



Plan Burkina Faso

Namentenga Village Savings & Loan Project

**Evaluation of Impact of the Tougouri Pilot Project and Establishment
of Baseline Data for Phase II**

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I. Summary of VSL Impact

Assessment of VSL pilot program impact in Tougouri department, Namentenga Province, took place in early February 2009 and involved focus group discussions and a household impact survey. Six focus group discussions were engaged in – three among the first group of VSLs formed by Plan (2006-07) and three in the second wave of VSL formation (2007-08). The household impact survey was administered to 60 women among the first group of VSLs formed (VSL 1), 60 from the second group of VSLs (VSL 2), and 60 comparable women from an area not yet involved in the VSL program.

The household survey contained 51 questions ranging over a number of socio-economic issues and indicators considered important in tracking the benefits of VSL membership for poor rural women of northern Burkina Faso.

The survey and focus groups found a number of positive impacts on women from the VSL pilot program that were found to a significantly lesser degree in the control group. There were also a number of impacts that were more pronounced in the first group of VSLs formed than in the second group, tending to confirm an increase in impact over time.

The most obvious impact in productive assets is in livestock and poultry ownership. Goat, sheep, and poultry ownership all increased significantly among VSL women compared to the non-VSL control group, and these increases appear related to length of VSL membership.

Greater use of important agricultural inputs over the previous three years appears related to VSL membership in the use of chemical fertilizer and purchased seed, but not in the ability to pay workers or hire animals for plowing.

Probably the most important non-productive possessions in a woman's household are their water storage jars and jerry cans, their storage trunks, festival attire (dresses) and bicycles, all of which show positive correlation with VSL membership.

The greater reduction between VSL 1 and non-VSL in children excluded from school for monetary reasons over the last three years may be significant and should increase over time. Eventually, one would expect to see the same pattern develop for the second wave of VSL associations (VSL 2).

A greater percentage of women in VSL groups compared to non-VSL women, and among VSL 1 members in particular, have increased their consumption over the previous three years of a variety of foodstuffs, particularly meat and fish. VSL members are much more likely than non-VSL women to have consumed more food over the preceding three years due to greater disposable income from savings, a difference related to length of membership.

There appears to be a significant relationship between VSL membership and the affordability of health care, although this is not related to length of membership.

The most important change in IGAs between early 2009 and 3 years earlier occurs in livestock fattening, a pattern that appears related to length of VSL involvement. There is a fairly strong rise in the frequency of cash cropping for VSL 1 compared to the VSL 2 and the non-VSL, all from a similar base three years earlier. There is also a substantial rise in the frequency of food processing/transformation for both VSL groups. VSL members show an enormous rise in the frequency with which they engage in restaurant operation since 2006. Cereals speculation activity, roughly as frequent in 2006 as small restaurant operation and with little variation between survey groups, shows a sizeable increase in frequency for VSL 1 and VSL 2 in 2009 compared to a small decrease for the non-VSL. This difference does not appear related to length of VSL membership.

There was greater use of children's labor in VSL groups compared to the non-VSL group in 2006, and this difference with the non-VSL has significantly increased over the last three years. On the other hand, this increase does not appear to be correlated with length of VSL membership.

There appears to be a significant relationship between length of VSL membership and women's feeling of higher social status. Among those women attesting to an increase in social status, significant differences between VSL and non-VSL women appear to lie in increased income and responsibilities within groups. Only in the case of increased earning power does the difference with non-VSL women appear related to length of VSL membership.

There is a clear pattern of increased control of household resources between 2006 and 2009, particularly with respect to VSL 1 members. Differences in control of common resources appear to be related to length of VSL membership.

There seems to be a significant shift away from husband's control of women's income to either women's control and or joint husband-wife control. In both women's control and joint control the shifts appear to be related to length of VSL membership.

As in the case of women's income, there is a significant shift from husband's control of decision making regarding the operations of her principal IGA, in favor of her own control or in favor of joint husband-wife decision making. Again, this appears to be related to length of VSL membership.

The VSL 1 group generally indicates greater awareness of women's rights over the non-VSL group, usually by large margins. Except in a few cases, awareness of women's rights seems to be related to length of VSL membership. Moreover, the VSL 1 group is always more likely than non-VSL to discuss women's rights within the wider family. However, in six of 10 rights the VSL 2 members are behind the non-VSL in their propensity to discuss these rights. They will need more time to gain the confidence to discuss new knowledge.

VSL members most tend to invest all or part of their share-out monies in their IGAs and animals (livestock and poultry). Beyond these, it appears money is most used for school-related expenses (depending on the season), food for the family, and social/festive purposes (also dependent on the timing of social needs). Beyond what is spent for commercial activities, uses will be quite sensitive to the timing of share-out.

As in the case of share-out, the most common uses of loan money within VSL groups is for IGAs. Purchase of food for the household is next most commonly reported by VSL members, rather than investment in animals as with share-out monies. Purchase of animals for fattening is third most frequently engaged in with loan money. Combining expenditures on school fees, school supplies, and uniforms, these also become an important use of share-out money. The same is true for a combination of social and festive expenditures. There does not appear to be a pattern linked to length of VSL membership.

Further focus group work is required to choose a fine-tuned set of indicators that can be tracked on a yearly basis among VSL participants. The focus group discussions and impact survey employed in Tougouri have established a base for further impact monitoring, but a final set of 20-25 indicators will require deeper knowledge of VSL members' objectives, strategies, investment, and final consumption patterns. This is particularly the case for use of income for children's needs.

II. Evaluation Methodology

Assessment of pilot program impact involved a number of researchers, including research director Philip Boyle and team leader Alkassoum Maiga, Maiga's assistants Boukari Sawadogo (field team supervisor) and Abdoulaye Semde (trainer and database manager), nine enumerators, and three data entry persons. The impact study was also overseen by key Plan staff Bérenger Béréoudougou (microfinance specialist), Ida Tamini (M&E specialist), and John Schiller (WARO microfinance advisor). Issaka Kabore (M&E manager) and Jean Emmanuel Zoungrana (Tougouri field supervisor) of Réseau MARP Burkina Faso were also involved in final questionnaire design and survey site selection.

Investigation into the nature and degree of socio-economic impact of Plan's VSL pilot program in Tougouri department relied on two research tools: (1) a 180-household survey; (2) six focus group discussions. The household survey consisted of 60 randomly selected households from those that joined the program in 2006-2007, 60 from those that joined the following year (2007-2008), and 60 households that had not yet been included in the VSL program. The 120 households drawn from the VSL villages represented about 4.5% of the 2,684 participants in the pilot program in February 2009. For each household the respondent was a woman member of a local VSL association or a comparable woman householder in the control area of non-participants.

The focus group discussions were held to provide more contextual material for interpreting the variety of answers flowing from the household survey. Three focus group discussions were held in the six villages that joined the program in 2006-2007 (VSL 1) and three from the 11 that joined in 2007-2008 (VSL 2). Since information sought in the focus groups related only to VSL association members, no discussions were held with non-participants. Each focus group contained from 15 to 22 VSL members with an average size of about 17. A total of 104 women (52 each from VSL 1 and VSL 2) from 30 VSL associations made up the six focus groups. The focus group final report is appended to this report.

Household Survey

The household survey contained 51 questions, some with multiple parts. It was based on the household survey used by Hugh Allen in Ethiopia in March 2008 but was adapted to the Tougouri context and expanded by the evaluation team. It was pre-tested in Logonzou (Tougouri department), a village that would not be involved in the subsequent survey. The average time for survey administration was about one hour. The 16-page questionnaire began with basic socio-demographic information on the female respondent, then progressed through: 11 questions on assets, saving, and borrowing; 8 questions on various aspects of wellbeing; 7 questions on income-generating activities outside of cereals cultivation; 11 questions on social status and various aspects of gender; 6 questions on time allocation, benefits of VSL membership, self-confidence, community attitudes toward VSL members, and participation in other village groups; 5 questions on the use of the money obtained through intra-VSL association lending and fund share-out at end of cycle; and finally 3 questions on women's knowledge and discussion of children's rights.

The same questionnaire was used for all three research groups (2006-07, 2007-08, and non-participant groups) with the exception of six questions that could only be asked of participants.

The survey questions were designed to make comparisons between current status and a time before the creation of the first VSLs by Plan in Tougouri. To keep recall periods consistent, respondents of all three research groups were asked to compare their situation three years before (February 2006) with that of the present (February 2009).

Some 60 household respondents were selected from the VSLs of the first group of villages to participate in the pilot project: Gompelgo, Nabelin, Toyogodin, Yoda, Ouattigue, and Taffogo. These villages were divided into two groups, one located relatively far from an important market and one relatively close. Gombelgo, Nabelin, and Toyogodin are relatively distant villages, while Yoda, Ouattigue, and Taffogo are relatively close. Since the population and number of VSLs formed in each village differed, the number of VSLs selected randomly from each village varied from one to four. From each of these VSLs, five women were again randomly selected to be interviewed by the enumerators.

The same procedure was followed in the second group of villages in which VSLs had been created approximately a year after the first. The 11 villages were first reduced to six through random selection: Satembilin, Paspanga, Namasa, Taonsogo, Sagouem, and Zomnogo. Satembilin, Paspanga, and Namassa are relatively distant from an important market, while Taonsogo, Sagouem, and Zomnogo are relatively close. Once again, five women were selected from between one and three VSLs in each village, according to the relative number of VSLs in each, to form the sample of 60.

In the case of the non-participant (control) group, 20 women were chosen randomly from each of three villages in the nearby department of Zeguedeghin. The sample of households was drawn along a continuum from relatively close to relatively far from the nearest important marketplace. The sample of 60 constitutes a comparable population to that of the women participating in the VSL program in Tougouri department.

Focus Group Discussions

Six focus group discussions were held by the evaluation team, led by Professor Maiga. Three groups were organized in villages where the first VSLs were formed (Gompelgo, Toyogodin, and Ouattigue), and three more were formed from VSL members of the second group (Basmakerga, Towace, and Hokobomde). Originally based on a focus group discussion model drawn up by Hugh Allen for use in Zimbabwe in 2004, the focus group guide was considerably expanded and came to include 61 questions. It took from 2 to 2 ½ hours to administer to the 15 to 22 assembled VSL members. The guide began with 6 questions on the VSL credit fund, then continued on through 3 questions on relations with other microfinance organizations and credit sources, 5 questions on the credit fund share-out at end of cycle, 4 questions on membership in other kinds of savings and credit institutions, 3 questions on the solidarity fund in each VSL, 1 question on income-generating activities undertaken by the VSL as a whole, 4 questions on members appreciation of their VSL, 4 questions on productive and non-productive assets, 11 questions on aspects of wellbeing and socio-cultural events, 4 questions on income-generating activities, 6 questions on social status, self-esteem, resource control, and participation in other village groups, 1 question on children's work in the women's income-generating activities, 1 question on sources of income from household members living or migrating away from the

household, 5 questions on training in income generation, and 3 questions on the village facilitators used in the expansion from 6 villages to 17 in the second year of the program.

Data Processing

The data collected by the household survey was inputted into the microcomputer program Epi Info and processed in SPSS¹ to produce the Word tables included in this report. Most of the tables represent the findings of individual questions in the survey, but a few combine more than one question. The focus group findings were often tabulated in Excel and transposed to Word. Both the household impact questionnaire and the focus guide are annexed to this report.

III. Findings

A. VSL Program

1. Relevance of the VSL Methodology

The VSL methodology represents a low-cost means to create savings-led, women-owned, income-oriented associations in areas where few, if any, alternative opportunities exist. The focus group discussions reveal that women do not engage in traditional rotating savings and credit associations (ROSCAs) in VSL pilot program areas. Both the focus groups and the household survey indicate that women in Tougouri department have few formal group activities at all. There is little doubt that beyond the obvious economic benefits of membership in VSL associations there are clear empowerment benefits.

Women in Tougouri department are enthusiastic over their VSL associations and readily make themselves available for focus group discussions and individual interviews, sometimes waiting for long periods until enumerators or researchers arrive. The simple methodology developed to launch and maintain these associations should be sustainable for an indefinite period, in spite of an 84% illiteracy rate and the fact that 95% of these women have never been to school. Nevertheless, focus group discussions reveal that many women have not yet taken full control of their groups and feel tied to rules established by Réseau MARP field agents. This is particularly true for the length of the share-out cycle and lending limits. Over time these women should come to feel in full control of their associations. The question of how much follow-up of VSL groups for how long and by whom remains to be resolved.

The savings-led VSL methodology is more empowering than an externally-supplied credit fund, such as those provided in the village-banking programs also operating in the Tougouri department.² According to the focus group participants, women in VSLs are no longer involved in village-banking groups, and those few that have been felt taken advantage of. The level of

¹ Statistical Package for the Social Sciences.

² The CRS Graine program and the village-banking component of Réseau des Caisses Populaires du Burkina.

association dependency on external agents is much greater in village banking, and the methodology is more rigid and complex. Loan sizes are larger generally and are more appropriate for urban or peri-urban contexts. The lack of literacy among rural women puts them in a situation in village banking where there is no likely end to field agent supervision. The VSL methodology is greatly simplified, relies on women's own savings and intra-group lending, and is meant to be turned over to them after one or two cycles. VSLs are certainly a more relevant microfinance model for poor rural women than village banking.

In Tougoui department, as elsewhere in rural sub-Saharan Africa, women are entrepreneurs and marketplace participants. Their income-generating activities are crucial to family income. Moreover, since most of rural sub-Saharan Africa consists of polygamous households (even in non-Muslim areas), a woman's income is directed to her own children. In important decisions she will need to consult her husband, and she has defined responsibilities in respect to the husband's cereal crops (sorghum, millet, maize).

African women are free to earn money through a variety of business activities, such as gardening, food transformation, animal fattening, and petty trade. Moreover, the disposable income they accumulate has no safe haven and may be appropriated by the husband if left in cash. Disposable income is thus often converted rapidly into tangible assets.

Without immediately seeking to convert their liquidity into tangible assets, women in VSLs can channel their savings into productive use through the interest earned on intra-group lending. Such savings remains far more liquid than in animals or other productive and non-productive assets. While demand for loans during the VSL cycle meets women's short-term needs or opportunities, the end-of-cycle share-out can be timed to correspond to a period of great need or great opportunity. The share-out is often timed to fall just before the agricultural season (June - October in Tougouri), when seed is needed for planting, grain can be stored for later consumption or resale, and livestock purchased for fattening on foliage or grass from upcoming rains. During the rainy season animals can be fattened and vegetables grown and processed for sale during the hungry season preceding the harvest. Animals can also be fattened preceding Muslim festivals, such as Tabaski or the feast following Ramadan. These move around the solar calendar because of their linkage to the Muslim lunar calendar.

The Tougouri focus group discussions and household impact survey indicate that women's interest in VSL activity is overwhelmingly pecuniary. It is a means to save and to invest in a range of income-generating activities, some of which may be speculative. Since women are largely responsible for their children's welfare, monetary benefits will be channeled largely to them. Tracking the health and nutritional well-being of VSL women's children through time should reveal considerable benefits. It is not yet clear whether women's heightened economic activity translates into greater need for their children's labor and, if so, to what extent does this keep them from school? This is potentially more problematic for girl children. Since a woman's primary source of additional labor is her own children, whether in domestic work or in commercial activities, increased economic opportunities for women should be accompanied by some form of consciousness raising that places value on formal education and literacy. The

95% of women in the household survey without formal education may well understand this value.

B. VSL Impact

1. Demographic Characteristics of the Overall Sample

As planned in evaluation design, the household survey was administered to 120 VSL association members in Tougouri department divided equally between those representing the first associations launched and those that were formed in a second wave one year later. The same survey, with the exception of a few questions, was administered to a control group of 60 women in nearby Zeguedeghin department that had not been involved in the Plan VSL pilot program. In the tables below we will refer to these three sample groups as VSL 1, VSL 2, and non-VSL. For simplicity, we will also refer to VSL associations as VSLs. VSL 1 and VSL women will sometimes be called members, while the non-VSL women may be called respondents.

For the overall sample of 180 women representing 180 distinct households, the average age was 35.4 years and ranged from 18 to 61 years. Some 72.2% of these women were in polygamous marriages, 22.2% in monogamous unions, and 5.6 % were widowed, divorced, or separated. Some 83.9% were illiterate, while 16.1% claimed literacy in a national language. Ninety-five percent (95%) of respondents had never been to school compared to 5% that had some primary schooling. Of the 5% of women with some formal schooling, the average number of years completed was 2.8.

An overwhelming proportion -- 91.1% -- of the 180 respondents were Mossi, followed by small numbers from other ethnic groups -- 3.3% Gourmantche, 1.7% Peulh, and 3.9% from others. These women had responsibility for an average of 4.1 children at home. Some 17.8% of respondents also had responsibility for an average of 1.9 children outside of the household. Overall, the 180 sampled women claimed responsibility for 795 children, an average of 4.4 per woman.

2. Productive Assets

Table 1 presents the key productive assets possessed by the three survey groups of women in February 2009 and 3 years earlier before any VSL associations were formed.

