge, experience and opportunity for cross-checking or triangulation against other sources. This contrasts with the quest to establish universal truths that are valid and reliable independently of the perceiver. In aspiring to produce reasonable or 'good enough' evidence the success of the QuIP ultimately hinges on the credibility of findings.

Count: the number of times a theme is mentioned in interviews and focus group discussions

a) Respondent Count: The number of respondents who mention a given theme ('driver of change', 'outcome' or 'attribution') when answering a given question. For example, the maximum respondent count for a given theme in a QuIP with 48 respondents is 48.

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¹ The QuIP has a strong affinity to Contribution Analysis as described by Mayne (Mayne J. 2012. Contribution analysis: coming of age? *Evaluation* 18(3):270-280.). Mayne (2012:273) also distinguishes between <u>attribution</u> ("... used to identify both with finding the cause of an effect and with estimating quantitatively how much of the effect is due to the intervention") and with <u>contribution</u>, that asks whether "... in light of the multiple factors influencing a result, has the intervention made a noticeable difference to an observed result and in what way?" Taking "observed results" to refer to changes measured through routine monitoring, the QuIP conforms to this definition of contribution. But as the basis for identification of causal chains it also conforms to the first part of Mayne's definition of attribution.





b) Citation Count: The number of times a theme is mentioned, with a maximum of one count per respondent per domain. For example, if a QuIP questionnaire has six domains and 48 respondents, then the maximum citation count for a given theme is 48 x 6 = 288.

Domain: An area of respondents' lives, or category of outcomes (e.g. Income, Health, Education) agreed in advance with the commissioner and used to structure interviews and focus group discussions. Most studies address a number of domains that are consistent with a *theory of change*. They typically refer to aspects of the wellbeing of individual intended beneficiaries that an organisation intends to affect positively.

Driver of change: An action or state (X or Z) behind an outcome (Y). These are generally self-reported by respondents, in answer to questions like 'why did that happen?' or 'what was the reason for that?' This term is synonymous with causal driver.

Intended beneficiary: Those people that a specified organisation is aiming to benefit, by achieving *outcomes* specified in its *theory of change*. Sometimes the intended beneficiaries are organisations or associations of people, as is the case with capacity building projects.

Impact: Evidence that a specified project *credibly caused* a specified set of outcomes. In some cases, the term impact may refer specifically to final *outcomes*. X *credibly causes* Y in a particular context if (a) there is strong evidence that X and Y happened, (b) several stakeholders independently assert that X was a cause of Y, with minimal prompting, (c) there is no more credible counter-explanation for why they might have said this, (d) their account of how X caused Y is consistent with a plausible *theory of change*.

Outcomes: Changes (positive or negative) reported by respondents, often in answer to a question in the form of: 'during this time period has anything changed in this domain of your life?'

Project or Programme: A specified set of activities, interventions, or investments over a given period of time aimed at achieving a specified set of intended outcomes for a specified group of intended beneficiaries. This is the object of a specified QuIP study. It is the responsibility of the commissioner to define it, as well as the theory of change behind it, as precisely as possible. Others may refer to a project as a 'treatment,' but in QuIP studies this term is generally avoided.

Respondents: Interviewees and focus group discussion participants. Their narratives are the source of causal claims, linking drivers of change (including but not limited to project activities) to outcomes, both intended and unintended. Respondents are usually a sample of intended beneficiaries, and data is collected from them through semi-structured interviews and focus group discussions.

Theory of change: The causal processes by which the commissioner of a QuIP study expects a specified project to achieve intended outcomes and impact. Not all causal drivers originate with the project. Theories of change also identify incidental drivers of change and may also assess the risks associated with their occurrence or non-occurrence.

Abbreviations:

BRAC: Building Resources Across Communities

ADC: YZ Agricultural Development Company

SACCO: Savings and Credit Cooperative

DP: Smallholder Development Unit (Organisation Z)

SF: Smallholder farmers

TSP: Tillage Service Providers

VSLA: village savings and loans associations

Note regarding respondent data

The QuIP interviews and focus group discussions are carried out in person and in the local language by a local research team. Summary rather than verbatim responses are then translated into English and written up by these same researchers. Any quotations used in the report reflect the English used by the researchers.

All the respondent data is anonymised by allocating a code to each respondent and focus group discussion. Any quotation used in the report is tagged with the code of the source of the quote.

Data in the form of audio recordings of interviews and notes taken by the local researchers are stored securely by the research team for a maximum of one year, at which point they are deleted.

Executive Summary

This QuIP study has been commissioned by **Organisation Z's Smallholder Development Unit** (DP) to provide evidence of any benefits derived by smallholder farmers in northern Uganda from the **'Microloans for Agricultural Production Programme'**, a programme carried out in collaboration with the **YZ Agricultural Development Company** (ADC). Between 2016 and 2018, the DP provided funding of \$509,000 to support XXX in setting up and building the capacity of 500 **village savings and loans associations** (VSLAs) involving 15,000 smallholder farmers in two districts, Lamwo and Pader, in the East Acholi region in northern Uganda. The programme also aimed to provide **training in financial literacy** to all members of the 500 VSLAs, and extended buy-to-own **asset loans** to individual VSLA members on the basis of Credit Risk Score. Smallholder farmers involved in the programme are intended to benefit from increased farm productivity, increased farming income and availability of credit score. Refer to Section 1 of the report for further programme details.

Using the QuIP methodology, 48 individual interviews and eight focus groups discussions (FGDs) were carried out in October 2019 by a local research team. Refer to Section 2 for further detail on the QuIP methodology. The interview summary transcripts were systematically coded and analysed in order to capture positive and negative outcomes, the perceived drivers behind them, and whether these changes were attributed to DP-XXX programme activities or to another source.

In response to the closed questions, respondents reported positive changes in various domains over the past three years, in particular in relation to attitudes towards borrowing, relationships, and hope for the future. However, half of respondents reported that they were saving less overall.

Narratives revealed strong evidence of how saving and borrowing with VSLAs was leading to positive changes in smallholder farmers' lives over the past three years. Whilst attributing these changes directly to the programme activities was difficult because XXX was not explicitly mentioned in being involved with the VSLA, it is important to note that almost all of the VSLAs mentioned by respondents were those that had been targeted by the XXX programme.

A key element of the XXX programme was to link each VSLA with a formal financial institution; there is evidence of relationships changing between groups/individual members and formal financial institutions. Respondents who mentioned saving in and borrowing from both VSLAs **and** banks did not explicitly link the two (VSLA saving and borrowing leading on to saving in / borrowing from a formal bank) thus this was not coded as a causal chain, however this link could be implied.

Aside from programme activities, respondents also highlighted a range of other key drivers that were impacting on their lives and on their level of engagement with VSLAs in terms of saving and borrowing. These other drivers include: market demand and prices; changing weather conditions; levels of spending and expenditure, especially school fees and medical expenses; investment in side businesses and farming, in particular the use of an ox-plough; and health.

There are three main causal stories from respondents' narrative accounts.

1. Saving and borrowing with VSLAs is leading to positive changes in smallholder farmers' lives.

In addition to increased savings, the key outcomes of saving and borrowing with a VSLA reported by respondents are:

- **Increased ability to cover household or emergency needs**, in particular paying school fees and medical expenses.
- Increased investment in business and farming. Farming investment includes increased amount of hired farm labour, seeds purchased, and ox-plough hired. These investments led to increased amount of land cultivated, increased amount of harvest, and increased earnings. Business investment includes starting or increasing side businesses, particularly buying/selling animals and brewing/selling alcohol, leading to increased earnings. Increased earnings from investment in business or farming in some cases fed back into increased saving in the VSLA.
- Increased financial planning and record keeping including training on financial management / managing money through the VSLA. Seven respondents identified receiving financial training provided by ADC.
- Improved community relationships. VSLA membership leads to improved community relationships through providing a space for the sharing of ideas, advice and support, increasing women's empowerment and gender equality, and increased communal work (including collective farming projects). Improved rules, regulations and procedures in VSLAs have also improved community relationships. Several respondents detailed how being able to save and borrow through VSLAs had improved marital relationships and reduced domestic violence.
- 2. Healthy market demand and good prices for cash crops, new or increased side businesses, use of ox-plough and improved agronomic practices are leading to increased earnings and increased saving in VSLAs.
- A key driver leading to increased income is healthy market demand including good or higher prices and increased buyers leading to new or increased cash crop production. In particular, respondents report adapting to changes in market demand by starting or increasing production of soybeans, cotton, sunflower, simsim and rice. Three respondents identified selling crops (cotton and simsim) to XXX buyers.
- Increased **use of ox-plough** has increased the amount of land cultivated leading to increased amount of harvest / quantity grown and increased income. Five respondents reported taking an **asset loan** from **XXX** or **VSLA**, of these one respondent reported that her oxen had died and that she gave the plough to a neighbour. One respondent reported receiving an asset loan from 'Projects for Restoration of Livelihoods in Northern Uganda' (PRELNO). One of the asset loan takers reported that they rented out the ox-plough to others providing an additional source of income. One asset loan taker mentioned training from XXX on how to farm using oxplough.
- New or increased 'side businesses', in particular alcohol brewing/selling and small-scale animal husbandry (goats, poultry, pigs, cows), and providing farm labour, are important additional sources of income for smallholder farmers and have increased earnings and increased saving.
- Further drivers of increased farm productivity include increased amount of hired farm labour (for weeding and harvesting) and improved agronomic practices (use of high-quality seeds, timely planting, weeding, timely harvesting, and post-harvest management) linked with training on farming. Nine respondents and one FGD identified agronomic training / provision of seeds by ADC.

- 3. Bad weather, especially heavy rainfall and flooding, decreased market demand and prices, and ill health are leading to decreased earnings and reduced saving and borrowing with VSLAs.
- **Bad weather**, especially **heavy rainfall and flooding**, is a key driver leading to reduced amount of harvest, decreased earnings and saving less. Changing weather conditions was particularly affecting communities in the Pader district.
- **Decreased or fluctuating market demand** and **falling prices of crops**, especially for maize, millet and cassava, are also leading to reduced earnings from farming.
- III health and old age leads to reduced amount of land cultivated and reduced harvests, leading to reduced earnings. III health also leads to increased expenses. Reduced income then leads to reduced amount saved and less borrowing.
- A further driver of decreased saving is when decreased earnings are combined with increased spending/expenditures, particularly due to increased school fees and increased medical expenses. This reduced saving leads to reduced borrowing, not only because amount borrowed is a function of amount saved, but also because people become more reluctant to borrow with more limited and uncertain resources.
- Several respondents identified a **reduction in VSLA group activity**. In particular the VSLA Lacan Obil (Lamwo district) was reported to have stopped functioning. An interruption to VSLA activities (e.g. temporarily not having weekly meetings and not saving) was identified by some respondents due to farmers moving to distant fields to cultivate crops.

1. Introduction

The report is comprised of the following sections:

Section 1 gives a brief introduction to the research questions for this QuIP study and a brief overview of the project background.

Section 2 outlines the QuIP methodology, including the sampling strategy and data collection methods used.

Section 3 presents the key overall changes reported by respondents in open-ended discussions, and an overview of the responses from the closed questions, indicating respondents' overall perceptions of change across the different domains.

Section 4 explores the main stories of change in more detail.

Section 5 shows the different organisations respondents listed and ranked at the end of the questionnaire.

Section 6 includes appendices relevant to this QuIP study and report.

Please note that the raw data behind this report is available in an interactive dashboard, giving access to all summary transcripts and a more detailed analysis of counts.

1.1 Project Overview

Organisation Z is a social impact investor and agribusiness project developer. Its mission is to reduce poverty and improve food security by transforming agriculture in Africa from subsistence farming to a modern, commercial and value-adding sector. Since 2009 Organisation Z has invested over US\$120 million in 69 agribusinesses in sub-Saharan Africa, connecting more than 400,000 farmers to markets and generating 7,313 jobs.

The DP's first project was a collaboration with an **Agricultural Development Company (ADC)**, an agroprocessor that works with smallholder farmers in northern Uganda, aiming to revitalize the region's cotton industry, diversify crop production, and provide access to modern agricultural inputs, new markets, and training. XXX purchases cotton, sesame, sunflower, chilies, and maize directly from smallholder farmers, processes the crops locally, and then sells them in domestic and international markets. XXX has developed a large network of field officers who provide extension and buying services and have built strong relationships with smallholder farmers. XXX is currently working with more than 80,000 farmers across the region and has invested in organic certification for more than 40,000 of them.

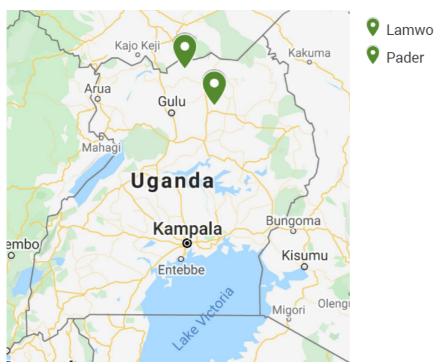
Between 2016 and 2018, the DP provided funding of \$509,000 to support XXX in setting up and building the capacity of 500 **village savings and loans associations** (VSLAs) involving 15,000 smallholder farmers in two districts, Lamwo and Pader, in the East Acholi region in northern Uganda².

Smallholder farmers involved in the 'Microloans for Agricultural Production' programme are intended to benefit from increased farm productivity, increased farming income and availability of credit score.

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² Separately from the support provided by the DP, Organisation Z also provides working capital to ADC, which has enabled it to pre-finance a large network of buying agents and therefore rapidly to increase the volumes of cotton and other crops it purchases from smallholder farmers over the past three years.

Figure 1: Map of project locations



Key components of the 'Microloans for Agricultural Production' programme:

- The programme engaged with 500 VSLAs³ and aimed to **formally register** all the VSLAs with the local authorities at three levels (referred to by Local Council or 'LC' numbers: LCI the village level, LCII the parish, and LCIII the subcounty), and to link each VSLA with a **formal financial institution** (i.e. open an account with a bank at the group and/or individual member level).
- The programme aimed to provide **training in financial literacy** to all members of the 500 VSLAs, employing a 'train the trainer' model. XXX trained 50 staff members ("Field Officers") and 100 VSLA leaders ("Lead Farmers") in an eight-module financial literacy curriculum⁴. Each Field Officer was responsible for training 10 VSLAs. VSLAs were supplied with branded cashboxes along with **starter kits** (including passbooks, ledgers, calculator, counting bowls). For new VSLAs, training focused on group formation, constitutional regulations, account opening, and goal-oriented saving; for mature VSLAs, training also covered business planning for individuals and groups. A key dimension of the XXX training was centred on bringing about a change in mind-set or thinking among VSLA target beneficiaries where VSLA groups had, in the past, been dominated with donations or free gifts from different organisations. The project sought to promote hard work and saving and borrowing for a purpose with strict loan programmes.

