

CARE International in Uganda

Impact of the Banking on Change Project: A Village Savings and Loan intervention that Integrates Bank Linkages

Project End-Line Report

November 2012

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ACRONYMS

BoC	Banking on Change
CARE	Care and Relief Everywhere
IDFA	Iganga District Framer's
SEPSPEL	South Eastern Private Sector Promotion Enterprise Limited
UWESO	Uganda Women's Efforts to Save Orphans
VSLA	Village Savings Loans Associations
WENIPS	West Nile Private Sector Development Promotion Center Limited

SUMMARY

In 2009 Care International in Uganda, started implementing a three years project “Banking on Change” in Eastern Uganda and West Nile Regions, with financial support from Barclays Bank, UK. The project’s main purpose is to contribute towards improving the quality of life for poor people by enhancing, innovating and accelerating sustained access to savings and other financial services. The project was expected to result in increase household incomes and financial literacy among the target beneficiaries. This was to be achieved by establishing 1,400 VSLA with 35,000 clients to access financial services through VS&LA methodology and assisting 10,000 clients with business skills and linking up to 5,000 VS&LA clients to formal financial institutions. By end of May 2012, the project had exceeded both the targeted number of VSLA groups by 7% and members by 26%. In total the project had formed 1503 groups with 43994 members, comprising 31063 females and 12931 males. It had linked 214 VSLAs comprising 4293 females and 1994 males to formal banking institutions, also exceeding the target of 5000 (Data submitted by BoC IPOs by May 2012).

CARE commissioned an impact study to establish the change on key project indicators in order to identify the contribution of the project to people’s wellbeing. This report specifically focuses on the quantitative design, which emphasized the use of baseline survey tool to enable comparison of data at baseline and end line. Therefore the key evaluation question answered by the study is: “what is the change on key project indicators for BoC VSLA members since the project was implemented? All people interviewed at baseline (57 with 1277 members: of which 25 groups (616 members had completed two cycles of savings while 32 groups (661 members) had completed one cycle) were followed up during the impact study, save for those who had left the village and those who had died. Data was collected from 870 respondents representing 82% response rate. The final impact study report will integrate qualitative findings whose focus will be informed by these quantitative findings.

Findings

The impact study found significant positive changes across several BoC indicators for both individual VSLA members and their households.

Household wealth indicators: Household monthly incomes appreciated from UGX149, 537.6 (US\$ 59.8) = at baseline to UGX236, 631 (US\$94.6) at final evaluation phase. Farming (crop and animal) was the more paying income source and commonest source of income at base and end line. More households reported investing in each of the ten given productive assets at end line than at baseline (19.9% to 43.5%). There were more households who strongly agreed to owning each of the twenty two items that are locally defined as basic necessities (12.3% at baseline to 23.3% at end line). On average households consumed two meals per day both at baseline and end line.

Household access to health care:

There were significant changes in VSLA members (and their household’s access to health care); VSLA members who met medical expenses for their household increased from 80.1% at baseline to 89.1% at end line. Also, there was a slight increase in the average amount of money spent on medical expenses by VSLA members at baseline (UGX 86941.66 (US\$ 34.7) and end line [UGX87881.09: US\$35.2], thus there is improved access to health care.

Household assets: There was a significant percentage increase (33%) in the number of VSLA members who bought at least one asset at base and end line and a 42% increase in the amount of money spent at baseline and end line to buy assets. The percent of households owing given items increased among 18 items, but reduced for 5 items; also the average number of assets owned increased.

Change in Quality of housing: Improvements were recorded for walls of houses with more households using modern burnt bricks (4.1% at baseline to 7.7%), cement blocks (2.4% to 7.7%), traditional burnt bricks (42.2% to 70.6%) while fewer households using wooden walls (42.9% to 5.9%). Households with iron sheets increased from 40.2% at baseline to 44.2% at the final. Grass thatched houses reduced from 57.9% at baseline to 55.3%. Energy sources for households improved, with less households reporting use of wood, paraffin, and candle, while more reported use of battery/generator and others (solar, gas and torches). Households using

covered pit latrines rose from 56.4% to 57.4% and those using uncovered pit latrines reduced from 35.3% at baseline to 32.8%. Clearly there is an improvement on most measures of quality of housing for VSLA members.

Children's rights: Net primary enrollment for children aged 5-12 years reduced from 97.8% to 93.5% at end line, but there was an increase for net secondary enrollment from 90.4% to 94.6%. More VSLA member invested in their children education (69.9 at baseline to 79% at end line). Households with children working in IGAs increased from 22.4% to 30.4% at end line but the average number of hours children were engaged in IGA work reduced from 3.83 hours per day to 3.29 hours at impact evaluation.

Savings and loans access among BoC VSLA members:

VSLA members use multiple savings mechanisms but largely VSLA (98.7%), in the house (29.6%), banks (9.9%) while others save in form of accumulating property (8.4%). VSLA members who had accessed loan increased by 62% at evaluation, the average number of loans secured increased by 77% while the average amount money taken in loans increased by 39%. Respondents who got loans from VSLAs increased from 87% at baseline to 98 (14% increase) while there were decreases ranging from 70% to 100% in use of loans from all other sources (Bank, MFI, ROSCAs, relative, and burial farmers associations).

Positive change in IGA (volume & number): Households that had increased their business funding over the last one year rose from 52.7% at base to 67.5%. At baseline, VSLA members that reported profits on their IGAs were 95.7% but this figure slightly reduced to 94.7%. In addition, members who invested in productive assets over the project implementation period increased.

VSL Women members' Empowerment: There was no statistically significant change on women's self esteem though there were some improvements on all indicators: ability to solve problems, influencing their spouse's decisions (29.8% to 39.7%), influencing important decisions in the community (22% to 28%). There was a positive change on women and perception of their social positions for these variables: "my spouse values my role in the household" and "other members of the extended family show me respect. Women's ratings on their contribution to all household financial expenses increased for health, household equipment and food, though the increases were not statistically significant. Women's control over financial resources increased from 65.5% to 70% at final evaluation while ability to sale freely the production from the field increased from 41.2% to 44.2%. Women experiencing gender based violence reduced from 22.3% at baseline to 17.9%, while women who believed they could inherit from their husband's property rose from 63.2% to 75.1%.

Business skills: There was significant change in %age of VSLA members with at least one skill strengthened (68.3% to 76.3%). VSLA members expressed significant improvements in thirteen skills related to managing income generating activities (IGAs).

Discussion and conclusion: The impact study findings show positive changes on the key indicators for the BoC intervention, right from increasing access to financial services (savings and loans), level of engagement in IGAs, investments in productive assets, quality of housing, investment in education, health access and women's self-esteem and social perception. Beyond the changes in key project indicators, the contribution of BoC to human development can be reflected in the contribution of these positive changes to the wider community. A project like BoC is likely to impact more than the immediate beneficiaries and their households. Two key questions remain: how much of the positive changes can be attributed to BoC? How did the effects of BoC affect the wider community and related financial services mechanisms in project intervention areas? In other words, what are the wider implications for society? Other issues worth exploring include urban/cross boarder VSLAs where we had more cases of people moving out of the village, or dropping out of the groups. These questions could not be answered using the quantitative survey design as it aimed at conducting a quantitative survey among the VSL members that were visited during the baseline survey using the VSL Member survey questionnaire. As indicated in the ToR, a qualitative survey to confirm these findings and establish the extent to which VSLAs have contributed to these changes is necessary. This will also feed into the final task of documenting the lessons learnt from conducting the VSL member survey using the given methodology.

CHAPTER 1: INTRODUCTION

The Banking on Change (BoC) project of CARE International in Uganda is a 36 month intervention with funding from Barclays Bank UK. Its' main purpose is to contribute towards improving the quality of life for poor people by enhancing, innovating and accelerating sustained access to savings and other financial services. The project is ending September 2012 and has been implemented in West Nile (Arua, Zombo, Nyadri, Nebbi, and Pakwach) and Eastern Uganda (Iganga, Namutumba, Busia, Bugiri and Soroti). The project is implemented through partnership with the following partners: Iganga District Farmer's Association (IDFA) in Iganga, Southern Easter Private Sector Limited (SEPSPEL) in Bugiri and Busia, Uganda Women's Efforts to Save Orphans (UWESO) in Soroti, Katine Sub county and West Nile Private Sector Foundation (WENISPS). The IPOs receive funding from CARE which also provides overall management and technical guidance to IPO's throughout the implementation period.

The project is part of CARE Uganda's Women and Youth Financial Inclusions Program (WAYFIP) whose foundation is the VS&L methodology, a savings-based financial service.

Basing on past experiences and lessons learnt the VS&L program has come up with new innovations aimed at improving the quality of service delivery and also contribute to measurable impact in the lives of the targeted beneficiaries. The main innovations include:

- Micro insurance to complement welfare fund
- Business skills development (commonly called SPM of IGAs)
- Bank linkages
- Village Agent model as a sustainability approach to VS&L implementation
- Urban VSLA implementation

Banking on change (BoC) key project components are: financial linkages (bank linkages and financial literacy) and business skills development. The project's goal is to provide access to financial services (savings, insurance and credit) through informal and formal service providers to 35,000 poor and marginalized households so as to improve the quality of their livelihoods. The project design is a comprehensive and coordinated approach involving funding support, technical assistance (TA), capacity building, advocacy, monitoring and evaluation (M&E), and information dissemination to promote VSL and linkage activities The project had three major objectives:

1. To establish 1,400 VSLA groups predominately in eastern Uganda, giving 35,000 clients to access financial services through VS&LA methodology.
2. To assist 10,000 clients in acquiring skills to improve existing business or start new business enterprises as a result of coaching through Selection Planning and Management (SPM) training and
3. To link up to 5,000 VS&LA clients to formal financial institutions of which Barclays is a partner of choice

The project specific outputs are:

1. 1,400 VSLA groups predominately in eastern Uganda, with 35,000 clients accessing financial services through VS&L methodology.
2. 10,000 clients acquiring skills to improve existing business or start new business enterprises as a result of coaching through Selection Planning and Management (SPM) training
3. 5,000 VS&LA clients linked to formal financial institutions of which Barclays will be a partner of choice.

This impact study is part of the overall design of the BOC project. The study purpose is to establish the change associated with BOC project through:

- Conducting a quantitative survey among the VSL members that were visited during the baseline survey using the VSL Member survey questionnaire ;
- Conducting a qualitative survey to confirm the findings from the quantitative study and establish to what extent the VSLAs have contributed to these changes and;
- Documenting the lessons learnt from conducting a VSL member survey to benefit other CARE Uganda and implementing BoC countries conducting similar exercises (combination of quantitative and qualitative studies).

Results from the quantitative study will make a contribution to both the design and focus areas for the qualitative study (Banking on Change: Guidelines for Conducting the Impact Survey). This report therefore provides part one of this process.

The BOC baseline survey collected data on 1277 members from 57 groups. Of these, 616 VSLA members were in cohort 1 from 25 groups and 661 VSLA members were in cohort 2 in 32 groups. The original design was to have 28 groups in the second cohort; however, after realizing that many of the members in some of the groups had been active members in other VSLAs at the time of the study, focus was put on people who were new to the VSL methodology. This report compares findings of the baseline and final data on quantitative aspects for both cohorts. It is organized in four chapters (Introduction, methodology, results, discussion and conclusions and implications for the qualitative data collection.

CHAPTER 2: METHODOLOGY

The design of the impact evaluation of BOC is a combination of quantitative and qualitative methodologies but this report is largely the quantitative one, focusing on providing data on quantitative indicators of the project in relation to the baseline information. All data were gathered in July and August 2012, the second phase being a follow-up of people who could not be met in the first phase because they were simply not available during the scheduled time for data collection.

Sampling: Given that the impact study was mainly a follow up on people who had been visited during the baseline, the sample remained the same i.e groups reached in the baseline study. However, these groups were selected after a verification of their functionality and member's existence by CARE so as to determine who to follow-up during the primary data collection. The sampling frame (list) provided the following aspects on the status of group members visited during the baseline:

- a) A person still being a member of the same group at Baseline
- b) A person having left the group and joined another VSLA
- c) A person having left the group and village altogether
- d) A person died during the course of the project

Those falling in group (a) and (b) were followed up during the final impact evaluation.

Tools: The study used the same tool which was used at baseline for the impact survey. One questionnaire combining household and individual VSLA member questions (The VSL member survey) was used to collect data. Household data focused on: demographics characteristics of household members, the quality of the habitat of the household, the household assets, the frequency and quality of household's meals. The individual data focussed on: socio-demographics, their access to loans, income generating activities, expenditures and investments made by the members, the member's participation in civil society associations. In addition, the tool also sought specific data on level of confidence and self esteem on female members of VSLAs and gender relations in the household as experienced by women.

Data collection

Baseline data was collected in 2010 (cohort 1) and 2011(cohort 2). In total, data were collected on 1277 VSLA members from 57 groups. The final impact survey data was collected in July and August 2012 targeting the eligible members for follow-up. Table 1 gives an overview of those targeted.