Table 1: Productive Assets (Average per household)

Who	2006	2009	Change	% Change	Who	2006	2009	Change	% Change
Cattle					Carts				
VSL 1	0.18	0.30	0.12	+ 66.7%	VSL 1	0.02	0.02	0,00	0%

VSL 2	0.30	0.37	0.07	+ 23.3%	VSL 2	0.03	0.03	0.00	0%
Non-VSL	0.07	0.18	0.11	+ 157.1%	Non-VSL	0.00	0.00	0.00	0%
Goats					Wheelbarrows				
VSL 1	2.12	2.38	0.26	+ 12.3%	VSL 1	0.02	0.03	0.02	0%
VSL 2	3.35	3.58	0.23	+ 6.9%	VSL 2	0.02	0.03	0.01	50.0%
Non-VSL	4.28	3.43	- 0.85	- 19.9%	Non-VSL	0.00	0.00	0.00	0%
Sheep					Peanut Shellers				
VSL 1	0.82	2.25	1.43	+ 174.4%	VSL 1	0.00	0.00	0.00	0%
VSL 2	1.62	1.85	0.23	+ 14.2%	VSL 2	0.02	0.02	0.00	0%
Non-VSL	1.58	1.55	- 0.03	- 1.9%	Non-VSL	0.00	0.00	0.00	0%
Donkeys					Sickles				
VSL 1	0.08	0.12	0.04	+ 50.0%	VSL 1	0.13	0.22	0.09	+ 69.2%
VSL 2	0.02	0.07	0.05	+ 250.0%	VSL 2	0.10	0.15	0.05	+ 50.0%
Non-VSL	0.00	0.00	0.00	0%	Non-VSL	0.05	0.08	0.03	+ 60.0%
Pigs					Plows				
VSL 1	0.17	0.13	- 0.04	- 23.5%	VSL 1	0.13	0.13	0.00	0%
VSL 2	0.42	0.33	- 0.08	- 19.0%	VSL 2	0.10	0.12	0.02	+ 20.0%
Non-VSL	0.25	0.13	- 0.12	- 48.0%	Non-VSL	0.10	0.08	- 0.02	- 20.0%
Poultry									
VSL 1	3.28	5.03	1.75	+ 53.4%					
VSL 2	3.73	4.17	0.44	+ 11.8%					
Non-VSL	6.07	4.93	- 1.14	- 18.8%					

a. Animals

We find that the average number of cattle possessed has risen for all three groups, but from a small base. In 2006, only 19 women possessed cattle out of the total of 180 women (10.6%). In 2009, 21 women owned cattle (11.7%). Since the non-VSL group rose the most (157.1%) from the smallest base, there appears to be no impact from VSL membership in respect to this livestock asset.

Goat and sheep possession, however, tells a different story. Goat ownership for the VSL 1 and VSL 2 groups rose 12.3% and 6.9%, respectively, while declining by 19.9% for the non-VSL women. Sheep ownership rose 174% for the VSL 1 group, 14.2% for the VSL 2 group and declined slightly for the non-VSL women. These changes appear to be significant and related to length of VSL membership. The relatively low cost and feed requirement of these small ruminants compared to cattle makes them the appropriate investment vehicle for livestock fattening or speculation. Nevertheless, some 26.7% of women overall owned no goats in 2009, while 39.4% owned no sheep.

Pig ownership declined for all three sample groups, falling more for the non-VSL group (-48.0%) than for the two VSL groups (-23.5% and -19.0%, respectively). While this may represent a switch from pig fattening to sheep and goat fattening for the VSL members, this does not appear to be the case for the non-VSL respondents, who declare fewer small livestock possessions across the three species (goats, sheep, and pigs).

While donkey ownership increased for the two VSL groups, the non VSL group had no donkeys in 2006 and this remained unchanged in 2009. The base from which these changes occurred is quite small and little can be concluded regarding the changes found. Only 5 women owned donkeys in 2009, none of the non-VSL respondents and 4.2% of VSL members.

An excellent store of wealth is found in poultry, consisting primarily of chickens, guinea fowl, and ducks. Table 1 shows that the VSL 1 group increased its average ownership of poultry by 53.4%, the VSL 2 group by 11.8%, while poultry possession of the non-VSL group declined by 18.8%. These differences appear significant and related to VSL membership. Nevertheless, in spite of relatively large holdings (4 – 5 birds on average), 45 women overall in 2009 (25%) claimed to own no poultry. This was down from 69 women without poultry in 2006 (38.3%).

Conclusion

There seem to be significant increases in small ruminant and poultry possession among VSL compared to non-VSL women. Neither cattle, pigs, nor donkeys appear to be common investments for women engaged in income-generating activities (IGAs). Pigs may not be culturally appropriate for many of the Muslim Mossi population in the Tougouri and Zeguedeghin departments. Cattle are at least 5 times more expensive than small ruminants and must range more widely than sheep and goats. Donkeys are also expensive and are not an animal normally fattened for sale.

Poultry is inexpensive and easy to raise in the immediate proximity of the household. It is a relatively liquid and easily multiplied asset, given the short reproductive cycle of these species.

b. Material Assets

Few, if any, of material productive assets show significant change between 2006 and 2009. In most cases, few of these assets are possessed. This is the case for carts, wheelbarrows, and peanut shellers. Plows and sickles are more common, but there appears to be no significant difference in ownership between non-VSL women and VSL members. In the case of plows, only VSL 2 members increased their possession (+ 20%), while non-VSL women decreased

their ownership by the same amount (- 20%). However, this involves only one person in each case. Overall, only 16 of 180 women (8.9%) owned plows in 2009 up from 15 (8.3%) in 2006. Understandably, sickles are more common than plows, and the number of owners increased overall from 12 (6.7%) to 20 (11.1%) between 2006 and 2009. Thus, 12 women owned 17 sickles in 2006 and 20 women owned 27 sickles in 2009. However, this increase in sickle ownership does not appear related to VSL membership. Moreover, the large majority of women declared no ownership of sickles in either 2006 or 2009.

Conclusion

The ownership of key non-living productive assets is both rare and unlikely to respond to short-term changes in women’s disposable income. The number of assets owned, moreover, is not likely to increase significantly, unless access to cultivable land (held by men) increases and women can afford supplemental labor beyond that of her own small household. Moreover, in nearly 3 of 4 cases (72.2%), survey respondents lived in polygamous compounds with at least one other wife and a husband. It is likely that major assets such as carts, wheelbarrows, and plows would be owned in common by the large household with formal ownership ascribed to the male head of compound. While an asset such as sickles may well be owned by individual wives, the survey shows that these are relatively rare and are also probably shared by members of the compound. On the other hand, ownership of livestock tends to be individual. It is important to focus on what material productive assets tend to be owned by individual wives, and these are probably most related to women’s IGAs, not cereals production.

3. Use of Key Agricultural Inputs

A series of questions in the household survey examined relative changes in women’s use of key agricultural inputs: paid labor, chemical fertilizer, purchased seed, and animal traction in plowing. The results of these questions are presented in Table 2.

Table 2: Change in the Use of Key Agricultural Inputs between 2006 and 2009 (% of respondents)

Survey Groups	No Use	Greater Use	Lesser Use	No Change
Paid Labor				
VSL 1	66.7%	5.0%	3.3%	25.0%
VSL 2	70.0%	11.7%	3.3%	15.0%
Non VSL	80.0%	5.0%	0%	15.0%
Chemical Fertilizer				
VSL 1	63.3%	18.3%	1.7%	16.7%

VSL 2	40.0%	23.3%	3.3%	33.3%
Non VSL	65.0%	13.3%	1.7%	20.0%
Purchased Seed				
VSL 1	35.0%	30.0%	3.3%	31.7%
VSL 2	36.7%	26.7%	5.0%	31.7%
Non VSL	56.7%	16.7%	3.3%	23.3%
Animal Traction in Plowing				
VSL 1	55.0%	10.0%	1.7%	33.3%
VSL 2	43.3%	11.7%	1.7%	43.3%
Non VSL	41.7%	16.7%	1.7%	40.0%

Between 66.7% and 80% of the three survey groups used no paid labor in 2006 or 2009. While the two VSL groups reported more labor use in general, only the VSL 2 group increased its use of paid labor in 2009 more than the non-VSL group. Consequently, there would not appear to be any clear impact of VSL membership on the use of paid labor. On the other hand, use of chemical fertilizer has risen more among the two VSL groups than among the non-VSL respondents from a similar or lower base (18.3% and 23.3% for VSL 1 and VSL 2, respectively, compared to 13.3%). Again, the biggest change is found among the VSL 2 members for reasons that are not clear.

The purchase of seed also seems related to VSL membership, with greater use reported by 30% and 26.7% in the VSL 1 and VSL 2 groups, respectively, compared to 16.7% of the non-VSL. Finally, the non-VSL group reports a greater increase of animal traction in plowing than the two VSL groups (16.7% for non-VSL and 10.0% and 11.7% for VSL 1 and VSL 2). Moreover, the VSL 1 group reports lesser use of animal traction in general than the other survey groups (55.0% reporting no use in 2006 or 2009 compared to 43.3% for VSL 2 and 41.7% for non-VSL respondents). There would appear to be no impact with regard to animal traction from VSL membership.

Conclusion

Greater use of important agricultural inputs over the previous three years appears related to VSL membership in the use of chemical fertilizer and purchased seed. These are more indicative of a lower level of wealth change than the ability to pay workers or hire animals for plowing. The quantities of fertilizer and seed involved are not captured in this survey.

4. Non-Productive Assets

Examination of women's ownership of key non-productive assets was undertaken in order to judge welfare impacts of VSL membership. These are presented in Table 3. However, these assets are derivative of investments made by women in productive assets and IGAs and are generally less directly linked to the monies received from VSL activities (loans and share-out). The longer the membership the more likely is the impact at this level. The same is true for changes to the home dwelling (cf. Table 7).

Table 3: Non-Productive Assets (average per household)

Who	2006	2009	Change	% Change	Who	2006	2009	Change	% Change
Water Jars					Storage Trunks				
VSL 1	1.82	1.82	0.00	0%	VSL 1	0.10	0.17	0.07	+ 70.0%
VSL 2	2.00	2.10	0.10	+ 5.0%	VSL 2	0.37	0.48	0.11	+ 29.7%
Non-VSL	1.73	1.50	- 0.23	- 13.1%	Non-VSL	0.17	0.20	0.03	+ 17.6%
Jerry Cans					Festival Dresses				
VSL 1	1.77	2.32	0.55	+ 31.1%	VSL 1	2.80	3.93	1.13	+ 40.4%
VSL 2	1.97	2.77	0.80	+ 40.6%	VSL 2	4.30	6.45	2.15	+ 50.0%
Non-VSL	1.93	2.33	0.40	+ 20.7%	Non-VSL	4.17	4.63	0.46	+ 11.0%
Cooking Pots					Serving Dishes				
VSL 1	1.92	2.38	0.46	+ 24.0%	VSL 1	5.78	8.52	2.74	+ 47.4%
VSL 2	2.08	2.58	0.50	+ 24.0%	VSL 2	7.07	9.77	2.70	+ 38.2%
Non-VSL	1.77	2.13	0.36	+ 20.3%	Non-VSL	6.18	9.32	3.14	+ 50.8%
Beds					Large Serving Dishes				
VSL 1	0.08	0.08	0.00	0%	VSL 1	0.98	1.37	0.39	+ 39.8%
VSL 2	0.12	0.15	0.03	+ 25%	VSL 2	1.17	1.88	0.71	+ 60.7%
Non-VSL	0.03	0.03	0.00	0%	Non-VSL	0.85	1.42	0.57	+ 67.1%
Chairs					Radios				
VSL 1	0.18	0.22	0.03	+ 16.7%	VSL 1	0.03	0.03	0.00	0%
VSL 2	0.17	0.30	0.13	+76.5%	VSL 2	0.07	0.10	0.03	+ 42.9%
Non-VSL	0.03	0.07	0.04	+ 133.3%	Non-VSL	0.00	0.02	0.02	n/a

Stools					Bicycles				
VSL 1	0.85	1.25	0.40	+ 4.7%	VSL 1	0.03	0.10	0.07	+ 233.3%
VSL 2	1.23	1.75	0.52	+ 42.3%	VSL 2	0.12	0.20	0.08	+ 66.7%
Non-VSL	0.65	1.03	0.38	+ 58.5%	Non-VSL	0.03	0.03	0.00	0%
Tables					Motorbikes				
VSL 1	0.13	0.20	0.07	+ 53.8%	VSL 1	0.00	0.00	0.00	0%
VSL 2	0.25	0.37	0.12	+ 48.0%	VSL 2	0.00	0.00	0.00	0%
Non-VSL	0.12	0.17	0.05	+ 41.7%	Non-VSL	0.00	0.00	0.00	0%
Kapok Mattresses					Cell Phones				
VSL 1	0.03	0.03	0.00	0%	VSL 1	0.00	0.00	0.00	0%
VSL 2	0.03	0.05	0.02	+ 66.7%	VSL 2	0.02	0.03	0.01	+ 50.0%
Non-VSL	0.05	0.05	0.00	0%	Non-VSL	0.00	0.02	0.02	n/a
Foam Mattresses									
VSL 1	0.02	0.02	0.00	0%					
VSL 2	0.02	0.03	0.01	+ 50.0%					
Non-VSL	0.02	0.02	0.00	0%					

Certain non-productive assets appear correlated with VSL membership, while others appear to show no or negative correlation. Thus, while change in number of water jars, jerry cans, tables, storage trunks, festival dresses, and bicycles seem to reveal a pattern of VSL impact, the number of chairs, stools, serving dishes, and large serving dishes seem to reveal a negative correlation. There would seem to be no clear explanation for this. In the case of change in numbers of beds, kapok and foam mattresses, radios and cell phones, the VSL 2 group stands out above the two other groups. It is not clear why this should be, since it is a group whose VSLs have been in existence for slightly more than a year at most and for whom only a minority have engaged in share-out. However, these percentage changes are based on very few cases.

Probably the most important non-productive possessions in a woman's household are their water storage jars and jerry cans, their storage trunks, festival attire (dresses) and bicycles, all of which show positive correlation with VSL membership. While possession of cooking pots shows greater association with VSL membership, the difference may not be significant. It should be noted that cooking pots and bicycles can also be seen as productive assets, since

women often prepare food for sale and bicycles enable them to reach a wider range of marketplaces.

Conclusion

Significant changes in ownership of non-productive assets are most likely to be found in those assets crucial to physical comfort, such as water jars and jerry cans, in major cooking vessels likely also to be used for food processing or preparation for sale, and in vehicles for transportation of goods, such as bicycles. Motorbikes (none owned) are much too expensive for the women in this survey. Even in the case of bicycles, few women have them. The number of bicycle owners rises from 2 to 5 women (2 to 6 bicycles) in the VSL 1 group, from 5 to 10 women (7 to 12 bicycles) in the VSL 2, but it remains at one person with two bicycles among the non-VSL respondents. While involving a relatively small number of cases, the VSL groups do appear to have significantly more bicycles than the non-VSL women in 2009 and the increase over 2006 is also noteworthy.

5. Change in Other Non-Productive Assets

Table 4 presents the results of questions focused on approximate change in those non-productive assets for which it is difficult to obtain precise counts from respondents.

Table 4: Change in Selected Non-Productive Assets between 2006 and 2009 (% of respondents)

Survey Groups	Do Not Possess	Greater Amount	Lesser Amount	No Change
Plates				
VSL 1	32.2%	52.5%	1.7%	13.6%
VSL 2	23.7%	40.7%	5.1%	30.5%
Non VSL	20.4%	42.6%	14.8%	22.2%
Glasses and Cups				
VSL 1	51.8%	14.3%	3.6%	30.4%
VSL 2	42.1%	15.8%	3.5%	38.6%
Non VSL	45.8%	20.8%	0%	33.3%
Pieces of Jewelry				
VSL 1	39.7%	22.4%	1.7%	36.2%
VSL 2	16.9%	32.2%	8.5%	42.4%

Non VSL	32.1%	11.3%	11.3%	45.3%
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VSL 1 women show greater increase in plates and jewelry than the non-VSL group, but not in frequency of increased number of glasses and cups. VSL 2 is equal or superior to non-VSL in plates and jewelry. Only in the case of glasses and cups, does there appear to be negative correlation with VSL membership, since the non-VSL group reports a greater number of women increasing this household asset. There would appear to be no clear explanation for this.

Once women have reached a number of plates, glasses, and cups equivalent to household needs, increased disposable income is best appreciated by tracking the amount of jewelry owned. Jewelry as a store of wealth and status symbol should be revealing of increased affluence, and this appears to be the case, although the VSL 2 group reports an increase in possession more often than the VSL 1 respondents. However, about 40% of VSL 1, 17% of VSL 2, and 32% of non-VSL report owning no jewelry in 2006 or 2009. This still leaves a fairly large number of women with jewelry, although we do not know how much they own.

Conclusion

The most useful indicator of changing wealth in this group of assets is jewelry. When combined with the non-productive assets of Table 3, it seems that counts of household furniture, implements, or utensils are not likely to be as useful as those that represent a serious rise in disposable income.

6. Changes in Saving and Borrowing Behavior

a. Changes in Saving Behavior

Table 5 presents the changes occurring to saving behavior in the three study groups between 2006 and 2009. The change in percentage of respondents indicating a particular means of saving is followed by the percentage change between the proportion of respondents indicating that they engaged in this behavior in 2006 and their current behavior (2009). The various options represent possible means by which the women save.