³ Most (if not all) of the 500 VSLAs in the programme were in existence before the start of the programme. XXX identified the VSLAs to work with based on financial stability, business environment and ease-of-access for XXX field staff.

⁴ The eight modules were: 1. VSLA formation, 2. Leadership and elections, 3. Rules and constitution, 4. Record-keeping and share purchasing, 5. Loan disbursement, 6. Loan repayment, 7. Small business planning, 8. Share-out of loan fund

• The programme also extended buy-to-own **asset loans** to individual VSLA members on the basis of Credit Risk Score.

Assets include:

- tillage implements (ox-drawn tillage tools such as planters, weeders, carts, etc). Loans to buy tillage equipment were made with the intention that borrowers would provide tillage as a service to others, referred to as Tillage Service Providers (TSPs)
- motorcycles

VSLA members and Tillage Service Providers (TSPs) also attended field day trainings and production asset demonstrations, led by ADC's tillage engineer.

The two-year pilot programme was designed to test the business case, viability and cost-benefit to XXX of the VSLA model and asset loan programme to explore its impact (positive and/or negative) on smallholder farmers. If the project is deemed successful, XXX planned to grow the loan portfolio. It is noted that loan demand has been changing from tillage equipment loans to spray pumps and motorcycle loans⁵.

The QuIP study has been commissioned to provide evidence of any benefits derived by smallholder farmers in Lamwo and Pader districts from ADC's VSLA and financial inclusion activities between 2016-2018.

2. Methodology

2.1 QuIP Overview

This research study was carried out using the *Qualitative Impact Protocol* (QuIP) evaluation approach⁶. QuIP studies are designed to collect credible evidence on the household-level impacts of an intervention. This information is gathered directly from intended beneficiaries and based on their perceptions of what has changed in their lives over a set period of time and across a series of domains related to the project's theory of change (ToC).

The interview data was collected by a team of local researchers who are fluent in the local language. The researchers worked completely independently of the project team and commissioning organisation and were 'blindfolded' in that they were not informed that the intervention was sponsored by Organisation Z or that it was implemented by ADC. They did know that they were asking about financial behaviours and attitudes, and that they were talking to members of VSLAs. The Lead Researcher was not blindfolded in order to coordinate and manage the research effectively. These procedures are important as they help to reduce pro-project and confirmation bias. Moreover,

⁵ In the 2017-2018 marketing season XXX disbursed 85 tillage equipment loans, 341 spray pumps, and 25 motorcycle loans to buying agents. Based on the performance of these loan portfolios XXX has re-strategised which loans to disburse taking into consideration operation cost and profitability. In the current 2019-2020 marketing period XXX has made more motorcycle loans and to date XXX has disbursed a total of 41 motorcycle loans to buying agents.

⁶ Further background and QuIP resources can be found at: www.bathsdr.org

blindfolding increases the likelihood that field researchers will collect a broad range of information about changes in the community, as interviewers and interviewees are not limited to thinking about one intervention or project activity. This further enhances the open-ended nature of the questionnaire, which is consciously designed to increase the potential to uncover unintended intervention outcomes or unexpected stories of change. Informed consent was obtained by respondents prior to starting interviews.

The semi-structured questionnaire used in this study was divided into seven relevant domains, based upon the 'Microloans for Agricultural production' theory of change. The domains covered were:

- Farming and farming practices
- Sources of income
- Spending
- Savings
- Borrowing
- Relationships
- Aspirations for the future

A final section asked respondents about financial organisations and agencies they had engaged with over the past three years. Respondents were asked to rank these organisations and to detail their involvement with them. This element of the QuIP is used in almost every study as it provides further information about which organisations and interventions are at work in the community and their relative importance to respondents.

Questions were purposefully designed to be broad and open-ended to allow the respondents to speak freely about what they believed to be significant changes in their lives. Researchers were trained to use the additional questions to probe further and establish what the perceived drivers of these changes were. Closed questions were also used at the end of each domain to capture overall perceptions of change in some specific areas. These provide a useful snapshot of responses as an introduction to the findings and are presented in Section 3.1. It is important to stress that these closed questions are limited in their scope as respondents are only given three choices (for example: better, worse, the same). The open questions provide a more detailed narrative providing the often complex and multiple drivers of the changes. The main findings from these questions are presented in in Section 4, drawn from the standard QuIP analysis process as described below, allocating driver, outcome, and attribution codes to each statement of change.

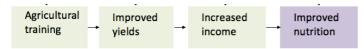
QuIP analysts only code statements related to *changes* that the individual or focus group experienced and reported (i.e. any statements about the status quo are not coded, unless they are deemed significant to highlight to the commissioner).

How to interpret QuIP presentation of findings

QuIP data is not statistically representative of the wider population. Findings cannot be extrapolated out across wider project target areas, nor is that the intention. The aim of carrying out a QuIP is to conduct a 'deep dive' assessment with a purposively selected group of people in the project target area to understand whether, and if so, how different aspects or 'domains' of their lives have changed in recent years. Counts are used to highlight trends in the data, but these should not be interpreted as being representative of a particular population other than those interviewed, rather this offers an opportunity to learn from detailed perceptions of change in a carefully selected group. Where quotes

are used, this is to help communicate more detail and give examples of the types of stories under discussion, but the number of quotes used is not representative of a 'majority' or 'minority' view.

The QuIP approach to analysing data relies on counting 'tags' applied during the coding process. Analysts carefully mine the responses to all questions and apply a tag (e.g. 'Increased income') to each portion of text. These tags are unique to each project. Multiple tags are placed in different columns, depending on the order in which the story warrants their use, as per the example below.



Not all columns need to be used, but a story would usually rely on the use of at least two columns, to denote a 'driver of change' and an 'outcome. A similar story could also be coded differently in fewer columns depending on how much information is volunteered by respondents, and in what order they tell the story, as shown below.



In addition to driver and outcome codes, an attribution code is added to the line of tags, depending on how closely the story mirrors the known theory of change and interventions, as per Table 1 below.

Table 1: Attribution coding

	Positive	Negative	Neutral	Explanation
	code	code	code	
Explicit attribution to the Programme	PE	NE	E	Positive, negative or neutral / ambiguous change explicitly attributed to XXX programme activities: - Asset loan taken from XXX or the ADC-VSLA - Training on financial management or asset loans from XXX - ADC-VSLA membership — saving and borrowing with a VSLA targeted by XXX and linked with XXX activities

Implicit attribution	PI	NI	I	Positive, negative or neutral / ambiguous change relating to XXX programme activities but with no explicit reference to the programme/ADC: - ADC-VSLA membership — saving and borrowing with a VSLA targeted by XXX (no mention of ADC) - Bank account holder — saving with a formal financial institution which XXX contacted to establish links with VSLAs - Side business providing animal traction services — respondent mentions hiring out their ox-plough to other SFs to earn extra income - Respondent mentions use of ox-plough Includes change attributed to other agencies doing similar activities to XXX programme activities: - Other VSLA membership - Asset loan from other agencies on financial management, asset loans, relationships
Explicit attribution to XXX unrelated to programme activities	PY	NY	Y	Positive, negative or neutral / ambiguous change explicitly attributed to XXX in a role unrelated to the programme - buyer of cash crops - farm inputs and trainings
Other attribution	РО	NO	0	Positive, negative or neutral / ambiguous change attributed to external / other forces, not related to programme activities .
Noteworthy		Х		Statements of interest / context but not referencing change.

When the whole dataset has been coded it is possible to run queries to establish how many times different tags have been used in different ways, and the relationships between them. Figures in this QuIP report will use two different types of 'count' of different codes.

- c) Respondent Count: The number of respondents who mention a given tag (driver of change, outcome or attribution code) when answering a given question. The maximum respondent count will always be equal to the number of people interviewed, or the number of FGDs, (these are presented separately), i.e. 48 interviews and 8 FGDs in this study.
- **d) Citation Count:** The number of times a tag is mentioned, with a maximum of one count <u>per respondent per domain</u>. In this study the questionnaire had seven main domains and 48 individual interviews were conducted, so the maximum citation count for a given theme is 48 x 7 = 336.

Some figures present both counts alongside each other; this is important as they tell us two different types of information. The respondent count tells us how many times a particular theme (tag) was brought up across all the interviews - to a maximum of once per interview. This is telling us how many people mentioned this theme in general. The citation count tells us whether they repeated that tag across more than one domain, thereby telling us if it was important in more than one area of their

life. For example, 'increased income' is likely to be mentioned across multiple domains, whereas 'eating more vegetables' may only be mentioned in one domain (e.g. food consumption). If the citation count is much higher than the respondent count, that tells you that it has been mentioned across more than one domain.

This analysis method allows the rich narrative information gathered from interviews to be coded and displayed in the tables and visualisations contained in this report. This coding process enables the analyst to look for patterns and trends across the dataset, and to understand which stories of change are common across the sample, and which are specific to certain individuals, or to a particular group of respondents.

A note on respondent voice



As respondent voice is central to QuIP's methodology and philosophy, quotations from the narrative accounts are presented throughout this report. Furthermore, the respondent codes presented in the tables, figures, and quotations, allow the reader to trace back from the charts to the original qualitative data (available in the accompanying dashboard or extracted Excel file).

The QuIP questionnaires were carried out in the local language and then summarised and translated into English by the same researchers. All quotations used in this report reflect the wording and English language used by the data collection team. Translations or clarifications are provided where necessary, but where possible the English has been deliberately left as written by the field researchers, in order to maintain authenticity. Original notes and recordings are held by the research team.

2.2 Case selection

This study was undertaken using a double QuIP, consisting of 48 interviews and eight FGDs. Sample selection combined purposive and random approaches. Purposive sampling is used in a QuIP study to explore potential differences in impact of a given project based on programme attributes, intended beneficiary attributes, and/or observed changes over time in participant wellbeing. Random sampling is used to select respondents from the categories defined by purposive sampling.

In this study, purposive sampling focused on four key attributes⁷ of the population of an estimated 15,000 smallholder farmers who were all members of VSLAs, as recorded in 2017:

- 1) Location: Lamwo District & Pader District
- 2) Loan experience: farmers who had received an asset loan, and farmers who had not
- 3) Gender: women & men
- 4) Age: under 35 years old & 35 and above

The intention was to distribute the 48 individual interviews and 8 FGDs by respondent attributes as shown in Table 2.

⁷Project-related attributes such as the age and size of the VSLAs were considered but rejected, because complete and up-to-date data was unavailable for these attributes.

Table 2: Sampling strategy by respondent attributes

Individual Interviews						
	Loc	cation				
Gender & Loan	Lamwo	Pader	Total			
Asset Loan Taker (either Gender)	8	8				
Other Women (no Loan)	8	8				
Other Men (no Loan)	8	8				
Totals	24	24	48			

FGDs						
	Loc	cation				
Gender & Age	Lamwo	Pader	Total			
Women (35 and under)	1	1				
Women (Over 35)	1	1				
Men (35 and under)	1	1				
Men (Over 35)	1	1				
Totals	4	4	8			

Respondents for the study could best be reached via the VSLA to which they belonged. Given a minimum purposive sample size per respondent category of six, and a total sample size of 48, eight VSLAs were selected for the individual interviews. To ensure no overlap between respondents for individual interviews and focus groups, eight further VSLAs were selected for the eight FGDs. Table 3 summarises the counts across different VSLAs.

Table 3: Sampling strategy by VSLA

	Lamwo	Pader	Total
Individual Interviews	6 each at:	6 each at:	
	VSLA-1,	VSLA-9,	
	VSLA-2,	VSLA-10,	48
	VSLA-3,	VSLA-11,	
	VSLA-4	VSLA-12	
FGDs	1 each at:	1 each at:	
1.003	VSLA-5,	VSLA-13,	
	VSLA-6,	VSLA-14,	8
	VSLA-7,	VSLA-15,	, and the second
	VSLA-8	VSLA-16	
		_	

In order to be able to interview sufficient asset loan borrowers, we sought to identify all VSLAs that had more than one asset borrower as members (excluding field officers and lead farmers). We identified 12 of those VSLAs, of which 8 were selected based on travel considerations (VSLAs within two sub-counties in each district). The VSLAs for the focus groups were selected by the field team from the same four sub-counties, based on where they could access. Each VSLA selected was under the supervision of a different XXX Field Officer, to lessen the risk of skewing findings based on field officer attributes rather than project impact. Researchers then selected respondents at random from the VSLA lists provided, according to the strategy set out above.

The availability of respondents within the data collection timeframe meant that although the sampling strategy was broadly followed and 24 individual interviews and four FGDs were conducted in each district, the full strategy could not be implemented exactly as set out above. Tables 4 and 5 show the composition of the final sample by district (refer also to Appendix 2, Table 9 for individual interviews and FGD codes for each VSLA). 11 people on the VSLA membership lists needed to be replaced (two could not be identified, eight had moved away, and one had deceased). In terms of asset loan takers, the actual sample was six individuals interviewed against the 16 intended. Three males and two females were identified as asset loan takers yet in the interviews reported that they had never taken an asset loan (these respondents were recoded as 'regular'). Of these, one female (LFRC-1) reported that she was registered for an asset loan in 2016 for an ox-plough but she never received the loan since she was away from the community the day the other members received their loans. The remaining discrepancy was due to the unavailability of Asset Loan Takers named on the VSLA lists on the days of the interviews.

Table 4: Comparison of intended sampling strategy vs actual sample for individual interviews

Tabl	e 4: Companson of inten	ueu sampiii	ig strategy v	S uctuur San	ipie ioi iliui	viduai iiitei v	iews		
			Individu	ial Interviev	vs – Lamwo				
		Asset Lo	an Takers	Wo	men	M	en	Tot	al
				witho	ut Loan	witho	ut Loan		
	VSLA	Strategy	Actual	Strategy	Actual	Strategy	Actual	Strategy	Actual
1.		2	1 (F)	2	1	2	3	6	5
2.		2	2 (F)	2	6	2	1	6	9
3.		2	0	2	3	2	2	6	5
4.	*	2	0	2	5	2	0	6	5
	(women only)								
	Total (Strategy)	8		8		8		24	
	Total (Actual)		3		15		6		24

			Individ	ual Intervie	ws – Pader					
			Asset Loan Takers		Women without Loan		Men without Loan		Total	
	VSLA	Strategy	Actual	Strategy	Actual	Strategy	Actual	Strategy	Actual	
5.		2	0	2	3	2	4	6	7	
6.		2	1 (F)**	2	3	2	2	6	6	
7.		2	0	2	2	2	4	6	6	
8.		2	2 (F+M)	2	2	2	1	6	5	
	Total (Strategy)	8		8		8		24		
	Total (Actual)		3		10		11		24	

^{*} In brackets: M = Male Respondent and F = Female Respondent

Table 5: Actual sample details for FGDs

	FGDs- Lamwo								
	VSLA	Women (35 and under)	Women (Over 35)	Men (35 and under)	Men (Over 35)	Total			
9.		1							
10.					1*				
11.					1*				
12.			1						
	Total					4			

	FGDs-Pader								
	VSLA	Women (35 and under)	Women (Over 35)	Men (35 and under)	Men (Over 35)	Total			
13.				1*					
14.				1*					
15.			1						
16.		1							
	Total					4			

^{*} Due to participant availability, both of the male FGDs in Lamwo were conducted with men over 35 years old, and both of the male FGDs in Pader were with men under 35 (rather than having one of each age group in each district, as described in the strategy).

