

EXPERIENCE NOTE

Title of the exercise: Progress out of Poverty Index (PPI) survey 2012

Length of the exercise: 11 weeks (from the 4th of June to the 17th of August)

Country: Cambodia

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Chamroeun Microfinance Limited and poverty assessment tools

Chamroeun Microfinance Limited was initiated in 2005 as a microfinance program by Entrepreneurs du Monde; it registered as a private company in 2009, reached operational sustainability in 2010 and became licensed by the National Bank of Cambodia, in 2011. It is now (Sept 2012) the 7th Microfinance Institution (MFI) in Cambodia in terms of number of customers with about 35,000 active borrowers spread in 9 Provinces.

Chamroeun's social mission consists in providing adapted financial and non-financial services to Cambodia's poorest populations. To ensure it does reach the target population it has set for itself, and to assess changes in living standards of its partners¹, the MFI administers a Poverty Assessment questionnaire (called PAT) to capture the socio-economic situation of its partners according to predefined criteria. In 2012, Chamroeun's management decided to introduce an internationally recognized poverty assessment tool, the Progress out of Poverty Index (PPI), to assess the level of poverty of its new loaners according to internationally recognised standards.

This document aims at taking the main teachings from the PPI survey 2012, and presenting relevant advice based on this experience in order to avoid certain mistakes or to facilitate some point of the exercise in the future.

The rationale behind implementing the PPI

The PPI is an internationally recognised tool that is used to measure the monetary poverty incidence of an institution's clients. The PPI relies on national statistics and the results obtained from administering the 10-question scorecards translate into probability of monetary poverty incidence as a percentage of the institution's clients.

The PPI was designed by the Grameen Foundation, has gained international recognition, and gives results which are easily understood by different stakeholders when looking at the level of poverty of

¹ Chamroeun refers to its clients as « partners » to emphasise its social mission

a given population. Saying “55% of the clients are below the national poverty line” is easier to apprehend than “66% of the clients are unable to send all their children to school”.

Hence, in order to be able to communicate to external stakeholders on its partners in these simple and clear terms, Chamroeun wanted to implement the PPI as a poverty assessment tool.

The constraints of the PPI

The PPI relies on national statistics, as mentioned above, and this is precisely one of its main limits as far as Cambodia goes: the population census on which this tool is based dates back from 2004 - and indeed the country has gone through tremendous economic and social change since then, making the PPI scores and poverty likelihood somewhat outdated. Indeed, the issue of the validity over time of some questions might arise (for instance question on television ownership). Since the date when the national survey was carried out (2004), television ownership could have significantly expanded. This could tend to underestimate the monetary poverty incidence among partners and affect the reliability of the tool to track the evolution of the levels of poverty of the partners (another objective in using poverty assessment tools). Moreover, it is uncertain how long the PPI questionnaire will remain unchanged. A scorecard update (based on a more recent national household survey) might lead to a significant difference in terms of poverty likelihoods. In addition, changes could take place in selected indicators.

Who, when and how

Based on Chamroeun’s motivation and the constraints listed above, it was decided the PPI would be used as a one-off survey tool to measure the monetary poverty of partners entering Chamroeun on a representative sample. If such an experiment proved successful, the PPI could be used on a one-off yearly basis, as a complement to the PAT, to give data on monetary poverty incidence of Chamroeun’s partners, when effectively the PAT gives a more detailed picture of the socio-economic status of the partners and its evolution in time.

The PPI implementation was given as a secondary mission to the interns in charge of conducting the Partner Satisfaction Survey (PSS) in 2012. It was done concurrently to the PSS itself – but could not be fully integrated into the PSS because the PPI survey targets new partners, whereas the PSS is actually on partners from higher loan cycles.

The questionnaire was administered by loan officers, in the course of the loan assessment visits.

It is important to note that it was the first time the PPI was implemented at Chamroeun: the exercise was new for everyone, so it involved a lot of experimentation, and some aspects not considered this year could be taken into consideration in the future.

Survey organisation and sample design

As stated in the introduction, two assignments were run at the same time: the first was the PSS 2012 and the second the PPI survey. Both assignments involved going to provincial branches (for training, audit, FGD organization, etc.), so it would have been very valuable to plan both assignments side by side in the very first days: this way it would be much easier to prepare everything needed in advance.

The interns in charge of coordinating the exercise did not realize this in the beginning, which resulted in the loss of one week of PPI implementation (originally planned on 6 weeks). Indeed, they needed more time to prepare all the requirements for the PSS 2012 (much more complicated to organise) and thus had to re-schedule the entire mission a week later. It is very easy to get confused with all the preparations needed for both missions.