Table 1: Situation at Impact study

Members status at follow up	Interviewed at baseline	Successfully Interviewed at end line	Response rate
a) Number of VSL members ¹	1277	870	68%
b) Still members of same group	933	751	80%
c) No longer members but lives in the village	98	87	88%
d) Has left the village	212	2	0.9%
e) Has joined another VSLA group	30	30	100%
f) No longer alive	4	0	0%

¹ The number of VSL members number in a (Table) ie 1277) a is the sum of b to f at baseline or end line respectively,

Before the data collection exercise, a 2 days training was done, involving the entire research team. The training focused on the context of the impact study, key concepts of the survey, the tool and mechanism of data collection, coordination and mobilization of VSLA members and ethical conduct while in the field. During the training, the research team also reviewed the reports from CARE's monitoring exercise to ascertain preliminary data on potential survey respondents.

Ethical considerations: During the survey, respondents were informed about the objectives of the survey and the duration of the interview. It was emphasized that data collectors give a right to respondents to decide to participate in the study and or to withdraw their participation at any time during the interview. Verbal consent was obtained before each interview. The survey team was bound by the confidentiality and non disclosure clause of the content of an individual interview.

Data processing, entry and analysis: The data entry was organized by a team of 2 data entry clerks. The entry was done using CISPRO, after all data had been collected, questionnaires cleaned and verified for entry. The data entry template had to be adjusted to capture new variables (sources of income and membership to other VSLAs) which were introduced during cohort 2 of the baseline survey and capturing key variables in the tool which had been omitted in the initial template i.e others. The CISPRO software permits strong quality control during data entry and can easily handle multi level type of records as in the case of the BOC studies. The data was cleaned and exported to SPSS for analysis.

Before the analysis, the data file was prepared in matching baseline file with the end-line one. Thus we had a file with baseline value and final value for each member, therefore allowing a pairing comparison. During the analysis, members lost at follow-up (those who either left the village or were no longer alive) and those who could not be interviewed at final evaluation were excluded from the analysis. Nevertheless, the members who abandoned the group after a baseline but were available for interviews were still considered for data analysis. The baseline data was adjusted accordingly in computing the value only for those included in the sample.

To assess the significance of the difference between the baseline value and the final value, the non-parametric Wilcoxon rank test was used as required by BOC study guidelines. The Wilcoxon signed-rank test is used when comparing two related samples, matched samples, or repeated measurements on a single sample to assess whether their population mean ranks differ (i.e. it's a paired difference test). Positive changes reflect the possibility of BOC contributing to these changes.

CHAPTER 3: FINDINGS

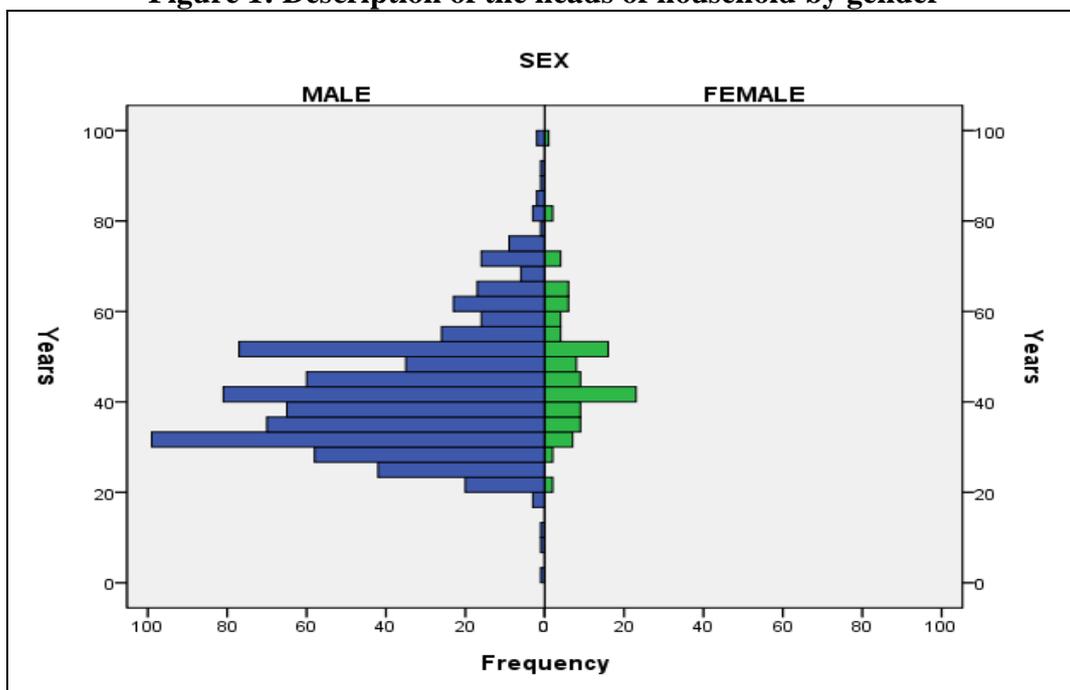
3.1 Description of the Study population

This section provides the socio-demographic characteristics of the unit of analysis more specifically the household head, household population and VSL members aimed at providing the reader with an overview of the study population.

3.1.1 Households/Head of Household gender and education

Households were mainly headed by males (87%) and only 13% were headed by females. The majority of the household heads were male aged between 20 and 58 years while most of the female household heads were aged between 30 and 58 years. Very few household heads were aged below 20 (0.7%) and above 80 (0.8%) years irrespective of sex (Figure 1).

Figure 1: Description of the heads of household by gender



Education of household heads: More male household heads had accessed formal education at all levels compared to female households (Table 2), reflecting the national situation where more males access formal education than women (UDHS 2012).

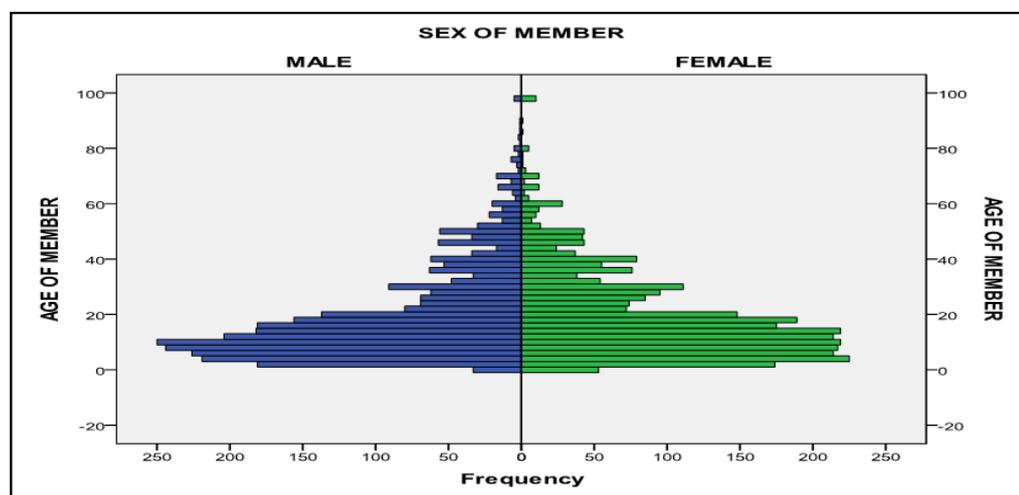
Table 2: Distribution of the heads of household by education level

Sex	Level of education				Total
	Primary	Secondary	University	Don't know	
Male	59.3%	35.3%	5.3%	0.1%	100.0%
Female	72.6%	23.3%	4.1%	0.0%	100.0%
Total	60.5%	34.1%	5.2%	.1%	100.0%

3.1.2 Household population: structure, education, gender composition and occupation

Household population structure: Figure 2 below depicts the study population as being very young with most of the household population for both male and female being under 20 years old.

Figure 2: Structure of the household population



Uganda has the youngest age structure in the world, with 77 percent of its population under the age of 30 (Population action international 2010). The household population structure for BOC target group is also similar to that of Uganda as a country where over 50% of the population are 15 years and below. Since there were few households with members aged 40 years and above, labour burden is likely to be felt for the few adults to provide for economically dependent population.

Education level and gender composition of household population: The majority of the household members are children still attending formal education (Table 3), which is consistent with Uganda’s population structure (UBOS 2011).

Table 3: Education level of the population 5 years and + by gender and age

		Level of education				Total	Number of people aged 5 years and +
		Primary	Secondary	University	DN		
Sex	Male	71.5%	25.2%	3.2%	.1%	100.0%	2373
	Female	80.2%	18.2%	1.6%	.0%	100.0%	2225
Age	5-14 years	97.1%	2.8%	.1%	.0%	100.0%	1958
	15-17 years	62.8%	36.8%	.4%	.0%	100.0%	489
	18-24 years	47.2%	48.6%	4.2%	.0%	100.0%	737
	25 years and +	65.5%	28.9%	5.5%	.1%	100.0%	1420
	Total	75.7%	21.8%	2.4%	.0%	100.0%	4604
Location	Urban (West Nile & Busia/Burgiri)	76.1%	20.8%	3.0%	.1%	100.0%	2850
	Rural (Soroti & Iganga)	74.9%	23.6%	1.5%	.0%	100.0%	1723
	Total	75.7%	21.8%	2.4%	.0%	100.0%	4573

A big proportion of the household members aged 5 years and above (75.6%) attained primary education. However, males fared better for all education levels attained compared to women, a finding consistent with the national situation (NDP, 2010). The majority of the household population fell in the age group 5-14 years (1930) and of these 97.2 had received primary education, which is indicative of the country's efforts to provide Universal primary education. It also shows that at least the majority of children in that age bracket have their right to education fulfilled.

The majority of the sampled household's population live in urban areas 2850 compared to 1723 that live in rural areas. This is because of the sampling methodology where more groups in urban areas were selected compared to those in rural areas. More residents in the urban areas had attained primary education (76.1%) compared to those in rural areas (74.9%). However, the reverse is true for secondary education as slightly more residents in rural areas (23.6%) reported having attained secondary education than 20.8% in the urban areas, although the reasons for such situation were not ascertained.

Occupation: Over 70% of the household members aged 5 years and above (over 70%) were economically inactive since 55.5% and 48.9% of the male and female household members were students respectively (Table 4). About 18.9% males and 25.5% female household members were agriculturalists while 6.5% and 9.8% of male and female members were engaged in small businesses respectively. Among the employed household members, majority were aged 25 years above. More rural members (23.2%) were engaged in agriculture compared to their urban counterparts (21.7%) and more members from urban had businesses (9.9%) compared to those in rural areas (5.3%). Nationally, 86.6% of the population is in crop agriculture, while 30% in animal agriculture and 3% in formal employment (UBOS 2012).

Table 4: Occupation of the population 5 years+, by gender, age and Location

		Economically Inactive population			Economically active population							Total
		No occupation	Student	House work	Agriculture	Pastoralist	Handicraft	Small businesses	Office Employee	Fisher	Other	
Sex	Male	6.3%	55.1%	0.1%	18.9%	0.5%	0.5%	6.4%	6.0%	0.5%	5.6%	100%
	Female	6.8%	48.9%	3.6%	25.5%	0.3%	0.6%	9.7%	2.7%	0.0%	2.0%	100%
Age in years	5-14	6.9%	91.5%	.3%	.3%	.2%	.0%	.2%	.1%	.0%	.5%	100%
	15-17	7.5%	82.8%	2.0%	5.3%	.0%	.2%	1.4%	.6%	.0%	.2%	100%
	18-24	8.8%	41.8%	3.5%	28.4%	.7%	.3%	7.3%	4.6%	.3%	4.4%	100%
	25+	4.8%	.8%	3.1%	50.9%	.6%	1.5%	19.4%	10.4%	.7%	7.9%	100%
Location	Urban	6.8%	50.3%	2.0%	21.5%	.3%	.8%	9.9%	5.0%	.4%	2.9%	100%
	Rural	6.2%	54.6%	1.6%	23.3%	.7%	0.3%	5.1%	3.1%	.0%	5.1%	100%
Total		6.6%	52.0%	1.9%	22.2%	.4%	.6%	8.1%	4.3%	.3%	3.8%	100%

3.1.3 Description of VSLA Member Socio-demographics

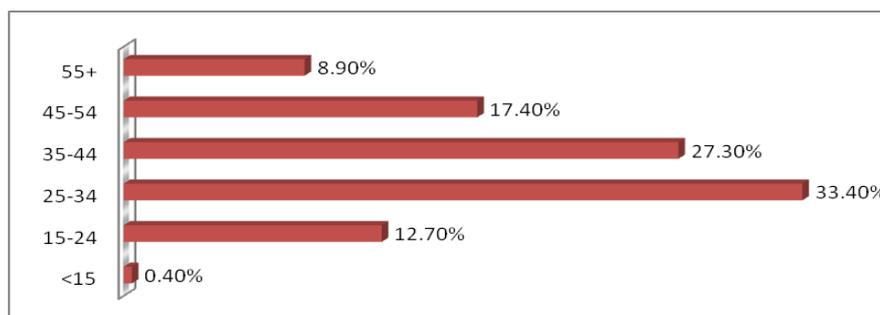
Sex of VSL members: Out of 870 VSLA members that participated in the study, majority were female (67.8%) while male respondents accounted for 32.2% suggesting that the VSL methodology is more attractive to women than men. This resonates with a finding consistent with previous VSL studies in CARE International. In all the districts, there were more females in VSLAs than males (Table 5).