^{**} This respondent [PFBJ-2] stated that they received an asset loan from 'Projects for Restoration of Livelihoods in Northern Uganda' (PRELNO).

^{*}All FGDs had between 5 and 7 participants.

Codes were assigned to the 48 individual respondents and eight FGDs as follows: first, during note-taking and data transcription; then again after data collection and prior to data analysis. This recoding aimed to prevent the codes being linked to any personal data used in setting up the interviews and FGDs. The key to the respondent codes used in this report is shown in Table 6 below.

Table 6: Code key for unique respondent codes

Position	1	Position	1 2	Position 3		Position 4		
District		Gender		Asset Loan		VSLA		
Pader	Р	Female	F	Borrower (Loan Taker)	В		K	
Lamwo	L	Male	М	Regular (No Loan)	R		Α	
				FGD	G		В	
							D	
							J	
							С	
							Т	
							U	
							L	
							N	
							0	
							I	
							Р	
							R	
							W	
							Υ	

3. Main findings

This section presents the overall snapshot of change derived from respondents' responses to closed questions and a brief overview of the main positive and negative changes reported by respondents within the detailed narrative accounts. It also includes an overview of project attribution across the different questionnaire domains.

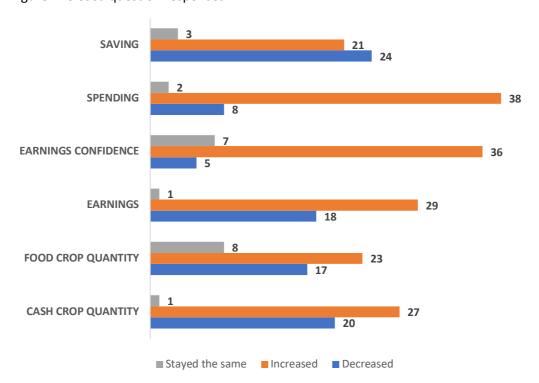
3.1 Snapshot of change: closed questions

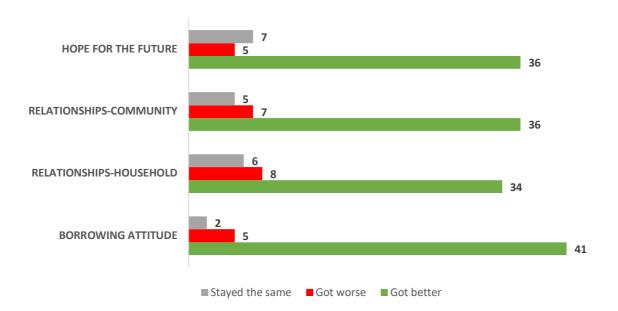
Figure 2 shows the number of respondents reporting positive, negative, or no change across the different questionnaire domains in response to the closed questions. The figure uses a shortened version of the closed question; Table 7 outlines the full list of closed questions.

Table 7: Closed questions

Question ID	Closed Question	Closed Question shortened
B2	Over the past three years, has the quantity of crops you grow for sale	Cash crop quantity
B4	Over the past three years, has the quantity of crops you grow for food	Food crop quantity
C2	Over the past three years, has the total amount you earn over the course of a year	Earnings
C4	Would you say your confidence in future earnings compared to 3 years ago has	Earnings confidence
D2	Would you say how much money you spend now compared to 3 years ago has	Spending
E2	Would you say the amount you save compared to 3 years ago has	Saving
F2	Would you say your ideas about borrowing compared to 3 years ago have become	Borrowing attitude
G2	Overall how do you feel that relationships within your household have changed, if at all in the last three years?	Relationships-household
G3	Overall how do you feel that community relations and decision-making have changed over the past three years?	Relationships-community
H2	Would you say your expectations / aspirations for the future have	Hope for the future

Figure 2: Closed question responses





As shown in the figures above, the overall direction of change was mostly positive across the different domains. This was overwhelmingly the case for attitudes towards borrowing, whereby the vast majority of respondents claimed they were more positive about borrowing now compared to three years ago.

A similar positive pattern can be seen in the domains associated with relationships and wellbeing, with many respondents reporting that their household and community relationships had improved over time and they had greater hope for the future. This finding was relatively consistent across the two districts. Respondents from the and and VSLAs were less likely to report positive changes within community relations.

There was a more mixed picture for changes in domains associated with earnings. Whilst 18 respondents reported that their earnings had decreased during the period, only 5 respondents claimed that their confidence for future earnings had gone down. Respondents from the Pader district were slightly more positive about their income in general.

Looking at spending and saving habits, there is certainly an observable increase in spending across both districts, however the same cannot be said for savings. Half of respondents reported that they were saving less; and half said they were saving the same amount or an increased amount. A few more respondents in Lamwo reported an increase in their savings (and less reported a decrease) than respondents in Pader. All respondents in the VSLA reported that their savings had decreased.

With regards to changes in production of food and cash crops, more households reported an increase in the quantity grown to consume and to sell. Respondents in Pader were slightly more likely to report an increase in cash crop yields, whilst respondents in Lamwo were slightly more likely to report increased food crop yields.

Appendix 4 provides a detailed table of how all individual respondents responded to each closed question.

3.2 Overview of changes by cluster

Responses to the open-ended questions revealed a range of changes in people's lives over the past three years. These positive and negative changes (both drivers and outcomes) emerging in the detailed narratives were grouped into four different clusters:

- Cash crop farming and other earnings
- Spending, saving & borrowing
- Relationships
- Training and other support

Table 8 below outlines how the changes reported by respondents were clustered into these thematic categories by the analyst. The changes are listed in descending order of frequency within each category, with the most frequently mentioned first. The distinction between drivers and outcomes is made by the analyst and not based on the positions in the dashboard. The distinction between drivers and outcomes is not exclusive; changes can be both drivers and outcomes. For example, increased earnings is considered as an outcome, which then drives further change. Table 8 includes all changes

with a respondent count of at least 7 or more. Refer to Appendix 3 for a detailed presentation of specific counts (respondent and citation) of individual changes by cluster.

Table 8: Changes by cluster

Cash crop farming & other earnings-related	ł
drivers	

- Market demand & price (increase)
- Market demand & price (decrease/fluctuating)
- Ox plough (hired)
- Side business: alcohol (increase)
- Bad weather (too much rain: flooding)
- Diversity of crops (vegetables) grown for food (increase)
- Ox plough (bought outright)
- Crop resilient to 'new' weather (rain or sun)
- Ox plough (source unspecified)
- Bad weather general (too much rain or sun)
- Side businesses: various (increase)
- Owned ox plough fails (cows dead or stolen)
- Bad weather general (too much rain or sun)
- Hired farm labour / animal traction price (increase)
- Ox plough (bought with asset loan) (6 respondents)

Cash crop farming & other earnings-related outcomes

- Earnings (increase)
- Amount of land cultivated (increase)
- Amount of harvest / quantity grown (decrease)
- Earnings (decrease)
- Amount of harvest / quantity grown (increase)
- Hired farm labour amount (increase)
- Side business: animals buy/sell (start/increase)
- Food grown for consumption (decrease)
- Seed purchased
- Food grown for consumption (increase)
- Soya cash crop (start/increase)
- Other or various cash crops (start/increase)
- Simsim as cash crop (start/increase)
- Cotton as cash crop (start/increase)
- Amount of land cultivated (decrease)
- Sorghum, maize, cassava / various cash crops (stop/decrease)
- Crop maintenance / farming easier (eg less labour required)
- Sunflower as cash crop (start/increase)
- Side business: various (decrease)

Spending, saving & borrowing related drivers

- ADC-VSLA membership save & borrow
- School fees (increase)
- Medical expenses (increase)
- Health (decrease-old age or injury)
- Health (decrease-malaria)
- Inflation / higher prices
- Bank account (new)
- VSLA activity stopped / interrupted / fluctuating
- Other VSLA membership save & borrow
- Asset loan taken (6 respondents)

Relationships related drivers

- Share ideas / give advice / support

Spending, saving & borrowing related outcomes

- Spending / expenditures (increase)
- Cover household or emergency needs (increase)
- VSLA saving/borrowing (increase)
- Investment in business / farming (increase)
- Financial planning/management (increase)
- VSLA saving/borrowing (decrease)
- Pay school fees
- Spending / expenditures (decrease)

Relationships related outcomes

- Community relationships (got better)

-	Women's empowerment / children's rights / gender equality (increase) Communal work (increase) Alcohol consumption (increase)	 Marital / family relationship (got better) Marital / family relationship (got worse) Domestic violence (decrease) Domestic violence (increase)
Tra	nining & other support related drivers	Training & other support related outcomes
-	Training on financial management /	Enforcement of regulations / laws / rules
	managing money	
-	Training on farming	
-	Training on relationships	
-	Material aid (start/increase)	
	VVV no langer in contact / stanned	
-	XXX no longer in contact / stopped	

Figure 3 shows how frequently respondents reported positive changes related to each thematic cluster. The chart shows that respondents frequently reported the most positive changes relating to cash crop farming and other earnings, followed by spending, saving & borrowing.

Figure 3: Positive changes by cluster

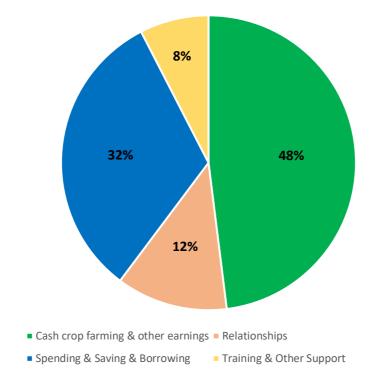
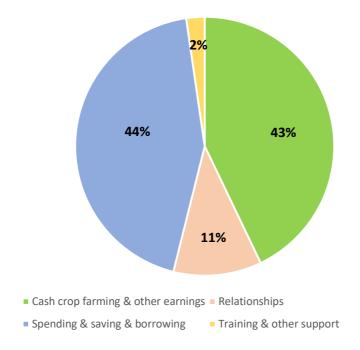


Figure 4: Negative changes by cluster



Respondents reported fewer negative changes overall. Most of the negative changes related to spending, saving & borrowing, and cash crop farming & other earnings. Very few reported negative changes related to training & other support.

3.3 Attribution of change

This section of the report summarises to whom or what changes are attributed, looking very broadly across clusters. Every causal chain coded in the text is given an attribution code, depending on what was cited by the respondent as the core driver of change, and the extent to which that change relates to the project being assessed. This code also tells us whether the statement was positive or negative.

Please note that there are likely to be a high number of implicit references due to the blindfolded approach used. Figures 5-8 show attribution of change for each cluster, please note that the axis respondent counts vary for each bar chart and so are not comparable visually.

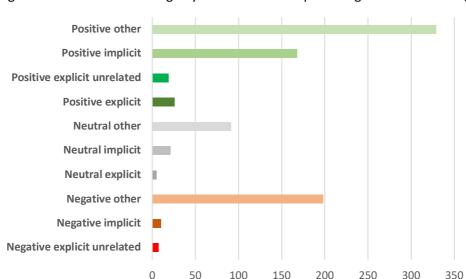


Figure 5: Attribution of change by cluster - Cash crop farming and other earnings

The majority of positive and negative change in the Cash crop farming & other earnings cluster was attributed to other/external forces. Positive change was mostly linked with increased market demand and price for cash crops, diversification of crops, hiring of farm labour, and increased income from farming and side businesses. Negative change related to changes in weather conditions (e.g. too much rain or too much sun) impacting on harvests and decreasing income. Other negative drivers include market demand reduced or fluctuating and lower prices for crops or ill health reducing earnings. Positive implicit attribution relates to usage of animal traction for agriculture and to borrowing from the VSLA to invest in farming or businesses. Negative implicit attribution relates to less usage of animal traction and continued use of hand hoes. Positive explicit attribution mainly relates to an asset loan being taken through XXX for purchasing an ox-plough, and also borrowing and investing in agriculture / businesses linked with XXX training. Positive explicit unrelated attribution reflects selling crops to XXX buyers, XXX agronomic training and seed provision.

150

200

250

300

350

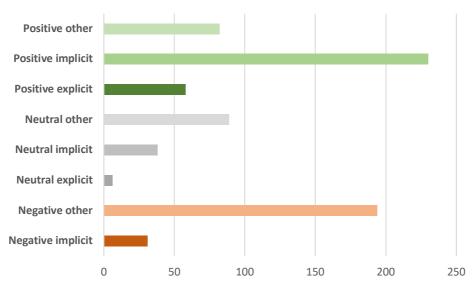
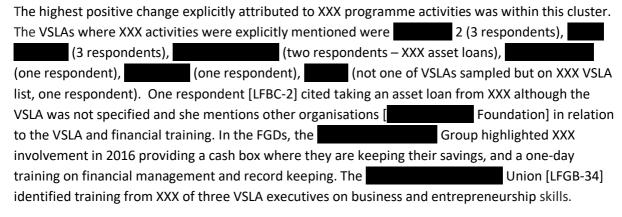


Figure 6: Attribution of change by cluster - Spending and saving and borrowing

In the Spending and saving and borrowing cluster most positive change was implicitly attributed, these implicit positive stories are predominantly related to saving and borrowing with VSLAs targeted by ADC. Extracts were coded 'explicit' only where a direct link with XXX was mentioned (e.g. the respondent received XXX financial training through the VSLA, XXX training on the VSLA methodology, XXX provision of equipment for the VSLA, or asset loan received from ADC). However, it is very likely that many of the changes respondents have reported in relation to VSLAs **do** reflect input from the project.



'Other' drivers bringing about negative change in this cluster relate to increased spending / expenditures mainly due to increased school fees and medical expenses, inflation/higher prices, and decreased amount of saving.

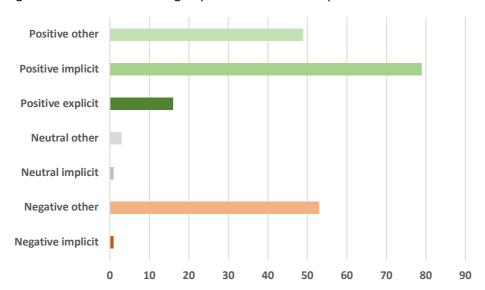


Figure 7: Attribution of change by cluster - Relationships

Attribution of change in the relationship cluster was mainly coded positive implicit. This relates to VSLA membership bringing about improved community relationships and is also linked with training on relationships. 'Other' drivers of negative change here include increase alcohol consumption and increased domestic violence as well as land disputes or wrangles causing family conflicts.