- This emphasises the need for a precise and well designed schedule, agreed with the managers ahead of time, in order to save time, money and energy.

Obviously, this concern is irrelevant in the case where the PPI and the PSS were to be implemented separately in time or by different persons in the future.

Sample design was done on the basis of the desired level of confidence and margin of error, and in order to design a representative sample, Chamroeun branches were grouped in clusters according to the socio-economic situations. For more details on this, please refer to appendix 1.

Training the loan officers

The PPI survey was aimed at the new partners joining Chamroeun and the interviews were to be conducted at the partners' homes, along with the filling in of their first loan application forms. Hence, the most qualified persons to run the interviews were obviously the loan officers.

So the interns were not directly in charge of the implementation, but had to train the loan officers to ask the questions in the correct way, to send the scorecards to head office regularly along with the other documents the branches usually send to head office, and to communicate with them the dates of the beginning and end of the exercise.

The training on the questionnaire itself did not raise any major difficulties: a Khmer version of the questionnaire was already available, so translation was not an issue. But it remained important to ensure that all questions and possible answers were well understood.

- Though the questions are quite straightforward it is important to ensure good understanding by the Loan officers of certain subtleties: on the equipment present in the house, it is important to count only equipment that is usable (a broken TV or motorcycle does not count); also it is important to clarify how to count the number of household members...

The main challenge was training loan officers who did not speak English (which was almost always the case).

- This issue can be avoided by having another member of Chamroeun staff (English-speaker) join the training to translate the instructions. This also helps ensure proper understanding by all, as the French interns may not immediately perceive misunderstandings that exist.
- It is also important to encourage the loan officers to help each other when one of them has understood a question (they will not do it spontaneously).
- It is also very helpful to have the explanations written down since it is always easier for the loan officers to read English (the best is to have a board available for the training, but a simple sheet of paper can do the job as well). Drawing little schemes to illustrate the questions and the possible answers was also very useful.

Finally, the interns should test the loan officers after having explained each question since they will not come forward and say they have not understood one of them...

The questionnaire was translated in Khmer and was not so difficult to understand. The interns did their best during the training to ensure everybody has understood everything. Still, some questions can be a little confusing, and since none of the loan officers took any notes during the training, it can be assumed that some of them had forgotten certain critical details of the implementation methods.

The loan officers understood pretty easily the general organisation of the survey: when to send the scorecards to head office, when to start and stop the implementation. However, there were no scorecards coming back from certain branches during the whole first week of the PPI survey. This is due to the fact that the loan officers forgot whether they had to start the exercise on the 2nd of July or they had to send the scorecards regularly. It can easily be avoided: it only takes a reminder on the very first day of the exercise (a simple phone call should do). This way it can be ensured to have the required number of scorecards coming back, and even more (which could allow an increase of the sample accuracy by improving the level of confidence and the margin of error for example). Appendix 2 shows the general planning of the survey.

Quality control

The main problem encountered regarding the PPI exercise was the fact that the interns did not have any means to assess the quality of its implementation. After the training of the loan officers, the only guarantee was the fact that the scorecards kept coming in at the head office. Every scorecard was of course checked for mistakes (some presented errors such as miscalculations of the total scores or confusions on the answers), but it was unclear how they had been completed, nor the difficulties (if any) that the loan officers had faced.

Thus it was impossible to know if the questions were asked correctly and the answers collected in the right way. Accompanying the loan officers on the field was not an option since it would have been very confusing for the new partners to see foreigners taking part in the loan application process, or to run an audit among the surveyed partners for similar reasons. Also, there was insufficient time or available budget to travel again in provinces to organize such controls.

The Chamroeun R&D team conducted a quality check on a sample of questionnaires after the survey had been completed. The check was done on 34 questionnaires (among the total 332) by re-interviewing some partners and discussing with the loan officers involved in the exercise.

This audit highlighted the following difficulties:

- Miscalculation on the number of household members on 30% of the questionnaires!
- Misinterpretation and inconsistency of method on the housing materials
- Lack of visual check on cooking fuel
- Misinterpretation on the sanitation facilities
- Miscalculation on the assets (counted broken assets)
- Misunderstanding on bed set, wardrobe

Based on these findings, Chamroeun decided to redo the survey, after a better training and briefing of the loan officers, to avoid the difficulties and inaccuracies noted above.

