



SILC INNOVATIONS

RESEARCH BRIEF 1

Poverty Outreach in Fee-for-Service Savings Groups

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Project Background – SILC & the PSP model

Savings and Internal Lending Communities (SILC) is a model developed by Catholic Relief Services (CRS) for user-owned, self-managed savings and credit groups. A SILC group typically comprises 15-30 self-selecting members, and offers a frequent, convenient and safe opportunity to save. It helps members build useful lump sums that become available at a pre-determined time and allows them to access small loans or emergency grants for investment and consumption.

SILC Innovations is a pilot within the broader SILC program, funded by the Bill & Melinda Gates Foundation over 2008-2012, which aims to establish local entrepreneurial capacity for sustained spread of the savings-group model beyond the funding period. In the project design, Field Agents (FA) responsible for forming and supporting SILC groups are recruited and paid by the project for up to one year. The FAs then undergo an examination process to become certified as Private Service Providers (PSP), who offer their SILC services to communities on a long-term, fee-for-service basis, with no further project funding. The project currently serves over 300,000 group members, mostly rural villagers, across the three pilot countries of Kenya, Tanzania, and Uganda.

KEY FINDINGS ON POVERTY OUTREACH

- Poverty outreach is deep— as many as 64% of SILC members are below National Poverty Lines—though variable across the project due to geographic targeting.
- Over two-thirds of group members in Kenya and Tanzania fell below the \$1.25/day poverty line, as did nearly 40 percent of members in Uganda.
- There was no significant difference in depth of poverty outreach between the PSP- and FA-supported SILC members on the endline.
- Filtering for households that joined SILC groups during the research interval (after fee-for-service status was assigned and clear) revealed no statistical difference between PSP- and FA-supported SILC segments.
- The SILC sample is statistically equivalent to the non-SILC sample, even when examined for quartile distribution—in other words, the project is serving a cross-section of typical rural villagers.
- PSP-supported SILC groups showed greater resiliency compared to FA-supported groups in a context of economic decline.



Research Design & the PPIs

To assess the model and inform future SILC rollouts of this fee-for-service savings-group model, CRS carried out a broad research project using a Randomized Control Trial (RCT) design. The research was set up to make a fundamental comparison between delivery channels: the fee-for-service PSP model against the more conventional project-paid FA model. To rigorously compare the two, an experimental design established statistically comparable cohorts of agents serving members in comparable environments over a one-year interval (see the additional research background section on page 6).

At the heart of the mixed-methods RCT is a large-scale quantitative household survey (endline n = 2119) to gauge the impact of the savings-group model at the household level. Sampling centered on both SILC and non-SILC households in 240 randomly-selected villages, served by agents randomly assigned PSP or FA status under the study. Embedded in the survey tool were the country-specific Progress out of Poverty Indices (PPI) developed by the Grameen Foundation, which are simple, standardized 10-question surveys used to measure the likelihood that a population falls below various poverty lines. Use of the PPIs allowed for precise observations on poverty outreach in the areas served by the program. The PPI tools were available and employed in all three pilot countries on the endline and in Kenya at both baseline and endline.

Descriptive Statistics on Outreach among SILC Members

Depth of outreach among SILC members (Table 1) varied considerably between the three pilot countries in the endline observation. Despite Kenya's reputation as a regional economic powerhouse, the member base there emerged as the least affluent. Nearly 30 percent of the Kenya sample fell below the USAID Extreme Poverty line¹, and 64 percent fell below Kenya's national poverty line.² Sixty-three percent of respondents in Kenya and 71 percent of respondents in Tanzania fell below the \$1.25/Day poverty line (2005 Purchasing Power Parity [PPP]³). By contrast, the Uganda sample showed the most affluence of the three countries, with only 4 percent of SILC households below the USAID Extreme Poverty line and 15 percent below their national poverty line.

TABLE 1 - PPI FINDINGS ON SILC HOUSEHOLDS USING VARIOUS POVERTY LINES

	Mean PPI Score, SILC Members	National Poverty Line (total below)	150% of the National Poverty Line (total below)	National Food Poverty Line (total below)	USAID "Extreme" Poverty Line (total below)	\$1.25/Day/ 2005 PPP Line (total below)	\$2.50/Day/ 2005 PPP Line (total below)
Kenya	30.1	63.7%	83.3%	23.5%	27.6%	63.1%	95.4%
Tanzania	40.0	27.6%	60.4%	10.7%	10.4%	71.6%	95.3%
Uganda	41.1	15.1%	47.2%	4.3%	4.2%	38.0%	86.5%

To a large extent, these differences at the national level are attributable to the geographic targeting of the project. Kenya's targeting, for example, included some of the country's poorest communities in the coastal region, while Uganda's numbers were lifted by the inclusion of relatively affluent and fertile Western agricultural regions. By logical extension, Kenya's rates in the study are higher than the country's national poverty averages, while Uganda's are lower, with Tanzania closest to the national rates (Table 2).