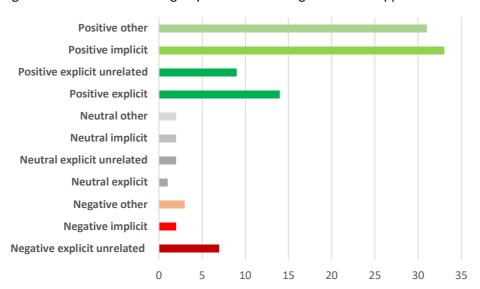


Figure 8: Attribution of change by cluster - Training and other support

Positive explicit change here relates mainly to XXX financial management and record keeping training and positive explicit unrelated change refers to XXX farming training and seed provision. Negative change attributed explicit unrelated relates to a lack of provision of seeds from XXX and that XXX did not return to buy the harvested produce following training on chili/red pepper production. One respondent reported that XXX had promised to supply an asset loan for tractors but that this did not materialise⁸.

Positive changes implicitly attributed include financial management training through VSLAs (XXX not cited) and other organisations, and also relationship training from other organisations including

drivers of positive change include non-XXX farming training and seed provision, and radio programmes including agricultural programmes and awareness programmes on positive parenting, gender roles, children's rights and domestic violence.

-

⁸ However, it is important to note that XXX does not provide seeds directly to farmers but rather links the farmers to cotton seed suppliers as well as local seed businesses for sesame seeds. XXX also does not supply tractors on loan.

4. Stories of change

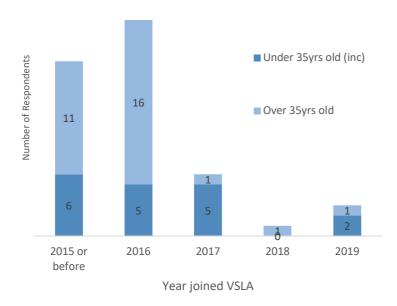
Note that in the forthcoming causal diagrams, the size of the arrows corresponds to the number of respondents reporting that outcome in relation to the driver/previous outcome. The number above the arrow uses the citation count to give the exact number of times that outcome was reported in relation to the driver/previous outcome (if more than once).

4.1 VSLA saving and borrowing is leading to positive changes in farmers' lives

VSLA saving and borrowing is leading to increased ability to cover household or emergency needs, increased investment in business/farming, increased financial planning and management, and improved community relationships.

Saving and borrowing with a VSLA targeted by XXX was the most cited tag mentioned by 47 out of 48 respondents, with the highest citation count of 167, meaning that VSLAs were mentioned across multiple domains in the interviews. Most respondents linked saving and borrowing with a VSLA with predominantly positive changes in their lives over the past three years. All FGDs also mentioned saving and borrowing with a XXX targeted VSLA. Figure 9 below shows a breakdown of when respondents reported they had joined the VSLA. It shows that the majority of respondents reported joining the VSLA from 2016 onwards, the year in which the Programme was launched. 17 respondents reported being members of the VSLA since before 2016.

Figure 9: VSLA joining date



The smallholder farmers described having saved and borrowed on a regular basis for some years already, and attributed increased saving and borrowing to their membership of the VSLA.

In response to interview questions about "saving" and "borrowing", respondents revealed clear processes and understanding of how the VSLA operated which involved:

- a) Weekly meetings of the VSLA with mandatory attendance (typically with a fine for absenteeism).
- b) Good record keeping and accounting practices. The VSLA secretary or treasurer keeps clear financial records in register or ledger books and each member has a personal book or pass book with details of amount borrowed, saved, and interest accumulated. Some respondents emphasised keeping their own records of their savings (and expenditures) in an exercise book.
- c) Weekly savings, typically between 1000 and 5000 Ugandan Shillings (Ush) in some cases with a minimum and/or maximum stipulated by the group.
- d) The amount saved as a function of the amount earned minus necessary expenditures (hence savings increase as earnings increase and as expenditures decrease).
- e) The amount borrowed first and foremost as a function of the amount saved (rather than as a function of the cost of desired investments): VSLA lending criteria varies from group to group but typically a member can borrow up to three times what they have saved. However, the loan committee evaluates each loan request and reports to the group about what their decision is. In the first and second quarters of the cycle members can typically borrow a multiple of three times his/her savings. However, at the beginning of the third quarter (3 months towards the end of the cycle) if a member wishes to borrow from the group the member will be restricted to borrow the amount equal to what has been saved so far.
- f) Interest on the amount borrowed typically set at 10% is paid by the borrower to the group. VSLA members are encouraged to 'borrow' in order to generate interest for members.
- g) Pay-out regimes differ from VSLA to VSLA, but on the whole:
 - a. Upon repayment of the amount borrowed, the borrower gets back half of the 10% interest they paid; the other half is distributed to the group. The member must have repaid the amount borrowed before the share out date in order to benefit from the group interest realised if the interests generated out of lending are shared equally to all the members.

And/or

- b. Only borrowers are eligible to receive interest pay-outs
- c. All savers are eligible to receive interest pay-outs, in proportion to their savings.

The picture that emerges is of the VSLA as a vehicle to 'smooth' income and expenditure rather than as a vehicle to assist in large-scale investment. For borrowing larger amounts some respondents remarked that is was either not possible, or that they were loath, to borrow 'large' amounts from their ADC-VSLA. For this they said they would need to go to a bank or to seek an asset loan.

PFRY-11: I plan to borrow from the bank only when I have **a big project** such as constructing a permanent house. ... I have never borrowed for asset loan but I plan to borrow from the bank in 2020 and buy a motorcycle. Money from the VSLA is not enough to buy a motorcycle.

A key element of the XXX programme was to link each VSLA with a formal financial institution (i.e. open an account with a bank at the group and/or individual member level). One respondent mentioned that the VSLA kept the group savings box at the village bank (for security purposes (LFBC-2). Another respondent reported that a bank account had been opened by a 'financial institution' for the VSLA group (group discussions reported generally that some members of their VSLA groups also had bank accounts. A total of 11 respondents identified having bank accounts as well as saving and borrowing in their VSLA. The banks cited include 9 and a commercial bank (unknown name). Respondents who mentioned saving in and borrowing from both VSLAs and banks did not explicitly link the two (VSLA saving and borrowing leading on to saving in / borrowing from a formal bank) thus this was not coded as a causal chain, however this link could be implied.
Some respondents preferred saving/borrowing with banks over VSLAs, especially because they felt their savings were more secure and private in the bank:
PFBJ-2: [In addition to saving in her VSLA] <i>I started saving with</i> bank YZ for one year and half now. I save in the bank because it is safe. I fear to save mainly in the VSLA because the money can easily be stolen by idle youth in the village. In the bank, it is secretive, not many people will know how much I have in the bank compared to VSLA group.
LFRU-6: Important link to Village Bank - I save money and borrow because the loan is low compared to VSLA. [H1]I am confident because in the village bank, I can borrow money to implement my plans.
PFRY-11: I save both in the VSLA and in 2017, I started saving in one of the commercial banks in YZ district [the respondent forgot the name the bank at the time of interview]. I save in the bank because there has never been history of money getting stolen . In the VSLA group, I save thirty thousand every Sunday to avoid careless spending and theft by idle youths loitering in the village.
One respondent remarked how he changed to saving with the village bank due to the VSLA activity having been stopped temporarily:
LMRC-6: I used to save 5000 shillings on a weekly basis particularly on Sundays, but of late we have

LMRC-6: I used to save 5000 shillings on a weekly basis particularly on Sundays, but of late we have stopped saving because people have moved to distant garden to cultivate crops and we are unable to meet regularly so we plan on starting again next year in January. So I have **changed to saving with the village bank, Cooperative** saving society for now till January, with the village bank I save on a monthly basis amounts of 200,000 to 100,000 shillings. You earn an interest rate of 15% yearly. They also give passbooks that have record of your savings and that how we keep track of the records.

Other respondents expressed that they could not manage to save in two places and that saving and borrowing with the VSLA was preferred, in particular because savings with these groups were easily accessible:

LMRP-2: The amount I save annually has increased from shs900000 last year to shs1500000 this year. I only save in my VSLA Group weekly. I save shs5000 once every week. I only save in one place

⁹ One respondent (PMRD-5) reported that he had joined a SACCO known as but that this SACCO went bankrupt and savings were lost.

because I don't have the capacity to save in more than one place though I have plans of opening up a bank account in future when I start earning more

PFRJ-8: I haven't changed where I save my money because I feel the **conditions within the VSLA are more favourable**; no additional charges on my savings, **easy access of savings when I require** and **longer loan period** of up to 3 month and being able to borrow and pay with a **fairly low interest rate** of 10% makes the VSLA group my choice for saving.

PMRD-4: The only place I borrow from is my VSLA group because I don't like a lot of debts and I am also comfortable borrowing from a group I belong to. ... [Important link to Centenary Bank] - I also save money in this bank though currently I don't have any savings there. I withdrew all my savings, it is also hard for me to access my money from the bank because I have to move to centre where there is an agent.

PMRJ-7: I joined village savings and loan association in 2016, ... I only save with the village saving and loan association in my home area because its **easily accessible**. I save 10,000 shillings weekly at every meeting. I only borrow from the village savings and loan association because it's **easy to process a loan**, unlike banks like Stanbic in Kitgum. I hear you have to write a lot to get loan. [although this respondent also mentions in links to organisations: 'Important link to Post Bank - Financial literacy (Savings, borrowing and account opening)'].

PFGL-36: We do not borrow from banks because the **banks are expensive to operate**, our savings are too small to be kept in the bank so we borrow from the VSLA only and other community members.

PMRN-11: I have always borrowed from my VSLA only because I don't know what it takes to borrow from the bank and it's **quite difficult to access the bank** since I have to travel to bigger towns like Pader town, Kitgum town or YZ town. [although he has bank account with Centenary Bank].

LFRR-16: I only save with the village savings and loan association because it's **easy to access money** and **we trust and know each other**.

Saving and borrowing with a VSLA targeted by XXX is a driver leading to range of positive outcomes including increased ability to cover household or emergency needs, increased investment in farming or businesses, increased financial planning and management, and improved community relationships. Refer to Figure 10 below for the causal network diagram of this story of change (other VSLA membership is not incorporated in this diagram).



VSLA saving and borrowing leads to increased ability to cover household or emergency needs

Respondents repeatedly reported borrowing from the VSLA to cover household or emergency needs, in particular to pay increasing school fees and to cover medical expenses. Narratives consistently illuminated the priority placed on children's education, in particular some respondents seek better quality education for children in private schools rather than government run schools which are viewed as inadequate, with low educational standards, and lacking resources. Similarly, in relation to health care, respondents repeatedly emphasised the need to go to private clinics for medicines and treatment, again pointing to the inadequacy of government health services. Being able to meet these expenses through borrowing from the VSLA is mainly viewed positively, as enabling them to solve problems:

PFRD-6: I normally **borrow** what I can pay back. I only borrow from my group [DiiCwinyi] because there [are] no banks here. I mostly borrow when children have been chased from school and there is no means to raise their fees.

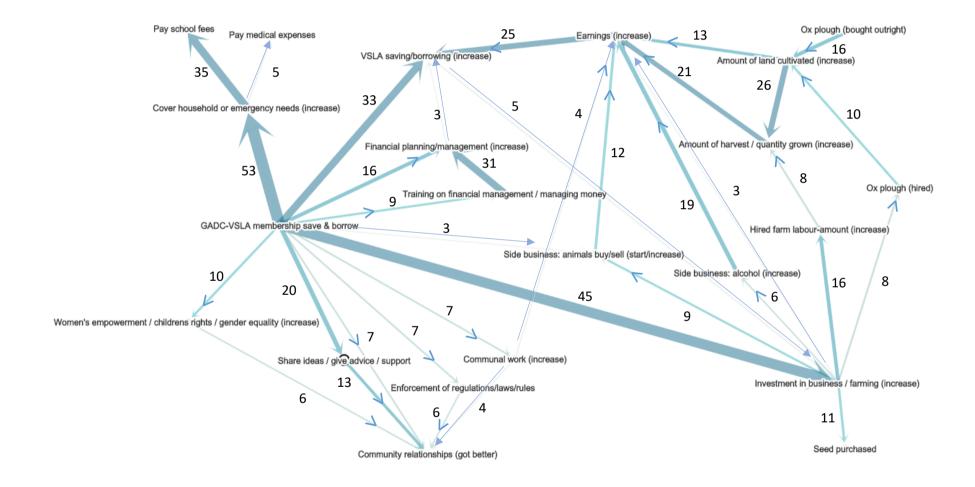
LFRC-4: Borrowing has enabled me to pay school fees for my children...Borrowing is a good thing because it's one way I have managed to get out of tough situations.

PMRD-6: I have borrowed three times in the past three years, I first borrowed 50,000, later on I borrowed 150,000 and then 80,000. I borrowed to **pay school fees** for my children who study in Kitgum for secondary school, I pay 165,000 and 200,000 for the two. I took them to **private schools** so they can have **quality education**. The village savings and loan association is the only place I borrow from and no other. I have never taken an asset loan... On a weekly basis I have been saving 2000 shillings with the village savings and loan association as per **advice and training given to us by the YZ Agricultural Development Company**. They trained us in 2016 and gave us equipment to start.

LFBU-8: Most times I borrow to fill the missing gaps in my life for example pay **school fees, medical bills...**Borrowing has enabled me push on with life in times when am helpless. I believe borrowing is a good thing but should be done with loyalty.

Respondents also mentioned borrowing for other expenses including to buy food in times when food crops have been destroyed, to buy clothes for children, to purchase household items, and to contribute towards funeral costs.

Figure 10: VSLA membership saving and borrowing



VSLA saving and borrowing leads to Increased investment in farming and business.

36 respondents reported borrowing money from the VSLA to invest in farming or business activities. Farming investment includes the hire of farm labour, purchase of seeds, and hire of oxplough (this will be explored further in section 4.2.2), and these investments lead to increased amount of land cultivated, increased amount of harvest, and increased earnings. Investment in side businesses, especially small-scale animal husbandry (goats, poultry, pigs, cows) and brewing / selling alcohol, leads to increased earnings. These increased earnings from investment in business or farming can then feed back into increased saving in the VSLA, reflecting the cyclical nature of VSLA processes.