Table 5: Sex of VSL members

	Iganga N=188	Busia N=198	Soroti N=124	Arua N=133	Nebbi N=102	Bugiri N=38	Maracha N=41	Zombo N=46	Total N=870
Male	33.5%	29.8%	34.7%	28.6%	32.4%	23.7%	34.1%	45.7%	32.2%
Female	66.5%	70.2%	65.3%	71.4%	67.6%	76.3%	65.9%	54.3%	67.8%

Age of VSL members: Majority (33.4%) of the VSLA members were aged between 25-34 years, followed by those age 35-44 (27.3%). Very few VSLA members were aged 15 years and below (Figure 3).

Figure 3: Age group of VLSA members



Out of 870 members, 280 were male and 590 were female with the minimum of 14 years and a maximum of 98 years. Table 6 shows the average age of VSL members by sex.

Table 6: Age of the VSL members by sex

Sex	Age				Number of VSL members
	Mean	Median	Minimum	Maximum	
Male	39.32	37.00	15	86	280
Female	36.28	35.00	14	98	590
Total	37.27	35.00	14	98	870

Average age of VSL members was 37 years. Data suggest that elderly women are likely to join VSLAs more than their male counterparts; however, the median age of the VSLA members was 35 years.

Marital status, literacy and education of VSL Members:

Marital status: Slightly above sixty one percent (61.1%) of VSLA members were in monogamous marriages, followed by 23.5% who were married polygamously, 7.9% were widows/widowers, 4% were singles while 3.5% were either divorced or separated (Table 7). More male VSL members were in monogamous marriages (72.4%) compared to females and more females were in polygamous marriages with 26.1%. Thus VSL has a potential to attract and impact a broad spectrum of the population. Soroti had more monogamous marriages (72.6%), followed by Bugiri with 69.9%, Nebbi 66.7%, while Iganga had the least percentage monogamous (44.1%). Polygamous marriages were more popular in Iganga, Bugiri and Busia with the former recording 39.4% and the latter with 27.5% of respondents in that category, Maracha and Arua district followed in that category with 24.4% and 20.5% respectively. All the districts had less than 10% of single and divorced/separated respondents.

Literacy levels: Out of 870 respondents, over 66.5% of the members could read and write in any language while 33.5% could not. Comparison by sex shows that more male VSL members (84.2%) could read and write compared to 58% female members. Arua district had the majority (85.5%) of respondents who could read and write in any language, followed by Iganga with 70.2%, Bugiri with 69.9%, Nebbi with 61.8%, Soroti with 58.9%, Zombo with 55.6% Busia had 50.0%, while Maracha posted the least percentage (48.8%).

Education level: Out of 870 VSL members 81.7% (711) had ever attended school while 18.3% (159) had never been in any formal education. Of those who attended school (711), majority (71.8%) had attained primary education, followed by those who had attained secondary education (24.71%) while VSL members that had attained tertiary/university education accounted for only 3.5%. More female members had stopped at primary level (77.5%) compared to males (61.9%); and more male members had attained secondary education (33.1%) than their female counterparts (19.9%). More than ninety percent (92.9%) of respondents in Arua had ever attended school, followed by 87.9% from Bugiri, Busia with 81.2%, Soroti with 80.7%, Iganga (78.0%), Nebbi(74.2%), Maracha had 70%, while Zombo recorded the least with (68.2%) of respondents. National those whose highest level of education is primary are 10.3%, secondary 30.6% and those with post secondary 70.6% and those without any formal education 5.6% (UBOS 2012).

Table 7: Marital status, literacy and education levels of VSL members by Sex

		Sex of VSLA Member		Total
		Male	Female	
Marital Status	Single	7.5%	2.4%	4.0%
	Widow	.4%	11.5%	7.9%
	Divorced/separated	1.8%	4.2%	3.5%
	Married monogamous	72.4%	55.7%	61.1%
	Married polygamous	17.9%	26.1%	23.5%
	N=	280	590	870
Literacy	Yes	84.2%	58.0%	66.5%
	No	15.8%	42.0%	33.5%
	N=	280	590	870
Highest Level Of Education	Primary	61.3%	77.6%	71.8%
	Secondary	33.6%	19.8%	24.7%
	College/university	5.1%	2.6%	3.5%
	N=	253	455	708

3.1.4 VSLA Membership Status at Follow-up by location

Table 8 gives an overview of those covered at impact study.

Table 8: Status of VSL members at follow up by location

	Still member of the group	Joined another VSL Group	No longer member of any VSLA group but still in the village	No longer in the Village	No longer alive	Total
Overall	933	30	98	212	4	1277
Rural (Soroti & Iganga)	343	12	19	30	2	406
Busia/Bugiri & West Nile	590	18	79	182	2	871

Of the 57 groups in the baseline 2, (3.5%) had disintegrated (Govuleku in West Nile and Sichakaala-Sichakatono in Busia) at the end line. Some members of Sichakala-Sichakato had joined other groups but those in Govuleku had not due to bad experience² in the group. Others who left the village, it was due to change of status e.g. marriage, job transfer, business, especially for urban areas in West Nile and Bugiri/Busia. It was established that VSLA members in urban-cross boarder tend to be mobile among countries involved (South Sudan, Uganda and Democratic republic of Congo)

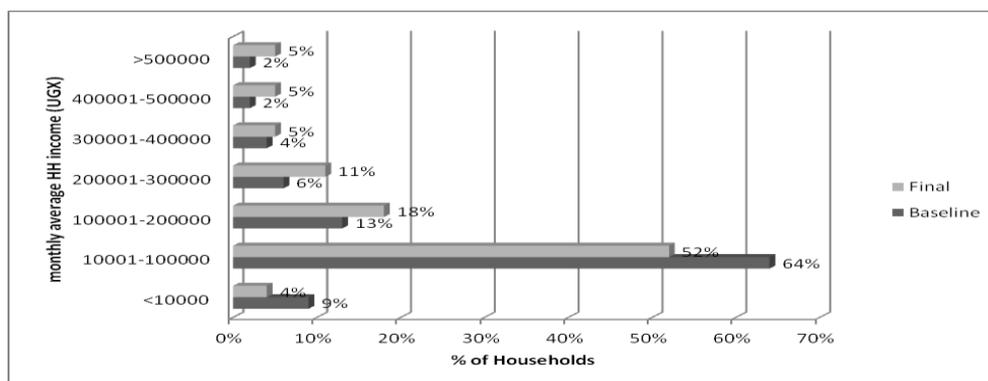
3.2. BoC impact on Household livelihood conditions

The study used income levels and ownerships of locally defined basic needs to establish changes in poverty levels since the implementation of BOC.

3.2.1 Household incomes and income sources

Household monthly incomes appreciated from UGX149537.6 (US\$ 59.8) = at baseline to UGX236631 (US\$94.6) at final evaluation phase. The minimum monthly income at baseline appreciated from UGX900 (US\$ 0.36) at baseline to 2500/= (US\$ 1) at final evaluation. The maximum monthly income reduced from UGX2, 550,000 (US\$1020) at baseline to UGX (US\$700). Given the maximum and minimum figures which are so skewed the average household monthly income should be treated with caution as this is a representative of a very small percentage of the VSLA members (Figure 3). More respondents (5%) earned >UGX500, 000 (US\$200) amount compared to end line (2%). A bigger number (64.1%) of respondents earned between 10,000/= to 100,000/= but the number reduced to 52% at end line, because some people had started earning more. However, those earning above 100000/= had a higher percentage at evaluation than the baseline (Figure 3). This could be because some groups increased their monthly incomes.

Figure 4: Household monthly income groups



Monthly income categories by different sources: Farming (crop and animal) was the more paying source of income both at baseline and end line. While 40.8% of households reported earning 200000-300000/= from salary/formal employment at baseline these households reduced at to 2.2% at end line, while craft work under income category 300000-400000/= increased from nothing to 38.9% (Table 9). This shows that crafts have potential for business.

² It was reported that the group had internal conflicts an members could not agree any more on how to run the group and they shared their savings before maturity

Table 9: Distribution of household's monthly earnings among income sources

		Farming (crop/animal)	Petty	Salary/paid employment	Casual labor	Craft work	Service	Buying and selling produce	Business	Others
<10000	Baseline	75.2%	43.8%	1.0%	24.8%	1.9%	2.9%	29.5%	5.7%	17.1%
	Final	77.1%	35.4%	8.3%	4.2%	31.2%	27.1%	6.2%	6.2%	22.9%
10000- 100000	Baseline	69.9%	36.6%	10.8%	18.0%	6.6%	6.8%	21.9%	9.3%	21.3%
	Final	73.4%	19.3%	11.6%	8.3%	41.9%	16.6%	10.6%	9.6%	23.4%
100000- 200000	Baseline	57.0%	29.7%	25.3%	5.7%	2.5%	12.0%	20.9%	15.2%	23.4%
	Final	65.7%	18.8%	13.5%	9.7%	36.7%	9.2%	5.3%	16.9%	34.3%
200000- 300000	Baseline	62.0%	25.4%	40.8%	8.5%	4.2%	11.3%	8.5%	15.5%	29.6%
	Final	67.5%	19.5%	12.2%	8.1%	26.8%	8.1%	.8%	29.3%	42.3%
300000- 400000	Baseline	78.6%	11.9%	26.2%	2.4%	.0%	4.8%	21.4%	28.6%	26.2%
	Final	66.7%	16.7%	14.8%	13.0%	38.9%	5.6%	1.9%	31.5%	42.6%
400000- 500000	Baseline	62.1%	27.6%	24.1%	3.4%	3.4%	6.9%	24.1%	24.1%	27.6%
	Final	63.5%	21.2%	11.5%	15.4%	30.8%	3.8%	3.8%	21.2%	40.4%
>500000	Baseline	70.0%	35.0%	25.0%	10.0%	.0%	5.0%	15.0%	30.0%	25.0%
	Final	59.7%	14.5%	19.4%	27.4%	22.6%	4.8%	3.2%	25.8%	45.2%

Sources of household income: Farming (crop and animal) was the major source of income with 62% at baseline and this slightly increased at final evaluation to 62.3%. Petty trade and salaried employment recorded a reduction as sources of income at evaluation. Household engagement in crafts increased from 4.6% at baseline to 35.1% at end line (Table 10). The service sector also registered an increased number of households. These data confirm the national poverty situation where majority of the poor live on agriculture for a livelihood and where the service sector is gaining momentum as a leading source of income especially in urban areas. However, in this context, although many of the respondents are in urban areas, agriculture remains the primary source of income. Therefore, CARE might want to integrate an element of agricultural knowledge in future VSL interventions or link their VSLAs to institutions supporting agricultural initiatives.

Zombo district had more households (81.6%) for households earning more income from agriculture (crop and animal) followed by Soroti with (76.9%) at baseline. However, at end line it was Soroti that took the lead with 83.2% of households earning income from agriculture (animal/crop) followed by Nebbi (79.4%) while Arua had the least percentage in this category with 41.7%. Salary/paid income was better in Zombo (26.3%) and Arua (23.5%) at baseline but at evaluation Zombo and Iganga had superior percentages 21.7% and 12.6% respectively) over other districts. Craft work appreciated in all districts but more so in Nebbi (62.7%) and Maracha (55%) districts where it rose from nothing at baseline (Table 11). These data reflect uncertainties of household earnings, especially from agriculture which seem to be unpredictable. They also reflect the national picture where 67.9% derive their livelihoods from agriculture (UBOS). CARE's future interventions may seek to address this challenge as most of the people depend on agriculture.

Table 10: Sources of income by cohort

Source of income		Baseline 2010/2011	Final 2012
Farming (crop/animal)	Overall	62.0%	62.3%
	Cohort 1	56.3%	66.0%
	Cohort 2	66.7%	59.2%
Petty	Overall	25.9%	13.2%
	Cohort 1	20.5%	15.7%
	Cohort 2	30.4%	11.1%
Salary/paid employment	Overall	11.3%	8.8%
	Cohort 1	8.3%	5.8%
	Cohort 2	13.7%	11.3%
Casual labour	Overall	12.3%	7.6%
	Cohort 1	11.7%	7.6%
	Cohort 2	12.9%	7.5%
Craft work	Overall	4.6%	35.1%
	Cohort 1	2.4%	31.2%
	Cohort 2	6.4%	38.4%
Service	Overall	5.7%	10.9%
	Cohort 1	6.7%	9.7%
	Cohort 2	4.9%	12.0%
Buying and selling produce	Overall	16.2%	5.6%
	Cohort 1	21.1%	4.7%
	Cohort 2	12.2%	6.4%
Business	Overall	12.3%	12.1%
	Cohort 1	20.8%	11.0%
	Cohort 2	5.3%	13.1%
Others	Overall	19.7%	26.8%
	Cohort 1	9.1%	25.1%
	Cohort 2	28.6%	28.2%

There was a positive change in service as an income source across all districts apart from Maracha where it reduced from 3.6% at baseline to 2.5% at end line (Table 11). This is in line with national trends which show that service industry contributes more than any other sector to GDP (Uganda Fiscal Budget Speech 2012).