Table 5: Changes in Saving Behavior (% of respondents)

Who	2006	2009	Change	% Change	Who	2006	2009	Change	% Change
Member of a VSL					Commercial Bank				
VSL 1	0%	96.7%	96.7%	n/a	VSL 1	0%	0%	0%	0%
VSL 2	0%	91.7%	91.7%	n/a	VSL 2	0%	0%	0%	0%
Non-VSL	0%	0%	0%	0%	Non-VSL	0%	0%	0%	0%
Member of a ROSCA					Private Savings Collector				

VSL 1	3.3%	0%	- 3.3%	- 100%	VSL 1	0%	0%	0%	0%
VSL 2	6.7%	8.3%	1.6%	+ 23.9%	VSL 2	0%	0%	0%	0%
Non-VSL	1.7%	1.7%	0%	0%	Non-VSL	0%	0%	0%	0%
Microfinance Institution					Somewhere in the House				
VSL 1	1.7%	1.7%	0%	0%	VSL 1	83.3%	48.3%	- 35.0%	- 42.0%
VSL 2	3.3%	1.7%	- 1.6%	- 48.5%	VSL 2	86.7%	58.3%	- 28.4%	- 32.8%
Non-VSL	5.0%	5.0%	0%	0%	Non-VSL	90.0%	91.7%	1.7%	+ 1.9%
Agricultural Cooperative					Asset Accumulation				
VSL 1	0%	0%	0%	0%	VSL 1	61.7%	48.3%	- 13.4%	- 21.7%
VSL 2	0%	0%	0%	0%	VSL 2	35.0%	35.6%	+ 0.6%	+ 1.7%
Non-VSL	0%	0%	0%	0%	Non-VSL	35.0%	35.0%	0%	0%
COPEC					Other People				
VSL 1	3.3%	1.7%	-1.6%	- 48.5%	VSL 1	6.8%	3.4%	- 3.4%	- 50.0%
VSL 2	3.3%	1.7%	- 1.6%	- 48.5%	VSL 2	10.0%	5.1%	- 4.9%	- 49.0%
Non-VSL	5.0%	3.3%	- 1.7%	- 34.0%	Non-VSL	16.7%	16.7%	0%	0%
Post Office					Other Means				
VSL 1	0%	0%	0%	0%	VSL 1	1.9%	2.0%	0.1%	+ 5.3%
VSL 2	0%	0%	0%	0%	VSL 2	5.4%	3.6%	- 1.8%	+ 3.3%
Non-VSL	0%	0%	0%	0%	Non-VSL	11.9%	15.5%	3.6%	+ 30.3%

According to survey findings, none of the women in the three study groups saves in a commercial bank, agricultural cooperative, the Post Office, or by means of a private savings collector. Few women indicate saving by means of a COPEC, microfinance institution, or a rotating savings and credit association (ROSCA). The most common methods of saving prior to the arrival of the VSLs were in the house (83.3% - 90.0%), asset accumulation (35.0% - 61.7%), and other people (6.8% - 16.7%). A few women, especially those in the non-VSL group, indicate other methods of saving.

Obviously, most change has occurred in the use of VSLs. Virtually all VSL 1 and VSL 2 members indicate saving within their VSL. It is unclear why two women in VSL 1 and five in

VSL 2 would indicate that they do not. Perhaps they have taken out a loan equal or greater than their contribution and consider that they have no savings at present. Obviously, the great jump in savings through VSLs is not echoed by the non-VSL respondents.

Paralleling the rise in use of the VSL savings mechanism, there is a corresponding drop in hiding money in the house, asset accumulation, and reliance on other people. Thus, 42.0% and 32.8% fewer respondents of VSL 1 and VSL 2, respectively, keep money in the house, while there is a 1.9% increase among the non-VSL. There is a similar drop in asset accumulation (21.7%) among the VSL 1, but essentially no change among the VSL 2 and the non-VSL groups. There is another pronounced drop in the number of women that use other people to save: 50.0% fewer in VSL 1, 49.0% fewer in VSL 2, and no change among the non-VSL.

Conclusion

Not surprisingly, the VSL savings mechanism is engaged in by all (or virtually all) members, since this is the primary objective of this microfinance methodology. Saving cash in this way tends to replace hiding money in the house, storing wealth in material assets, and keeping savings with other people. Storing wealth in assets should be distinguished from investment in animals, which is both an investment and a store of wealth. The latter is clearly promoted by VSL membership.

b. Changes in Borrowing Behavior

Table 6 presents the survey results for women's borrowing behavior between 2006 and 2009. The various options represent possible sources of credit.

Table 6: Changes in Borrowing Behavior (% of respondents)

Who	2006	2009	Change	% Change	Who	2006	2009	Change	% Change
VSL Association					Agricultural Cooperative				
VSL 1	0%	96.7%	96.7%	n/a	VSL 1	0%	0%	0%	0%
VSL 2	0%	86.7%	86.7%	n/a	VSL 2	0%	0%	0%	0%
Non-VSL	0%	0%	0%	0%	Non-VSL	0%	0%	0%	0%
Husband					Money Lender				
VSL 1	50.0%	33.3%	- 16.7%	- 33.4%	VSL 1	3.3%	0%	- 3.3%	- 100%
VSL 2	46.7%	20.0%	- 26.7%	- 57.2%	VSL 2	0%	0%	0%	0%
Non-VSL	65.0%	63.3%	- 1.7%	- 2.6%	Non-VSL	0%	0%	0%	0%
Other Members of the Extended Family					Microfinance Institution				

VSL 1	31.7%	21.7%	- 10.0%	- 31.5%	VSL 1	1.7%	1.7%	0%	0%
VSL 2	28.3%	20.0%	- 8.3%	- 29.3%	VSL 2	1.7%	0%	- 1.7%	- 100%
Non-VSL	21.7%	21.7%	0%	0%	Non-VSL	5.0%	5.0%	0%	0%
Other Members of the Same Compound					Commercial Bank				
VSL 1	45.0%	31.7%	- 13.3%	- 29.6%	VSL 1	0%	0%	0%	0%
VSL 2	26.7%	20.0%	- 6.7%	- 25.1	VSL 2	0%	0%	0%	0%
Non-VSL	36.7%	38.3%	1.6%	+ 4.4%	Non-VSL	0%	0%	0%	0%
Friend					Women's Group				
VSL 1	30.0%	23.3%	- 6.7%	- 22.3%	VSL 1	5.0%	1.7%	- 3.3%	- 66.0%
VSL 2	26.7%	13.6%	- 13.1%	- 49.1%	VSL 2	20.0%	3.3%	- 16.7%	- 83.5%
Non-VSL	15.0%	15.0%	0%	0%	Non-VSL	5.0%	5.0%	0%	0%
COPEC					Other Means				
VSL 1	3.3%	3.3%	0%	0%	VSL 1	0%	0%	0%	0%
VSL 2	6.7%	6.8%	0.1%	+ 1.5%	VSL 2	3.3%	0%	- 3.3%	- 100%
Non-VSL	5.0%	3.3%	- 1.7%	- 34%	Non-VSL	6.7%	6.7%	0%	0%

As in the case of savings methods, none of the women surveyed has borrowed from a commercial bank or an agricultural cooperative and virtually none from a money lender. Few women have borrowed from a COPEC, an MFI, or declare some other means to borrow. The most common traditional methods to borrow money have been from the husband (50.0% - 65.0%), other persons in the compound (26.7% – 45.0%), members of the woman's extended family (21.7% - 31.7%), and from friends (15.0% - 30.0%).

In early 2009, 96.7% of VSL 1 and 86.7% of VSL 2 members indicated they were borrowing from their VSL group. Concomitantly, members of these groups had significantly decreased borrowing from husbands, persons in the compound, members of the extended family, and friends. Thus, VSL 1 members reduced their proportion of borrowing from these groups by 33.4%, 29.6%, 31.5%, 22.3%, respectively, while VSL 2 members decreased their reliance on these same groups by 57.2%, 25.1%, 29.3%, and 49.1%. On the other hand, borrowing from these groups by non-VSL women was not significantly changed. There is, thus, a clear correlation between borrowing from the VSLs and reduced use of common traditional methods.

Conclusion

Virtually all women in older VSLs and the great majority in new ones borrow from the VSL fund. This borrowing tends to replace borrowing from husbands, other persons in the compound, members of the extended family, and friends. It focuses borrowing activities on one source that is largely under the control of the borrowers.

7. Home Improvements

Women in the three survey groups were queried about any improvements they had made over the previous three years to their house or homestead. Table 7 presents these findings.

Table 7: Improvements Made to the House between 2006 and 2009 (% of respondents)

Type of Improvement	% Doing	Type of Improvement	% Doing
New or rebuilt house		Shelter added for livestock	
VSL 1	10.0%	VSL 1	21.7%
VSL 2	5.0%	VSL 2	10.0%
Non-VSL	1.7%	Non-VSL	20.0%
Room added to the house		Window added	
VSL 1	1.7%	VSL 1	10.0%
VSL 2	3.3%	VSL 2	1.7%
Non-VSL	0%	Non-VSL	1.7%
Wood roof on house		Floor cemented	
VSL 1	0%	VSL 1	16.7%
VSL 2	1.7%	VSL 2	3.3%
Non-VSL	0%	Non-VSL	16.7%
Purchase of a food cupboard		Shower built	
VSL 1	0%	VSL 1	25.0%
VSL 2	0%	VSL 2	15.0%
Non-VSL	6.7%	Non-VSL	11.7%
New hut built		Latrine built	
VSL 1	13.3%	VSL 1	6.7%

VSL 2	20.0%	VSL 2	8.3%
Non-VSL	8.3%	Non-VSL	0%
New aluminum roof		Granary constructed/improved	
VSL 1	5.0%	VSL 1	50.0%
VSL 2	1.7%	VSL 2	20.0%
Non-VSL	1.7%	Non-VSL	31.7%
Plastering of house exterior		Storehouse built	
VSL 1	26.7%	VSL 1	15.0%
VSL 2	16.7%	VSL 2	0%
Non-VSL	28.3%	Non-VSL	1.7%
Plastering of house interior		Enclosure built around house	
VSL 1	40.0%	VSL 1	25.0%
VSL 2	35.0%	VSL 2	8.3%
Non-VSL	30.0%	Non-VSL	5.0%
House painted or repainted			
VSL 1	0%		
VSL 2	0%		
Non-VSL	1.7%		

The most common improvements made to the house and immediate surroundings over the preceding three years by the women in this survey are: plastering (crépissage) of the house interior (30% - 40%) or exterior (17% - 28%), construction or improvement of the granary (20% - 50%), addition of a shower (12% - 25%), addition of an enclosure around the house (5% - 25%), construction of a shelter for livestock (10% - 22%), construction of a new hut (8% - 20%), and cementing of the house floor (3%-17%).³

Some women reported building or rebuilding a new house (2% - 10%), adding a window (2% - 10%), or building a latrine (7% - 8%). On the other hand, few women reported adding a room to

³ These percentages are all rounded to the nearest whole number.

their house, adding an aluminum or wood roof, adding cupboards, painting their house, or building a storehouse (except for 15% of VSL 1 members).

With regard to the most common types of home improvements, VSL members seem to be more active only in plastering the house interior, construction of a granary (VSL 1 only), addition of a shower, building an enclosure around their house, and construction of a new hut. In the less common improvements made, VSL members seem to be more active in building or rebuilding a new house, adding a new window (VSL 1 only), building a latrine, or building a new storehouse (VSL 1 only).

Differences between VSL and non-VSL members are not striking in most cases, but some do appear to exist. It is to be noted that there appear to be significant differences in the addition of showers and latrines, although the frequency is not high (7% - 8%) in the case of latrines. Although involving only a small number of cases, six VSL 1 and three VSL 2 women compared to one non-VSL woman have built or rebuilt their main dwelling. Given the amount of labor and likely cost involved, this may be a significant difference between VSL and non-VSL women.

Conclusion

Home improvement activities over the preceding three years are not reported by a high proportion of women. The most common of these activities are plastering the interior and/or exterior of the house, construction of a new granary, building a shower, building an enclosure around the house, and construction of a shelter for livestock. In these activities the VSL 1 group shows a clear superiority over the non-VSL. It does appear that length of VSL membership is important, since the VSL 2 group does not show this superiority.

8. Changes in Children's School Attendance

Women were questioned about the number of their children that had not attended school because of a shortage of money to pay school fees and educational supplies. Table 8 presents these results.

Table 8: Children Not Attending School for Lack of Money in 2006 and 2009 (average per household) *

Who	2006	2009	Change	% Change
Boys				
VSL 1	0.35 (21)	0.32 (19)	- 0.03	- 8.6%
VSL 2	0.17 (10)	0.23 (14)	+ 0.06	+ 35.3
Non-VSL	0.15 (9)	0.15 (9)	0.0	0%
Girls				
VSL 1	0.43 (26)	0.38 (23)	- 0.05	- 11.6%

VSL 2	0.30 (18)	0.25 (15)	- 0.05	- 16.7%
Non-VSL	0.05 (3)	0.07 (4)	+ 0.02	+ 40%

*The number of children is indicated in parentheses following the group average.

The VSL 1 group has a slightly reduced number of boys and girls not attending school for lack of money in 2009 over 2006. This difference is two boys and three girls. On the other hand, the non-VSL group has no change in boys but one more girl. Finally, the VSL 2 has four more boys not attending but three girls fewer excluded. While there may be a slight, but significant, difference between the VSL and non-VSL groups in non-attendance for lack of money, the VSL 2 group results seem counter-intuitive. It is normally girls that are pulled into women's household or IGA activities rather than boys. The numbers are small here and can also be influenced by short-term demographic variation.

Conclusion

The small difference between VSL 1 and non-VSL in children excluded from school for monetary reasons may be significant and should increase over time. Eventually, one would expect to see the same pattern develop for the second wave of VSL associations (VSL 2). However, if women's economic activities increase because of greater disposable income from savings and borrowing in VSLs, it is possible that fewer girls will attend school, in order to assist their mothers. This decreased attendance will not be for lack of money, but on the contrary because of more money available for productive use. Only when these households reach a much higher level of affluence and labor can be hired will girls return to school at a level equal to that of boys.

9. Changes in Nutrition

Women were queried with regard to the number of meals taken by their household members and the quantities of various foodstuffs consumed. Tables 9-12 present the findings of these queries.

Table 9: Household Meal Consumption per Day during the Hungry Seasons of 2006 and 2008 (% of respondents)

Who	2006	2008	Change	% Change
One Meal				
VSL 1	0.0%	3.3%	+ 3.3%	n/a
VSL 2	3.3%	5.0%	+ 1.7%	+ 51.5%
Non-VSL	0.0%	3.3%	+ 3.3%	n/a
Two Meals				

VSL 1	46.7%	46.7%	0.0%	0%
VSL 2	35.0%	26.7%	- 8.3%	- 26.7%
Non-VSL	30.0%	26.7%	- 3.3%	- 11.0%
Three Meals				
VSL 1	53.3%	50.0%	- 3.3%	- 6.2%
VSL 2	61.7%	68.3%	+ 6.6%	+ 10.7%
Non-VSL	70.0%	70.0%	0.0%	0%

In Table 9 we see that with very few exceptions (only 2 women overall), women of the three survey groups eat two or three meals a day. However, this question does not examine the size or composition of these meals.

Table 9 contains information that relates to the frequency of meals during the hungry season (July – October), when the population is awaiting the cereals harvest and food stocks have run low. The two reference points are the hungry seasons of 2006 (prior to any VSL formation) and 2008 (last hungry season). Thus, 30% - 47% of surveyed women ate two meals and 53% - 70% ate three meals per day in 2006. These frequencies are essentially the same for 2008: 27% - 47% ate two meals and 50% - 70% ate three meals a day.⁴ On balance, the number of persons changing the number of meals between the two reference periods is minimal: two women shifted from three meals to one meal in VSL 1; three women shifted to three meals and one to one meal from two meals in VSL 2; and two women shifted from two meals to one meal in the non-VSL group. There is no indication of significant change here.

Conclusion

It is clear that this population of women tends to maintain the same number of meals through custom and habit, although the composition and nutritional value of the meal may be reduced in lean times or increased with greater income.

Table 10 presents the reasons given by the 20% of women - 36 of 180 - that declared having increased the number of meals between the hungry seasons of 2006 and 2008. Since overall the women increasing the number of meals appear to be only 3, 33 women must have moved in the opposite direction but are masked by the totals. Some 16 women of VSL 1, five of VSL 2, and 15 of the non-VSL declared an increase in meals as presented below.

⁴ These percentages are all rounded to the nearest whole number.

**Table 10: Reasons for Consuming More Meals in the Hungry Seasons of 2006 and 2008
(% of households Consuming More Meals)**

Reasons for Consuming More Meals (N=36 of 180)	Percentage of Households
More Money Available Due to Savings or Loans	
VSL 1 (N=16)	37.5%
VSL 2 (N=5)	60.0%
Non-VSL (N=15)	0%
Food Prices Have Dropped	
VSL1	0%
VSL2	0%
Non-VSL	0%
Better Agricultural Production in the Previous Season	
VSL1	12.5%
VSL2	40.0%
Non-VSL	0.0%
Children Have Grown	
VSL1	25.0%
VSL2	20.0%
Non-VSL	6.7%
A Household Member Has Found More Employment	
VSL1	0%
VSL2	0%
Non-VSL	0%
Other Reason	
VSL1	6.3%
VSL2	0%
Non-VSL	13.3%

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The women unanimously responded that food prices had not dropped between 2006 and 2008, which is to be expected. This is also true for household members finding more employment. The fact the children have grown in size (or number) would be a natural finding, although the two VSL groups indicated this more often than the non-VSL group. This is unlikely to be a result of VSL membership.

The two VSL groups also claim better harvests between the two years, while the non-VSL group does not. This may indicate more agricultural activity by VSL members than non-VSL respondents. Most importantly, 37.5% of VSL 1 members and 60.0% of VSL 2 members indicate increasing the number of meals, due to increased disposable income generated through savings and borrowing. On the other hand, none of the non-VSL respondents gives this as a reason for increasing the number of meals.

Conclusion

There would appear to be a significant linkage for VSL groups between increasing the number of meals and increasing savings and borrowing behavior. This is an expected and demonstrated impact of the VSL program, although it will be necessary to verify why on balance there was little absolute change (an almost equal number of women must have reduced their number of meals during the same period).

To explore further changes in food consumption between 2006 and 2009, women were asked to indicate whether they consumed more, less, or the same amount of key foods. Table 11 presents the results of this question.