LFRC-4: I save in my VSLA group and I can borrow to facilitate my farming through buying seeds and also hire more equipment like ox-ploughs and also hire more labour if need be. The more I input in my farming, the more I earn from it and the trend has shifted positively compared to the past 3 years. [VSLA]

LFRU-4: Over the last 3 years, I was using hand hoes but currently, I'm able to **hire ox-plough** using **money borrowed from VSLA**....I started **brewing alcohol as small-scale business** with the **savings** from **VSLA** [VSLA].

LFBC-2: My savings have increased because I borrowed money and invested it in a business, the proceedings from the business I saved. And I am making more money so I save more. ... In 2016 I borrowed 120,000 shillings from the VSLA to buy piglets, each going for 60,000 shillings. I then later on borrowed 90,000 shillings for purchase of another pig... Borrowing is good as long as you use the money well, it helps resolve problems at hand.

Money saved in the VSLA is to help me in farming and meet emergency needs. In the VSLA, I save weekly, every Tuesday. The interest has increased from 10% in 2016 to 20% now. The interest has increased because many members have learnt how to manage money, save and make money... I borrow more to invest and increase my interest. Each member is required to borrow money so that the interest accumulated is shared among all the members. I have been borrowing from VSLA, now I also borrow from bank. I borrow to expand my business, and I plan to borrow to buy land.

PMRJ-7: My savings have increased because I do business and earn more, I sell alcohol, chicken and I have cultivated more land. I **save more** because from my first saving I started buying chicken cheaply and selling them at a higher price and I get **profit** that I kept on saving on top of my weekly savings. I only save with the village saving and loan association in my home area. In the past three years the amount I borrow has increased because I save more and you can borrow only three times what you have saved, I also borrow more [for] travelling to YZ on business trips to get alcohol. I only borrow from the village savings and loan association because it's easy to process a loan...

The FGDs reiterated this story of change:

LMGT-36: We usually borrow money from our VSLA groups. Most of us **borrow** to pay school fees, **buy seeds**, pay medical bills, buy food and also **open up small businesses** to get us **extra income**. We also **borrow** to **facilitate** our **farm work** through **buying seeds** and **hiring farm equipment** like **ox-ploughs**. **Borrowing** has improved lives in my community and has given people capacity to **increase their potential in farming** and **open up businesses** which has **improved quality of life** in our community. [VSLA



VSLA membership leads to training on financial management and increased financial planning and record keeping

VSLA members detailed how they planned and budgeted for their expenses, keeping a record of their
spending, saving and borrowing. Some respondents linked these accounting practices with skills
gained through training on financial management, sometimes through the VSLA. 19 respondents and
five FGDs reported receiving training on financial management; seven respondents identified financial
training provided by ADC. Additional sources of financial training cited in the interviews and FGDs
include: the

PFBY-3: I am currently a member of WSLA group where I save since 2017. I **track better my savings** compared to 3 years ago. Currently I ask the secretary for my records of savings every month compared to when I previously only asked for my records once a year. I felt I needed to know my saving records so that I can **plan** on how to **borrow** and **repay my loans** without defaulting.

PFRJ-8: I am a member of Group with 30 members (5M:25F) which I joined in 2016...Previously the secretary would provide updates of savings every 3 months but this has improved and now I receive my saving updates every month. This is because members have a better understanding of the benefits of good record keeping.

PFRD-5: I only save at SSLA ... I have changed how I plan and how much because now I have school fees to pay household needs and emergency medical expenses. I usually, budget how much to spend on school fees, clothes, food (changing diet) and medical bills. I continue to save the little I have after receiving training from YZ Agricultural Development Company (ADC) on financial management and basic business skills which was done in August 2018. We were trained two times on how to make money, how to save, manage finances and investing. For example, we watched videos of successful business people in farming and how and why they were successful farmers.

PFRJ-8: I jointly **plan** with my husband on how and when to **spend** money...I keep better **records** of all that I spend following a 2 days **training** by **Child Care** in 2017 for both men and women. Topics included: record keeping, conflict management. The training equipped me with skills and good practices of **records keeping**.

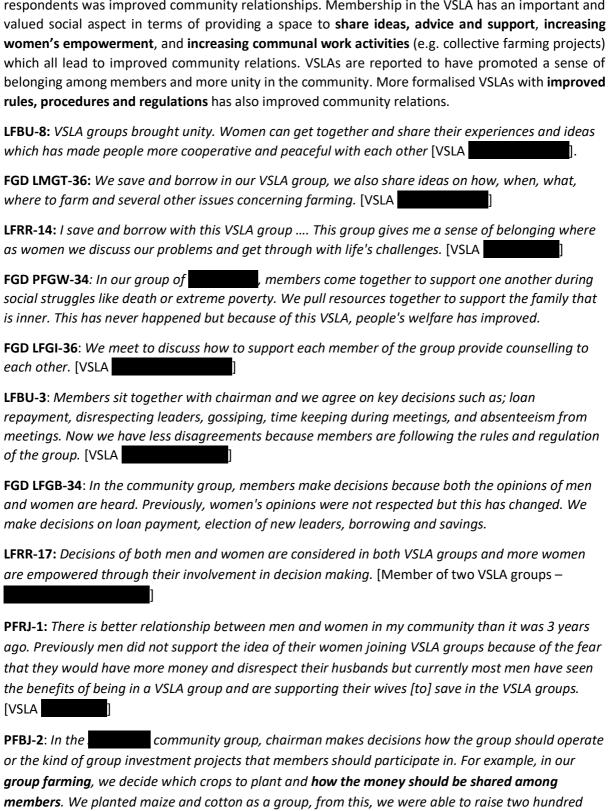
LFBU-3: I plan and budget for school fees, retail business, health and how much to save in the VSLA. I write down my spending in a book to help me prioritise important things. I started planning more because of the knowledge I got from colleagues in the VSLA who were trained in 2016 by executives (Chairman, Treasurer and secretary) were trained 4 times on how to make money, budgeting, savings and managing money effectively. ...Through the executives, I learnt about managing money effectively, making more money and savings. ...From the training, I was inspired to start a retail business. I bought a milling machine for grinding groundnuts which has increased my earnings.

PFRJ-6: I usually plan and spend money according to needs. For example, I budget for school fees or when to buy more animals. When I budget, I don't spend money carelessly and I am able to track my spending from the results of things bought. ...Another change in my life was the training I attended from in 2016. We were trained on financial management, borrowing and investment... And every week (every Sunday) I save five thousand Uganda shillings (5,000/=) because of the training I received from BRAC Uganda where we were

trained how to save, borrow and invest. I joined. village saving loan group in 2016 and have been saving only with them because it is easy to save and borrow when I have saved.

VSLA membership is leading to improved community relationships

An important non-financial outcome of VSLA membership frequently reported by respondents was improved community relationships. Membership in the VSLA has an important and



and eighty thousand Uganda shillings (280,000/=) from selling these crops. This money has been saved in the group accounts and will be shared among members in January 2020...Such group projects/activities have helped to promote and show solidarity, sharing of ideas among its members.

It is important to note that the establishment of group gardens or collective farming projects which VSLA members jointly look after and invest in is a practice that was encouraged by ADC. The proceeds from the harvest are shared by the group and this is one way of raising more revenue for the group.

Although only mentioned by several respondents a further important outcome of VSLA membership is **improved marital relationships** and **reduced domestic violence**. Wives related that husbands sometimes forcibly confiscated their income, or sometimes became violent if the wife asked for money for household expenditures. However, some wives reported that once they could save and borrow money directly from the VSLA, at least some of the domestic abuse could be avoided.

PFRD-6: Before I joined VSLA in 2017, the relationship in my household was rough. My husband was so violent because I used to burden him a lot financially. And if he doesn't give me money for what I have asked for, we would argue. But now that I have joined VSLA, currently the relationship has improved. He is no longer violent because I don't ask him for money. I have actually earned respect and confidence in my house. For example, when children have been chased from school, I borrow from VSLA and pay their school fees without asking him for money. Sometimes I inform him of the money borrowed to pay school fees and we work together to repay the loan. We also agree on how much to borrow for medical bills.

The following case study brings together many of the positive changes that are linked with VSLA membership:

PFRY-11: [D1] Before I was spending less on school fees because my children were young. Now that all my children are in boarding private schools, I am spending more on school fees. I prefer private schools because government schools have poor level of education. Children tend to perform poorly compared to private schools. I send my children to private schools to broaden their knowledge and with the hope that when they complete their studies, they can become doctors, pilot and member of parliament. These jobs are well paying so they will be able not only to support themselves but also support me as well in the future. ... I have changed how much to spend. For example, I draw a budget on how much to spend on school fees, medical bills and small businesses.

[E1] In 2016, I saved only one hundred thousand Uganda shillings (100,000/=) because I had limited knowledge on how VSLA operates and how to multiply interest. But currently, I have saved one million Uganda shillings (1,000,000/=) after receiving training from YZ Agricultural Development Company in 2016 where we were trained two times on budgeting skills, importance of farming, benefits of farming, access to financial services such as VSLA, how to manage money and invest. I save both in the VSLA and in 2017, I started saving in one of the commercial banks in YZ district [the respondent forgot the name the bank at the time of interview]. The interest is accumulated according to number of times a member has borrowed money. In the VSLA we keep track of savings in exercise book. Each member has his or her exercise books where financial details are kept. For example, amount saved, borrowed, interest accumulated. The VSLA also has a ledger book where additional records are kept.

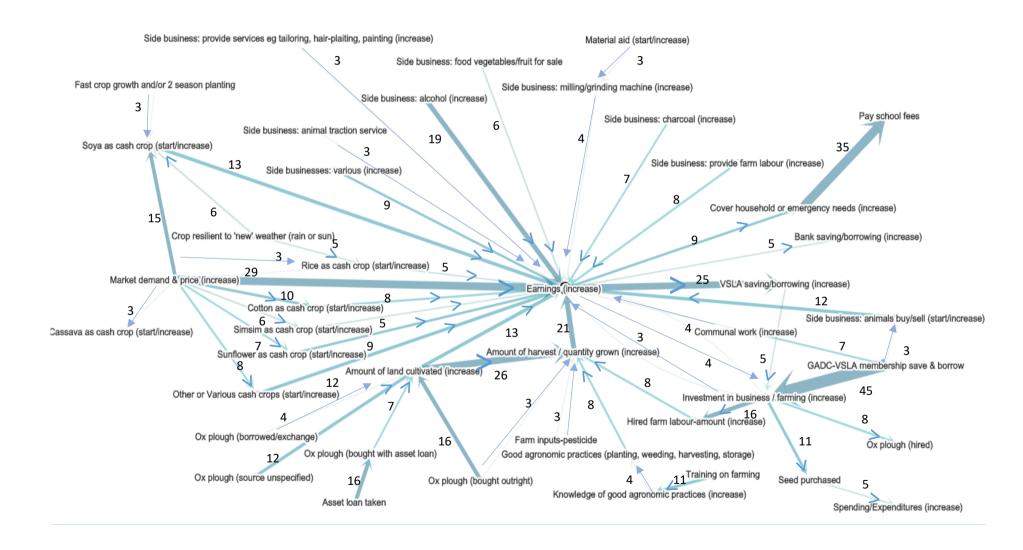
[F1] This year I have borrowed more to pay school fees and accumulate interest. I only borrow from the VSLA and I don't borrow from the bank ... I plan to borrow from the bank only when I have a big project such as constructing a permanent house. I borrow [from the VSLA] to hire farm workers to

weed my garden on time so that I can get better yields. I have never borrowed for asset loan but I plan to borrow from the bank in 2020 and buy a motorcycle. Money from the VSLA is not enough to buy a motorcycle [F3] Borrowing is good because it helps you to achieve your plan on time. It also helps you to solve emergency needs such as school fees.

4.2 Drivers leading to increased earnings and increased VSLA saving and borrowing

Increased market demand and good prices for cash crops, increased use of an ox plough, and new or increased side businesses are leading to increased earnings and increased saving and borrowing with the VSLA. Figure 11 below visually displays the story of change relating to increased income and increased saving and borrowing. Section 4.1.3. detailed how saving and borrowing with VSLAs leads to increased investment in farming and business leading to increased income. Other **key drivers** of increased income, as shown in Figure 11, include **healthy market demand**, **diversified cash crop production**, development of **side businesses alongside farming**, and **use of animal traction** which have led to increased income which then feeds into increased saving with VSLAs.

Figure 11: Drivers leading to increased income and increased VSLA saving/borrowing



Healthy market demand including good or higher prices and increased buyers leads to new/diversified or increased cash crop production, in particular soybean, cotton, sunflower and rice.

Respondents reported how they adapted to market demand and prices by starting or increasing production of different cash crops.

PFRJ-6: [B3] Initially, I was only growing cotton, soya, simsim as cash crops. But currently I have added **sunflower** because it has **good market price**. With sunflower, I sell both the seeds and extract oil from it and sell to markets in YZ or Kitgum districts and local markets within Pader district.... I get about four hundred thousand Uganda shillings (400,000/=) from selling sunflower seeds and eighty thousand Uganda shillings (80,000/=) from selling 20 litres of extracted sunflower oil.

Three respondents identified selling crops (simsim and cotton) to XXX buyers.

LFRP-12: Previously, I was growing simsim for sale. I was not earning much from only one crop so I decided to add **cotton** in 2019. It has good ready market. I sell to **YZ Agricultural Development Company** (GDAC).

Other buyers of crops cited include 'the union', village cooperatives, and selling to business middle men or 'retailers' in the village. Some respondents reported selling produce directly to wholesale buyers who offered better prices.

LFRU-10: Currently, I grow simsim as my main source of earnings because it has good market price. For example, in 2016, a kilogram of simsim increased from two thousand five hundred Uganda shillings (2,500/=) to three thousand five hundred Uganda shillings (3,500/=). In 2016, I was selling simsim to business middle men within this village because they had stores and were buying in bulk. But I realised I was being cheated. Now have started selling directly to produce dealers (whole sale buyers who do collective bulking and marketing) in the districts of Lira and offer better prices. For example, in 2018, I sold 4 bags of simsim to business middle men buyers in this village and was paid only eight hundred thousand Uganda shillings (800,000/=) and in 2019 sold 4 bags of simsim to whole sale produce dealers in Lira district and earned one million eight hundred thousand Uganda shillings (1,800.000/=).

In addition to adapting to changes in market demands, farmers in the Pader district also reported crop resilience to weather and ease of harvesting as influencing crop diversification decisions. In particular, six of the seven members of the VSLA interviewed identified a change to soya as a cash crop due to these considerations:

PMRD-4: 3 years ago, I was growing simsim, beans and sorghum and currently I am growing soya and maize. I am planting soya and maize mainly for sale because here, these crops have a bigger market.... I decided to start growing soya because simsim, beans and sorghum were dying in the garden before harvest because of the heavy rains but soya can with stand this kind of weather condition and I get to plant it in two different seasons. ... There has been a positive change because the price of soya has gone up compared to 3 year ago. I was selling a kilogram at Ugx800-1200 and now selling at Ugx1300-1500 a kilogram. Soya is my main source of farming income because it has ready market and I get a profit of about 1 million shillings from it.