Table 11: Distribution of household income sources across districts

Income sources		Iganga	Busia	Soroti	Arua	Nebbi	Bugiri	Maracha	Zombo
Farming (crop/animal)	Final 2012	59.3	59.1	83.2	41.7	79.4	53.8	67.5	76.1
	Baseline	53.3	65.2	76.9	50.3	68.1	70.2	60.7	81.6
Petty	Final 2012	20.9	3.0	26.2	11.4	6.9	5.1	27.5	2.2
	Baseline	21.7	10.1	22.3	39.9	51.1	12.8	32.1	44.7
Salary/paid employment	Final 2012	12.6	.0	6.5	8.3	9.8	7.0	2.5	21.7
	Baseline	4.3	10.7	4.1	23.5	8.5	6.4	3.6	26.3
Casual labour	Final 2012	10.4	6.1	5.6	13.6	2.0	7.0	2.5	4.3
	Baseline	10.9	14.0	12.4	12.6	14.9	4.3	14.3	15.8
Craft work	Final 2012	20.3	33.3	14.0	50.0	62.7	26.6	55.0	52.2
	Baseline	3.3	6.2	3.3	5.5	.0	.0	.0%	18.4
Service	Final 2012	10.4	12.1	18.7	6.8	9.8	13.3	2.5	6.5
	Baseline	9.2	7.3	4.1	3.8	.0	4.3	3.6	5.3
Buying and selling produce	Final 2012	4.9	4.5	4.7	3.0	10.8	5.7	10.0	4.3
	Baseline	15.8	1.7	14.0	24.6	34.0	2.1	32.1	36.8
Business	Final 2012	7.7	6.1	5.6	39.4	11.8	5.1	7.5	4.3
	Baseline	6.0	25.3	10.7	7.1	6.4	25.5	17.9	.0
Others	Final 2012	43.4	18.2	13.1	26.5	19.6	24.7	27.5	28.3
	Baseline	32.1	14.6	12.4	21.3	10.6	23.4	3.6	18.4



3.2.2 Household assets

Change in household assets since 2010/11 was analyzed by looking at the changes in asset acquisition, number of assets and possession of various types of assets, Table 12 gives details.

Table 12: Change in asset acquisition by VSL members

Indicators	Baseline 2010/11	Final 2012
% who have purchased at least one asset during the last 12 months ^(***)	45.3%	60.4%
Average amount spent (in SHS) to purchase the assets ^(ns)	125,861.2	184,185.6
% of VSLA members who could sell their assets during the 12 months preceding the survey ^(***)	32.2%	32.7%

*** =significant at 99% (ns) = Not significant

There is a significant percentage increase (33%) in number of VSLA members who bought at least one asset at base and end line i.e 45.3 and 60.4%).Likewise, there was a 42% increase in the amount of money spent at baseline and end line to buy assets. However there was a percentage decrease for those willing to sell (0.6%) at end line. This is because VSLAs are associated with asset protection attribute (CARE, SUSTAIN Report, 2009). The percentage of households that purchased at least one item was established to have registered a significant change with a P value of 0.001, the same to the percentage of VSL members who could sell their assets.

During the project implementation period, the ownership for 23 items increased among households, with the most percentage increase showing in electric iron (65%) followed by dining tables (40%) and mobile phone (18%). These are more in the urban than rural areas. However, the number of households owning 5 items (sheep, goats, poultry, radio, bicycle, landline and lantern) decreased while the number of households owning rabbits remained the same (Table 13).

Table 13: Change in household ownership of given items (2010/11 to 2012)

Assets	% of household who possess at least one asset		Wilcoxon
	Baseline 2010/11	Final 2012	
	Livestock		
Cow***	32.2	33	0.000
Sheep(ns)	11.7	9.7	0.013
Goat ***	66.4	54.9	0.000
Pig (ns)	14.6	17.9	0.223
Poultry***	71.4	69.2	0.000
Rabbit(ns)	1	1	0.020
	Means of transport		
Car (ns)	0.7	1	0.286
Motorcycle***	7.2	10	0.000
Bicycle***	64.3	63.2	0.000
	Electronics		
Radio***	70.7	67.5	0.000
Television***	3.1	5.2	0.001
Mobile phone***	55.9	67.4	0.000
Landline(ns)	1.4	1	0.528
Electric iron***	19.4	32	0.000
Fridge(ns)	0.8	1.3	0.059
Fan(ns)	0.3	1	0.317
Sofa ***	19.3	27.5	0.000
Kettle ***	5.2	20.7	0.001
	Agricultural materials		
Hoe ***	91.8	95.5	0.000
Plough ***	8.3	7.9	0.000
Panga ***	70	74.8	0.000
Irrigation pump(ns)	0.2	1.5	0.655
Mill(ns)	0.2	0.8	0.317
Wheelbarrow ***	4.6	7.5	0.000
Mattress(ns)	89.9	93.2	0.181
Bed ***	81.3	89.4	0.000
Lantern***	57.4	48	0.000
Sewing machine***	5.4	7	0.001
Solar panel(ns)	1.4	4.9	0.102
Ox-cart(ns)	0.3	0.8	0.102
Shovel(ns)	2.5	5.9	0.010
Sickles ***	17.9	19.4	0.000

NB: Wilcoxon non parametric paired test; (***) =significant at 99%, (**) =significant at 95% (*) =significant at 90%, (ns) =not significant

Items that recorded significant change based on Wilcoxon paired non parametric test included; cattle, goats, poultry, motorcycles, bicycles, mobile phones, televisions, beds, mattresses and sewing machines among others (Table 13 above).

The trend in mobile phones is a reflection of the general increase in usage of mobile phones across the country where over 10 million people own mobile phones (UN, 2010). Expansion of assets owned by households is one such indicator of improving lives of VSL members. The study compared the volume of assets owned by VSLA members at baseline and end line and established that overall there has been a slight positive increment in most of the assets. Table 14 shows assets expansion efforts by VSL members.

There was slight increase in the number of assets owned by the beneficiary VSLA members between the time of the baseline survey and impact study. However, an increase was noted for poultry (8.71 to 9.98), rabbits (4.2 to 14.22), pumps (1.50 to 1.69) and sheep (2.67 to 3.14). Items that recorded

significant change based included; cattle, goats, poultry, motorcycles, bicycles, mobile phones, televisions, beds, mattresses and sewing machines (Table 14).

Table 14: Average number of each asset possessed by the households in 2010/11 and 2012

Assets	Baseline 2010/11	Final 2012	Wilcoxon
Livestock			
Cow***	3.55	3.46	.000
Sheep ^(ns)	2.67	3.14	.013
Goat ***	3.82	3.99	.000
Pig ^(ns)	2.42	2.17	.223
Poultry***	8.71	9.98	.000
Rabbit ^(ns)	4.11	14.22	.020
Means of transport			
Car ^(ns)	1.17	1.00	.285
Motorcycle***	1.17	1.06	.000
Bicycle***	1.19	1.27	.000
Electronics			
Radio***	1.15	1.16	.000
Television***	1.11	1.04	.001
Mobile phone***	1.49	1.58	.000
Landline ^(ns)	4.33	4.78	.528
Electric iron***	1.13	1.06	.000
Fridge ^(ns)	1.00	1.10	.059
Fan ^(ns)	1.00	1.00	.317
Sofa ***	1.21	1.27	.000
Kettle ***	1.18	1.26	.001
Agricultural materials			
Hoe ***	3.33	3.51	.000
Plough ***	1.17	1.16	.000
Panga ***	1.21	1.26	.000
Irrigation pump ^(ns)	1.50	1.69	.655
Mill ^(ns)	1.00	1.14	.317
Wheelbarrow ***	1.15	1.06	.000
Mattress ^(ns)	2.30	2.46	.181
Bed ***	1.76	1.89	.000
Lantern***	1.71	1.73	.001
Sewing machine***	1.15	1.41	.001
Solar panel ^(ns)	1.00	1.05	.102
Ox-cart ^(ns)	1.00	1.14	.102
Shovel ^(ns)	1.36	1.51	.010
Sickles ***	1.31	1.31	.001

NB: Wilcoxon non parametric paired test; (***) =significant at 99%, (**) =significant at 95% (*), (ns) =not significant

Investment in productive assets and ownership of locally define basic needs: There were general positive changes in all productive assets (Table 15). In addition to assets, households were assessed for ownership of locally defined welfare indicators; i.e. necessities which they believed a household should not do without. Respondents were asked to say how much they agreed as to having enough of 25 locally defined indicators (household equipment, homestead infrastructure and social and productive resources) that were not included among domestic and agricultural assets. Table 16 gives details. The percentage of members who strongly agreed to having the locally defined basic needs at baseline increased from 12.5% to 23.3% at evaluation time, further asserting results on improvements in income. The indicators with more positive at end line were land (8.5% at baseline to 27%) bed-sheets (1.2% to 20.4%), kitchen (29.7% to 50.5%), treated mosquito nets (15.1% to 26%). Others included income (1.4% to 7.2%), granary/food store (9.2% to 13.4%), decent clothing (7.4% at baseline to 15.5%) and blankets (10.6% to 18.1%)-Table 15

Table 15: Investment in productive assets

Productive assets	Baseline 2010/2011	Final 2012
Agricultural material	25.6%	40.7%
Electronics	5.7%	22.8%
HH furniture	18.4%	38.5%
Jewelry	12.2%	57.9%
Kitchen ware	38.4%	62.0%
Land	9.5%	16.8%
Livestock	46.9%	61.3%
Mobile phone	17.1%	35.4%
Other beddings fishing nets business clothing water container	10.8%	87.7
Transportation	10.8%	29.8%
N=	1018	1585
Overall percentage	19.9%	43.5%

Table 16: Whether household has enough of given necessities

Do you have enough of the following necessities in your HH	Average score for locally defined Poverty Indicators		%age of respondents that strongly agree to have enough of the items	
	Baseline 2010/11	Final 2012	Baseline 2010/2011	Final 2012
Domestic equipment/materials	2.13	1.95	25.3%	40.6%
Bath shelter	2.47	2.38	11.2%	20.4%
Bed sheets	2.46	2.32	11.5%	28.2%
Bed with curtain	2.57	2.50	10.6%	18.1%
Blanket	2.72	2.66	7.0%	13.2%
Cooking oil	2.56	2.48	7.4%	15.5%
Decent clothing	2.29	2.16	16.1%	27.2%
Jerrycan	1.82	1.62	40.4%	59.0%
Pot for water	2.53	2.35	15.1%	26.0%
Treated mosquitoes net	2.33	2.15	11.9%	28.8%
Utensils				
Homestead infrastructure	3.20	3.16	2.7%	6.4%
Drugs	2.57	2.34	18.1%	32.3%
Drying rack	3.41	3.51	3.2%	3.9%
Fence	3.46	3.39	2.9%	5.5%
First Aid kit	2.99	2.97	9.2%	13.4%
Granary food store	2.06	1.78	29.7%	50.5%
Kitchen				
Infrastructure and productive resources	2.66	2.46	8.7%	18.7%
Good roads	3.16	3.01	1.4%	7.2%
Income	2.86	2.47	8.5%	27.0%
Land	2.50	2.13	11.9%	30.3%
Market for produce	2.61	2.41	10.6%	20.5%
Metallic boxes	2.54	2.37	16.5%	29.2%
Resting shade	2.52	2.34	13.7%	22.2%
Security	2.76	2.56	8.5%	18.4%
Seeds				
Total	2.63	2.47	12.5%	23.3%

3.2.3 Change in Quality of housing

This section analyses the type of housing used by VSLA households with the aim of ascertaining the quality of housing. It compares the number of rooms being used, number of persons per room, number of VSLA members who did some improvements and the amount spent on house improvement between the two cohorts.

Table 17: Changes in housing condition from 2009 and 2012

Indicators	Cohort	Baseline	Final	Wilcoxon
Average number of person per room		3.3	3.3	
Average number of rooms used as bedrooms ^(ns)		2.05	2.14	0.122
% of VSLA members who did house improvement ^(ns)	Overall	26%	25.2%	0.912
	Cohort 1	26.3	21.1	
	Cohort 2	25.8	28.7	
Average amount spent for house improvement ^(ns)	Overall	227205.2	193513.7	0.020
	Cohort 1	274113.3	243676.1	
	Cohort 2	191306.1	161714.3	

NB: Wilcoxon non parametric paired test: (***) =significant at 99%, (**) =significant at 95% (*), (ns) =not significant

Overall the average number of persons occupying each bedroom remained the same i.e. 3.3 persons at baseline and end line. The number of rooms used as bedrooms had slightly increased from 2.05 at baseline to 2.14 bedrooms at evaluation. The non-parametric tests showed that the rooms used as bedrooms didn't significantly change between baseline and final with a P value of 0.122.