Table 11: Change in Quantity of Food Types Consumed between 2006 and 2009 (% of respondents)

Survey Groups	No Use	Greater Use	Lesser Use	No Change
Meat				
VSL 1	1.7%	36.7%	43.3%	18.3%
VSL 2	0%	38.3%	30.0%	31.7%
Non VSL	5.0%	28.3%	46.7%	20.0%
Fish				
VSL 1	0%	55.0%	36.7%	8.3%

VSL 2	0%	50.0%	18.3%	31.7%
Non VSL	1.7%	31.7%	38.3%	28.3%
Vegetables				
VSL 1	0%	51.7%	20.0%	28.3%
VSL 2	0%	30.0%	16.7%	53.3%
Non VSL	3.3%	38.3%	25.0%	33.3%
Bread				
VSL 1	53.3%	13.3%	25.0%	8.3%
VSL 2	15.0%	28.3%	21.7%	35.0%
Non VSL	30.0%	8.3%	30.0%	31.7%
Tea and Coffee				
VSL 1	71.7%	8.3%	15.0%	5.0%
VSL 2	46.7%	5.0%	10.0%	38.3%
Non VSL	40.0%	13.3%	23.3%	23.3%
Local Beer (Dolo)				
VSL 1	53.3%	18.3%	11.7%	16.7%
VSL 2	51.7%	13.3%	8.3%	26.7%
Non VSL	61.7%	15.0%	13.3%	10.0%
Fruit				
VSL 1	18.3%	18.3%	21.7%	41.7%
VSL 2	0%	18.3%	15.0%	66.7%
Non VSL	6.7%	15.0%	28.3%	50.0%
Cow's Milk				
VSL 1	5.0%	46.7%	31.7%	16.7%
VSL 2	1.7%	20.0%	18.3%	60.0%

Non VSL	3.3%	31.7%	25.0%	40.0%
Rice				
VSL 1	3.3%	41.7%	45.0%	10.0%
VSL 2	0%	26.7%	36.7%	36.7%
Non VSL	0%	26.7%	36.7%	36.7%
Millet, Sorghum, and Maize				
VSL 1	1.7%	50.0%	25.0%	23.3%
VSL 2	1.7%	46.7%	13.3%	38.3%
Non VSL	0%	63.3%	10.0%	26.7%

VSL 1 and VSL 2 members appear to consume more of the following foods in 2009 over 2006 than the non-VSL respondents: meat, fish, vegetables (VSL 1 only), bread, cow's milk (VSL 1 only), and rice (VSL 1 only). The amounts consumed of local beer and fruit do not appear significantly different. On the other hand, non-VSL respondents indicate more increased consumption of traditional cereals and tea and coffee.

In six of these foods, VSL 1 respondents appear to have increased their consumption significantly more than the non-VSL respondents. The differences between VSL 1 and non-VSL are (rounded): meat (37% - 28%); fish (55% - 32%); vegetables (52% - 38%); bread (13% - 8%); cow's milk (47% - 32%); and rice (42% - 27%). VSL 2 members also indicate greater increased consumption than non-VSL respondents in: meat (38% - 28%); fish (50% - 32%); and bread (28% - 8%). On the other hand, non-VSL indicate greater increased consumption than VSL 2 in vegetables (38% - 30%), and cow's milk (32% - 20%).⁵

Conclusion

It appears that a greater percentage of women in VSL groups compared to non-VSL women, and among VSL 1 members in particular, have increased their consumption over the previous three years of a variety of foodstuffs. Especially noteworthy is the increased consumption of high-protein foods, particularly meat and fish.

Table 12 presents the reasons given by the surveyed women for consuming more foodstuffs in 2009 over 2006.

⁵ These percentages are all rounded to the nearest whole number.

Table 12: Reasons for Consuming More Foodstuffs between 2006 and 2009 (% of respondents)

Reasons for Consuming More Foodstuffs (N=139 of 180)	Percentage of Households
More Money Available Due to Savings	
VSL 1 (N=50)	56.0%
VSL 2 (N=41)	65.9%
Non-VSL (N=48)	16.7%
Food Prices Have Dropped	
VSL1	2.0%
VSL2	4.9%
Non-VSL	0%
Children Have Grown	
VSL1	40.0%
VSL2	43.9%
Non-VSL	45.8%
Other Reasons	
VSL 1	21.7%
VSL2	43.6%
Non-VSL	66.0%

Some 139 women (77.2%) indicated that they consumed more now of some foodstuff than three years ago. Some 83.3% of VSL 1 members, 68.3% of VSL 2 members, and 80% of non-VHL respondents indicate that they increased consumption of at least one foodstuff since early 2006.

Interestingly, a few women indicate that they consumed more because prices had dropped, although none had indicated this with regard to increased number of meals (cf. Table 10). The most common reason for increasing consumption was increased money available from savings. In this the two VSL groups are significantly more represented than the non-VSL. Thus, 56.0% and 65.9% of VSL 1 and VSL 2 members, respectively, point to savings as a reason for increased food consumption, while this figure falls to 16.7% for the non-VHL. The second most important reason given is that children have grown, implying increased food need. There

appears to be no significant difference in the response of the three groups to this reason for increased consumption. Finally, a significant number of women overall indicate other reasons for increased consumption (22% - 66% rounded). These reasons range over a wide variety of factors for all three groups, including better climate/rainfall, better harvests, more money generated from business, and increased household size.

Conclusion

VSL members are much more likely than non-VSL women to have consumed more food over the preceding three years because of greater disposable income from savings. This does appear related to length of membership. Other reasons for greater consumption do not distinguish VSL members significantly from non-members.

10. Affordability of Health Care

A question was posed to the surveyed women regarding the affordability of health care services. Table 13 presents those results.

Table 13: Change in Affordability of Health Services between 2006 and 2009 (% of respondents)

Survey Group	More Affordable	Less Affordable	No Change
Affordability of Health Services			
VSL 1	63.3%	25.0%	11.7%
VSL 2	60.0%	8.3%	31.7%
Non VSL	49.2%	30.5%	20.3%

There appears to be a clear difference between the responses of the three groups, with the two VSL groups indicating a higher proportion of respondents declaring greater affordability in 2009 over three years earlier. Thus, 63.3% of VSL 1 and 60.0% of VSL 2 members claim greater affordability compared to only 49.2% for the non-VSL respondents.

Conclusion

There appears to be a significant relationship between VSL membership and the affordability of health care, although this is not related to length of membership.

11. Income Generating Activities (IGAs)

Since it is known that women expect to channel their savings and borrowing in VSLs into IGAs, a series of questions were asked of them regarding their activities. Tables 14 through 21 present the results of these related questions. The first of these, Table 14, presents the IGAs

these women had in early 2009 and 3 years earlier. Multiple answers were permitted, since most women and their households engage in more than one economic activity.

Table 14: Types of Income Generating Activities Carried Out by Households in 2006 and 2009 (% of respondents)

Who	2006	2009	Change	% Change	Who	2006	2009	Change	% Change
Livestock Fattening					Handicrafts (pottery, basketry)				
VSL 1	61.7%	86.7%	+ 25.0%	+ 40.5%	VSL 1	8.3%	11.7%	+ 3.4%	+ 41.0%
VSL 2	68.3%	83.3%	+ 15.0%	+ 22.0%	VSL 2	8.3%	8.3%	0%	0%
Non-VSL	70.0%	80.0%	+ 10.0%	+ 14.3%	Non-VSL	5.0%	3.3%	- 1.7%	- 34.0%
Vegetable Gardening					Domestic Work				
VSL 1	10.0%	10.0%	0%	0%	VSL 1	21.7%	21.7%	0%	0%
VSL 2	6.7%	3.4%	- 3.3%	- 49.3%	VSL 2	11.7%	11.7%	0%	0%
Non-VSL	20.0%	20.0%	0%	0%	Non-VSL	11.7%	11.7%	0%	0%
Cash Cropping					Searching for Gold				
VSL 1	46.7%	60.0%	+ 13.3%	+ 28.5%	VSL 1	13.3%	18.3%	+ 5.00%	+ 37.6%
VSL 2	41.7%	43.3%	+ 1.6%	+ 3.8%	VSL 2	10.0%	6.7%	- 3.3%	- 33.0%
Non-VSL	55.0%	55.0%	0%	0%	Non-VSL	0%	0%	0%	0%
Cereals Speculation					Small Restaurants (doughnuts, pancakes)				
VSL 1	35.0%	43.3%	+ 8.3%	+ 23.7%	VSL 1	18.3%	35.0%	+ 16.7%	+ 91.3%
VSL 2	31.7%	40.0%	+ 8.3%	+ 26.2%	VSL 2	30.0%	45.0%	+15.0%	+ 50.0%
Non-VSL	35.0%	33.3%	- 1.7%	- 4.9%	Non-VSL	58.3%	58.3%	0%	0%
Local Beer Production					Food Processing (oil, karité butter)				
VSL 1	3.3%	3.3%	0%	0%	VSL 1	20.0%	26.7%	+ 6.7%	+33.5%
VSL 2	10.0%	10.0%	0%	0%	VSL 2	25.0%	33.3%	+ 8.3%	+33.2%
Non-VSL	6.7%	6.7%	0%	0%	Non-VSL	28.3%	28.3%	0%	0%
Others									
VSL 1	20.4%	24.1%	+ 3.7%	+ 18.1%					

VSL 2	26.3%	33.3%	+ 7.0%	+ 26.6%	
Non-VSL	23.3%	25.0%	+ 1.7%	+ 7.3%	

The most important change in IGAs between early 2009 and three years earlier occurs in livestock fattening. There has been a 40.5% rise for VSL 1 in the frequency of respondents claiming to engage in this activity in 2009 over 2006. VSL 2 has a 22.0% rise in the proportion of people indicating activity in this area followed by the non-VSL with a 14.3% increase. This is the most important IGA for women with about two-thirds of women overall (62% - 70% rounded) claiming to engage in this activity in 2006. While there has been an increase in this activity for all three groups, there is a pattern here that appears to be correlated with length of VSL involvement.

Cash cropping (e.g., peanuts) was the second most popular IGA in 2006, with activity ranging from 41.7% - 55.0% between the three survey groups. There is a fairly strong rise in the frequency of cash cropping for VSL 1 (28.0%) compared to the VSL 2 (3.8%) and to the non-VSL (0%), all from a similar base three years earlier.

There is also a substantial rise in the frequency of food processing/transformation for both VSL groups. Thus, there is a rise of 33.5% for VSL 1 and 33.2% for VSL 2 respondents indicating involvement in this IGA between 2006 and 2009. On the other hand, although 28.3% of non-VSL respondents engaged in this activity in 2006 (compared to comparable levels among the VSL groups), there has been no change since then. Here again, there would appear to be a linkage between the tendency to engage in this IGA and membership in VSLs (although not length of involvement).

VSL members show an enormous rise in the frequency with which they engage in restaurant operation since 2006. There is a percentage rise in this activity of 91.3% for VSL 1 members and 50.0% for VSL 2, contrasted with no change for the non-VSL respondents, who were far more involved in this IGA in 2006 for some reason than the two VSL groups. Length of VSL membership again appears correlated with increase in restaurant operation. It should be noted that these are not fixed restaurant locations but small stands or cooking stations opened in marketplaces on market days (usually every third day).

Cereals speculation activity, roughly as frequent in 2006 as small restaurant operation and with little variation between survey groups (32% - 35% rounded), shows a sizeable increase in frequency for VSL 1 (23.7%) and VSL 2 (26.4%) in 2009 compared to a decrease of 4.9% for the non-VSL. Here again there seems to be correlation between VSL membership and increased frequency of cereals speculation, although this appears unrelated to length of VSL membership.

The remaining IGAs are considerably less important than the five just reviewed. They are in terms of their frequency in 2006: domestic work (12% - 22%); vegetable gardening (7% - 20%); gold prospecting (0% - 13%); handicrafts (5% - 8%); and beer making (3% - 10%). There is no

change in frequency of domestic work and beer making.⁶ On the other hand, the increase of 41.0% for VSL 1 in handicrafts is a move from five to seven people between 2006 and 2009, and the 37.6% increase in gold prospecting is a move from eight to 11 women during the same period. In the same manner, the decrease of 34.0% for non-VSL in handicrafts is a move from three to two women, the decrease of 33% for VSL 2 in gold prospecting is a move from six to four women, and the drop of 49.3% in vegetable gardening for VSL 2 is a move from four to two women. Consequently, none of these small moves should be considered significant, given the few women involved.

Conclusion

The most important change in IGAs between early 2009 and 3 years earlier occurs in livestock fattening. This pattern appears to be related to length of VSL involvement. There is a fairly strong rise in the frequency of cash cropping for VSL 1 compared to the VSL 2 and the non-VSL, all from a similar base three years earlier. There is also a substantial rise in the frequency of food processing/transformation for both VSL groups. Likewise, VSL members show an enormous rise in the frequency with which they engage in restaurant operation since 2006. Cereals speculation, roughly as frequent in 2006 as small restaurant operation and with little variation between survey groups, shows a sizeable increase in frequency for VSL 1 and VSL 2 in 2009 compared to a decrease for the non-VSL, indicating a significant linkage to VSL membership. Only in the case of livestock fattening and restaurant operation do the changes appear to relate to length of VSL membership.

Table 15 presents other types of IGAs that women had in 2009. These are new businesses since 2006.

Table 15: Other Types of Household Income Generating Activities Existing in 2009 (% of all respondents)

Survey Group (N=180)	Small Business and Trading	Restaurant Operation	Artisanal, Music, Religious	Other	Total
VSL 1 (N=13)	18.3%	1.7%	0%	1.7%	21.7%
VSL 2 (N=19)	28.3%	0%	3.3%	0%	31.7%
Non-VSL (N=16)	18.3%	1.7%	3.3%	3.3%	26.7%

Overall, some 48 women (26.7%) had new IGAs in 2009 that they did not engage in three years earlier. By far the most common among them is the category of small business and trading.

⁶ The preceding percentages are rounded to the nearest whole number.

This is either processing and sale or simply buying and resale. Overall, some 39 women (21.7%) engage in these activities. Other new businesses include small restaurant operation, artisanal activities (carpentry and weaving), music and religious activities, and others.

VSL 2 with 19 women had the greatest number of women beginning new businesses since 2006, followed by the non-VSL group (16) and the VSL 1 women (13). Some 11 of 13 VSL 1, 17 of 19 VSL 2, and 11 of 16 non-VSL new businesses were small business and trading activities. Each of these women had launched only the one new business.

When compared to their sample group, some 31.7% of VSL 2 women had launched new IGAs since 2006, compared to 21.7% for the VSL 1 and 26.7% for the non-VSL. A comparison of new businesses between VSL 1 and non-VSL does not support a correlation between new IGAs and length of membership in VSLs. Moreover, when we combine the two VSL groups we find a percentage of new business activity (26.7%) exactly equal to that for the non-VSL women.

Conclusion

It appears that for some reason new business activity is not related to VSL membership. It seems that increased cash from savings and borrowing within VSL groups is plowed primarily into existing IGAs. We see this principally in livestock, cash cropping, and cereals speculation.

Given a certain increase in business activity between 2006 and 2009, there is the issue of the degree to which children's labor was involved in these IGAs. Table 16 presents these results.

Table 16: Children Working Regularly in Household Income Generating Activities (average number per household and group total)

Survey Group	2006	2009	Change	% Change
Boys Under 18				
VSL 1	0.50 (30)	0.75 (45)	+ 0.25	+ 50.0%
VSL 2	0.33 (20)	0.50 (30)	+ 0.17	+ 51.5%
Non-VSL	0.23 (14)	0.28 (17)	+ 0.05	+ 21.7%
Girls Under 15				
VSL 1	0.57 (34)	0.83 (50)	+ 0.26	+ 45.6%
VSL 2	0.42 (25)	0.68 (41)	+ 0.26	+ 61.9%
Non-VSL	0.38 (23)	0.58 (35)	+ 0.20	+ 52.6%

All groups indicate substantial increase in children’s economic participation (22% - 62% rounded) between 2006 and 2009. There appears to be a significant difference between the two VSL groups and the non-VSL. Thus, the average number of boys working in the household has increased by 50.0% and 51.5%, respectively, for VSL 1 and VSL2, while the number for non-VSL has increased only 21.7%. On the other hand, the non-VSL households indicate a greater increase in girls working in household economic activities than the VSL 1 group, although VSL 2 households surpass non-VHL with 61.9%. Both boys and girls appear to be more involved in household activities now than three years earlier. Overall, there are 28 more boys working in household activities in 2009 (25 in VSL households and 3 in non-VSL), and 44 more girls (32 in VSL households and 12 from non-VSL.)

Taken together the VSL households now have a total of 75 boys working in their 120 households (an average of 37.5 in each VSL group) compared to 17 in the non-VSL households. The VSL households have added an average of .21 boy to their labor force, while non-VSL households have added .05 boy.

Taken together, the VSL households now have a total of 91 girls (50 in VSL 1 and 41 in VSL 2), an average of 45.5 girls for each VSL group, compared to 35 in non-VSL households. VSL households have added an average of .27 girl to their labor force, while the non-VSL households have added .20 girl.

Conclusion

There was greater use of children’s labor in VSL groups compared to the non-VSL group in 2006, and this difference with the non-VSL has significantly increased over the last three years. On the other hand, this increase does not appear to be correlated with length of VSL membership, with the VSL 2 equaling or surpassing the VSL 1 increases.

Women in the three groups were asked to rate whether their principal IGA had undergone a positive change (evolution) over the preceding three years. This can be taken to mean increased income generation through growth in volume, increased productivity, or both. Table 17 presents the results of this question.

Table 17: Positive Change in the Household’s Principal IGA between 2006 and 2009 (% of respondents)

Survey Groups	Positive Change	No Positive Change
Positive Evolution in Principal IGA		
VSL 1	80%	20%
VSL 2	80%	20%

Non VSL	80%	20%
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The results of this question indicate that an equal percentage (80%) of all three survey groups felt that there had been a positive evolution (growth) in their principal income generating activity. This is encouraging for all three groups, since 144 of 180 respondents feel that they are making progress in their IGA.