PFRD-5: In 2016, I was planting maize, cassava, sorghum as cash crops because at that time their market prices were good and I had little knowledge about the prices of other crops and where to find

them. But when the market prices of these crops (maize, cassava and sorghum) dropped, I started planting soya because it has good market price and it is not easily destroyed by sunshine. For example, a kilo of soya currently goes for one thousand two hundred Uganda shillings (1.200/=). I planted soya and got 19 bags. I made three million Uganda shillings (3,000.000/=) after selling to retail business middle men who come with their lorry and buy in bulk from home. [Important link to YZ Agricultural Development Company (ADC) supplied soya and bean seeds]

Crop resilience to new weather conditions was also a driver in starting to grow rice as a cash crop.

PMRJ-7: In the past three years the major change I have made in regards to farming that I initially was growing sorghum, cassava and cotton however they did not yield much to the expectation because of the swampy and waterlogged land that I have so I decided to start growing rice that is suitable for this kind of waterlogged place and rice fetched a higher price in the market of 3000 shillings ... I changed to rice that loves water and has been my major source of cash, on top of doing well it fetches a high market price compared to sorghum, cassava and groundnuts. My rice is sold at the milling machine in YZ.



Increased use of an ox-plough leads to increased amount of land cultivated which leads to increased amount of harvest (increased farming productivity) and increased income.

An ox plough is a sizable purchase. Some respondents owned an ox plough and had bought it without the assistance of an asset loan, others did not specify how they acquired an ox plough. Others stated that they hired an ox plough, although some respondents complained about the high/increasing cost of animal traction services. Several respondents reported that they borrowed or exchanged an ox plough (e.g. they borrowed an ox plough from a neighbour and in exchange they ploughed their neighbour's land or looked after their animals). Those farmers who did not own an ox plough looked forward to the day when they might manage to acquire their own ox plough. Respondents consistently reported how use of an ox plough had increased the amount of land cultivated which had increased the amount of harvest and increased income. It had also made farming easier, saving time and increasing ability to plant on time.

PFRY-12: In 2017 I started using animal traction after I bought a pair of oxen from a market in Lira District. With the animal traction in place I have increased the overall land cultivated from 4 acres in the past 3 years to 7 acres in 2019.

LFRP-12: Now I hire Ox-plough for farm clearing. Before, I was mainly using hand hoes but was not able to clear a large plot of farm land and I was planting late. With the Ox-plough, I clear **large size of farm land** and **plant of time...**. I used to hire ox-plough at one hundred thousand Uganda shillings (100,000/=) for clearing an acre of land but his has now increased to two hundred thousand Uganda shillings (200,000/=).

Five respondents reported taking an **asset loan** from **XXX** or the VSLA, of these, one respondent reported that her oxen had died and that she gave the plough to a neighbour. One respondent reported receiving an asset loan from **Projects for Restoration of Livelihoods in Northern Uganda PRELNO**. One of the asset loan takers reported that they rented out the ox-plough to others providing an additional source of income:

LFBC-2: In 2018 I took an asset loan from the group [VSLA] to buy an ox plough that I paid on a monthly for period six month ... It has also become another source of income as I rent it out to other people... I am planting more food and cultivating bigger land now that I have an ox plough. ... The money I earn has increased because I am now digging using an ox plough so I produce more harvest, but also renting out the ox plough brings in more money as well. [Spending] Most of the money I am making I basically save it and some is for buying food. I have also invested in silver fish retailing. I also spend on medical bills when the occasion arises. ... I spend money on weeding of the garden. Part of my money also goes to paying for the loan that I took as an ox plough from the group.

Another asset loan taker explained that when she could not afford to pay farm labourers to work on her land she offered use of her oxen as a means of payment:

PFBJ-2: Before, I was using hand hoes to clear my farm. With this, I was only cultivating about 2 acres of land. But with the ox-plough and 2 oxen that I bought, now I cultivate about 5 acres of land in only 3 days and plant on time. I also hire farm workers to plough the farm because I am old to do farm work by myself.... These days I am weak and old to do farming by myself. I have to hire farm workers because my children are at school and I have no one to help with farming. Sometimes, when I don't have money to pay farm workers, I give them my ox-plough in return for them to clear my field. ... The ox-plough and 2 oxen that I bought...I received asset loan from ________. For example, I was given ox-plough at three hundred thousand Uganda shillings (300,000/=) and was able to pay back later in 3 instalments for 3 months.... Farming in my garden (farm) has become hard now that I am old. I have to hire farm workers to plough and either pay directly with cash or barter trade. For example, I give them my oxen to plough their field as a means of payment.

One asset loan taker mentioned **training** from **XXX** on how to farm **using an ox-plough**. These asset loan takers reportedly did not have any difficulty paying back within the term of the loan.

It is important to note, however, that there were several mentions of XXX promising to deliver asset loans for ox ploughs but that this had not yet materialised:

FGD: LFGI-36: We heard of asset loan for ox plough from YZ Agricultural Development Company Ltd in 2016 who had promised to deliver to us but we did not receive. We are still interested in this kind of asset loan because it is an easier option for acquiring an asset.

Respondents generally took a positive view towards asset loans and expressed that an asset loan would be a good way to acquire not only an ox-plough but other productive assets such as a grinding mill or motorcycle (e.g. for transporting farm products to the market). Seven respondents expressed interest in acquiring a motorcycle either through an asset loan or through borrowing from the bank.

PFRD-4: I have never taken any asset loan but if there was an opportunity I would get one for grinding mill that would generate more money to pay back the loan within a specific time period. It would also help me raise more money to save and meet my other needs. The good part of an asset loan is that I will be able to get the asset at once unlike the loan which I borrow from the VSLA group that is most time inadequate to do long term investment...

LFRU-10: I have not borrowed for any assets. Asset borrowing is good. If you borrow for something productive, you can use it to expand your sources of income. For example, if you borrow for a

motorcycle, you can use as additional source of income where you transport people and get paid. It is also bad. If you fail to pay, your valuables may be taken.

For some respondents the fear of not being able to pay back the loan meant they were less favourable towards the idea of taking an asset loan.

New or increased side businesses, especially alcohol brewing/selling, small-scale animal husbandry (goats, poultry, pigs, cows), and providing farm labour, have increased earnings and increased VSLA saving and borrowing.

Aside from farming cash crops, most respondents reported engaging in one or more "side businesses" to generate some extra income. Older women (i.e. 35 years and older) in particular see these businesses as a wise investment as they age and have less strength for cash crop farming. Side businesses include alcohol brewing, small-scale animal husbandry (goats, poultry, pigs, cows), grain milling, charcoal burning, retail services (hairdressing, tailoring, shoe repair), transport services (for people or for taking goods to market), and sale of food in the market (fish, fruit, vegetables). Women tended to mention more alcohol brewing/selling business activities and men tended to mention more buying/selling animals. Section 4.1.2 detailed how saving and borrowing with the VSLA was an important driver leading to investment in side businesses.

PFRJ-8: I earn more money from production of cotton, soybeans and maize because they fetch more money due to high unit price per commodity. ... I also have a **small business** at the market where I **sell food items** such onions, tomatoes, vegetables, beans and non-food items such as **charcoal**. I felt I needed an **alternative source of income** to **minimise** the **risks** of losing money by entirely relying on agriculture and that is why I currently engaged in my small business at the market... I am a member of Group with 30 members which I joined in 2016. The amount of money I save has increased for instance in 2017 I saved 240,000 Ugx while in 2018 I saved 380,000Ugx and I have saved 200,000Ugx for the 7 months in 2019. I receive **more income** from sale of cash crops, business, poultry ... than in the past 3 years therefore I am able to **save more**.

PFRJ-6: I have **started brewing alcohol** as additional source of income... My hard work in farming and additional business, like brewing alcohol has **increased my earnings**. Currently, I have more money to spend from additional businesses... I was only saving between forty thousand Uganda shillings (40,000/=) to fifty thousand Uganda shillings (50,000/=) because I was not earning much. But now, I save close to two hundred thousand Uganda shillings (200,000/=) in the VSLA.



Training on farming is leading to improved agronomic practices, increased farm productivity and increased income.

Training on farming often includes seed provision and a demonstration plot established for
experimental learning. Respondents cited XXX as an important provider of agronomic training (9
respondents and one FGD), as well as training from
, and also an agricultural radio
$programme. \ Other farm\ inputs\ that\ respondents\ mentioned\ that\ increased\ farm\ productivity\ included$
increased hired labour for weeding and harvesting whereas fertiliser and pesticides were less
frequently mentioned.

PFRY-12: I practice early land clearing, timely planting and weeding as part of improved agronomic practices. I acquired these skills after **YZ Agricultural Development Company** Ltd conducted a one-day training on improved agronomy in 2017. Much as the training focused on chili production, I apply the basic principles during the season. ... The increase in quantity [of crops grown for sale] is due to increased acres of land cultivated and adoption of improved agronomic practices.

PFRJ-1: In 2017, **YZ** Agricultural Development Company Limited (ADCO) conducted a 2 days training of farmers on improved agronomic practices with emphasis on organic production of simsim. This training equipped me with skills and knowledge on use of high quality seeds, timely planting and weeding and post-harvest management...Through their training I have adopted some of the recommended agronomic practices such as timely planting, weeding and harvesting which has contributed to increased production....[and] improved agricultural production techniques such as use of animal traction ...Production of cash crops that fetch more money has contributed to my earning.

4.3 Drivers leading to decreased income and reduced saving and borrowing with the VSLA

Changing or bad weather conditions, decreased market demand and prices, lack of use of an ox plough, and ill health are leading to reduced earnings and subsequent decrease in saving and borrowing with VSLAs. Whilst the narratives explored so far portray a positive picture of change, some respondents revealed more negative changes. In the closed question responses half of the respondents stated the amount of saving had decreased whilst half reported that they were saving the same amount or an increased amount. This section explores the stories behind decreased income and subsequent decreased saving and borrowing with the VSLA, see Figure 12 for the diagram showing the drivers leading to these outcomes.

The main drivers of negative change are changing or bad weather conditions, especially too much rainfall and flooding, decreased or fluctuating market demand and prices, lack of use of ox plough, and ill health. These drivers all lead to reduced earnings which leads to reduced saving and borrowing with the VSLA. Respondents reflecting these more negative narratives of change reveal how the cyclical nature of VSLA saving and borrowing becomes more stagnant and interrupted when the income/saving flow reduces. Savings are reduced which reduces the amount of interest gained, and also borrowing decreases. The amount borrowed is based on the amount saved (usually limited to three times the amount saved), but also people become more reluctant to borrow with the extra interest added and are concerned whether they will be able to meet the repayment with their limited and uncertain resources.



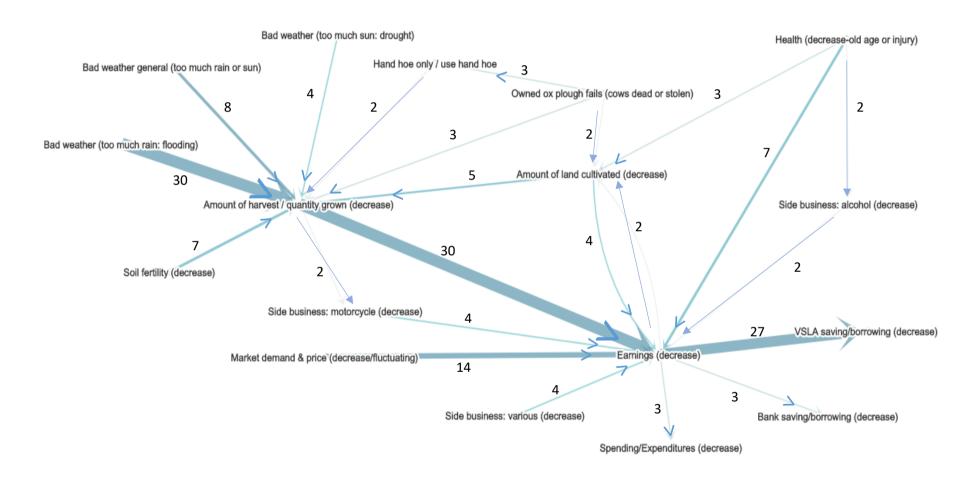
Bad weather, especially heavy rainfall and flooding, has led to reduced amount of harvest and decreased earnings.

Changing weather conditions was particularly an issue in the Pader district, especially among members belonging to the VSLA where all six respondents reported that heavy rain and flooding had reduced earnings and reduced saving.

PMRN-12: [decreased quantity of crops grown for sale] This is because **heavy and constant rains** throughout the year that **destroy my crops** in the garden. I plant 7 acres of simsim and before I would harvest to about 10-12 bags but now I can only harvest 2 bags from these 7 acres of simsim. My **earning has reduced** because I no longer harvest as much as I used to. I am also a motorcyclist

though apparently my motorbike is having a mechanical problem and besides with the poor harvest, I don't get clients to hire me transport their goods to the market... My **savings** have really **decreased** compared to 3 years ago because I earn much less than I used to.

Figure 12: Drivers leading to decreased income and decreased VSLA saving and borrowing





Decreased or fluctuating market demand and lower or falling prices for produce have reduced incomes leading to reduced amount of savings made with the VSLA.

Respondents reported falling market demand and lower prices for some crops (especially maize, millet, and cassava) as leading to reduced earnings. Some respondents were dependent on selling to middlemen or retailers and expressed that they felt cheated by them due to lower prices paid for produce compared with selling directly to wholesalers. However, they were unable to sell to wholesalers because they lacked the means of transport to take produce to sell directly to other markets where they would achieve better prices or they lacked contacts to buyers in other markets.

LFRR-17: Prices keep reducing in the past 3 years with retailers and wholesalers being the main buyers. I feel cheated by the retailers because they charge little prices compared to the wholesale buyers. The retailers are locals within Lamwo while the wholesalers come from Lira District.

LFRC-1: My main source of income is production and sale of cash crops. ... The main cash crops that provide more income are simsim and millet ... I have not grown any other cash crops in the past 3 years. Prices of simsim and millet have reduced in the past 3 years possibly because of the low demand. Generally, my savings has reduced in the past 3 years because I have limited opportunities to generate income coupled with the fact that prices of major cash crops have reduced.

PMRN-12: Simsim is my main source of farming income though its price has dropped from Ugx4500 to Ugx3000 a kilogram. I was making about 2 million shillings from 7 bags of simsim and now I get about Ugx1800000 from the few bags I manage to harvest. My savings have really decreased compared to 3 years ago because I earn much less than I used to.