There was a slight decrease from 26% to 25.2% in the number of VSLA members who said they had made improvements on their houses at end line and equally the average amount of money invested decreased. At baseline 26% of the VSLA members had spent an average of UGX 227205.2, while at end line 25% had spent an average UGX 193521.7 on improving their houses. The general picture shows that households had invested more money in improving houses at baseline than at the end line

Cohort comparison shows that cohort 1 had 26.3% members investing in house improvement at baseline which declined to 21.1% at end line. Equally the amount of money spent by cohort 1 on improving housing decreased from 274113.3/= at baseline to 243676.1/= at end line. For Cohort 2 there was an increase from 25.8% of the households investing in improving their houses to 28.7% at the final evaluation phase. However, the average amount of money invested by cohort 2 decreased from 191306.1/= at baseline to 161714.3/= at final evaluation phase, a reflection on cash flow uncertainty.

Main materials for walls of main house: Households that were using modern burnt bricks appreciated from 4.1% at baseline to 7.7% at final. Both cohorts showed a considerable increase in percentage of households using modern burnt bricks from baseline to final evaluation, the same trend was observed for households using cement blocks from 2.4% at baseline to 7.7% at final evaluation. Households using wood and mud reduced considerably from 42.9% at baseline to 5.9% at evaluation time. There were no significant difference between Cohort 1 and 2. Those traditional burnt bricks increased from 42.2% at baseline to 70.6% at final evaluation (Table 18). These data should be treated with caution because there seem to be a contradiction when comparing the overall picture of those who had made improvement on their houses with details on specific aspects of household improvement for walls (Table 18), roof (Table 19) and materials for floor (Table 20) as explained below. The possible explanation could be that some VSLA member had shifted residence/houses at the time of end line; possibly they had built their own houses.

Table 18: Main materials for walls of main houses

Wall of the main house	Cohort	Baseline 2010/2011	Final 2012	Wilcoxon
Modern burnt face bricks ^(***) (National level: 43.9% (UBOS 2006))	Overall	4.1	7.7	0.001
	Cohort 1	5.1	7.7	
	Cohort 2	3.2	7.7	
Cement blocks ^(ns) National level : 17% (UBOS 2006)	Overall	2.4	7.7	0.074
	Cohort 1	3.0	7.4	
	Cohort 2	1.9	7.9	
Traditional Burnt bricks ^(***) National level : 77% UBOS (2006)	Overall	42.2	70.6	0.001
	Cohort 1	39.7	75.8	
	Cohort 2	44.2	66.2	
Wood/mud ^(***) National level: 49% (UBOS 2006)	Overall	42.9	5.9	0.001
	Cohort 1	46.6	7.2	
	Cohort 2	39.7	4.8	
Tin material ^(ns)	Overall	.3	.3	0.276
	Cohort 1	.5	.6	
	Cohort 2	.2	.0	
Others (grass) ^(***)	Overall	8.0	7.8	0.001
	Cohort 1	5.1	1.4	
	Cohort 2	10.5	13.4	

Non parametric paired test: (***) =significant at 99%, (**) =significant at 95% (*), (ns) =not significant

Principal Material of the Roof of Main House: Respondents reporting having houses with iron sheets increased from 40.2% at baseline to 44.2% at the final evaluation. This was for cohort 2 (40.8% at baseline to 53.9% at final evaluation) but that of cohort 1 reduced from 39.4% to 37.7% at final. Grass thatched houses also reduced from 57.9% at baseline to 55.3% at final evaluation, yet they were more for cohort 1 (58.1% to 61.4%) yet those in Cohort 2 increased from 58.1% to 61.4% (Table 19).

Table 19: Principal materials of the roof of the main house

Response	Unit of Analysis	Baseline (2010-2011)	Final (2012)	Wilcoxon
Tiles/asbestos ^(ns)	Overall	1.7	.5	0.083
	Cohort 1	2.2	.9	
	Cohort 2	1.5	0.0	
Iron sheets ^(***)	Overall	40.2	44.2	0.001
	Cohort 1	39.4	37.7	
	Cohort 2	40.8	53.9	
Grass ^(***)	Overall	57.9	55.3	0.001
	Cohort 1	58.1	61.4	
	Cohort 2	57.7	46.1	

Non parametric paired test; (***) =significant at 99%, (**) =significant at 95% (*), (ns) =not significant

The percentage of VSLA members living in houses with tiles reduced from 1.7% to 0.5%.at baseline and end line respectively. The explanation is not known, however, it could be because some members shifted residence.

Principal material of the floor of main house: The majority of the floors were made of soil. Households with cemented floors decreased in both cohorts, especially cohort 2 (Table 20). VSLA members who lived in houses with soil floors changed from 66% at baseline to 75.7% at end line. This could mean that members were renting at first but later were able to build their own houses.

Table 20: Principal material of the floor of main house

Response	Unit of Analysis	Baseline (2010-2011)	Final (2012)	Wilcoxon
Cement***	Overall	22.6	19.6	0.001
	Cohort 1	22.4	17.7	
	Cohort 2	.2	22.4	
Sand***	Overall	10.0	4.2	0.001
	Cohort 1	12.1	2.7	
	Cohort 2	22.7	6.6	
Soil***	Overall	66.7	75.7	0.001
	Cohort 1	64.0	78.8	
	Cohort 2	8.1	71.1	
Others (ns)	Overall	.7	.5	1.000
	Cohort 1	1.5	.9	
	Cohort 2	69.0	0.0	

Non parametric paired test (***) =significant at 99%, (ns) =not significant

Energy sources for household: VSLA members utilize a variety of lighting facilities such as electricity, battery/ general, candle, wood, paraffin, and others such solar, gas & torches. Use of electricity at end line remained the same as at baseline (1.8%). However the general picture shows improvement in energy sources with less VSLA reporting use of wood, and candle, while more reported use of battery/generator and others (solar, gas and torches) (Table 21)

Table 21: Sources of energy for VSL households per cohort

Source of energy for lighting	Cohort	Baseline 2010/11	Final 2012
Electricity	Overall	1.8%	1.8%
	Cohort 1	1.8%	1.0%
	Cohort 2	1.7%	2.4%
Battery/Generator	Overall	2.9%	3.7%
	Cohort 1	2.6%	2.3%
	Cohort 2	3.2%	4.7%
Candle	Overall	8.5%	3.7%
	Cohort 1	11.4%	4.7%
	Cohort 2	6.1%	2.8%
Wood	Overall	4.4%	2.6%
	Cohort 1	1.0%	2.6%
	Cohort 2	7.1%	2.6%
Paraffin	Overall	90.6%	89.8%
	Cohort 1	86.6%	90.9%
	Cohort 2	93.9%	88.8%
Others (Solar, Gas & Torches)	Overall	2.6%	5.4%
	Cohort 1	2.3%	4.4%
	Cohort 2	2.8%	6.2%

Facilities for disposal of human waste: Households has various types of facilities to dispose of their human waste. Overall majority of households use covered pit latrines and uncovered pit latrines both at baseline and end line. There was an improvement in households using covered pit latrines from 56.4% at baseline phase to 57.4% at final phase. Cohort1 had a slight reduction in number of people using covered pit latrines while Cohort 2 recorded an increment in number of households using covered pit latrines. The percentage of households using uncovered pit latrines reduced from 35.3% at baseline to 32.8% at evaluation phase, suggesting an improvement in sanitation (Table 22).

Table 22: House use of facilities to dispose of human waste

Toilet Facility	Unit of analysis	Baseline 2010/11	Final 2012
Flush toilet National picture: 34.5% (UBOS 2006)	Overall	.8	.7
	Cohort 1	.5	1.0
	Cohort 2	1.1	.4
Covered pit latrine National picture: 69.7% (UBOS 2006)	Overall	56.4	57.4
	Cohort 1	57.2	56.6
	Cohort 2	55.8	58.1
Uncovered pit latrine	Overall	35.3	32.8
	Cohort 1	35.2	32.6
	Cohort 2	35.4	32.9
Composting toilet	Overall	.8	3.9
	Cohort 1	.3	3.8
	Cohort 2	1.3	4.1
No facility/bush	Overall	6.3	5.0
	Cohort 1	6.6	5.8
	Cohort 2	6.0	4.3
Others (use neighbors)	Overall	.3	.2
	Cohort 1	.3	.3
	Cohort 2	.4	.2

Overall, there was a reduction of households using the bush from 6.3% at baseline to 5% at final evaluation.

Table 23: Sharing human waste disposal facility (toilet/latrine) with other households^(ns)

Response	Unit of Analysis	Baseline (2010-2011)	Final (2012)	Wilcoxon
Share facility	Overall	34.9	34.7	0.830
	Cohort 1	28.5	35.0	
	Cohort 2	40.2	34.4	
Do not share	Overall	65.1	65.3	
	Cohort 1	71.5	65.0	
	Cohort 2	59.8	65.6	

Overall 34.9% of the households were sharing toilet facilities at baseline and this slightly reduced to 34.7% at final evaluation. Cohort 1 registered a increment in percentage of households sharing toilet facilities from 28.5% at baseline to 35% at the final evaluation stage while Cohort 2 experienced a reduction in the number of households sharing toilet facilities from 40.2% to 34.4%. Sharing of toilets was common in the urban areas and this could mean that these people lived in rented houses.

3.2.4 Change in Food security

Households which went without food for one day during the last months 6 months prior to the study increased to 29.5% at end line from 20.6% at baseline, meaning that more households are going without food for a day compared to when the project started, possibly due to fact that data was collected during planting time at end line. The average number of meals in last two days prior to the study remained the same (Table 24).

Table 24: Access to food by the household members in 2010/10 and 2011

Indicators	Baseline 2010/11	Final 2012
% of HH without food for 1 day during the last 6 months ^(***)	20.6%	29.5%
Average number of meals in last two days prior to interview ^(***)	3.62	3.61

NB: Wilcoxon non parametric paired test: (***) =significant at 99%, (**) =significant at 95% (*) =significant at 90%, (ns) =not significant

Meals consumed and food quality: Households had fewer special events at final (2.6%) compared with baseline 7.3%. The non parametric paired rank test showed a significant change between special events at baseline and final. On the average, meals served in the households in the two days preceding the special event were generally established to have reduced from 4.39 at baseline to 3.47 at final evaluation. The comparison by cohorts showed cohort 1 with a considerable reduction while cohort 2 somehow appreciated from baseline to final (Table 25). This could be partly be attributed the fact that data was collected during planting time at end line.

Table 25: Special events and meals consumed 2 days prior to special event

	Cohort	Baseline 2011/2012	Final evaluation 2012	Wilcoxon
%age households with special events in the last 2 days ***	Overall	7.3	2.6	0.001
	Cohort 1	10.1	1.8	
	Cohort 2	4.9	3.2	
Average meals served in households in two days preceding to special event (ns)	Overall	4.39	3.47	1.000
	Cohort 1	5.15	1.83	
	Cohort 2	2.95	4.36	
% age of households that spent a day without food at all***	Overall	20.6	29.5	0.001
	Cohort 1	23.4	30.7	
	Cohort 2	18.1	28.5	

NB: Non parametric paired test: (***) =significant at 99%, (*), (ns) =not significant

At baseline most of the households with special events had consumed food mainly comprising cereals, beans, meat and some vegetables the same development at the final evaluation, where majority of the households had consumed cereals, meat, beans and vegetables (Table 26).

Table 26: Table showing Composition of meals served on the special event

Composition	Baseline 2010/2011	Final 2012
Milk	29.1	7.7
Cereals	80.6	95.2
Meat	74.6	89.5
Vegetables	51.7	72.2
Fruits	12.7	26.7
Beans	83.3	100.0
Groundnuts	39.7	52.9

Table 27 shows that more household reported having consumed milk at end line 19.5% than baseline 18.4%. No major change between rural dwellers and urban dwellers in regard to milk consumption. For cereal consumption, there was an increment from 92.9% to 94.5% for baseline and final evaluation respectively. The percentage of households in urban areas appreciated in consumption of cereals (92.6% to 90.3%) but the change was not significant. Consumption of meat improved at final from 44.2% to 48%, but for rural areas the percentage of households consuming meat dropped from 40.8% to 30.3% at evaluation. For vegetables there was a notable improvement in its consumption from baseline to final with the overall picture showing an increment from 76.8% at baseline to 82.3% at final (Table 27).

Table 27: Composition of meals served in the household in previous 2 days

Composition		Baseline 2010/2011	Final 2012
Milk(ns)	Overall	18.4	19.5
	Cohort 1	18.9	21.5
	Cohort 2	18.0	17.8
	Urban	14.9	14.9
	Rural	24.7	27.3
Cereals(ns)	Overall	92.9	94.5
	Cohort 1	90.6	95.4
	Cohort 2	94.9	93.8
	Urban	93.1	96.8
	Rural	92.6	90.3
Meat(ns)	Overall	44.2	48.0
	Cohort 1	46.5	45.0
	Cohort 2	42.3	50.6
	Urban	46.1	57.6
	Rural	40.8	30.3
Vegetables(ns)	Overall	76.8	82.3
	Cohort 1	80.2	81.7
	Cohort 2	74.0	82.7
	Urban	79.9	85.1
	Rural	71.4	77.0
Fruits***	Overall	22.3	31.6
	Cohort 1	20.1	31.1
	Cohort 2	24.1	32.0
	Urban	19.0	35.1
	Rural	28.1	25.4
Beans(ns)	Overall	79.9	90.5
	Cohort 1	82.7	90.2
	Cohort 2	77.5	90.7
	Urban	85.2	89.7
	Rural	70.4	91.9
Ground nuts(ns)	Overall	47.4	38.9
	Cohort 1	44.6	38.8
	Cohort 2	49.7	39.1
	Urban	52.9	49.2
	Rural	37.6	20.6

NB: Non parametric paired test (***) =significant at 99%, (ns) =not significant

Other compositions of meals were beans and ground nuts. The percentage of those consuming beans increased from 79.9% at baseline to 90.5% while g/nuts consumption reduced from 47.4% to 38.9%. These trends were observed for both cohorts irrespective of urban or rural location.