Conclusion

There is no perceived impact of VSL membership on the success of women's principal IGA over the previous three years. This is a somewhat surprising finding.

The reasons for this positive change in IGAs were explored in a further question. Table 18 presents the results for this question.

Table 18: Reasons for Positive Change in Household's Principal IGA between 2006 and 2009 (% of respondents)

Reason for Change in Principal IGA (N= 144 of 180)	% of Households
Increase in Invested Capital	
VSL 1	86.5%
VSL 2	58.3%
Non-VSL	62.0%
Increase in Sales	
VSL 1	82.7%
VSL 2	77.1%
Non-VSL	76.0%
Greater Profitability	
VSL 1	76.9%
VSL 2	91.7%
Non-VSL	70.0%

Increase in Time Devoted to the Activity	
VSL 1	50.0%
VSL 2	35.4%
Non-VSL	54.0%

The 80% of respondents in each survey group (48 of 60 women in each) that claimed positive change in their IGA indicated in roughly equal proportions that this was due to: greater profitability (70% - 92%); increase in sales (76% - 83%); and increase in invested capital (58% - 87%). Many fewer indicated that increased success in their principal IGA was due to greater time devoted to the activity (35% - 54%).⁷

The VSL 1 group indicated more often than the non-VSL women that greater success in their businesses was due to an increase in capital invested (86.5% to 62%), increase in sales (82.7% to 76%, and greater profitability (76.9% to 70%). However, with regard to greater investment of time, the non-VSL group narrowly preferred this response to the VSL 1 (54.0% to 50.0%).

The VSL 2 group responses were not significantly different from those of the non-VSL, except in profitability (91.7%) where they surpassed even the VSL 1 (76.9%), and in regard to time devoted, where the VSL 2 were surpassed by the non-VSL women (35.4% to 54.0%).

Conclusion

The greatest difference between the VSL 1 group and the non-VSL is in invested capital, which seems to be a reflection of the money saved and borrowed in this older group of VSL members. There is also a clear difference here between VSL 1 and VSL 2 in the tendency to consider invested capital as reason for success. This may be explainable by the lesser time VSL 2 members have been involved in VSLs. In general, VSL 1 women lead the VSL 2 in these four reasons for greater success, except in regard to greater profitability where VSL 2 women mention give this reason for positive business change much more often. Why this should be is unclear.

Another question in the IGA group queried women as to whether they had a second IGA. Table 19 presents these results.

Table 19: Existence of a Second Income Generating Activity in the Household (% of respondents)

Survey Group	Have a Second	Do Not Have a
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⁷ The preceding percentages are rounded to the nearest whole number.

	IGA	Second IGA
VSL 1	76.7%	23.3%
VSL 2	73.3%	26.7%
Non VSL	76.7%	23.3%

Approximately three-quarters overall (75.6%) of the women in these three groups indicate they have a second IGA, and there is virtually no difference between the frequencies of their responses.

Conclusion

Membership in VSLs is apparently not related to adding a second IGA to one already in existence. This corroborates the findings concerning new businesses created over the previous three years. If we assume the VSL members to have been equally active in their second business three years before as non-VSL women, some 3 of 4 VSL women already had at least two IGAs prior to joining their VSLs. Although no question was asked about more than two IGAs or whether completely new IGAs were formed, VSL impact is more likely to be noted in the size and profitability of first and second IGAs than in the creation of wholly new ones. This issue, however, should be further explored in future.

Table 20 indicates whether the surveyed women feel that their second IGA enjoyed positive change between 2006 and 2009.

Table 20: Positive Change in the Second IGA Since 2006 (% of respondents)

Survey Groups (N=136 of 180)	Positive Change in the Second IGA	No Positive Change in the Second IGA
VSL 1	80.4%	19.6%
VSL 2	84.1%	15.9%
Non VSL	67.4%	42.6%

The two VSL groups are clearly ahead of the non-VSL in indicating positive change in the second IGA over the previous three years, and they are not far apart in this appreciation (80.4% and 84.1% for VSL 1 and VSL 2, respectively). Only 67.4% of non-VSL respondents felt that their second IGA had undergone positive change between 2006 and 2009.

Conclusion

VSL members affirm a positive evolution in their second IGA to the same degree that they do for their principal IGA – about four of every five. While both VSL and non-VSL groups equally attest to positive change in their principal IGA, the non-VSL group does not see the same positive change in their second IGA. The non-VSL response appears to be significantly related to their lack of membership in VSLs. It is in the second IGA - not the principal activity - that the commercial benefits of VSL membership most appear to lie. Interestingly, this does not appear to be linked to length of membership.

Table 21 parallels Table 18 in presenting the frequencies of responses to the set of four common reasons for greater success in the business.

Table 21: Reasons for Growth in Household's Secondary IGA between 2006 and 2009 (% of respondents)

Reason for Growth in Secondary IGA (N= 114 of 180)	% of Households
Increase in Invested Capital	
VSL 1 (N=41)	75.6%
VSL 2 (N=37)	59.5%
Non-VSL (N=36)	50.0%
Increase in Sales	
VSL 1	78.0%
VSL 2	78.4%
Non-VSL	61.1%
Greater Profitability	
VSL 1	68.3%
VSL 2	81.1%
Non-VSL	50.0%
Increase in Time Devoted to the Activity	
VSL 1	53.7%

VSL 2	37.8%
Non-VSL	50.0%
Others	
VSL 1	5.4%
VSL 2	0%
Non-VSL	3.1%

There is a clear difference between both VSL groups and the non-VSL in the frequencies of all four of these responses: increase in invested capital; increase in sale; greater profitability; and increase in the time devoted to the activity. While the VSL1 group is more likely than the VSL 2 to claim an increase in capital (75.6% to 59.5%) and time (53.7% to 37.5%) as reasons for positive change, the VSL 2 do so slightly more than the VSL 1 in regard to increase in sales (78.4% to 78.0%). The VSL 2 women far more commonly state than their VSL 1 counterparts that an increase in profitability explains the positive evolution of their second IGA (81.1% to 68.3%). This VSL 2 preference for increased profitability is also found in respect to their principal IGA (cf. Table 18) for reasons that are unclear. The lower VSL 2 preference for time dedication also echoes the findings for their principal IGA.

Conclusion

With regard to the second IGA, VSL membership seems to translate into increased capital investment, greater sales, and greater profitability compared to non-members. Time dedication, while increasing for all groups, shows no significant difference between the older VSL 1 and non-VSL. On the other hand, while the VSL 2 do not claim increased time involvement nearly as much as the other two groups, they do so far more for greater profitability. This seems to be linked primarily to increased sales.

12. Social Status in the Community

The survey included some questions aimed at exploring whether a woman's social status might be related to VSL membership. Table 22 indicates women's responses to whether they felt their social position in the community had changed over the preceding 3 years.

Table 22: Change in Social Position within the Community between 2006 and 2009 (% of respondents)

Survey Groups	Lower Status	No Change	Higher Status
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VSL 1	0%	5.0%	95.0%
VSL 2	1.7%	20.0%	78.3%
Non VSL	0%	45.0%	55.0%

The responses to this question seem to reflect VSL membership. Some 95.0% of VSL 1 and 78.3% of VSL 2 members indicate that they feel their social status (position) is higher in early 2009 than three years before when they were not involved in VSL group activities. The lesser proportion of VSL 2 members indicating a feeling of high status appears significantly related to length of VSL membership.

Conclusion

There appears to be a significant relationship between length of VSL membership and women's feeling of higher social status.

Those women responding that their felt status had risen in the community were queried about why they believed this. Table 23 presents the results of that question.

Table 23: Reasons for Believing in a Change in Social Position between 2006 and 2009 (% of respondents)

Reason for Change in Social Position (N=147 of 180)	No	Yes
Husband's Respect is Greater		
VSL 1	10.7%	89.3%
VSL 2	12.8%	87.2%
Non-VSL	14.0%	86.0%
More Participation in Decisions of the Extended Family		
VSL 1	17.9%	82.1%
VSL 2	27.1%	72.9%
Non-VSL	41.9%	58.1%
More Respect from Other Members of the Compound		

VSL 1	3.6%	96.4%
VSL 2	18.7%	81.3%
Non-VSL	39.5%	60.5%
More Admiration by People in the Community		
VSL 1	5.4%	94.6%
VSL 2	14.6%	85.4%
Non-VSL	39.5%	60.5%
Other Reasons		
VSL 1	89.8%	10.2%
VSL 2	90.5%	9.5%
Non-VSL	93.0%	7.0%

Nine women more answered this question than should have done so according to the preceding table, but since they cannot be identified they will be kept in the responses. There is also one person experiencing lower status who may have answered 'no' to the above. These questions should be interpreted as revealing to what degree those experiencing an increased social status ascribe this to the reasons given in the table.

There is no significant difference in the responses to the issue of greater husband's respect, with responses all lying between (86.0% and 89.3%). In the case of greater participation in the decisions of the woman's extended family there is a clear difference between the two VSL groups and the non-VSL. Thus, 82.1% of VSL 1 and 72.9% of VSL 2 members indicate greater participation in decision making of their extended family, while only 58.1% of the non-VSL respondents do so.

The same clear difference is found in how the VSL women see increased respect from other compound members and greater admiration from community members in general. Thus, 96.4% and 81.3% of VSL 1 and VSL 2 members, respectively, feel they are respected or admired more in their compound, while for non-VSL respondents this figure is only 60.5%. In the same way, 94.6% and 85.4% of VSL 1 and VSL 2 members feel more admiration from community members, while this figure is again only 60.5% for the non-VSL. It should be noted that the distinction between extended family and people of the same compound is that a woman leaves her father's family upon marriage and joins her husband in his compound where there may already be other wives. Of the 130 women overall that were in polygamous marriages, 64 (49.2%) were not the husband's first wife.

Finally, a few women offer other reasons for considering their status to have improved over the previous 3 years. Here again the two VSL groups tend to provide more reasons than the non-VSL respondents.

Conclusion

While a sense of greater respect from the husband does not appear to differentiate VSL and non-VSL in their perception of greater social status, VSL women more often than non-VSL claim an increased role in extended family decision making, increased respect from other compound members, and greater admiration from community members. These differences between VSL and non-VSL appear related to length of VSL membership.

A further question was asked of the sample women regarding the main reasons for their change of status over the previous three years. These results are presented in Table 24. The difference between this question and that of the preceding table is between women's perceived feelings of greater status and their sense of why objectively this has happened.

Table 24: Reasons for Experiencing a Change in Social Position between 2006 and 2009 (% of respondents)

Reason for Change in Social Position (N=147 of 180)	No	Yes
More Income Generated		
VSL 1	8.8%	91.2%
VSL 2	20.8%	79.2%
Non-VSL	35.7%	64.3%
Greater Responsibilities in Group Activities		
VSL 1	70.2%	29.8%
VSL 2	39.6%	60.4%
Non-VSL	95.2%	4.8%
Change in Self Confidence		
VSL 1	15.8%	84.2%
VSL 2	20.8%	79.2%

Non-VSL	21.4%	78.6%
Other Reasons		
VSL 1	97.9%	2.1%
VSL 2	95.2%	4.8%
Non-VSL	92.9%	7.1%

It appears the same 147 women answered this question as in Table 22. In regard to higher social position in the community, a stated change in earning power clearly differentiates the two VSL groups from the non-VSL respondents. Thus, 91.2% of VSL 1 and 79.2% of VSL 2 members indicate greater earning power, while only 64.3% of non-VSL respondents do. It appears that the tendency to identify income as a cause for higher status is related to length of VSL membership.

The same distinction is found between VSL groups and the non-VSL in greater responsibilities in the groups to which these women belong. Thus, 29.8% of VSL 1 and 60.4% of VSL 2 members indicate this as a reason for higher social status, while only 4.8% of the non-VSL respondents do so. Since we know from the focus group work that women belong to very few other organized groups, these responses are most likely the result of membership in the VSLs. The VSL 2 members have a higher score in this than the VSL 1 members due probably to their more recent creation and accompanying enthusiasm.

With respect to increased self-confidence, the three groups of women do not seem significantly different, ranging from 84.2% for VSL 1, through 79.2% for VSL 2 to 78%.6 for the non-VSL respondents. The slightly higher number for VSL 1 women may reflect their longer connection with the VSL program.

Conclusion

Among those women attesting to an increase in social status within the community, significant differences between VSL and non-VSL women appear to lie in increased income and responsibilities within groups. In respect to greater self-confidence, there does not appear to be a significant difference in responses between the VSL and non-VSL. Moreover, only in the case of increased earning power does the difference with non-VSL appear related to length of VSL membership.

13. Gender Issues

a. Resource Control by Women in the Household

Given the expectation that VSL women are likely – over time – to improve their bargaining position and control of resources in the household, a question in the survey was designed to

explore this gender issue. We should be clear here that each woman in the compound has her own living quarters (a hut or small house) and that there would be few (if any) other adults in this unit. Asking a woman to what degree she controls household resources thus inevitably involves consideration of her wider compound, where there may be one or more other wives. As mentioned earlier, nearly 3 of 4 respondents to this survey are in polygamous marriages and nearly half are not the first wife.

Table 25 presents the results of the question on what resources the woman controls in the household now and three years previously.

Table 25: Resource Control by the Women of the Household (% of respondents)

Who	2006	2009	Change	% Change
Vegetable Garden Products and Seeds				
VSL 1	33.3%	40.0%	+ 6.7%	+ 20.1%
VSL 2	25.0%	25.0%	0%	0%
Non-VSL	30.0%	30.0%	0%	0%
Cattle				
VSL 1	1.7%	10.0%	+ 8.3%	+ 488.2%
VSL 2	6.7%	16.7%	+ 10.0%	+ 149.3%
Non-VSL	0%	1.7%	+ 1.7%	n/a
Goats and Sheep and Their Products				
VSL 1	41.7%	71.7%	+ 30.0%	+ 71.9%
VSL 2	48.3%	73.3%	+ 25.0%	+ 51.8%
Non-VSL	65.0%	73.3%	+ 8.3%	+ 12.8%
Money Earned in Income Generating Activities				
VSL 1	50.0%	83.3%	+ 33.3%	+ 66.7%
VSL 2	75.0%	88.3%	+ 13.3%	+ 17.7%
Non-VSL	88.3%	91.7%	+ 3.4%	+ 3.9%
Money Generated from VSL Loans and Share-out				
VSL 1	n/a	83.3%	n/a	n/a

VSL 2	n/a	78.3%	n/a	n/a
Non-VSL	n/a	n/a	n/a	n/a
Labor				
VSL 1	20.0%	20.0%	0%	0%
VSL 2	10.2%	13.6%	+ 3.4%	+ 33.3%
Non-VSL	11.7%	11.7%	0%	0%
Others				
VSL 1	0%	0%	0%	0%
VSL 2	0%	0%	0%	0%
Non-VSL	0%	0%	0%	0%

In all cases except control of labor, the VSL 1 respondents claimed far greater increases in level of control of resources than the non-VSL and to a significant degree also than the VSL 2 group. Thus, there was a 20.1% increase in VSL 1 women claiming greater control over their vegetable garden produce, compared to 0% for the two other groups, and a 71.9% increase in control of VSL 1 of sheep and goats compared to 51.8% and 12.8% for VSL 2 and non-VSL respondents, respectively. The number of VSL 1 women claiming control over the income from IGAs was 66.7%, while this figure was only 17.7% for VSL 2 and 3.9% for the non-VSL women. The difference in control of these resources between the two VSL groups and the non-VSL is striking. This difference appears to be related to length of VSL membership.

The degree of control over VSL income is 83.3% and 78.3% for VSL 1 and VSL 2 women, respectively, indicating little difference between the groups. The flip side of this is that some 16.7% and 21.7% of VSL participants claim not to control the income generated by VSL loans and share-out. This bears looking into through new focus group activities.

The significance of the large percentage increases in the number of VSL 1 and VSL 2 women claiming greater control over cattle between 2006 and 2009 (488.2% and 149.3%, respectively) is greatly reduced by the fact that these are very small numbers. Thus, in VSL 1, one woman claiming ownership increases to six and among the VSL 2, four women owners increase to 10. Nevertheless, not one of the non-VSL respondents claimed control of cattle in 2006 and only one does so in 2009. These differences appear related to VSL membership, although they concern a very small number of women.

The increase in control over labor for VSL 2 (up 33.3%) looks more impressive than it is, since this only represents a change from six responses to eight. In fact, only a small minority of women claim control over household labor supply, which certainly includes their own. Thus,

only 25 women overall (13.9%) in 2006 and 27 in 2009 (15.0%) had control over household labor supply.

Conclusion

There is a clear pattern of increased control of resources between 2006 and 2009, particularly with respect to VSL 1 members. In all resource categories, except control of labor, the VSL 1 respondents claimed far greater increases in level of control of resources than the non-VSL and to a significant degree also than the VSL 2 group. Differences in control of common resources thus appear to be related to length of VSL membership.

b. Decision Making in the Household

Following up the degree to which VSL membership may have brought about change in control over household productive resources, a set of three questions were asked about who makes the decisions regarding the woman's income and IGA activities, as well as who is the decision maker concerning the schooling, clothing, and health care of children. These results are presented in Tables 26 – 29. Table 26 presents the breakout of the responses for the first question on who makes the decisions regarding the use of the woman's income. .