¹ Defined as those who fall in the bottom 50% of those under their national poverty line.

² Applicable definition of national poverty line varies between the countries, though in each case it is derived from the national/ food poverty line, which is based on expenditures for food items corresponding to a minimum of daily calories.

³ Defined in terms of what 1.25 USD buys in each country where the measure is applied, as of 2005.

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The financial burden of having to pay agents does not diminish the project's poverty outreach.

TABLE 2 - COMPARISON OF STUDY VS. NATIONAL POVERTY RATES⁴

	National Poverty Line, Households (total below)	USAID "Extreme" Poverty Line, Households (total below)
Kenya		
National average	38%	17%
Study average	64%	28%
Tanzania		
National average	27%	13%
Study average	28%	10%
Uganda		
National average	19%	9%
Study average	15%	4%

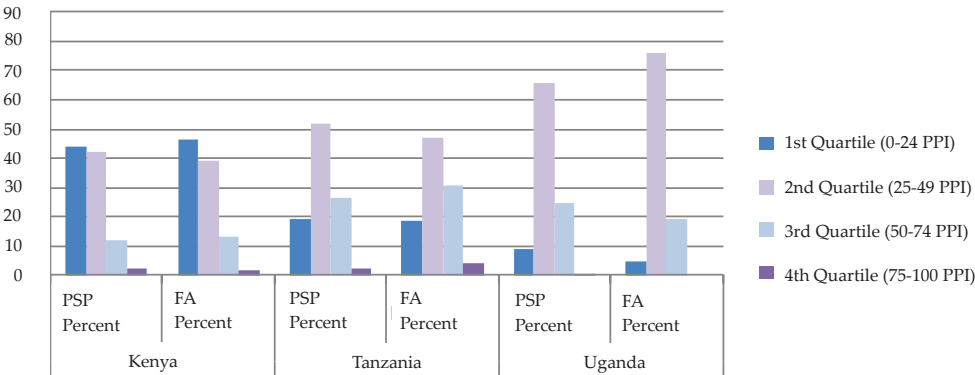
Dividing the SILC sample into those served by PSP agents and those served by FAs, (Table 3),⁵ we see that the PSPs are not serving a significantly different member base from the FAs. This is an important finding, in that it suggests that the financial burden of having to pay agents does not diminish the project's poverty outreach.

TABLE 3 - PPI SCORES - HOUSEHOLD STATUS, SILC MEMBERS ONLY

	PSP-led SILC members (N)	PSP-led SILC members Mean PPI	FA-led SILC members (N)	FA-led SILC members Mean PPI	Overall (N)	Overall Mean PPI
Kenya	326	29.7	90	31.5	416	30.1
Tanzania	241	39.1	92	42.2	333	40.0
Uganda	204	41.3	117	40.8	321	41.1

For a more detailed look at the comparative distribution of poverty, we break the PPI scores down into quartile bands among the PSP- and FA-supported subpopulations. The score distributions mostly mirror each other, with minor differences (Figure 1). Uganda stands out somewhat against the other two countries in that both the PSPs and FAs served a lower proportion of respondents in the most vulnerable PPI band (0-24), and a higher percentage in the 2nd quartile (25-49). In all three countries, the percentages in the 3rd (50-74) and 4th (75-100) quartiles are low, indicating that the relatively wealthy are not joining SILC groups in large numbers.

FIGURE 1 - PPI SCORE DISTRIBUTION, SILC HOUSEHOLDS



⁴ All rates as cited in PPI Design Documentation memos provided by Grameen Foundation, which in turn cite the following: Kenya national rates per 2005/06 KIHBS; Uganda national rates per 2009 National Household Survey; Tanzania national rates per 2004/05 HIS.

⁵ A formal means test was applied and showed no significant difference between the PSP- and FA-supported subpopulations in the three countries.

Collectively, the data suggests that even when it is clear that consumers must pay for services (i.e. engage a PSP), the poverty outreach for SILC does not diminish.