There was a reduction in households that reported to have produced enough to cover the household food needs from 53.6% at baseline to 48.5% at final evaluation. The non parametric ranked test also showed no significant change from baseline to final with a p value of 0.044 and a Z value of -2.015 using a 2-tailed test (Table 28). Uganda's food security is likely to remain unstable and the country's agriculture is largely rain fed. Interventions on food security out to reflect this challenge and support communities to add value to their produce so it meets food needs all the time.

Table 28: Table showing household harvests

	Cohort	Baseline 2010/11	Final 2012
%age households that produced enough during the most recent harvest to cover the HH food needs. ^(ns)	Overall	53.6	48.5
	Cohort 1	55.8	45.4
	Cohort 2	51.7	51.2
% of respondents saying the year was a good one in terms of harvest. ^(ns)	Overall	25.0	28.9
	Cohort 1	27.3	27.0
	Cohort 2	23.0	30.4
Average months the most recent cereal production covered the food needs for your HH members ^(ns)	Overall	3.92	3.66
	Cohort 1	3.81	3.61
	Cohort 2	4.00	3.71

NB: Non parametric paired test, (ns) =not significant

Households saying that the year was good in terms of harvest increased from 25% at baseline to 28.9% at evaluation. Equally cohort 2 registered an increase while cohort 1 registered a slight decrease from 27.3% to 27% at final evaluation. There was a reduction of household that reported to have produced enough food to carry them to the next season from 3.92 months at baseline to 3.66 months at final evaluation but this change is not significant (Table 28).

3.2.5 Change in Children's rights

Primary & Secondary) school enrollment at household level: The percentage of school going children attending school shows no significant change in number of children attending school at final evaluation from baseline survey with 93.1% from 93.4%. Comparison across years 5-18 years shows an increase in male children attending school (93.8%) at baseline to 94.7% at final while that of females reduced (93% at baseline to 91.5%). An indication that despite the universal primary and secondary education enrolment is not yet 100% and also girl children are likely not to enroll in schools or drop out of school compared to the male child (Table 29). Girls tend to drop out early due to cultural and religious biases towards early marriage for girls and economic poverty. But overall the picture for BOC is better, as nationally primary enrolment under the Universal Primary Education program is 81% for both females and males.

Table 29: Table showing percentage of school going children (5-18 Years) attending school

Sex		Attending school	Not attending school	Total
Male	Baseline	93.8%	6.1%	1184
	Evaluation	94.7%	5.3%	1329
Female	Baseline	93.0%	7.0%	1218
	Evaluation	91.5%	8.5%	1305
Total	Baseline	93.4%	6.5%	2402
	Evaluation	93.1%	6.9%	2634

Children's involvements in income Generating Activities (IGAs): Overall 22.4% of the households had children working in IGAs at baseline and this increased to 30.4% at end line. An increment of households with children participating in IGAs from 25.8% to 31% was reported

among cohort 1, while Cohort 2 registered an increment from 19.3% at baseline to 29.9% at evaluation. There was no change in the average number of children engaged in IGAs which was 2. Children were engaged in IGA work for an average of 3.83 hours per day at baseline and this reduced to 3.29 hours at final. Cohort 1 data had at an average of 3.54 hours at baseline which reduced to 3.48 hours at end line while Cohort 2 reduced from 4.2 hours at baseline to 3.15 hours at end line (Table 30). These data suggest an improved situation where children learn to appreciate the importance of work in their lives, while also enjoying their rights such as education as shown by household social demographic characteristics (Section 3.1.2).

Table 30: Children below age 18 currently working in these IGAs

	Cohort	Baseline 2010/11	Final 2012	Wilcoxon
Children below 18 years working in IGA ^(ns)	Overall	22.4	30.4	0.031
	Cohort 1	25.8	31.0	
	Cohort 2	19.3	29.9	
Average Children below 18 years working in IGAs ^(ns)	Overall	2.07	2.07	0.776
	Cohort 1	1.98	2.26	
	Cohort 2	2.17	1.91	
Average hours children collectively work ^(ns)	Overall	3.83	3.29	0.209
	Cohort 1	3.54	3.48	
	Cohort 2	4.20	3.15	

Non parametric paired test; (ns) =not significant

Participation in IGAs: Majority of the households had children engaged in selling products. At baseline 67.2% were engaged in selling products and this increased to 69.2% at evaluation. Cohort 1 had 69.6% of households with children selling products at baseline and this reduced to 67.6% and for Cohort 2 it increased from 64.3% at baseline to 70.3%. Equally there was an increment in percentage of households with children helping in collecting inputs and materials from 24.8% at baseline to 25.2% at final evaluation, with cohort 1 increase by 3.3% while that of cohort 2 reduced by 3.3% from baseline to final (Table 31).

Table 31: Table showing Activities Children engage in while working with IGAs

		Baseline 2010/11	Final 2012
Selling products	Overall	67.2	69.2%
	Cohort 1	69.6	67.6%
	Cohort 2	64.3	70.3%
Helping in collecting the input material	Overall	24.8	25.2%
	Cohort 1	21.7	25.0%
	Cohort 2	28.6	25.3%
Helping with design/confection	Overall	4.8	1.9%
	Cohort 1	2.9	1.5%
	Cohort 2	7.1	2.2%
Others	Overall	3.2	25.2%
	Cohort 1	5.8	26.5%
	Cohort 2	0.0	24.2%

BoC VSLA member invested in their children's education: Results show statistically significant changes in percentage of VSLA members investing in their children education which increased from

69.9 at baseline to 79% at end line. Similar results showed for amount of money spent on education. However, in the case of net primary enrollment for children aged 5-12 years reduced from 97.8% to 93.5% at end line, but increased for net secondary enrollment increased from 90.4% to 94.6%. These changes could be a result of children leaving primary education to join secondary level.

Table 32: Investment into education and enrolment rate for primary and secondary education

	Baseline 2010/11	Final 2012
% of VSLA members who have invested in their children education(***)	69.9%	79.0%
Average amount spent into education (in UGX) (***)	355540.33	356928.20
Net Primary education enrolment rate: % of children 5-12 years attending primary education	97.8%	93.8%
Net Secondary education enrolment rate:% of children 12-18 years attending secondary education	90.4%	94.6%

NB: Wilcoxon non parametric paired test: (***) =significant at 99%, (**) =significant at 95% (*) =significant at 90%, (ns) =not significant

3.2.6 Access to health care

Statistically, there were significant changes in VSLA members (and their household's access to health care). VSLA members who met medical expenses for their household increased from 80.1% at baseline to 89.1% at end line. Also, there were significant changes in amount of money spent at baseline and end line on medical needs by VSLA members (Table 33).

Table 33: Expenditure into health care by the VSL member in 2009 and 2011

Indicators	Baseline 2010/2011	Final 2012	Wilcoxon
% VSLA members who met medical expenses for their HH(***)	80.1%	89.1%	0.001
Average amount in of medical expenses done by the VSLA members ***	86941.66	87881.09	0.001

NB: Wilcoxon non parametric paired test: (***) =significant at 99%, (**) =significant at 95% (*) =significant at 90%, (ns) =not significant

3.2.7 Expenditure on selected household needs by sex

Expenditure on given areas/items among males and females show that VSLA members increased their ability to purchase or contribute to given aspects of household welfare (purchase of assets, education (except for males in cohort 1), medical, special events, and clothing (except for cohort 2 females) for both cohort 1 and cohort 2. However, the number of females who spent on education at end line increased more than that of males; the opposite is true of expenditure on health (Annex 1). These findings support earlier data on improvements in household income associated with participating in BOC.

3.3. Economic Situation of VSL members

3.3.1 Change in Access to Savings and Credit

Saving and Change in saving mechanism used: Respondents were asked “in general in what ways do you save your money?” Those mentioning VSLAs increased from 75.7% to 89.5%, those savings in houses reduced from 55.8% to 29.6%, while those saving in ROSCAs reduced from 3.1% at 1.5% at final evaluation. Those saving in banks increased from 9.3% at baseline to 9.9% at evaluation (Table 34). Although those saving in VSLA at baseline appear high, (75.7%) this is because the baseline study was done when the groups had just started to save, after formation. The increases still show the dominance of VSLAs over all other saving mechanisms.

Table 34: Saving Mechanisms Uses By VSLA members

Form of saving	Baseline 2010/2011			Final 2012		
	Overall	Cohort 1	Cohort 2	Overall	Cohort 1	Cohort 2
Bank	9.3%	8.9%	9.6%	9.9%	10.6%	9.4%
MFI	.5%	.3%	.6%	1.3%	1.8%	.9%
Cooperatives	1.5%	2.3%	.9%	1.6%	1.5%	1.7%
VSLA	75.7%	78.3%	73.4%	89.5%	87.2%	91.5%
ROSCA	3.1%	2.8%	3.4%	1.5%	2.0%	1.1%
Saving clubs	.3%	.8%		1.0%	1.3%	.9%
Private saving collector	.8%	1.0%	.6%	1.5%	1.0%	1.9%
In the house	55.8%	40.3%	68.7%	29.6%	28.6%	30.3%
Keep with relatives	.7%	.8%	.6%	.6%	.5%	.6%
Keep with local traders	.7%	.5%	.9%	.2%	.5%	0.0
Accumulating property	4.1%	3.6%	4.5%	8.4%	6.5%	10.0%
Others	1.0%	2.0%	.2%	5.0%	3.3%	6.4%

Access to and use of loans: There were significant changes in percentage of VSL members who had accessed loan, the average number of loans secured and average amount of loans taken Overall, there was a 62% increase among VSLA members accessing loans at baseline and end line. Within the first cohort this percent increase was 69%, while for cohort 2 it was 57% (Table 35).

Table 35: Access to loan by the VSL members in 2010/11 and 2012

Indicators		Baseline 2010/11	Final 2012
% of VSLA members who have accessed a loan during the last 12 months***	Overall	54.7	88.8 (62% increase)
	Cohort I	51.9	87.5 (69% increase)
	Cohort II	57.1	89.9(57% increase)
Average number of loan taken***	Overall	1.51	2.68 (77% increase)
	Cohort I	1.50	2.52 (68% increase)
	Cohort II	1.52	2.81(85% increase)
Average amount of loan taken in UGX***	Overall	UGX 98321.64 (US\$ 39)	UGX 136669.11/US\$ 54.6 (39% increase)
	Cohort I	UGX 88478.71 (US\$ 35)	137088.35/US\$ 55 (54.8% increase)
	Cohort II	UGX 105874.38/US\$42.3	136362.31/US\$54.5 (29% increase)

NB: Wilcoxon non parametric paired test; (***) =significant at 99%

On average, the number of loans contracted by the VSLA members increased from 2 at the time of baseline to 3 during evaluation. Being in a VSLA strongly increased members' access to loans; this is not surprising as VSLA loans are generally paid over a short time (usually three months), allowing a members to borrow several times during a year.

Source of loans for VLSA members: Overall, the main source of loans for VSLA members at baseline and end line was informal groups/VSLAs, with a change from 86.6 to 98.7 (14% increase). For cohort 1 this increase was 25% (from 78.9% and 98.4) while for cohort 2 it was 7% (from 92.6% to 98.8%). Noticeably grocery associations ceased to be source of loans by end line, while all other sources (Bank, MFI, ROSCA, relative, and burial and farmers associations) also showed a reducing number of people obtaining loans from them with well over 75% decreases in all other sources (Table 37). Those accessing loans from formal institutions are probably salaried employees with formal institutions, e.g teachers.

Table 36: Table showing sources of loans to VSL members

Source Of Loan	Cohort	Baseline (2010/11)	Final 2012
Bank	Overall	3.9	0.4 (89% decrease)
	Cohort I	4.9	0.3
	Cohort II	3.2	0.5
MFI	Overall	1.5	0.2 (87% decrease)
	Cohort I	1.3	0.1
	Cohort II	1.7	0.2
Relative/family	Overall	2.3	0.5 (78% decrease)
	Cohort I	3.9	0.7
	Cohort II	1.0	0.4
ROSCA	Overall	2.0	0.1(95% decrease)
	Cohort I	3.2	0.3
	Cohort II	1.0	0.0
Burial association	Overall	0.6	0.1 (83% decrease)
	Cohort I	0.6	0.1
	Cohort II	0.5	0.1
Farmer Association	Overall	0.3	0.1(76% decrease)
	Cohort I	0.6	0.1
	Cohort II	0	0.0
Grocery association	Overall	2.8	0.0 (100% decrease)
	Cohort I	6.5	0.0
	Cohort II	0	0.0
Informal Groups / VSLA	Overall	86.6	98.7 (4% increase)
	Cohort I	78.9	98.4 (25% increase)
	Cohort II	92.6	98.8 (7% increase)

Main use of loans among VSLA members: The use of loans appears to be more on IGA/Business (61.9%) at baseline, though this figure reduced to 47.2% at end line (a 24% decrease), the percent of VSLA members using loans on household expenditure and social expenses also reduced (Table 38).