Table 26: Decision Maker Regarding Use of the Money Earned by the Woman (% of respondents)

Who	2006	2009	Change	% Change
Male Head of Household				
VSL 1	40.0%	26.7%	- 13.3%	- 33.3%
VSL 2	41.7%	21.7%	- 20.0%	- 14.9%
Non-VSL	35.0%	31.7%	- 3.3%	- 9.4%
Wife Responsible for Her Own Household				
VSL 1	28.3%	38.3%	+ 10.0%	+ 35.3%
VSL 2	28.3%	31.7%	+ 3.4%	+12.0%
Non-VSL	28.3%	28.3%	0%	0%
Husband and Wife Together				
VSL 1	31.7%	51.7%	+ 20.0%	+63.1%
VSL 2	33.3%	45.0%	+ 11.7%	+35.1%
Non-VSL	31.7%	36.7%	+ 5.0%	15.8%

All Household Members (including children)				
VSL 1	0%	0%	0%	0%
VSL 2	8.3%	6.7%	- 1.6%	- 19.3%
Non-VSL	13.3%	13.3%	0%	0%

There is a significant shift from the husband's control of the respondent's income to that of the woman herself or toward joint decision making by the husband and the wife. This is strongest for VSL 1, followed by VSL 2, and least frequent for the non-VSL women. Thus, the VSL 1 women indicated a 33.3% lesser tendency for their husbands to control their income in 2009, followed by 14.9% of the VSL 2, and 9.4% of the non-VSL women. The shift to women's own control roughly mirrors the loss of husband's control, with 35.3% of VSL 1, 12.0% of VSL2, and 0% of the non-VSL indicating increased control of their own income in 2009 over 3 years earlier.

On the other hand, there was also an increase in women responding that control over their income was now a joint decision between the husband and the woman income earner. Thus, there was an increase of 63.1% in responses favoring joint decision making among VSL 1 women, 35.1% among the VSL 2, but only 15.8% among the non-VSL respondents. Not surprisingly, relatively few women indicated that all family members participated in family decisions regarding the use of the woman's income, including children, although there is a downward shift of 19.3% in the choice of all family members for VSL 2. This only represents a change from five to four women. It is also a little surprising that the non-VSL respond 13.3% for each reference period that even children participate in deciding how to use the woman's income. Again, this involves only 8 women of 60 and there was no change over the years, as would be expected in the absence of VSL.

A few women answered affirmatively to more than one of these choices, although the questions had been conceived to be mutually exclusive.

Conclusion

There seems to be a significant shift away from husband's control of women's income to either women's control or joint husband-wife control. In both women's control and joint control the shifts appear to be related to length of VSL membership.

Table 27 presents the results for the question on who makes the decisions relative to the woman's principal IGA.

Table 27: Decision Maker Regarding the Woman's Principal IGA (% of respondents)

Who	2006	2009	Change	% Change
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Male Head of Household				
VSL 1	35.6%	27.1%	- 8.5%	- 23.9%
VSL 2	38.3%	28.3%	- 10.0%	- 26.1%
Non-VSL	26.7%	26.7%	0%	0%
Wife Responsible for Her Own Household				
VSL 1	38.3%	56.7%	+ 18.4%	+ 48.0%
VSL 2	28.3%	35.0%	+ 6.7%	+ 23.7%
Non-VSL	40.0%	40.0%	0%	0%
Husband and Wife Together				
VSL 1	20.3%	33.9%	+ 13.6%	+ 67.0%
VSL 2	38.3%	45.0%	+ 6.7%	+17.5%
Non-VSL	43.3%	44.1%	+0.8%	1.8%

Not surprisingly, the results of this question are quite similar to those in Table 26. Thus, there is a marked shift from husband's control of decision making regarding the operations of the woman's principal IGA, in favor of her own control or in favor of joint husband-wife decision making. Again, the shift to the woman's control or to joint control is stronger for VSL 1 than for VSL 2 women and much stronger than for non-VSL respondents. Thus, VSL 1 women reported 48.0% more frequently in 2009 that the woman makes the decisions regarding her IGA operations, compared to 23.7% more of VSL 2, and 0% of non-VSL women. In the same vein, 67.0% of VSL 1 women reported more frequently in 2009 than 3 years earlier that joint decision making exists compared to 17.5% of VSL 2 women and 1.8% of non-VSL respondents.

The two VSL groups indicated a similar level of reduction in husband's control of decision making regarding the woman's IGA operations, compared to no change for the non-VSL. Thus, there was a reduction in the frequency of reporting husband's control over the woman's business decisions of 23.9% and 26.1% for VSL 1 and VSL 2, respectively. Some 40% of non-VSL respondents report husband's control in both 2006 and 2009.

Conclusion

As in the case of women's income, there is a significant shift from husband's control of decision making regarding the operations of her principal IGA, in favor of her own control or in favor of joint husband-wife decision making. Again, this appears to be related to length of VSL membership.

In order to explore who is the principal decision maker regarding children’s wellbeing, a question was put to the survey groups concerning the current pattern (2009 only). These results are presented in Table 28.

Table 28: Current Decision Maker with Respect to the Schooling, Clothing, and Health Care of Household Children (% of respondents)

Survey Groups	Male Head of Household	Wife Responsible for Own Household	Husband and Wife Together
VSL 1	30.0%	8.3%	61.7%
VSL 2	25.9%	22.4%	51.7%
Non VSL	23.7%	8.5%	67.8%

We find little difference between the responses of these 3 groups. Again, there are a few women responding affirmatively to more than one response. That may be explained by the fact that one or the other spouse may make some types of decisions, but that both do so in other situations. We find a higher level of VSL 1 response in favor of the husband’s decision making than among the VSL 2 and the non-VSL, but the difference is slight and probably not significant. VSL 2 women are more balanced in the distribution of responses between husband and wife, and favor less joint decision making.

Conclusion

While we might have expected that the two VSL groups should favor the woman’s decision making in respect to their children, particularly the VSL 1 women with a longer history of empowerment, this is not borne out by the pattern of responses to this question.

c. Change in Health Knowledge

A question was asked of respondents concerning their knowledge of how HIV/AIDS is transmitted, since it was possible that participation in VSL groups exposes women more to outside information. Table 29 presents the results of this question.

Table 29: Knowledge of HIV/AIDS Transmission (% of respondents)

Survey Groups	Affirmative Response
Unprotected Sexual Relations	
VSL 1	98.3%

VSL 2	96.6%
Non-VSL	96.6%
Through Infected Blood	
VSL 1	91.7%
VSL 2	94.9%
Non-VSL	83.1%
During Pregnancy	
VSL 1	52.5%
VSL 2	50.0%
Non-VSL	49.2%
When Giving Birth	
VSL 1	68.3%
VSL 2	69.5%
Non-VSL	71.2%
When Nursing	
VSL 1	51.7%
VSL 2	50.8%
Non-VSL	54.2%
Other Means	
VSL 1	22.0%
VSL 2	14.6%
Non-VSL	31.0%

These responses are not significantly different between the three survey groups, except perhaps for the non-VHL response to contamination through infected blood. Under other

reasons given, there is also a tendency for non-VSL respondents to find other means of HIV transmission (31.0% compared to 22.0% and 14.6% for VSL 1 and VSL 2, respectively). However, in an examination of the other means proposed, it is the VSL 1 group that refers most to HIV transmission through excision (5 responses of 11) compared to the VSL 2 (1 of 7) and the non-VSL (1 of 12). The VSL 2 and non-VSL women more frequently point to blades and razors as a means to transmit HIV.

A high percentage of all three groups already know that transmission is primarily through unprotected sexual relations (97% – 98%) and contact with infected blood (83% – 95%). On the other hand, generally over half of all groups believe in erroneous means of transmission: birth (68% - 71%); nursing (52% - 54%); and during pregnancy (49% - 53%).⁸

Conclusion

One cannot conclude from these figures that VSL membership has increased women’s understanding of HIV transmission. However, the greater reference by VSL 1 women to excision as a cause of HIV infection, while erroneous, may indicate a greater tendency to address this sensitive issue, a possible result of empowerment through length of VSL membership. Such empowerment may be combined here with exposure to health messages that have not been entirely understood.

Recommendation

If a fairly long period of VSL membership (2+ years) is related to greater exposure to outside messages, this should be explored further. Excision involves both health and women’s rights issues that bear further exploration through focus group work by female investigators.

d. Knowledge of Women’s Rights

To explore whether VSL membership and resulting empowerment can result in greater knowledge and discussion of basic women’s rights, a question was posed to all three groups relating to what rights they know now that they did not know three years earlier. This was accompanied by a question on whether the women had discussed this new knowledge within the family. Table 30 presents the results of these questions.

Table 30: Knowledge of Women’s Rights Not Known in 2006 and Discussion within the Wider Family (% of respondents)

Women’s Rights	Awareness	Discussed in Family
Women’s Right to an Equal Share of Land as Men		
VSL 1	33.3%	28.3%

⁸ The preceding percentages of this paragraph are rounded to the nearest whole number.

VSL 2	21.7%	10.0%
Non-VSL	15.0%	13.6%
Right Not to Be Inherited When Widowed		
VSL 1	50.0%	35.0%
VSL 2	33.3%	21.7%
Non-VSL	20.0%	18.6%
Right to Inherit Property		
VSL 1	50.0%	40.0%
VSL 2	40.0%	11.7%
Non-VSL	30.0%	16.7%
Right to Protection from Harmful Customary Practices		
VSL 1	80.0%	61.7%
VSL 2	86.7%	45.0%
Non-VSL	83.3%	58.3%
Right to Share Property When Divorced		
VSL 1	31.7%	20.0%
VSL 2	20.0%	15.3%
Non-VSL	10.0%	10.5%
Right to an Education		
VSL 1	95.0%	80.0%
VSL 2	91.7%	40.0%
Non-VSL	93.3%	75.4%
Right to Health Care Services		
VSL 1	96.7%	83.3%
VSL 2	85.0%	38.3%

Non-VSL	94.8%	64.3%
Right to Personal Security (non-violence toward women)		
VSL 1	76.7%	71.7%
VSL 2	61.7%	26.7%
Non-VSL	68.3%	47.5%
Right to Participate in Family Decision Making		
VSL 1	75.0%	56.7%
VSL 2	70.0%	38.3%
Non-VSL	50.0%	37.3%
Right to Representation and Participation in Public Affairs		
VSL 1	61.7%	55.0%
VSL 2	50.0%	31.7%
Non-VSL	38.3%	26.7%
Other Rights		
VSL 1	3.3%	1.7%
VSL 2	6.7%	6.7%
Non-VSL	1.7%	1.7%

Not surprisingly, women overall were less aware of some rights than others. Awareness of the right to an education and to health care services was extremely high among all groups - 92% to 95% and 85% to 97%, respectively (rounded). This awareness is also high for the right to protection from harmful customary practices (80% - 83%), of which excision is probably the most obvious. These are modern rights about which these women must hear a great deal from government and radio.

On the other hand, certain rights are not well known in all groups and may not be respected in their areas. These are: women's right to share property in a divorce (10% - 32%); right to an equal share of land (15% - 33%); right not to be inherited when widowed (20% - 50%); and right to inherit (30% - 50%). The foregoing rights are recognized overall by well less than half of survey women.

Finally, some rights may be seen as modern rights, but they do not enjoy the same levels of awareness as education, health care, and freedom from harmful customary practices. Thus, right to representation and participation in public affairs (38% - 62%), right to participate in family decision making (50% - 75%), and right to personal security (62% - 77%) are less recognized as women's rights by the survey women.⁹

As indicated in Table 30, a few women (4 of VSL 1, 3 of VSL 2, and 2 of non-VSL) named other rights. While only one or two women named each of these other rights, they are indicative of rights that may be followed-up in future surveys: autonomy in the use of assets; right to remain married if sterile; right to work; right to financial support from the husband; right to discussion with husband; right to engage in a business; right to family planning; and right to be housed and clothed. Given the small numbers and distribution of responses, these results do not appear significant.

Regarding the rights presented in the survey, the VSL 1 group generally indicates greater awareness of these women's rights over the non-VSL group, usually by large margins. This would seem to be correlated to VSL membership. However, this awareness gap almost disappears in the right to education and the right to health services. It reverses slightly in the case of the right to be protected from harmful customary practices.

A greater awareness of these rights is evident between the VSL 1 and VSL 2 groups, except in the right to be protected from harmful customary practices, and the awareness gap is not substantial in right to education and participation in family decision making. Except in these cases, awareness of women's rights does seem to be related to length of VSL membership.

Finally, VSL 2 members generally indicate greater awareness of these rights than do the non-VSL, although the gap is slight with respect to protection from harmful customary practices. On the other hand, VSL 2 members are slightly less aware than non-VSL in right to education and substantially less aware of the right to personal security and health care services.

A second question queried women about whether they had discussed new awareness of rights since 2006 within the wider family. This can be taken to mean the wider family compound. Overall, rarely did more than two-thirds of any group indicate engaging in family discussion of women's rights. Thus, only the VSL 1 group in the case of right to health care (83.3%) and right to education (80.0%), followed by the non-VSL for right to education (75.4%), rose above two-thirds of respondents reporting family discussion.

The proportion of respondents overall on average claiming to have engaged family members in discussion of traditional rights is extremely low: the right to share property in a divorce (15.3%), right to an equal share of land with men (17.3%), right to inherit (22.8%), and right not to be inherited by a man when widowed (25.1%). Also relatively low on average across the three groups is discussion of the right to be represented and participate in public affairs (37.8%), right to participate in family decisions (44.0%), and right to personal security (48.6%). Only in the case of the right to protection from harmful customary practices (55.0%), right to health care

⁹ The preceding percentages are all rounded to the nearest whole number.

(62.0%), and right to education (65.1%) is the average propensity overall to discuss rights within the family above 50% of respondents.

The VSL 1 group is always higher than the non-VSL in propensity to discuss women's rights within the wider family. This is true for all 10 rights of the survey. This gap appears significant, except in education where the gap is only 80.0% to 75.4%. However, in six of 10 rights the VSL 2 members are behind the non-VSL in their propensity to discuss these rights. In one case, there is almost equal reported propensity. In regard to only three rights do the VSL 2 members discuss more in the family than the non-VSL: right to be represented and participate in public affairs; right not to be inherited when widowed; and right to share property in a divorce. Given the clearly greater tendency for VSL 1 women to discuss these rights than the non-VSL, it is not clear why the VSL 2 do not show a greater propensity to do so when compared to non-VSL.

Conclusion

Women overall are far more familiar with the modern rights of education, health care services, and protection from harmful customary practices than others. On the other hand, they claimed much less awareness of rights that lie within customary law: sharing property in a divorce, an equal share of land with men, not to be inherited by a man when widowed, and inheritance. It is not clear these are truly rights within their society.

The VSL 1 group generally indicates greater awareness of women's rights over the non-VSL group, usually by large margins. This would seem to be related to VSL membership. However, this awareness gap almost disappears in the right to education and the right to health services and reverses slightly in the case of the right to be protected from harmful customary practices.

A greater awareness of these basic women's rights is evident between the VSL 1 and VSL 2 groups, except in the right to be protected from harmful customary practices, and the awareness gap is not substantial in right to education and participation in family decision making. Except in these cases, awareness of women's rights does seem to be related to length of VSL membership.

The VSL 1 group is always higher than the non-VSL in propensity to discuss women's rights within the wider family. This is true for all 10 rights of the survey. This gap appears significant, except in education. However, in six of 10 rights the VSL 2 members are behind the non-VSL in their propensity to discuss these rights. It appears that only after a fairly long period of membership (2+ years) does a significant gap appear between the likelihood of the VSL and non-VSL to discuss women's rights within the wider family.

Given the fact that VSL members have gained new awareness of women's rights and that this generally seems correlated with involvement in VSL associations, it is of interest to know whether this new knowledge has resulted in any changes in their lives. The results of a question to this end are presented in Table 31.

Table 31: Whether Changes Have Occurred in Life from New Awareness of Rights since 2006 (% of respondents)

Survey Group	No	Yes
Something Has Changed in Life		
VSL 1	10.0%	90.0%
VSL 2	30.0%	70.0%
Non-VSL	32.3%	67.7%

The VSL 1, VSL 2, and non-VSL respondents indicate that changes occurred in their lives to a degree that appears to relate to length of VSL membership, although there is little difference between VSL 2 and non-VSL groups. Some 90.0% of VSL 1, 70.0% of VSL 2, and 67.7% of non-VSL respondents indicate such a change. The gap is particularly great between the VSL 1 and non-VSL respondents, as would be expected if two years or more of VSL membership lead to significantly more such changes.

Conclusion

It appears that women's membership in VSL associations for a substantial amount of time (two or more years) is related to their observation that something has changed in their lives because of new awareness of women's rights. This is not the case for women who have been VSL members for less time, who seem little different from non-VSL women in sensing these changes.

14. Changes in Allocation of Time

The degree to which VSL membership might bring about changes in women's allocation of time is of interest and a question to that effect was included in the survey. Table 32 presents the results of that question.

Table 32: Changes in Time Allocated to Key Activities Since 2006 (% of respondents)

Type of Time Allocation	Same or Less	More
Housework and Childcare		
VSL 1	25.0%	75.0%
VSL 2	40.0%	60.0%
Non-VSL	33.3%	66.7%
Income Generating Activities		

VSL 1	3.4%	96.6%
VSL 2	6.7%	93.3%
Non-VSL	31.7%	68.3%
Participation in Groups (attendance at meetings)		
VSL 1	3.3%	96.7%
VSL 2	11.7%	88.3%
Non-VSL	83.3%	16.7%
Literacy Training		
VSL 1	83.7%	16.3%
VSL 2	61.7%	38.3%
Non-VSL	73.7%	26.3%
Others		
VSL 1	0%	0%
VSL 2	0%	0%
Non-VSL	0%	0%

Except for the non-VSL respondents in group participation and all three survey groups in literacy training, all groups reported more time allocated to these activities than three years earlier. As might be expected, the biggest changes in time allocation for VSL 1 are reported for participation in groups and IGAs (96.7% and 96.6%, respectively). VSL 2 also reported high levels of increased time allocation for the same two activities (93.3% and 88.3%). However, the non-VSL group also reported more time allocated to IGAs, although to a lesser degree (68.3%). The much higher scores by VSL members for participation in groups probably reflects direct VSL involvement.