Both chili and tobacco are crops which SFs had been encouraged to grow in the past by market buyers (including ADC, in the case of chili/red pepper), but for which there is no longer a good market

PMBY-3: The reason for decline in sales of goods is that YZ Agricultural Development Company trained us on how to plant pepper and gave seeds but never returned to buy the harvest, so I just poured away my harvest and am trying focus on rice and soya.



Owned ox plough fails / use of hand hoe leads to decreased amount of land cultivated and decreased amount of harvest and subsequent decreased earnings.

A further driver of reduced farming productivity and farming income was lack of use of an ox plough mainly due to an owned ox plough failing (cow died or stolen). Several respondents reported returning to the use of hand hoes following cows being stolen, lost, or dying. Others reported starting to hire animal traction services but complained that these were expensive and were used less frequently than when they had access to their own oxen. Increased cost of hire of animal traction services was mentioned by six respondents.

PMRD-5: My savings have been declining from 2016. My savings in 2016 was 400000 shillings and in 2018 my savings dropped to 300000 shillings. I haven't realized yet how much money I have saved for this year. My **savings** have **dropped** over the years because of the **death of my cow** that I would use to dig bigger piece of land.

LMRU-3: Initially I **acquired an ox plough** that I was using but the **cow died** The **quantity of crop** has **reduced** because initially I had **full time oxen** for ploughing and ploughed whenever I wanted but

now I do it for just a **short time** because I **hire from someone**... Now that I don't have oxen for plough I am not spending as much time on crops for sale...

PFBY-3: Before I acquired oxen in 2017, I used hand hoes for land clearing but when I started use of animal traction, my total acres of land under food crop cultivation increased from 2.5 acres to 5 acres and those for cash crop production increased from 2 acres to 6 acres. I acquired the ox plough through an asset loan with XXX where I paid 49,200Ugx monthly for a period of 6 months.

Unfortunately, **my oxen died** in April 2019 leaving me with no option than to **give away the plough to a neighbour** who supports to open land for more using her oxen...

LFRU-5: I previously owned and used a pair of oxen and a plough but I lost the oxen in 2018 and this has left me to use hand hoes for land clearing, subsequently affected my agricultural production. The total number of acres I plant with both food and cash crops has reduced in the past 1 year. I am unable to open more land for production of cash crops because I lost my oxen... I currently hire animal traction services and it is expensive compared to when I have my own... I also spend more to hire animal traction services because the cost of hire to clear one acre increased from 120,000Ugx to 200,000Ugx I currently save with 2 VSLA groups;

My saving has reduced in the past 3 years because I get little money from sale of cash crops which is my main income source. The interest I get on my savings is directly proportional to my savings and this has reduced in the past 3 years as a result of reduced savings... The amount of money I borrow has reduced because I save less. Normally the amount I can borrow is only 3 times my savings, therefore with reduced savings I borrow less. I used to borrow between 100,00Ugx and 200,000Ugx but currently I only borrow a maximum of 40,000 Ugx.

Ill health / old age leads to reduced amount of land cultivated and reduced harvests, leading to reduced earnings. Reduced income then leads to reduced amount saved and less borrowing.

PMRY-13: Last year I planted 2 gardens of cassava and cotton and this year I planted soya and groundnuts. I was also planting groundnuts and simsim before my health deteriorated, I had an operation due to an infection that I had in my stomach and because of this I am now unable to farm as much as before. Before I got ill, I was so hardworking and I was planting more. I would plant 2 acres of cassava and 4 acres of cotton and now am growing cassava on 2 acres of land and 1 acre of soya. I believe I would do more if my health was still in good. ... I only survive on farming and due to my current health condition, my earnings have reduced from Ugx4656000 last year to Ugx1293000 this year. ... My earning has reduced because the amount I farm has greatly reduced due to my health condition.... My savings have drastically dropped over the past 3 years. I used to save Ugx2500 in my VSLA savings group and currently, I can only manage to save when I get, some weeks I am unable to save when I don't have money. In 2017, my savings was Ugx 800000 and in 2018 my savings dropped to Ugx500000. This is because my production reduced because of my health and also bad weather conditions like heavy rains that damage my crops in the garden.

PFRD-4: For the past 3 years, I save with WSLA group... The group members meet weekly but for me, I have not attended the meetings regularly because ill health but I am still a member of 51

the group. My last savings was in July and this has been because at one point I was very sick with no money to save. My savings has reduced in the past three years; I save less money every year because my treatment is quite expensive leaving me with very nothing to save. Because I save less money every year, the interest I get on my savings reduces every year. Besides, I borrow very little and since interest charged is for the borrower, I have not benefitted from this interest because I borrow very little money. Previously before my health became poor, I would ask the secretary for my saving records but in the past 2 years I no longer track my savings because I know I have saved very little and I have lost the motivation to ask. ... This year I have not borrowed completely because I fear I may not be able to pay back and my assets will be confiscated thus might make me more vulnerable. The VSLA helped me save and borrow easily for any emergency but because my current savings are low and irregular, I have not borrowed in 2019. My interaction with the group has changed because I have become an irregular member due to ill health.

Ill health leads to increased medical expenses. Some respondents reported an increase in malaria leading to increased medical costs, including needing to buy medication from private clinics due to the absence of medication at government health facilities. This was mentioned particularly by members of the VSLA, four respondents reported increased malaria and all nine respondents interviewed cited increased medical expenses had increased spending/expenditures.



Decreased earnings combined with increasing spending/expenditures leads to decreased saving and borrowing with VSLAs.

When decreased income is combined with increased spending/expenditures, due largely to increased school costs and increased medical expenses, VSLA activity is reduced. Prioritising spending in these areas (education and health) leads to less investment in farming and business, for example, not being able to purchase seeds or reduced frequency of hiring farm labour, further reducing income. Reduced income coupled with high expenses leads to decreased saving which then leads to reduced borrowing.

PMRN-12: The amount I spend has increased because currently, I have a child in secondary school (s3) and I pay Ugx320000 per term and I have 3 more children I primary and I pay Ugx39000 each per term in a government aided school. Last my son also got an infection called "sosoma" and I would spend money going to private clinics because government health facilities lacked drugs to treat him.... what I earn has reduced [heavy and constant rains have destroyed crops] and yet my expenditure has increased ... My savings have really decreased compared to 3 years ago because I earn much less than I used to. My annual savings from the VSLA group dropped from Ugx400000 to Ugx50000. I only save in my VSLA group ... Every time I borrow, I get an interest of 3% on my savings. My interest has reduced because I have borrowed less compared to 3 years ago. I am borrowing less compared to 3 years ago because I would not have the capacity to pay back if I borrowed more. I only borrow from my VSLA group because I save with them so it gets easier for me to acquire a loan.

PMRN-11: There has been no major change on how I farm, I have always been using hand hoes from 3 years ago up to date because I can't afford ox-ploughs yet. We have been experiencing heavy rains this year which has greatly destroyed our crops in the garden. This year, almost half of the maize I planted rotted in the garden.... The amount I earn has decreased because my crops are rotting in the garden due to diseases and the bad weather which has reduced my harvest I am not earning from farming as before... I don't make much money from my motorcycle business anymore because due to low production in my area, people don't get to hire me to transport their produce to

the market. I mostly spend money on paying school fees and taking care of my family. I am currently paying more school fees compared to 3 years ago because I had only 2 children in school and now I have 4 of them going to school. My spending on farming has also increased because when crops rot in the garden, I have to buy more seed to re-plant. I am currently planning less than before because my earnings have also reduced... My savings have been reducing over the years. In 2016, I saved Ugx200000, 2017 I saved Ugx96000 and slightly increased to 110000 last year this is because my savings depend on how much I earn. I save in my VSLA group weekly and annually in Bank. My interest has reduced because I am now saving less and also borrowing less... Since I am saving less now, I am not eligible to borrow as much so I have reduced on how much I borrow compared to 3 years ago, last year I borrowed Ugx100000 and this year I have only borrowed Ugx20000 because I don't have the capacity to pay back if I borrow more. I have always borrowed from my VSLA only.



A further driver leading to decreased savings is VSLA activities stopping or being interrupted and this was only mentioned by respondents and FGD participants in Lamwo.

In particular, the VSLA (Lamwo district) was reported by 3 respondents to have stopped functioning since early 2019:

LFRC-1 We no longer meet weekly to save, borrow and work together as a group. ... It is almost 5 months that I am not saving with Lacan Obil VSLA group which I have been a member for the past 3 years. The person who kept the cash box got a misunderstanding with the husband and she went away to YZ thus members have never saved in the past 5 months. ... I no longer save with Lacan Obil because the group members have disintegrated due to weaknesses in the leadership.

However, others identified the reason for the VSLA stopping as being due to people moving to distant fields to cultivate crops.

LMRC-6: I used to save 5000 shillings on a weekly basis particularly on Sundays, but of late we have stopped saving because people have moved to distant garden to cultivate crops and we are unable to meet regularly so we plan on starting again next year in January.

Similarly, other respondents and FGD participants reiterated this interruption to VSLA operation due to agricultural activities during the rainy season when they temporarily relocate for several months to their farms/fields:

LFRP-11: I am a member of VSLA group since 2016.... However currently I have not been saving because I moved to the farm for more than 3 months and this has halted the group's saving activity.

LFGI-36: We used to save every Wednesday but currently we have halted our savings as most members are in their farms that are very far away from the homes. Most of us farm at the borders of South Sudan so we relocate there during the rainy season to do agricultural production. We will only resume after 2 months when members have finished harvesting and have returned to Village.

5. Financial Services Ranking

Towards the end of the questionnaire individual interviewees and focus group participants were asked to list and rank - without prompting - the main financial organisations / agencies they had interacted with during the past three years.

Please note:

- The organisation names in the tables below reflect the spelling of the researchers. Where
 this spelling differs from the name provided by Organisation Z/ADC, alternative spellings
 have been included in parenthesis. In some cases the respondent didn't provide a name for
 the VSLA/bank.
- Based on information provided by Organisation Z/ADC, the organisations highlighted in dark green are VSLAs associated with the programme; organisations highlighted in light green are banks associated with the VSLAs within the programme.

Table 9 below shows how frequently different organisations were cited and how they were ranked by individual interviewees.

Table 9: Ranking of financial organisations by individual household interviewees

Ranked	1st	2nd	3rd	4th	5th	6th	Total
		1					1
			1				1
	2		1				3
		1					1
		2					2
		1					1
		3					3
		1					1
	3	5	2				10
			1				1
	1	3					4
	1						1
					1		1
		2	1				3
	1						1
		1			1		1
				1			1
	1						1
	2	1		1			4
	1	1					2
	1						1
						1	1
		2					2
		1					1
	5						5

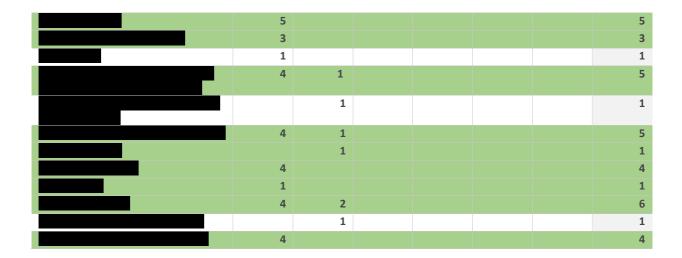


Table 10 below shows how frequently different organisations were cited and how they were ranked by focus group participants.

Table 10: Ranking of financial organisations within focus group discussions

Ranked	1st	2nd	3rd	Total
		1		1
	1	1		2
		1		1
		2		2
			1	1
	1			1
			1	1
		1		1
	2			2
	1			1
	1			1
	1			1
	1			1

Most individual interviewees and focus group participants listed a VSLA associated with XXX as the most important financial organisation to them over the past three years. Activities respondents mentioned in relation to these VSLAs included: saving, borrowing (for health, education and business purposes), training on financial management, sharing ideas, and providing support to one another.

Some individual interviewees also listed and ranked banks associated with the VSLAs, such as mentioning that they hold accounts with these providers and have received some financial training from them. It was often unclear whether the reference to the bank account was in connection with the VSLA or entirely separate.

10 individual interviewees and two focus groups listed and ranked XXX separately to the VLSA. Activities mentioned in relation to XXX specifically included: asset-loans, provision of seeds, learning

Other financial organisations were mentioned by a small number of respondents. Three individual interviewees listed mobile money as a service they use to send and receive money from friends and family.

Other NGOs were listed as providing financial services. was linked by four individual interviewees and one focus group to activities including business management training, money management training, gender/family/child rights training, and the provision of milling machines. was mentioned by two individual interviewees in relation to support for saving and borrowing, as well as training on financial management and investment. was noted by one individual interviewee and in one focus group discussion as providing training on book-keeping and group dynamics. were mentioned by one individual interviewee and two focus groups for provision of fruit seedlings, training on vegetable production, and sensitisation on money management.

about best farming practices, ox-plough training, advice on financial management and investment,

6. Appendices

Appendix 1: Individual Household Questionnaire

Question Id	Question
A1	Respondent code
A2	Name of VSLA, village, parish, district
А3	Name of the interviewer
A4	Date of interview (dd/mm/yyyy)
A5	Start time of interview (hh:mm)
A6	End time of interview (hh:mm)
A6b	Duration of interview (in minutes)
A7	Please can you tell me about yourself
A7a	What is the sex of the main respondent?
A7b	What is the age range of the main respondent?
A7c	Is the main respondent head of the household
A7d	How many years education does the respondent have?
A7e	Date joined this VSLA
A7f	What is VSLA role of the main respondent?
A8	Please can you tell me about others in your household
A9	What is the sex of the head of the household?
B1	Please tell me whether anything has changed about what you farm or how you farm, over the last 3 years? [Describe in detail any changes during the past 3 years, and give examples. What are the reasons behind any changes? What influenced these changes?]
B2	Over the past three years, has the quantity of crops you grow for sale
В3	What is the main reason for any change?
В4	Over the past three years, has the quantity of crops you grow for food
В5	What is the main reason for any change?
C1	Please tell me whether anything has changed about the way your household earns money from farming and other activities, over the last 3 years? [Describe in detail any changes during the past 3 years, and give examples. What are the reasons behind any changes? What influenced these changes?]
C2	Over the past three years, has the total amount you earn over the course of a year
C3	What is the main reason for any change?
C4	Would you say your confidence in future earnings compared to 3 years ago has

C5	What is the main reason for any change?
D1	Please tell me whether anything has changed about your spending (on both household goods and farming/business needs), compared to 3 years ago? [Describe in detail any changes during the past 3 years, and give examples. What are the reasons behind any changes? What influenced these changes?]
D2	Would you say how much money you spend now compared to 3 years ago has
D3	What is the main reason for any change?
E1	Please tell me whether anything has changed about the way you save, compared to 3 years ago? [Describe in detail any changes during the past 3 years, and give examples. What are the reasons behind any changes? What influenced these changes?]
E2	Would you say the amount you save compared to 3 years ago has
E3	What is the main reason for any change?
F1	Please tell me whether anything has changed about your borrowing over the last 3 years? [Describe in detail any changes during the past 3 years, and give examples. What are the reasons behind any changes? What influenced these changes?]
F2	Would you say your ideas about borrowing compared to 3 years ago have become
F3	What is the main reason for any change?
G1	Please tell me whether anything has changed about your relationships with other people in your household, or in community groups you belong to, over the last 3 years? [Describe in detail any changes during the past 3 years, and give examples. What are the reasons behind any changes? What influenced these changes?]
G2	Overall how do you feel that relationships within your household have changed, if at all in the last three years?
G3	Overall how do you feel that community relations and decision-making have changed over the past three years?
G4	What is the main reason for any change?
H1	Please tell me whether your thinking about the future has changed compared to 3 years ago? [Describe in detail any changes during the past 3 years, and give examples. What are the reasons behind any changes? What influenced these changes?]
H2	Would you say your expectations / aspirations for the future have
Н3	What is the main reason for any change?
I1	Please list the three main organisations/agencies (in order of importance) you have interacted with during the past year for all your money matters (e.g. receiving money, saving money, borrowing money, making payments, etc.).
	Please list the three main organisations/agencies (in order of importance) you have interacted with during the past year for all your money matters (e.g. receiving money, saving money, borrowing money, making payments, etc.).
J1	Questions asked by respondent.
J2	Other observations.