Table 37: Main use of the loan taken by the VSL members in 2010/11 and 2012:

Domain of main loan utilization	% of VSLA members	
	Baseline	Final 2012
IGA/Business	61.9	47.2
Household equipments/assets	1.8	0.9
Social expenses	0.4	0.3
Agricultural inputs	6.5	11.1
School fees	11.4	18.4
Food	2.0	3.0
Livestock	1.7	4.4
Housing	1.3	2.2
Clothes	0.6	0.8
Buy land	0.4	0.7
Health expenditure	6.3	6.3
Other	5.8	4.6
Total	100.0	100.0

The reduction of VSLA members using the loans for business could be due to other pressing needs such as school fees and food (Table 38). There was also an increase VLSA members reporting loan usage for agricultural input (71% increase), livestock, housing, clothing and land while there was no for change in health expenditure. High inflation and general increase in the cost of living in the country could also have led to higher cost of basic needs, thus affecting use of loans for IGAs.

3.3.2 BoC VSLA members engaged in IGAs and associated changes

VSLA members engaged in a variety of IGAs. Selling vegetables increased from 4% at baseline to 6.8% at end line, selling cooked food increased from 5.1% to 8.5% while shop/kiosks increased from 5.3% to 7%. Equally results revealed that local brewing appreciated from 7.2% to 9.9% while selling juice and fruits increased from 0.4% to 1.1%. IGAs that registered a decrement included live-stocking from 4.8% to 4.1%, tailoring from 2.8% to 1.7%, fishing from 1.1% to 0.6% while other IGAs like butcherly, brick making, boda-boda etc registered a drop from 32.3% to 19.8% (Table 39).

There was a significant change in the percentage of VSLA members that had increased business funding over the last one year from 52.7% at base to 67.5% at final evaluation (Table 39). Cohort 1 increased from 54.7% to 72.1% whereas Cohort 2 increased from 50.9% to 61.1%. However, those who reported profits on their IGAs reduced from 95.7% to 94.7% at final evaluation. A slight increment for cohort 1 profitable businesses was registered but the opposite was true for cohort 2 (Table 39). Cohort 1 groups had stayed longer in their groups compared to cohort 2 and this could possibly be the reason why cohort 1 did better on these indicators.

Table 38: Income generating activities for VSLA members

	Baseline 2010/2011	Final 2012
Selling vegetable	4.0	6.8
Selling fish	10.9	13.1
Local brewing	7.2	9.9
Selling cooked food	5.1	8.5
Selling cereals	17.6	17.9
Shop/kiosk	5.3	7.0
Hiring bicycles	.1	0.3
Tree nursery	.1	0.3
Public phone	0	0.3
Horticulture	1.1	1.2
Selling vegetables	.8	1.1
Selling juice and fruits	.4	1.1
Selling dried vegetables	.1	0.8
Milk vendor	.7	.6
Market stalls	2.9	2.7
Live stocking	4.8	4.1
Fishing	1.1	.6
Tailoring	2.8	1.7
Sewing	.4	0.5
Making/selling ornaments	.7	0.5
Hair dressing	1.1	1.1
Others (butcherly, brick making, boda-boda etc.)	32.3	19.8
Total	100.0	100.0

Table 39: VSLA members who increased their business funding & realized profits

	Cohort	Baseline 2010/2011	Final 2012
% age households reporting to have increased their business funding over the last 12 months (***)	Overall	52.7	67.5
	Cohort 1	54.7	72.1
	Cohort 2	50.9	61.1
% age of households that realized profit during the last 12 months (ns)	Overall	95.7	94.9
	Cohort 1	94.2	94.7
	Cohort 2	97.1	95.0

(***) = Significant at 99% (ns) = not significant

3.3.3 Business skills development

BoC implementation specifically addressed business skills building. There was significant change in %age of VSLA members with at least one skill strengthened (68.3% to 76.3%). There was a significant skills improvement in thirteen areas (Table 40), especially pricing and & seeling, determining profitability of IGAs, handling profits, among others.

Table 40: Change in business skills among VSLA members with business

Type of skill/knowledge	Baseline 2010/2011N=8496	Final 2012 N=9802	Wilcoxon
Pricing and selling the products from the IGAs ***	89.6%	93.4%	.000
Determining whether IGA is profitable or not ***	90.0%	93.0%	.000
Handling the profits ***	87.0%	91.9%	.000
Controlling Credits to customers ***	84.4%	84.4%	.001
When to inject new capital into the business ***	70.0%	78.8%	.000
Understanding the Competition in the market ***	61.4%	75.0%	.000
Preparing an operational plan ***	58.4%	70.8%	.000
Determining the expenditure categories/cost centers incurred when running IGA ***	56.2%	69.4%	.000
Planning to Diversify IGA ***	52.5%	63.9%	.000
Keeping different categories of funds separately ***	53.3%	62.4%	.000
Planning the Closure of the IGA ***	51.9%	60.6%	.000
Categorizing different segments of the market ***	42.9%	54.0%	.000
Simple Book keeping of IGA records ***	42.2%	48.6%	.000
Determining income from IGA ^(ns)	78.8%	89.7%	.114
Planning to expand the IGA ^(ns)	68.4%	75.9%	.073
Handling the losses ^(ns)	72.1%	76.7%	.243
Looking for Market for the products from the IGA ^(ns)	75.0%	82.1%	.051
Looking for capital to start the IGA ^(ns)	73.1%	84.1%	.203
Manage the HH budget in relation to the IGA ^(ns)	71.1%	80.3%	.045
Allocating duties and responsibilities in running the IGA ^(ns)	71.7%	74.3%	.105
Allocating appropriate time to IGA in relation to other activities ^(ns)	75.6%	85.4%	.354
Balancing income & expenditure ^(ns)	73.7%	75.9%	.513
Selecting a Suitable IGA ^(ns)	77.0%	90.5%	.299
General ***	68.3%	76.3%	.000

Although there were changes in other areas (e.g.a allocating duties and responsibilities in running the IGA; allocating appropriate time to the IGA in relation to other activities), these changes were not significant (Table 40).

3.4 Changes in Level of Women Empowerment

3.4.1 Women's estimation of their self esteem

At baseline 33.2% of the women fully agreed to always solve their problems on their own and this appreciated to 41.9% at evaluation phase. Equally on influencing their spouses (husbands) decisions the percentage of women that would fully agree increased from 29.8% to 39.7%, just as influencing important decisions in the community which improved from 22% to 28% at end line (Table 41). While these changes are not statistically significant, the improvement signal a positive trend where participation in improves self-esteem, especially given the project short term implementation period.

Table 41: Women’s estimation of their self-esteem

Self esteem aspects	Average Score		Percentage of who fully agree	
	Baseline	End line	Baseline	End line
I can always resolve problem on my own ^(ns)	2.96	3.05	33.2	41.9
If somebody opposes me, usually I can find a way to get what I want ^(ns)	2.90	3.02	25.5	33.1
I always find some way to deal with problem that confront me ^(ns)	3.02	3.17	29.0	39.7
I can influence my husband’s decision ^(ns)	3.04	3.03	29.8	39.7
I can take action to improve my life ^(ns)	3.18	3.32	36.2	48.1
I can influence important decision in my community ^(ns)	2.77	2.74	22.0	28.0
I am confident to speak in community meeting ^(ns)	2.96	2.97	34.9	41.3

NB: The maximum score is 4 “I strongly agree” and the minimum score is 1 which mean “I strongly disagree”. NB: Wilcoxon Signed Rank Test. (ns) = not significant

3.4.2 Women perception of their social position

Overall, the project positively contributed to improvements in women’s social position. Two variables recorded a significant positive change between baseline and evaluation i.e. “my spouse value my role in the household” and “other members of the extended family show me respect”. More women at end line (63.3%) fully agreed that their spouse valued their role in the household compare to 47% at baseline. Likewise, more women at end line at end line 52% fully agreed that other members of the extended family showed them respect compared to 35.6% at baseline, (Table 42).

Table 42: Women perception of their social position

	Average Score		Percentage of who fully agree	
	Baseline	Final	Baseline	Final
My spouse shows me respect(ns)	3.43	3.52	53.0	65.6
My spouse value my role in the household***	3.37	3.52	47.7	63.3
Other members of the extended family show me respect**	3.22	3.39	35.6	52.0
People in the community ask and value my opinion(ns)	2.99	3.10	26.9	37.2
People in the community respect me (**)	3.19	3.39	35.4	49.2

NB: The maximum score is 4 which means “I strongly agree” and the minimum score is 1 which mean “I strongly disagree” NB: Wilcoxon Signed Rank Test. (**) = significant at 95 percent, (***) = significant at 90 percent (ns) = not significant

3.4.3 Women’s contribution to household expenses

Married women were asked to indicate their level of contribution to household expenses. The results show that women’s ratings on their contribution to all household financial expenses have improved at final over the baseline ratings. Significant contributions were mainly in health expenses. Equally Women’s financial contribution to housing, household equipment and food appreciated (Table 43). Though the changes were not statistically significant, they are important in the short term period and probably a long term project would see highly significant change.

Table 43: Women Contribution to Household Expenses

Item of expenditure	Average Score		Percentage with high contribution to HH expenses		Wilcoxon
	Baseline	Final	Baseline	Final	
Children's schooling ^(ns)	2.72	2.89	23.7	37.2	.012
Health*	2.84	3.00	26.9	37.5	.001
Food ^(ns)	3.09	3.17	36.2	45.1	.000
Housing ^(ns)	2.44	2.66	18.3	31.1	.146
Equipment ^(ns)	2.77	2.90	27.9	35.3	.149

NB: Wilcoxon Signed Rank Test (*) = significant at 99 percent, (ns) = not significant

3.4.4 Women's contribution of Household Decision Making

Women were asked to rank their contributions to household decision making on five key dimensions: children's schooling, health, food, housing and household equipment for domestic and productive goods. Women's contribution has increased in all these areas e.g. their contribution to children schooling increased from 28.2% to 43.8%, contribution to housing appreciated from 25.3% to 37.6%, and that of health improved from 36.2% to 48.1%. However, the increment was not statistically significant (Table 44)

Table 44: Women Contribution to decision making at the household level

Item of decision	Average Score		Percentage with high contribution to HH decision making		Wilcoxon
	Baseline	Final	Baseline	Final	
Children's schooling ^(ns)	2.86	3.09	28.2	43.8	.010
Health ^(***)	3.09	3.25	36.2	48.1	.001
Food ^(***)	3.35	3.42	51.3	57.5	.001
Housing ^(ns)	2.70	2.85	25.3	37.6	.032
Equipment ^(ns)	2.97	3.06	32.2	42.0	.451

NB: Wilcoxon Signed Rank Test; (ns) = not significant (***) = significant at 99%

3.4.5 Women's Decision making on Household Expenses

At baseline 48.3% of the households' decisions were shared between husband and wife, followed by the husbands only (31.9%) while only 17.2% of the households had decisions taken by women (wives). The final evaluation established a slight change whereby collective decisions were reported in 49% of the households, decisions taken by only husbands reduced from 31.9% to 25.6% while those only taken by women (self) increased from 17.2% to 23.3% (Table 45) This change may be explained by the fact that as women become more engaged in IGAs using loans from their VSLAs, they are likely to take a major role in deciding where funds are spent.

Table 45: Decision making on household expenses

% age of women deciding on financial resource allocation	Cohort	Baseline (2010/2011)	Final (2012)
Myself (Woman)	Overall	17.2	23.3
	Cohort 1	17.5	20.0
	Cohort 2	16.9	26.1
Husband (spouse)	Overall	31.9	25.6
	Cohort 1	40.9	28.1
	Cohort 2	23.3	23.6
Both myself and spouse	Overall	48.3	49.0
	Cohort 1	39.3	49.6
	Cohort 2	56.8	48.4
Others (Children)	Overall	2.7	2.1
	Cohort 1	2.4	2.3
	Cohort 2	3.0	1.9

3.4.6 Women's control over household resources

Women's control over financial resources increased from 65.5% at baseline to 70% at final evaluation. For Cohort 1, the increment was from 56.5% at baseline to 70.5% at final evaluation whereas for cohort 2 this fell from 73.2% at baseline to 69.7% at evaluation. On women's ability to freely use the production from the field, findings show a rise from 56.4% at baseline to 66.3% at evaluation. For cohort 1, the increment was from 57.9% at baseline to 67.1% at evaluation, while for cohort 2 it rose from 60.2% to 65.7%. Women were also asked on whether they could sale freely the production from the field and results revealed that overall there has been a slight increment from 41.2% at baseline to 44.2% at final evaluation. Cohort 1 registered a drop from 40% to 38.1% while Cohort 2 appreciated from 42.3% to 49.3% (Table 46). However, these changes were not statistically significant.