All three groups reported increase in time devoted to housework and child care, and this was true slightly more for the VSL 1 (75.0%) than for the VSL 2 (60.0%) and non-VSL respondents (66.7%) for reasons that are unclear. The reason for the greater proportion of VSL 2 members indicating less time devoted to literacy training than the other two groups is also unclear.

Conclusion

It appears that VSL membership results in more time devoted to IGAs, which corresponds with VSL women's declared uses of both share-out and loan monies. Greater participation in groups

reflects membership in VSLs. The increased time reported by VSL on housework and childcare may be due to greater group and IGA activity, which leaves less time for domestic duties than before. The women thus gain the impression that they are devoting more time to domestic work than previously.

15. Self –Confidence and Social Participation

A question was asked of women in the two VSL groups concerning the attitude of non-members toward those women participating in the VSLs. Table 33 presents these findings.

Table 33: Attitude of Women Non-Members toward Women in VSL Associations (% of respondents)

Survey Groups	Positive	Indifferent	Negative
VSL 1	73.3%	10.0%	16.7%
VSL 2	58.3%	23.3%	18.3%
Non VSL	n/a	n/a	n/a

According to the survey results, the attitude of non-members toward VSL members is generally positive, especially in the case of the VSL 1 group (73.3%). In the case of the VSL 2 group, respondents report a more mixed attitude toward themselves as members of VSLs (58.3% positive). On the other hand, the VSL 1 group reports a more polarized distribution of attitudes toward them, with only 10% indifferent. In the case of the VSL 2, members report 23.3% of indifference. It would seem that as the community spends more time with VSL members they become less indifferent toward them. The levels of negativity remain roughly the same, however (16.7% - 18.3%). Of course, these are the perceptions of VSL members.

Conclusion

It appears that women non-members have an increasingly positive attitude toward VSL members as they observe the members in their activities through time. This indicates that non-members must increasingly come to see the advantages of VSL membership and will be more likely to join or form VSLs in further waves of recruitment in their areas.

Related to the preceding question is one that deals with men’s attitudes toward VSL members. Table 34 breaks out these responses.

Table 34: Attitude of Men toward Women in VSL Associations (% of respondents)

Survey Group	Positive	Indifferent	Negative
VSL 1	91.7%	6.7%	1.7%
VSL 2	100%	0%	0%
Non VSL	n/a	n/a	n/a

Here we find extremely high levels of perceived approval by men – probably largely the husbands of the same women – with only a few women dissenting from a positive attitude (4 women of the VSL 1 group indicating an indifferent attitude and 1 indicating a negative attitude). This approval by men of women’s VSL activities is likely closely linked to the income-generating objectives of these groups. Women clearly feel comfortable in their roles as VSL members, particularly with respect to their husbands and male relatives and neighbors.

Conclusion

That some 96% of men have a positive attitude toward women in VSL associations is a very encouraging finding. This is particularly valuable coming from the women involved, rather than from interviews with men, who may be disinclined to state their real attitude.

A question was put to women in all three survey groups about their membership in non-VSL groups in 2006. Table 35 presents these findings.

Table 35: Membership by Women in Other Groups in 2006 (% of respondents)

Survey Group	No	Yes
Membership in Other (Non-VSL) Groups		
VSL 1	84.7%	15.3%
VSL 2	68.3%	31.7%
Non-VSL	59.3%	40.7%

The two VSL groups were less likely to have been in other groups three years earlier than the non-VSL group. Thus, 15.3% of VSL 1 and 31.7% of VSL 2 members were in other groups prior to joining their VSLs, compared to 40.7% for those women not involved in VSLs. It does not seem reasonable to suppose that VSL membership is related to the former lack of opportunity or inclination to join other groups. It may be that this difference between the non-VSL respondents and those now in VSLs has to do with the crowding-out effect of current membership relative to what existed prior to VSL membership. In other words, assuming they

were involved in other groups in 2006 to the same degree as non-VSL members, now that they are involved in VSLs previous group affiliation has greatly receded in importance.

Conclusion

It appears that VSL members are much less likely than non-VSL women to have been members of other groups prior to VSL organization in their areas. It is understandable why VSL women may not now be in other groups in addition to their VSL association, but it is unclear why they should have been so much less inclined to group membership than the non-VSL in the past. This must reflect opportunities more than personal characteristics, and it bears further investigation.

Table 36: Whether Women Held Positions of Responsibility in Groups in 2006 and 2009 (number of respondents) *

Survey Group	Held a Position in 2006	Hold a Position in 2009
VSL 1	4	4
VSL 2	5	3
Non-VSL	23	16

*Includes president, secretary, treasurer, or other board member.

In similar manner to their greater involvement in groups prior to the introduction of VSLs, we find that the non-VSL women claim to hold many more positions of responsibility in groups in 2006 and 2009 than the VSL members. The reason for this is unclear. The exact types of groups involved require further investigation. There may be some village bank or other group activity in the area where the non-VSL respondents were selected (Zeguedeghin department).

Conclusion

It appears that the control group of non-VSL women holds considerably more positions of responsibility in groups than the VSL women, excluding for the latter the VSL associations. This reflects their greater involvement with groups in 2006 for which no reason can be provided without further investigation.

16. VSL Share-out and Lending

It is important to know to what degree VSL members have engaged in fund share-out and lending and what they tend to do with the money generated. Tables 37 – 41 deal with these questions. Table 37 presents the results for the question on whether women have engaged in fund share-out or not.

Table 37: Whether the Women's VSLs Have Yet Done a Share-out (% of respondents)

Occurrence of Share-out	No	Yes
VSL 1	1.7%	98.3%
VSL 2	73.3%	26.7%
Non-VSL	n/a	n/a

All but one person among the VSL 1 members agreed that they have done a share-out. Perhaps the one person did not understand the question. Some 26.7% VSL 2 members (16 women) also claimed to have done a share-out. These women may have been among the first VSLs founded in the second wave of VSL creation in the pilot program.

Conclusion

Since share-out is an essential requirement of VSL membership, it is nice to know that virtually all women understand the end of cycle activity of fund division. Focus group investigation, however, indicates that women want to lengthen the period of fund activity beyond the year recommended by Plan field agents and village facilitators. This is in order to increase the amount of share-out, an outcome they obviously highly value.

The question of what the share-out money amount was for each member was asked of the two groups of VSL respondents. It should be borne in mind that women can have a variable number of shares and that each VSL group decides the value of a share. This leads to quite some variation in declared share-out amounts. Their ranges and average values are presented in Table 38.

Table 38: Average and Range of Value of Women's Share-out (CFA francs) *

Survey Group	Average Value (CFA F)	Range of Values (CFA F)
VSL 1 (N=45)	5,724.78	1,250 – 9,000
VSL 2 (N=15)	3,783.33	700 – 7,500
Non-VSL	n/a	n/a

*US\$ 1 = 508 CFA francs

There is a wide range of share-out value for each of the two VSL groups, ranging from 1,250 – 9,000 CFA F for VSL 1 members and from 700 – 7,500 for the VSL 2 respondents. However, not all women that had shared out responded to this question. While 15 of the 16 claiming share-out responded with the share-out amount among the VSL 2, only 45 of 59 did so among the VSL 1. It is unclear why so many among the VSL 1 demurred in responding. This cannot

be a memory issue (greater time since share-out), since so much of the internal group activity (share purchase, lending, and loan reimbursement) is based primarily on the members' memory.

Conclusion

Share-out amounts of 3,783 to 5,725 CFA F (\$7.45 - \$11.27) are not sufficient to buy a whole goat or sheep, but they can be combined with other sources of income to do so. They are sufficient to buy poultry or raw materials for common women's IGAs. Timing of share-out can also be set to coincide with other household needs, such as school expenses and food for the family during the hungry season. The beginning of the school year, in fact, falls in the latter part of the hungry season (July – October).

It is of particular interest to gain an idea of what the VSL members do with the share-out they receive, since this can be a relatively sizeable sum of money. Table 39 presents the results of this survey question.

Table 39: Use of the Money Received from the Share-out (% of respondents)

Type of Use	No	Yes
Purchase of Agricultural Inputs		
VSL 1 (N=59)	83.1%	16.9%
VSL 2 (N=19)	89.5%	10.5%
Non-VSL	n/a	n/a
Purchase of Agricultural Labor		
VSL 1	96.6%	3.4%
VSL 2	100%	0%
Non-VSL	n/a	n/a
Purchase of Animals		
VSL 1	54.2%	45.8%
VSL 2	84.2%	15.8%
Non-VSL	n/a	n/a
Investment in Income Generating Activities		

VSL 1	42.4%	57.6%
VSL 2	36.8%	63.2%
Non-VSL	n/a	n/a
Purchase of Food for the Household		
VSL 1	69.5%	30.5%
VSL 2	84.2%	15.8%
Non-VSL	n/a	n/a
Payment for Health Services		
VSL 1	86.4%	13.6%
VSL 2	94.7%	5.3%
Non-VSL	n/a	n/a
Payment of School Fees		
VSL 1	78.0%	22.0%
VSL 2	100%	0%
Non-VSL	n/a	n/a
Purchase of School Supplies and Uniforms		
VSL 1	84.7%	15.3%
VSL 2	100%	0%
Non-VSL	n/a	n/a
Embellishments or Improvements to the House		
VSL 1	98.3%	1.7%
VSL 2	100%	0%
Non-VSL	n/a	n/a
Social Events		
VSL 1	88.1%	11.9%

VSL 2	94.7%	5.3%
Non-VSL	n/a	n/a
Festive Events		
VSL 1	88.1%	11.9%
VSL 2	100%	0%
Non-VSL	n/a	n/a
Other Uses		
VSL 1	92.2%	7.8%
VSL 2	100%	0%
Non-VSL	n/a	n/a

The VSL 1 group members responded most frequently that they spent some or all of their share-out money on investment in IGAs (57.6%) and purchase of animals (45.8%). Thus, share-out money is clearly largely destined to income generation, whether through animal fattening or other commercial activities. The next most common use of share-out money is the combined 37.3% spent on school-related expenses (school fees and school supplies/uniforms). Beyond this, 30.5% of VSL 1 women bought food for the family from share-out, 16.9% purchased agricultural inputs (probably primarily seed), 13.6% spent money on health services, and a combined 23.8% spent on social and festive purposes. Purchase of agricultural labor was indicated by only 3.4% of VSL 1 respondents (2 persons). Only one person among the VSL 1 members and none of the VSL 2 members indicate spending share-out money on house embellishment.

Some 19 VSL 2 members responded to the question on uses of share-out monies, 3 more than actually claimed share-out. Some confusion was obviously present. In any case, VSL 2 members also tended to spend money on IGAs (63.2%) and purchase of animals (15.8%). As in the case of VSL 1 members, the VSL 2 respondents also spent money on food for the household (15.8%) and agricultural inputs (10.5%), but a lower percentage mentioned health services (5.3%) and social/festive purposes (5.3%). Interestingly, the VSL 2 women did not mention the use of share-out money for school-related expenses, important in the case of the VSL 1 women. Perhaps the timing of their share-out did not lend itself to these expenses.

Conclusion

VSL members most tend to invest all or part of their share-out monies in their IGAs and animals (livestock and poultry). These two are both directly related to income generation. Beyond these, it appears money is most used for school-related expenses (depending on the season),

food for the family, and social/festive purposes (also dependent on the timing of social needs). Beyond what is spent for commercial activities, uses will be quite sensitive to the timing of share-out.

The question of the degree to which VSL members borrow money within their associations is important for understanding the level of extra income generation through VSL membership. Table 40 indicates the level of such intra-group borrowing behavior.

Table 40: Whether Women Have Received Loans in their VSL Associations (% of respondents)

Received Loans in Associations	No	Yes
VSL 1	33.9%	66.1%
VSL 2	33.3%	66.7%
Non-VSL	n/a	n/a

About two-thirds of women in each VSL group responded that they had availed themselves of a loan within their VSL. This appears to contradict the findings presented in Table 6 showing that between 86.7% and 97.7% of VSL 1 and VSL 2 women, respectively, borrow from their VSL association. However, this question should be interpreted as revealing whether VSL women currently have loans outstanding. That there is little difference between the two indicates that both sets of VSL members are using the loan facility as expected. Why one-third of women claim not to be borrowing at the moment, especially intriguing for the VSL 1 members, remains to be investigated through focus groups or individual interviews with VSL members. In any case, it is clear that borrowing from within the VSL association has much to do with seasonal or short-term economic opportunities.

Conclusion

Only two of three women are actually borrowing money in their VSL associations, and this appears unrelated to length of VSL membership. The flip side of this is that two-thirds of members are contributing through interest payments to the growth of their VSL fund.

It is important also to know what loans received in VSLs are actually used for. Table 41 presents the results of a question to that end.

Table 41: Use of the Money Received as Loans in VSL Associations (% of respondents)

Type of Use	No	Yes
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Purchase of Agricultural Inputs		
VSL 1 (N=43)	90.7%	9.3%
VSL 2 (N=41)	92.7%	7.3%
Non-VSL	n/a	n/a
Purchase of Agricultural Labor		
VSL 1	97.7%	2.3%
VSL 2	100%	0%
Non-VSL	n/a	n/a
Purchase of Animals		
VSL 1	81.4%	18.6%
VSL 2	85.4%	14.6%
Non-VSL	n/a	n/a
Investment in Income Generating Activities		
VSL 1	32.6%	67.4%
VSL 2	24.4%	75.6%
Non-VSL	n/a	n/a
Purchase of Food for the Household		
VSL 1	79.1%	20.9%
VSL 2	68.3%	31.7%
Non-VSL	n/a	n/a
Payment for Health Services		
VSL 1	90.7%	9.3%
VSL 2	87.8%	12.2%
Non-VSL	n/a	n/a
Payment of School Fees		

VSL 1	88.4%	11.6%
VSL 2	90.2%	9.8%
Non-VSL	n/a	n/a
Purchase of School Supplies and Uniforms		
VSL 1	93.0%	7.0%
VSL 2	92.7%	7.3%
Non-VSL	n/a	n/a
Embellishments or Improvements to the House		
VSL 1	95.3%	4.7%
VSL 2	95.1%	4.9%
Non-VSL	n/a	n/a
Social Events		
VSL 1	86.0%	14.0%
VSL 2	95.1%	4.9%
Non-VSL	n/a	n/a
Festive Events		
VSL 1	90.7%	9.3%
VSL 2	95.1%	4.9%
Non-VSL	n/a	n/a
Other Uses		
VSL 1	97.4%	2.6%
VSL 2	97.4%	2.6%
Non-VSL	n/a	n/a

As in the case of share-out, the most common uses of loan money within VSL groups is for IGAs. Thus, some 67.4% of VSL 1 members and 76.6% of VSL 2 members report spending loan money on IGAs. Purchase of food for the household is next most commonly reported by

VSL 1 and 2 members, rather than investment in animals as with share-out monies. Some 20.9% of VSL 1 and 31.7% of VSL 2 members spend loan money on foodstuffs for consumption, not investment. Purchase of animals for fattening is third most frequently engaged in with loan money, involving 18.6% of VSL 1 members and 14.6% of VSL 2 members.

If we combine those women that claim expenditures on school fees, school supplies, and uniforms we find that these expenditures are claimed by 21.0% of VSL 1 members and 12.2% of VSL 2 members. The same can be done with social and festive expenditures, totaling 23.3% and 9.8% of VSL 1 and VSL 2 respondents, respectively. In turn, health care expenditures are reported by 9.3% of VSL 1 and 12.2% of VSL 2 members, respectively. This is followed by the 9.3% of VSL 1 and 7.3% of VSL 2 members that report expenditures for agricultural inputs. On the other hand, use of agricultural labor is almost nonexistent (only one of the VSL 1 women and none of the VSL 2).

The use of loan money on house embellishment or improvements is limited to two women in each VSL group. While such improvements may occur over time with VSL membership, it appears to be extremely rare for share-out or loan money to be spent directly on home improvements over the first years of VSL membership. Only through greater passage of time and wealth accumulation from IGA and other investment activity will such VSL impact become obvious.

Conclusion

As in the case of share-out, the most common uses of loan money within VSL groups is for IGAs. Purchase of food for the household is next most commonly reported by VSL 1 and VSL 2 members, rather than investment in animals as with share-out monies. Purchase of animals for fattening is third most frequently engaged in with loan money. Combining expenditures on school fees, school supplies, and uniforms, these also become an important use of share-out money. The same is true for a combination of social and festive expenditures. There does not, however, appear to be a pattern linked to length of VSL membership. Other types of expenditures are not common.

17. Awareness of Children’s Rights

Because of Plan’s interest in child-centered community development, it is important to know how much VSL and other women now know about basic children’s rights that they did not know in 2006. A related issue is the degree to which women discussed new knowledge within the family. Table 41 presents the results to these questions.