The findings in Table 2, however, come with a caveat: due to the study’s design, most SILC households in the sample belong to groups that formed in their agent’s initial 12-month training period, when all agents were FAs, paid by the project (before agents went on to assume PSP status under the experiment). Given these roots, the outreach we measured across the whole sample may pertain more to the SILC methodology generally than the PSP model.

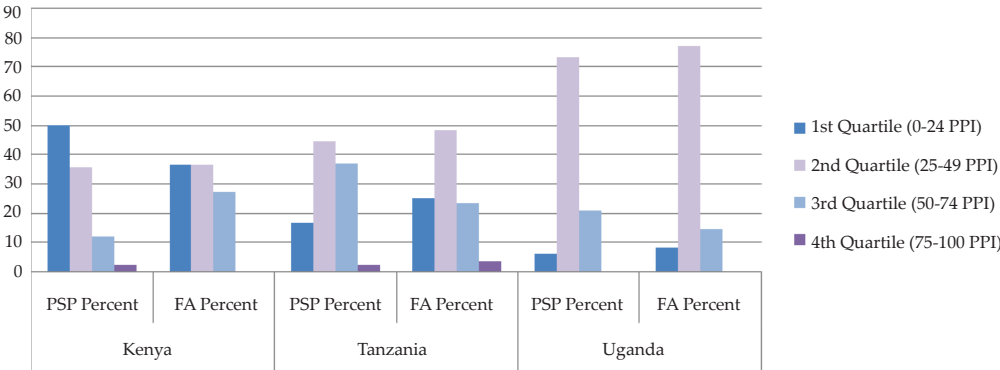
To counter this effect, we tracked the subpopulation of households in which any member of a household (whether the household had a SILC member or not at baseline) joined a SILC group during the research interval, after the agents had assumed (and made clear to members) their PSP or FA experimental status. In other words, once members knew they had to pay their agents in the cases of PSPs, how does the poverty outreach compare between PSPs and FAs? In this way, we gained a purer sense of what type of member base each model attracts.

What we found was that there was no significant difference in mean PPI scores between those who took up the services of PSP agents and those who took up the services of FA agents during the research interval, and also no significant difference between these scores and the overall scores for the SILC sample (Table 4).⁶ Moreover, the quartile distribution shows that the profiles of “takeup” households served by PSPs and “takeup” households served by FAs are quite similar (Figure 2).⁷ The distribution compares closely to the distribution in the overall SILC population (as seen in Figure 1). Collectively, this evidence suggests that even when it is clear that consumers must pay for services (i.e. engage a PSP), the poverty outreach for SILC does not diminish.

TABLE 4 - PPI SCORES, “TAKEUP” SILC HOUSEHOLDS

	“Takeup” SILC Households			Overall SILC Households	
	N	PSP Mean	FA Mean	PSP Mean	FA Mean
Kenya	53	29.9	29.7	29.7	31.5
Tanzania	193	42.4	39.1	39.1	42.2
Uganda	149	40.2	41.3	41.3	40.8

FIGURE 2 - PPI SCORE DISTRIBUTION, SILC “TAKEUP” HOUSEHOLDS ONLY



Because the sample included both SILC and non-SILC households randomly selected from within the randomized villages, we can compare SILC outreach against non-SILC populations in the same areas. Again, we find that the SILC and non-SILC

⁶ A formal means test was applied and showed no significant differences.

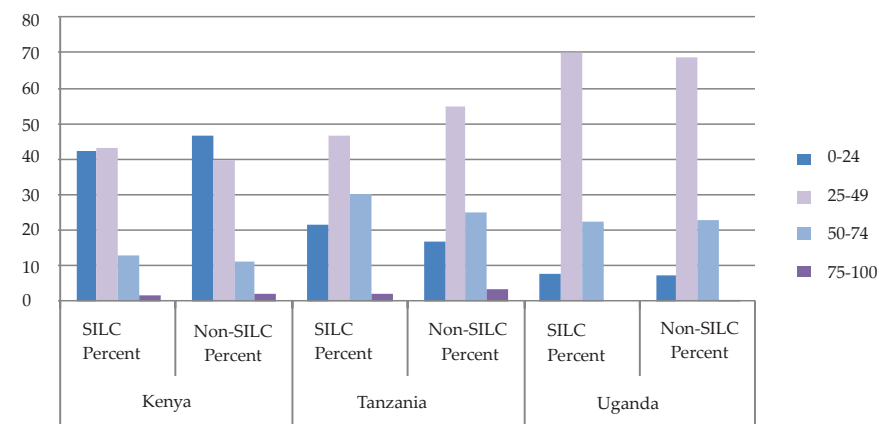
⁷ We see some minor, expected variation in the distribution that points to no particular divergence on outreach.