Appendix 2: Individual Household Respondent Summary

	Sex	Age	Head of household	Years of education	Date joined this VSLA	VSLA role	Number in the household (excluding respondent)	Number "16 and under" in household
LFRC-1	Female	Over 35	Yes	4	Feb-13	Regular member	7	5
LFBC-2	Female	Over 35	No	4	Feb-15	Regular member	2	0
LFBU-3	Female	Over 35	Yes	3	Jan-16	Regular member	7	6
LFBU-8	Female	Over 35	No	3	Jan-16	Official in group	10	5
LFRC-4	Female	Over 35	No	3	Jan-16	Regular member	9	6
LFRP-11	Female	35 and under	No	7	Feb-19	Official in group	2	1
LFRP-12	Female	Over 35	Yes	3	Oct-16	Regular member	2	1
LFRP-13	Female	35 and under	No	5	Feb-16	Regular member	5	3
LFRR-14	Female	Over 35	No	0	Mar-16	Regular member	3	2
LFRR-15	Female	35 and under	No	7	Mar-16	Regular member	10	7
LFRR-16	Female	35 and under	No	5	Jan-01	Regular member	8	5
LFRR-17	Female	Over 35	Yes	4	Mar-17	Regular member	4	4
LFRR-18	Female	Over 35	No	9	Feb-16	Regular member	8	5
LFRU-10	Female	35 and under	No	6	Jan-13	Regular member	4	5
LFRU-4	Female	Over 35	Yes	9	Mar-16	Regular member	5	4
LFRU-5	Female	Over 35	Yes	4	Feb-16	Regular member	5	5
LFRU-6	Female	Over 35	Yes	7	Jan-16	Regular member	8	3
LFRU-7	Female	Over 35	Yes	0	Feb-11	Regular member	8	6
LFRU-9	Female	35 and under	No	6	Feb-15	Regular member	7	6
LMRP-1	Male	35 and under	Yes	10	Feb-15	Regular member	3	2
LMRC-5	Male	35 and under	Yes	11	Jan-17	Official in group	2	1
LMRC-6	Male	35 and under	Yes	13	Mar-13	Official in group	2	1
LMRP-2	Male	35 and under	Yes	8	Jul-19	Regular member	5	2
LMRU-3	Male	Over 35	Yes	9	Aug-15	Official in group	7	5

PFRJ-1	Female	Over	No	7	Feb-18	Regular member	4	2
PFBJ-2	Female	Over 35	Yes	3	Jan-16	Official in group	8	7
PFBY-3	Female	Over 35	'-	6	Jan-16	Regular member	7	3
PFRD-4	Female	Over 35	No	0	Jan-19	Regular member	8	5
PFRD-5	Female	35 and under	No	6	Jan-17	Regular member	5	4
PFRD-6	Female	35 and under	No	6	Jan-17	Regular member	4	4
PFRJ-6	Female	35 and under	No	6	Apr-17	Regular member	6	5
PFRJ-8	Female	Over 35	No	4	Mar-16	Regular member	4	2
PFRN-10	Female	Over 35	No	2	Apr-16	Regular member	8	7
PFRN-9	Female	35 and under	No	3	Feb-16	Regular member	5	2
PFRY-11	Female	35 and under	No	10	Jan-15	Official in group	5	4
PFRY-12	Female	35 and under	No	0	Jan-16	Official in group	7	5
PMRD-1	Male	Over 35	Yes	1	Dec-99	Regular member	10	6
PMRN-2	Male	Over 35	Yes	10	Jan-14	Official in group	4	3
PMBY-3	Male	Over 35	Yes	7	Jan-15	Regular member	12	9
PMRD-4	Male	Over 35	Yes	5		Official in group	8	4
PMRD-5	Male	Over 35	Yes	7	Feb-13	Official in group	3	2
PMRD-6	Male	Over 35	Yes	1	Jan-13	Regular member	8	2
PMRJ-7	Male	Over 35	Yes	1	Feb-16	Official in group	6	2
PMRJ-8	Male	Over 35	Yes	1	Apr-16	Regular member	6	4
PMRN-10	Male	35 and under	Yes	5	Mar-16	Regular member	6	6
PMRN-11	Male	35 and under	Yes	8		Official in group	5	4
PMRN-12	Male	Over 35	Yes	7	Mar-16	Regular member	6	3
PMRY-13	Male	Over 35	Yes	3	Mar-15	Official in group	10	7

Appendix 3: Overall Changes by Cluster

The following table presents the overall (positive and negative) changes reported by individual respondents within thematic clusters. The table provides a deep dive into the coded data in order to present what individual respondents mentioned as changes within different thematic areas. The attribution related to these changes is discussed in Section 3.3. The casual relationships between these changes as drivers and outcomes are explored in Section 4 through the stories of change.

Cluster	Tag Description	Respondent count	Citation count
ash crop farming &	Market demand & price (increase)	42	74
ther earnings	Earnings (increase)	39	103
	Amount of land cultivated (increase)	34	62
	Amount of harvest / quantity grown (decrease)	28	62
	Earnings (decrease)	27	62
	Amount of harvest / quantity grown (increase)	26	44
	Market demand & price (decrease/fluctuating)	25	39
	Hired farm labour-amount (increase)	24	34
	Side business: animals buy/sell (start/increase)	21	35
	Ox plough (hired)	17	28
	Food grown for consumption (decrease)	17	18
	Seed purchased	16	20
	Side business: alcohol (increase)	15	29
	Bad weather (too much rain: flooding)	14	38
	Food grown for consumption (increase)	14	14
	Soya as cash crop (start/increase)	12	24
	Other or Various cash crops (start/increase)	12	21
	Diversity of crops (vegetables) grown for food (increase)	11	13
	Ox plough (bought outright)	10	19
	Simsim as cash crop (start/increase)	9	12
	Cotton as cash crop (start/increase)	8	15
	Amount of land cultivated (decrease)	8	12
	Crop resilient to 'new' weather (rain or sun)	8	10
	Sorghum, Maize, Cassava / various cash crops (stop/decrease)	8	10
	Crop maintenance / farming easier (eg less labour required)	8	8
	Ox plough (source unspecified)	7	15
	Sunflower as cash crop (start/increase)	7	14
	Side businesses: various (increase)	7	12
	Owned ox plough fails (cows dead or stolen)	7	12
	Bad weather general (too much rain or sun)	7	10
	Side business: various (decrease)	7	9
	Hired farm labour / animal traction-price (increase)	7	8
	Ox plough (bought with asset loan)	6	18
	Knowledge of good agronomic practices (increase)	6	11
	Good agronomic practices (planting, weeding, harvesting, storage)	6	11
	Side business: provide farm labour (increase)	6	9
	Side business: food vegetables/fruit for sale	6	8
	Fast crop growth and/or 2 season planting	6	7

Cluster	Tag Description	Respondent count	Citation count
Cash crop farming &	Side business: charcoal (increase)	5	8
other earnings	Cassava as cash crop (start/increase)	5	6
	Farm inputs-pesticide	5	6
	Ox plough (borrowed/exchange)	4	8
	Crop not resilient to 'new' weather	4	4
	Soil fertility (decrease)	3	7
	Side business: milling/grinding machine (increase)	3	6
	Rice as cash crop (start/increase)	3	6
	Crop maintenance (harder: eg more labour required)	3	5
	Bad weather (too much sun: drought)	3	5
	Cotton as Cash Crop (stop/decrease)	3	4
	Hand hoe only / use hand hoe	3	4
	Side business: food silverfish for sale	3	4
	Chili as cash crop (stop/decrease)	3	3
	Hired land or transport (increase)	3	3
	Seed re-used	3	3
	Sorghum as cash crop (start/increase)	3	3
	Side business: motorcycle (decrease)	2	4
	Side business: alcohol (decrease)	2	3
	Side business: animal traction service	2	3
	Side business: provide services eg tailoring, hair-plaiting, painting (increase)	2	3
	Chili as cash crop (start/increase)	2	2
	Farm inputs-storage solution	2	2
	Good weather	2	2
	Home improvement (repair, extend)	2	2
	Maize as cash crop (start/increase)	2	2
	Side business: salary as elected official or police	2	2
	Simsim as cash crop (stop/decrease)	2	2
	Soya as cash crop (stop/decrease)	2	2
	Tobacco as cash crop (start/increase)	2	2
	Eggplant as cash crop (start/increase)	1	2
	Rice as cash crop (stop/decrease)	1	2
	Tobacco as cash crop (stop/decrease)	1	2
	Hired farm labour-spend (decrease)	1	1
	Side business: shoes, clothing (increase)	1	1
Relationships	Community relationships (got better)	31	35
•	Share ideas / give advice / support	18	22
	Women's empowerment / childrens rights / gender equality (increase)	16	18
	Marital/Family relationship (got better)	13	17
	Marital/Family relationship (got worse)	13	14
	Communal work (increase)	11	12
	Domestic violence (decrease)	8	8
	Domestic violence (increase)	8	8
	Alcohol consumption (increase)	7	7
	Community relationships (got worse)	6	7
	Land disputes / wrangles	6	6
	Alcohol consumption (decrease)	5	6
	Born-again Christian	4	4
	Man takes (or has) additional wife/wives	4	4

Cluster	Tag Description	Respondent count	Citation count
Relationships	Women's empowerment (lacking / decrease)	3	3
	Jealousy of others' prosperity	2	2
Spending, saving & borrowing	ADC-VSLA membership save & borrow	47	167
	Spending/Expenditures (increase)	46	80
	Cover household or emergency needs (increase)	40	68
	VSLA saving/borrowing (increase)	39	65
	School fees (increase)	39	59
	Investment in business / farming (increase)	37	61
	Financial planning/management (increase)	35	60
	Medical expenses (increase)	32	48
	VSLA saving/borrowing (decrease)	30	45
	Pay school fees	29	38
	Health (decrease-old age or injury)	14	33
	Health (decrease-malaria)	14	18
	Inflation / higher prices	13	13
	Spending/Expenditures (decrease)	12	12
	Bank account (new)	11	26
	VSLA activity stopped/interrupted/fluctuating	9	12
	Other-VSLA membership save & borrow	7	12
	Asset loan taken	6	17
	Pay medical expenses	5	5
	Mobile Money account holder	4	4
	Health (improved / good diet)	3	3
	SACCO membership	2	4
	Financial planning/management (decrease)	2	2
	School fees (decrease)	2	2
	Investment in business/farming (decrease)	1	1
	SACCO bankruptcy (loss of savings)	1	1
Training & other support	Training on financial management / managing money	19	34
	Training on farming	14	20
	Training on relationships	11	15
	Material aid (start/increase)	11	14
	Enforcement of regulations/laws/rules	7	8
	XXX no longer in contact / stopped supporting / asset loan not received	6	6
	Friends	4	5
	Clan elders	2	2
	Training on asset loans	2	2
	Church leaders	1	1
Noteworthy / context	VSLA processes	37	50
	Attitude to buyers / middle men	32	33
	Attitude to asset loan	31	31
	Attitude to borrowing	31	31
	Attitude to fertilizer & pesticide use	31	31
	Attitude to education	18	24

Cluster	Tag Description	Respondent count	Citation count
Noteworthy / context	Cash crop farming / ox-plough	17	24
	Gender and decisions / finances	9	10
	Attitude to climate change	8	8
	Attitude to banks	7	9
	Attitude to medical care	7	7
	NGOs or Government agencies	4	4
	Refugee influx (Sudanese)	4	4
	VSLA linked to bank / account opened	2	2
	Attitude to retail opportunities	1	1
	Grow vs buy food	1	1
	Monitoring / Sampling Glitch	1	1
	Soil fertility	1	1

Appendix 4: Closed Question Summary

Positive change	+	Negative change	-	No change	=
Increase		Decrease			

	B2.CASH CROP QUANTITY	B4.FOOD CROP QUANTITY	C2.EARNINGS	C4.EARNINGS CONFIDENCE	D2.SPENDING	E2.SAVING	F2.BORROWIN G ATTITUDE	G2.RELATIONS HIPS- HOUSEHOLD	G3.RELATIONS HIPS- COMMUNITY	H2.HOPE FOR THE FUTURE
LFRC-1							+	+	+	+
LFBC-2										=
LFBU-3										+
LFBU-8										=
LFRC-4										+
LFRP-11										+
LFRP-12										-
LFRP-13										+
LFRR-14										+
LFRR-15										+
LFRR-16										=
LFRR-17										-
LFRR-18										+
LFRU-10								-		-
LFRU-4										+
LFRU-5							-			=
LFRU-6										+
LFRU-7										+
LFRU-9							-			+
LMRP-1										+
LMRC-5										+
LMRC-6										=
LMRP-2										+

LMRU-3	<	>	>	>	>	>	-	+	-	+
PFRJ-1										+
PFBJ-2										+
PFBY-3	>									+
PFRD-4	>									-
PFRD-5	>									+
PFRD-6	>									+
PFRJ-6	>									+
PFRJ-8	>									+
PFRN-10	<	<	<	<		<		-		-
PFRN-9	<				<			-		+
PFRY-11	>									+
PFRY-12	>									+
PMRD-1	=			<	<		-			=
PMRN-2	>									+
PMBY-3	<									+
PMRD-4	>									+
PMRD-5	>									+
PMRD-6	>									=
PMRJ-7	>									+
PMRJ-8	<									+
PMRN-10	<									+
PMRN-11	<									+
PMRN-12	<									+
PMRY-13	<		<	>	>		+	=	-	+