Table 42: Women’s Knowledge of Children’s Rights Not Known in 2006 and Discussion of Rights within the Wider Family (% of respondents)

Children’s Rights	Awareness	Discussed in Family
Right to Nourishment		

VSL 1	93.3%	83.3%
VSL 2	93.3%	50.0%
Non-VSL	95.0%	71.7%
Right to an Education		
VSL 1	96.7%	85.0%
VSL 2	96.7%	61.7%
Non-VSL	95.0%	75.0%
Right to Good Health		
VSL 1	98.3%	86.7%
VSL 2	91.7%	48.3%
Non-VSL	95.0%	75.0%
Right to Protection		
VSL 1	91.7%	80.0%
VSL 2	81.7%	40.0%
Non-VSL	81.7%	60.0%
Right to Be Heard		
VSL 1	73.3%	60.0%
VSL 2	58.3%	28.3%
Non-VSL	58.3%	41.7%
Right to an Identity (birth registration)		
VSL 1	90.0%	83.3%
VSL 2	91.7%	46.7%
Non-VSL	91.7%	73.3%
Right to Associate with Others		
VSL 1	43.3%	40.0%

VSL 2	28.3%	20.0%
Non-VSL	26.7%	23.3%
Right to Participate in Activities		
VSL 1	40.0%	35.6%
VSL 2	21.7%	16.9%
Non-VSL	20.0%	20.3%
Other Rights		
VSL 1	0%	0%
VSL 2	1.7%	1.7%
Non-VSL	3.3%	3.3%

Women's new knowledge of children's rights gained over the preceding three years varies between type of knowledge and type of survey group. The intention of this question was to relate new awareness to involvement in VSL activities. In effect, the proportion of women in each survey group that indicates awareness of various children's rights is consistently high with regard to four of the eight rights, and in these areas no significant difference between these groups appears to exist. As Table 42 indicates, the percentages of women across the 3 groups indicating new awareness of children's rights varies from: 97% to 95% for right to an education; 98% to 92% for right to good health; 95% to 93% for right to sustenance (nourishment); and from 92% to 90% for right to an identity (through birth registration).¹⁰

Lower levels of awareness appear in regard to the other four rights: 92% to 82% for right to protection; 73% - 58% for right to be heard; 43% to 27% for right to associate with others; and 40% to 20% for right to participate in activities and decisions.¹¹ In these four less recognized children's rights, a significant gap opens up between the VSL 1 and non-VSL groups: 91.7% to 81.7% for right to protection; 73.3% to 58.3% for right to be heard; 43.3% to 26.7% for right to associate with others; and 40% to 20% for right to participation. However, this same gap does not exist between the VSL 2 and non-VSL groups, where scores relative to these rights are similar in most cases.

A second question was designed to determine whether the survey women actually discussed these rights in the wider family, which means, in this case, the members of the husband's compound. The VSL 1 members were significantly more active in such discussion than the

¹⁰ The preceding percentages are rounded to the nearest whole number.

¹¹ The preceding percentages are rounded to the nearest whole number.

non-VSL women, although for reasons unknown VSL 2 members were often less active in engaging family discussion than the non-VSL. Thus, in order of overall importance VSL 1 and non-VSL discussed these rights as follows: 91.7% and 81.7% discussed right to protection; 85.0% and 75.0% discussed right to an education; 86.7% and 75% discussed right to good health; 83.3% and 71.7% discussed right to sustenance (nourishment); 83.3% and 73.3% discussed right to an identity; 60.0% and 41.7% discussed right to be heard; 40.0% and 23.3% discussed right to associate with others; and 35.6% and 20.3 % discussed right to participation. Interestingly, VSL 2 members indicated less discussion of these rights in seven of these eight rights and with equal frequency in one (right to protection). In no case did VSL 2 claim to discuss these rights more than the non-VSL.

Conclusion

There appears to be no correlation between new awareness of four of the children’s rights with VSL membership, while in four others there appears to be a significant difference between the VSL 1 respondents and non-VSL – but not between the VSL 2 and non-VSL respondents. It seems that length of VSL membership is important with respect to the lesser known rights of right to protection, right to be heard, right to associate with others, and right to participate in activities and decisions.

In addition, it appears that VSL membership is strongly related to the propensity to discuss children’s rights in the wider compound, but only among VSL women that have been members a year or more longer than the others (VSL 1 compared to VSL 2). Those with more recent VSL membership seem unaffected – even inhibited in this regard – by VSL membership. Why this should be so is unclear.

A question was asked of survey women regarding whether women’s increased awareness of children’s rights has led to changes in their children’s lives. Table 43 presents these results.

Table 43: Whether Women’s New Sensitization and Awareness of Children’s Rights Has Changed Children’s Lives (% of respondents)

Survey Group	No	Yes
VSL 1	10.0%	90.0%
VSL 2	23.7%	76.3%
Non-VSL	13.6%	86.4%

An overwhelming majority of all three groups have responded that learning about children’s rights over the past three years has actually resulted in a change in the life of their children. Thus, 90% of VSL 1, 76.3% of VSL 2, and 86.4% of non-VSL claim this link between new knowledge and benefits to children. However, there does not appear to be a significant

difference in the frequency of these responses between VSL 1 and non-VSL. The VSL 2 women again appear to be significantly less sure of benefits to their children than the other two groups. As such, a bigger gap appears between older and more recent VSL members than between VSL members and non-members.

Conclusion

Although some 83% of women overall state that changes have occurred in their children's lives because of women's awareness of these rights acquired since 2006, actual changes in children's lives – according to survey results – do not appear related to VSL membership.

IV. Lessons Learned

A. VSL Impact

- There seem to be significant increases in small ruminant and poultry possession among VSL compared to non-VSL women. Goat ownership for the VSL 1 and VSL 2 groups rose 12.3% and 6.9%, respectively, while declining by 19.9% for the non-VSL women. Sheep ownership rose 174% for the VSL 1 group, 14.2% for the VSL 2 group and declined slightly for the non-VSL women. The VSL 1 group increased its average ownership of poultry by 53.4%, the VSL 2 group by 11.8%, while poultry possession of the non-VSL group declined by 18.8%. These differences appear significant and related to length VSL membership.
- Greater use of important agricultural inputs over the previous three years appears related to VSL membership in the use of chemical fertilizer and purchased seed. This is not true for the ability to pay workers or hire animals for plowing.
- Probably the most important non-productive possessions in a woman's household are their water storage jars and jerry cans, their storage trunks, festival attire (dresses) and bicycles, all of which show positive correlation with VSL membership.
- Not surprisingly, the VSL savings mechanism is engaged in by all (or virtually all) members, since this is the primary objective of this microfinance methodology. Saving cash in this way tends to replace hiding money in the house, storing wealth in material assets, and keeping savings with other people.
- Virtually all women in older VSLs and the great majority in new ones borrow from the VSL fund. This borrowing tends to replace borrowing from husbands, other persons in the compound, members of the extended family, and friends. It focuses borrowing activities on one source that is largely under the control of the borrowers.
- The small reduction in number children excluded from school for monetary reasons between VSL 1 and non-VSL may be significant and should increase over time. Eventually, one

would expect to see the same pattern develop for the second wave of VSL associations (VSL 2). However, if women's economic activities increase because of greater disposable income from savings and borrowing in VSLs, it is possible that fewer girls will attend school, in order to assist their mothers. This decreased attendance will not be for lack of money, but rather because of more money available for productive use. Only when these households reach a much higher level of affluence and labor can be hired will girls return to school at a level equal to that of boys.

- It appears that a greater percentage of women in VSL groups compared to non-VSL women, and among VSL 1 members in particular, have increased their consumption over the previous three years of a variety of foodstuffs. Especially noteworthy is the increased consumption of high-protein foods, particularly meat and fish. VSL members are much more likely than non-VSL women to have consumed more food over the preceding three years because of greater disposable income from savings. This does appear related to length of membership.
- There appears to be a significant relationship between VSL membership and the affordability of health care, although this is not related to length of membership.
- The most important change in IGAs between early 2009 and 3 years earlier occurs in livestock fattening. There has been a 40.5% rise for VSL 1 in the frequency of respondents claiming to engage in this activity in 2009 over 2006. VSL 2 has a 22.0% rise in the proportion of people indicating activity in this area followed by the non-VSL with a 14.3% increase. This pattern appears to be related to the length of VSL involvement. There is a fairly strong rise in the frequency of cash cropping for VSL 1 (28.0%) compared to the VSL 2 (3.8%) and 0% for the non-VSL, all from a similar base three years earlier. There is also a substantial rise in the frequency of food processing/transformation for both VSL groups: a rise of 33.5% for VSL 1 and 33.2% for VSL 2 respondents compared to no change for the non-VSL. Further, VSL members show an enormous rise in the frequency with which they engage in restaurant operation since 2006: a percentage rise in this activity of 91.3% for VSL 1 members and 50.0% for VSL 2, contrasted with no change for the non-VSL respondents. Cereals speculation activity, roughly as frequent in 2006 as small restaurant operation and with little variation between survey groups (32% - 35% rounded), shows a sizeable increase in frequency for VSL 1 (23.7%) and VSL 2 (26.4%) in 2009 compared to a decrease of 4.9% for the non-VSL. Once again, there seems to be correlation between VSL membership and increased frequency of cereals speculation, although this is not related to length of VSL membership.
- There was greater use of children's labor in VSL groups compared to the non-VSL group in 2006, and this difference with the non-VSL has significantly increased over the last three years. On the other hand, this increase does not appear to be correlated with length of VSL membership, with the VSL 2 equaling or surpassing the VSL 1 increases.
- There appears to be a significant relationship between length of VSL membership and women's feeling of higher social status.

- Among those women attesting to an increase in social status within the community, significant differences between VSL and non-VSL women appear to lie in increased income and responsibilities within groups. In respect to greater self-confidence, it is not clear that there is a significant difference in responses between the VSL and non-VSL. Moreover, only in the case of increased earning power does the difference with non-VSL appear related to length of VSL membership.
- There is a clear pattern of increased control of resources between 2006 and 2009, particularly with respect to VSL 1 members. In all resource categories, except control of labor, the VSL 1 respondents claimed far greater increases in level of control of resources than the non-VSL and to a significant degree also than the VSL 2 group. Differences in control of common resources also appear to be related to length of VSL membership.
- There seems to be a significant shift away from husband's control of women's income to either women's control and or joint husband-wife control. In both women's control and joint control the shifts appear to be related to length of VSL membership.
- As in the case of a woman's income, there is a significant shift from husband's control of decision making regarding the operations of her principal IGA, in favor of her own control or in favor of joint husband-wife decision making. Again, this appears to be related to length of VSL membership.
- The VSL 1 group generally indicates greater awareness of women's rights over the non-VSL group, usually by large margins. This would seem to be related to VSL membership. A greater awareness of these basic women's rights is evident between the VSL 1 and VSL 2 groups, except in the right to be protected from harmful customary practices, and the awareness gap is not substantial in right to education and participation in family decision making. Except in these cases, awareness of women's rights does seem to be related to length of VSL membership. The VSL 1 group is always above the non-VSL in propensity to discuss women's rights within the wider family. This is true for all 10 rights of the survey. This gap appears significant, except in education. However, in six of 10 rights the VSL 2 members are behind the non-VSL in their propensity to discuss new knowledge of rights.
- It appears that women's membership in VSL associations for a substantial amount of time (two or more years) is related to their observation that something has changed in their lives because of new awareness of women's rights. This is not the case for women who have been VSL members for less time.
- It appears that VSL membership results in more time devoted to IGAs, which corresponds with VSL women's declared uses of both share-out and loan monies. Greater participation in groups reflects membership in VSLs. The increased time reported by VSL women on housework and childcare may be due to greater group and IGA activity, which creates the perception that there are more domestic duties than before.

- VSL members most tend to invest all or part of their share-out monies in their IGAs and animals (livestock and poultry). These two are both directly related to income generation. Beyond these, it appears money is most used for school-related expenses (depending on the season), food for the family, and social/festive purposes (also dependent on the timing of social needs). Beyond what is spent for commercial activities, uses will be quite sensitive to the timing of share-out.
- As in the case of share-out, the most common uses of loan money within VSL groups is for IGAs. Purchase of food for the household is next most commonly reported by VSL 1 and VSL 2 members, rather than investment in animals as with share-out monies. Purchase of animals for fattening is third most frequently engaged in with loan money. Combining expenditures on school fees, school supplies, and uniforms, these also become an important use of share-out money. The same is true for a combination of social and festive expenditures. There does not appear to be a pattern linked to length of VSL membership.

V. Recommendations

A. VSL Impact

- Plan International should not only gauge impact of pilot VSL programs, as has been done now in Tougouri department, but should also devise a fairly light impact monitoring survey (20 questions) that can be used to track change in important indicators well beyond the first two to three years of women's VSL membership. This can be done on a yearly basis and should not involve the same women or associations each time, since we assume a similar population of respondents. In some cases, enough is known now to design tracking questions, but in others more focus group work will be required to delineate the appropriate indicators and how to ask about them. The focus groups can be distinct VSL associations, and questions may be posed by Plan staff attending regular meetings of these associations, even if the latter no longer require much input from field agents.
- Possession of poultry, goats, and sheep offer the best means to track VSL-member investment and income-generation activity (IGA). While much of this activity is short-term and speculative, there is also the possibility to go beyond simple fattening and resale to reproduction of the livestock itself. While this is most obvious with respect to poultry, sheep and goat herds can double their number in less than a year. At 20,000 to 30,000 CFA francs small ruminants represent a considerable investment and store of wealth. In 2009 some 36.1% of women overall had goat herds of 4 or more and 14.5% had 4 or more sheep.
- Changes in material productive assets are likely to require considerably more time than changes in livestock and poultry. They will probably reflect greatly enhanced access to cultivable land, non-agricultural opportunities, and working capital. As such, they are likely to be relatively insensitive as measures of the benefits of VSL membership. In other words,

the responsiveness of indicators of material productive assets to increased income and income generating opportunities from VSL membership are likely to be considerably less apparent than those related to livestock. The nature of ownership and usufruct of productive technology and the degree to which men and women of the polygamous compound engage in collective activities should be further explored through focus groups and/or key informants.

- There is an economic sphere within which each wife in a polygamous compound is primarily owner of her own capital and tools. This includes market gardening (vegetables), cash cropping (e.g., peanuts), small animal production and fattening (poultry, goats, and sheep), food processing, restaurant operations, cereals storage, and petty trade. It is in this sphere that key indicators of VSL benefit should be tracked in future surveys.
- It would be useful to examine in future surveys or targeted case studies the quantities of fertilizer and purchased seed used by these women. Their use may not only be gaining ground among VSL members relative to non-members, but quantities employed may also be increasing. In this survey only the frequency of use among respondents is reported upon.
- Determining which non-productive assets are most likely to reflect VSL members' increasing access to working capital and eventual greater affluence should be more carefully worked out through focus group and individual interviews with VSL members. These assets should be divided into: (1) domestic utilitarian assets used for household water supply and ordinary living needs (stools, chairs, tables, sleeping mats), which are likely to be relatively inelastic with respect to increased income (once basic needs are met); (2) assets that can double as productive assets (granaries, cooking ware, or bicycles); and (3) vanity or status goods, such as dresses, festival attire, jewelry, and large serving dishes. The effects of VSL membership should first be visible in assets that are also used in IGAs, followed by vanity or status goods, with domestic utilitarian goods least likely to change significantly after meeting basic living needs.
- It would be useful to get a better idea of what types of jewelry these women have and how much of each they own. These represent a store of wealth and higher status, rather than an investment. Over time, they should constitute a fairly good measure of women's increased affluence. Small focus group or key informant interviews will be needed here, and questions should not be personal.
- Certain home improvements are worth tracking over time among VSL participants, including plastering of the exterior and interior of the house, new granary and livestock shelter construction, adding an enclosure around the house, and building a shower or latrine. The addition or improvement of granaries and livestock shelters are directly linked to increased productive activities, while plastering of the house, building an enclosure, and constructing a shower or latrine are signs of increased well-being. Both of these types of impacts should increase faster over time among VSL participants than among those not involved in the program. However, in the short-term increased income beyond commercial investment

opportunities will likely be channeled into immediate consumption, such as food for the family, school fees and supplies, and health care costs.

- Tracking the impact of VSL activities on girls' education should be part of any impact monitoring system in the future. If greater economic activity by VSL members leads to reduced girls' enrollment, a discussion module might be developed for village facilitators to assist VSL members in adapting girl's labor participation to school attendance hours.
- Since tracking VSL impact through a simple count of number of meals per day is not very useful, monitoring in the future should focus on quantities of distinct foods and their nutritional value. Quantities are not easily assessed through a large survey of this type. A focused approach (focus groups) with VSL members is more likely to yield useful data on the amounts of various types of foods provided to household members, especially children.
- Impact monitoring in the future should include questions that focus more deeply on the use of health care services, particularly for children, and on where the money has come from to pay these costs.
- Related to tracking the possession of key productive assets, particularly small ruminants and poultry, the strategies by which these assets generate income or, alternatively, provide funding in case of emergencies should be explored further through focus group discussions and impact monitoring surveys. While IGAs in general provide essential household income, storing wealth in animals provides a relatively liquid reserve that can be tapped as necessary. This "income-leveling" function may be crucial in weathering misfortunes, such as drought or family illness. This animal "bank account" can also be important when households face unusual social expenses (e.g., weddings, funerals). When the objectives and strategies of saving and borrowing within VSLs are understood more clearly, Plan can make a more sophisticated case to donors for investing in this methodology.
- Related to the objectives and strategies of saving and borrowing in VSLs is the need to determine the frequency with which women address recurring or unexpected needs and how they coordinate share-out and borrowing needs during a typical year. This will require focus group work with individual VSLs.
- Tracking the impact on children's labor in households and women's IGAs should be part of impact monitoring over time. This is particularly important for girls, since they will generally be employed by their mothers in women's tasks. On the other hand, boys may be involved in small ruminant herding.
- Exploring issues of empowerment for women resulting from participation in VSLs should focus on resource and income control and decision making within the larger compound, not only with respect to the husband but also in regard to the husband's first or more senior wives. This will require focus group work before appropriate questions can be generated for an impact tracking survey.

- Determining what women themselves consider to be their own basic rights and those of their male and female children will require more focus group work with VSL participants. Once these rights – as perceived by the women themselves – are delineated, it will be possible to track change through impact monitoring. These rights may not be what outsiders think they are or should be.