Table 46: Women's control over HH resources

Indicators		Baseline 2010/11	Final 2012
% of women with control over financial resources ^(ns) .	General	65.5	70
	Cohort 1	56.5	70.5
	Cohort 2	73.2	69.7
% of women use freely (home consumption) the production from the field ^(ns) .	General	56.4	66.3
	Cohort 1	57.9	67.1
	Cohort 2	60.2	65.7
% of women use freely sale the production from the field ^(ns) .	General	41.2	44.2
	Cohort 1	40	38.1
	Cohort 2	42.3	49.3

NB: Wilcoxon Signed Rank Test: ^(ns) Not significant

3.4.7 Women's experience of gender based violence and perception on inheritance

Overall the percentage of women experiencing gender based violence reduced from 22.3% at baseline to 17.9% at final evaluation. The comparison by cohorts showed a reduction in gender based violence for both cohorts, though this reduction was not statistically significant.

Table 47: Women’s experience of gender based violence

		Baseline	Final
% of women experiencing violence ^(ns)	Overall	22.3	17.9
	Cohort 1	23.3	18.1
	Cohort 2	20.2	17.7

NB: Wilcoxon Signed Rank Test (ns) = significant at 99 percent

The percentage of women believed they could inherit after the death of their spouses was 63.2% at baseline but increased to 75.1% at the evaluation phase.

CHAPTER 4: DISCUSSION OF THE RESULTS

The Banking of Change (BoC) Project focuses on improving the economic and social status of the poor, who are mobilized and served under village loans and savings methodology, a tested model of improving financial services access among the poor. Findings from this quantitative study have clearly demonstrated positive results on the targeted indicators for the BoC project, at the individual as well as household levels. VSLA members reported improvements in areas of access to savings, loans (amount, & number), IGAs, directly targeted by the project, as well as those on household indicators (assets acquisition), investment in IGAs (though not significantly profitable), improvements in housing conditions and women's empowerment. Improvements in business could have contributed to increased household income, which in turn may have led to the positive changes on members' contribution to school fees, quality of food for the household, and ownership of locally defined basic necessities. Still these positive indicators do not answer the question, what are these wider impacts?

Apart from the individual members in groups, such projects are expected to have indirect or wider outcomes for both household members and the wider community (Khalily 2004 and Zohir and Matin 2004) or spillover effects (Khandker 1998). Thus such impacts do not just influence the lives of individuals and their immediate families and communities but the larger society, and therefore have potential to provide insights into complex outcomes of such an intervention. A study which seeks to compare key indicators at baseline and end line such as this one, does not address such concerns, but a deeper interaction with communities benefiting from the intervention can offer such insights. Such interaction should aim to ask beneficiaries to articulate a Theory of Change retrospectively, to identify key points of change and their wider implications to the society, economically or otherwise. This will help CARE to integrate such indicators in future designs.

It would be interesting to explore for example, the social impacts resulting from tangible indicators of investment assets, increased income, improved savings, more funding to IGAs, expenditure on education, health, quality of food, among other positive indicators assessed. Gender relations are influenced by poverty reduction interventions, and while this study shows positive changes on women's social position in the household and community, the effects on this changes merit further inquiry. Some studies have found that economic empowerment of women has challenges within the household, such as insecurity of men leading to domestic violence and shifting financial responsibility in the household to women (CBR, 2012). What are the effects of women's felt improvements in self esteem, joint decision making, social perception, contribution to household expenditure, decision making and control over household resources? Such change will no doubt have wider implications and these need to be studied to improve CARE's appreciation of the impact of the VSL methodology in Uganda.

CHAPTER 5: CONCLUSION AND IMPLICATION FOR THE QUALITATIVE ASPECT OF THE STUDY

This quantitative survey report falls within in the broader BoC impact survey whose main purpose was to collect data on selected VSL groups and members that participated in the baseline study that was conducted in 2010 and 2011. The other aspects of BoC impact were to conduct a qualitative survey to complement the quantitative survey and document lessons to benefit other CARE Uganda and implementing BoC countries conducting similar exercises.

Eight hundred seventy (870) people were interviewed out of a possible 1061. Two VSL groups disintegrated, while members of one VSL group joined other groups. It appears members who left groups were mainly in urban areas, especially the cross border areas in West Nile and Busia, though some reasons such as job related and business transfer, change in marital status and family conflicts were also cited; there could also be other reasons, which need to be explored in the qualitative phase.

The findings suggest that BoC contributed to improvements in all aspects of the key indicators in varying degrees. For instance VSLA members and their household conditions of living, though in several cases these were not statistically significant. Investments improved as well as income, so did access to health, education and women's self esteem and perceptions on social status.

The assumption at the time of the baseline was that all groups had members who were new to the VSL methodology. Yet, the findings on economic situations (member's access to savings, and loans) showed the opposite. Some members said they had previously saved in VSLAs and also got some loans. This is because, at baseline some of the groups had started to meet and conduct business, and as such the average amount of loans and number was few compared to the end line. However, this required a change in methodology, to deliberately seek out those who were new to VSL methodology. This required more resources. Future interventions should bear this in mind.

While the volume and percentage of VSLA members' IGAs increased, profits on businesses did not. Yet indicators on livelihood conditions, access to health, investments in productive assets, education, food quality, showed positive changes at end line from the status at baseline. This requires further follow up in the qualitative aspect to explore the factors that explain these.

In addition, the quantitative survey was limiting it exploring the effects on the positive changes on key BoC indicators beyond the individual VSLA members and their household. There is need therefore, to explore and document these impacts, and use them in future design of related interventions.

VSL as a methodology appeals to people of various age groups and varying social economic status. While, it was meant for the poor, the non poor were found to be members (cross country traders (especially in west Nile), some of who never even meet but send their savings to their office bearers. Given these observations, it is worth exploring the implications of such diverse characteristics of members and likely influences on the actual target of VSL, in this case the poor.

Urban/cross boarder VSLAs: Though banks tend to be well spread in urban areas (Chemonics International Inc 2007; The Steadman Group 2007), people in the informal sector in urban locations have difficulty accessing formal banking services. One of the new aspects BoC introduced to the VSL methodology was working in the urban areas, in West Nile and Bugiri/Busia. An observation from this study that people in urban tend to be mobile, many operate businesses that require them to be mobile; their socio-economic conditions are quite different. Because of high mobility, during the evaluation they accounted for the missed responses (reported to be in Democratic Republic of

Congo and South Sudan). Thus they may not meet regularly as required by the VSL methodology. Yet they remained functional across the years of the project. It would be interesting to explore more on the functionality of these groups through qualitative inquiry. This will inform designs, targeting and implementation of future interventions.

Women’s empowerment: It is important to explore how the improved self image and self esteem have affected intra household relations, and building on the positive mechanisms such outcomes have in other interventions. This is because the change in women’s social perception and self esteem may have wider implications in household gender relations and the wider community. The qualitative design can shed more light on this.

5.1 Lessons learnt from the VSL member survey approach (quantitative design)

Design and tools	<ul style="list-style-type: none"> Maintain the qualitative and quantitative design because they complement each other. Use the qualitative design to make input into the baseline to determine indicators of change for follow-up during project implementation as well as final impact study. Questionnaire & guidelines for data management were too restrictive, yet project may be implemented in unique contexts and stakeholder needs may not be adequately addressed.
Phased data collection for baseline data	<ul style="list-style-type: none"> Maintain this design as it allows targeting of beneficiaries at the time when they are just formed, allowing good comparison of baseline and end line data
Participation of key stakeholders in the design	<ul style="list-style-type: none"> Need to include all implementing partners in the design of the study, solicit their input into the design, articulate their roles at different phases and hold them accountable during the implementation.
Mobilization of respondents/VSLAs	<ul style="list-style-type: none"> While it is essential to meet VSL members in their homes to observe some aspects of the study e.g. housing situation, this may not always be possible due to logistical constraints. In some cases members could not remember that they were involved in the baseline survey, thus taking more time with the researcher Some members would come to represent their spouses for interviews as respondents and this needs a careful researcher to sort this out. At follow-up (impact evaluation), some members were difficult to meet in groups, Some member’s names in registers were different from those commonly used by some of the respondents; therefore, more time is needed for mobilization.
Coordination	<ul style="list-style-type: none"> Guidelines for baseline and impact evaluation design should be appreciated by all parties involved at the beginning of the project so that during the baseline period, those conducting the baseline go through them to appreciate their implications on the end line exercise. The external consultant involved in the baseline should as well be aware of the impact design guidelines even if they may not be involved in it, as this provides for careful planning for the baseline.
Time and financial allocation to baseline.	<ul style="list-style-type: none"> There is need to improve this aspect to allow adequate time to meet respondents at their homes so as observation of some of the indicators e.g. state of housing faculties. Early mobilization by IPOs is strongly encouraged.
Data collection at base line.	<ul style="list-style-type: none"> Allow beneficiary input into indicators for change, i.e. beneficiary voice in Theory of Change articulation, which provides for adaptive nature of programming to meet target group needs, while also enriching the program wide indicators.
Impact evaluation	<ul style="list-style-type: none"> It is important to have clearly articulated evaluation questions, aligned to expected project outcome/impact indicators during the early stages of the project and adapt accordingly during implementation and at time of impact studies.

REFERENCES

The Steadman Group (U) Limited (2007). Results of a National Survey on Access to Financial Services in Uganda Final Report, August 2007: For: DFID's Financial Sector Deepening Uganda project

Chemonics International Inc (2007)-Improving access to Financial services In rural Uganda: Rural SPEED final report.

Khalily, B.M.A. (2004). Qualitative Approach to Impact Analysis of Microfinance Programmes in Bangladesh - What have we Learned? Journal of International Development 16: 331-353.

Khandker, S. (1998). Fighting Poverty with Microcredit. The International Bank of Reconstruction and Development (The World Bank), Washington D.C.

Population action international (2012), The Effects Of A Very Young Age Structure In Uganda, Washington

UBOS: http://www.ugandaonline.net/uganda_bureau_of_statistics

[Uganda Fiscal Budget Speech 2012- http://www.mediacentre.go.ug/details.php?catId=3&item=1720](http://www.mediacentre.go.ug/details.php?catId=3&item=1720)

ANNEXES:

1 Changes in expenditure on given household needs by sex

Expenses incurred in given areas by sex	Cohort	Baseline	Final
% of VSLA members that had purchased assets by sex			
Male	Overall Cohort 1 Cohort 2	56.2% 48.9% 63.0%	68.8% 64.4% 73.0%
Female	Overall Cohort 1 Cohort 2	40.0% 38.3% 41.5%	56.4% 57.1% 55.9%
Whether assets were purchased to generate income by sex			
Male	Overall Cohort 1 Cohort 2	37.6% 40.6% 35.5%	40.2% 44.7% 36.4%
Female	Overall Cohort 1 Cohort 2	25.9% 28.6% 23.9%	37.2% 37.8% 36.6%
% of VSL members that had incurred Education			
Male	Overall Cohort 1 Cohort 2	76.9% 79.1% 74.8%	80.0% 77.5% 82.3%
Female	Overall Cohort 1 Cohort 2	66.5% 68.4% 65.0%	78.6% 82.4% 75.5%
Average amount of Money (UGX) invested in education by VSL members.			
Male	Overall Cohort 1 Cohort 2	185291 170181 199943	374596 279367 463092
Female	Overall Cohort 1 Cohort 2	173925 169696 177568	407676 562913 274615
% of VSL members who had spent money on medical by sex			
Male	Overall Cohort 1 Cohort 2	89.0% 85.3% 92.5%	93.1% 91.0% 95.1%
Female	Overall Cohort 1 Cohort 2	76.3% 78.0% 74.9%	87.2% 88.6% 86.2%
Average amount of money (UGX) incurred in medical care of children			
Male	Overall Cohort 1 Cohort 2	99,405 100,586 98,304	140,059 113,914 164,352
Female	Overall Cohort 1 Cohort 2	74,221 75,175 73,362	92,992 87,689 97,542

Expenses incurred in given areas by sex	Cohort	Baseline	Final
% of VSL members incurring expenses in clothing			
Male	Overall Cohort 1 Cohort 2	86.2% 83.8% 88.4%	89.3% 87.5% 91.0%
Female	Overall Cohort 1 Cohort 2	74.2% 70.8% 77.0%	77.3% 78.0% 76.7%
Average amount of money spent on clothing by sex			
Male	Overall Cohort 1 Cohort 2	87366 80917 92595	122904 118130 127509
Female	Overall Cohort 1 Cohort 2	65354 57081 71863	89130 77800 98708
% of VSL members who incurred expenses on special events			
Male	Overall Cohort 1 Cohort 2	53.9% 51.5% 56.2%	57.9% 54.8% 60.8%
Female	Overall Cohort 1 Cohort 2	54.6% 42.0% 64.9%	52.7% 47.9% 56.5%
Average amount of money (UGX) spent in special events			
Male	Overall Cohort 1 Cohort 2	143,031 211,643 75, 623	163,371 171,779 155,431
Female	Overall Cohort 1 Cohort 2	72,149 99,611 57,322	103,544 108,512 100,255