subpopulations look nearly identical (Table 5),⁸ even in the finer detail of the PPI bands (Figure 3). This strongly suggests that SILC draws its members from a typical cross-section of rural villagers. SILC members on the whole do not stand out as poorer or more affluent within these communities. As noted earlier, the project’s poverty outreach depends much more on the selection of communities and regions via geographic targeting.

TABLE 5 - PPI SCORES, SILC VS. NON-SILC HOUSEHOLDS

	SILC (N)	SILC Mean	Non-SILC (N)	Non-SILC Mean	Overall (N)	Overall Mean
Kenya	416	30.1	414	29.4	830	29.8
Tanzania	333	40.0	326	40.5	659	40.2
Uganda	321	41.1	309	41.4	630	41.2

FIGURE 3 - PPI SCORE DISTRIBUTION, SILC VS. NON-SILC HOUSEHOLDS



The data strongly suggests that SILC draws its members from a typical cross-section of rural villagers.

Impact: Any Difference between PSP & FA Households?

The impact question—which is to say, how membership in each kind of SILC group affects the welfare of the member households over time—can only be considered vis-à-vis the PPIs in Kenya, as it was the only country with a PPI tool available and used at both baseline and endline.

As one would expect in an RCT design such as this, the PSP- and FA-supported subpopulations in Kenya showed statistical equivalence at the baseline. The subsequent endline observation aimed to capture any divergence between the two—i.e., an impact on poverty attributable to one model or the other. In fact, the endline did show a statistically significant drop in PPI scores across the sample (Table 6).⁹ In other words, these whole populations appeared to be suffering economically to some extent during this period.

TABLE 6 - BASELINE & ENDLINE PPI SCORES IN KENYA, VILLAGE STATUS

	PSP (N)	PSP Mean	FA (N)	FA Mean	Overall (N)	Overall Mean
Kenya Baseline	650	31.9	180	31.3	830	31.7
Kenya Endline	650	29.8	180	26.7	830	29.1

⁸ A formal means test was applied and showed no significant difference between the SILC and non-SILC subpopulations in the three countries.

⁹ A formal means test was applied and showed a significant difference between baseline and endline PPI scores in Kenya.

The effects were not equal, however (Table 6). The drop in mean PPI score within the FA portion of the sample (14.8%) was over twice the drop in the PSP portion of the sample (6.5%). This is an indication of greater resiliency among PSP villages, compared with FA villages, during this period of economic downturn. We will continue to look for corroboration of these findings in other aspects of the data analysis.

Additional Research Background

a. Design of the RCT

The study's experimental design was intended to create statistically comparable cohorts of agents, serving villages and households in comparable environments. Among FAs who successfully completed their examination and qualified to be certified as PSPs, some were randomly assigned for immediate certification (treatment), while others were randomly assigned to remain as FAs for an additional 12 months (control), before officially becoming PSPs. The treatment and control agents were equally qualified, and were supervised and supported in the same way. The only difference was how they were paid – by the project (control) or by the SILC groups (treatment).

The design thereby controls for observable and unobservable differences between agents, their supervisors and areas of operation. Through randomization, the treatment PSPs and the control FAs are statistically comparable and any differences in performance and outcomes can be attributed to the delivery channel.

A total 333 agents were selected for the study. The household survey focused on a subset of 240 such agents and the villages they served.

b. Research questions/issues

The RCT compares PSP and the FA delivery channels along the following dimensions:

- Group quality and financial performance
- Impact on group members and their households
- Poverty outreach
- Member satisfaction with agent services
- Agent satisfaction with their work and remuneration
- Competitiveness with respect to other financial service providers
- Sustainability of services to groups

c. Data Sources

CRS is employing four primary data sources in the research:

1. The project's existing Management Information System, which tracks agent productivity and group financial performance (quarterly).
2. Agents self-report on their work and income (every six months).
3. A market research firm's qualitative research (Focus Group Discussions and interviews) with agents and with group members regarding their satisfaction with the delivery channel and other topics (baseline/endline).
4. A survey firm's household survey of both SILC members and non-members in 240 villages to establish impact (baseline/endline).



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