Analysis of the results

The scorecard data is encoded in a simple Excel spreadsheet in two stages. It is shown in appendix 3.

1. All the scorecards are listed, with their individual score – e.g. if there are 56 scorecards in one branch, then there are 56 values in the column for that specific branch.
2. Then a summary table counts the number of scorecards in each score interval (data counted from the previous worksheet). The intervals are determined as 5 points intervals, and there is a poverty likelihood percentage associated to each.

In the summary table, the poverty likelihood for each branch is calculated as weighted average based on the number of scorecards in each interval.

The PPI guidelines provide several levels of analysis for the results, meaning that there are different values to be put in the poverty likelihood column for the data analysis. The analysis tables provided by the PPI guidelines typically include the following:

- National poverty line - 125% National poverty line - \$1.25/day 2005 PPP poverty line
- National food poverty line - 150% National poverty line - \$2.50/day 2005 PPP poverty line
- USAID extreme poverty line - 200% National poverty line - \$3.75/day 2005 PPP poverty line

In Chamroeun’s case, and because the statistics used for Cambodia are so out of date, it is interesting to look at several levels of poverty, not just the ‘national poverty line’. Indeed, the economy has grown considerably since the 2004 census on which the PPI tables are based.

CLUSTERS	Cluster 1			Cluster 2	Cluster 3	Cluster 4	Cluster 5	TOTAL	LIKELIHOOD	125%		150%
	S-cluster 1	S-cluster 2	S-cluster 3							LIKELIHOOD	LIKELIHOOD	
0 4	0	0	0	0	0	0	0	0	85.8%	88.9%	97.4%	
5 9	0	0	0	0	0	0	0	0	73.6%	84.4%	94.2%	
10 14	0	0	0	0	0	0	0	0	68.1%	85.3%	91.6%	
15 19	0	0	0	1	1	0	0	2	56.1%	78.2%	86.9%	
20 24	3	2	0	5	0	1	2	13	45.3%	65.8%	78.8%	
25 29	5	1	0	3	3	1	4	17	34.3%	58.8%	75.4%	
30 34	4	1	3	5	5	0	9	27	21.9%	42.5%	58.2%	
35 39	5	4	6	5	5	7	6	38	13.4%	29.2%	45.0%	
40 44	5	6	6	3	2	4	6	32	9.4%	20.2%	35.4%	
45 49	10	5	4	4	3	10	8	44	3.5%	10.0%	23.0%	
50 54	6	5	6	3	2	3	13	38	4.0%	8.3%	15.0%	
55 59	6	6	7	3	3	5	13	43	2.4%	4.7%	10.9%	
60 64	2	3	4	4	5	3	4	25	0.0%	3.0%	9.1%	
65 69	3	0	7	0	3	4	5	22	0.0%	1.4%	2.4%	
70 74	5	0	3	2	1	0	3	14	0.0%	0.0%	1.9%	
75 79	1	1	5	1	1	1	1	11	0.0%	0.0%	0.0%	
80 84	0	1	2	0	0	0	0	3	0.0%	0.0%	0.0%	
85 89	1	0	0	0	0	1	0	2	0.0%	0.0%	0.0%	
90 94	0	1	0	0	0	0	0	1	0.0%	0.0%	0.0%	
95 100	0	0	0	0	0	0	0	0	0.0%	0.0%	0.0%	
TOTAL	56	36	53	39	34	40	74	332				
POV. DISTRI.	10.4%	8.6%	4.9%	16.0%	11.2%	6.8%	9.1%	9.3%				
125 pov line	19.6%	16.7%	10.7%	28.0%	21.6%	14.3%	17.8%	18.0%				
150 pov line	29.8%	26.8%	18.4%	39.5%	31.9%	24.4%	27.6%	27.9%				

*Please note that the results above are **temporary and not validated** - based on the quality check performed by Chamroeun, the survey will be redone for more accurate results.*

The table above shows that overall, 18.0% of the new loaners entering Chamroeun are below 125% of the national poverty line, while it is the case for 45.7% of all Cambodian households (Source : PPI Design Documentation Memo for Cambodia). It also shows significant disparities per branch: cluster 2 (north western part of the country) is at 28% while sub-cluster 3 (Phnom Penh) is at 10%.

Appendices

Appendix 1 – Sampling

Est. nb of 1st loans (3-month basis):		2412											
Clusters	Branches	Number of L.Os	Est. Nb of 1st loans	Proportion of new partners estimated in each cluster	Nb of PPI scorecards needed	Nb of est. New partners per L.O in branch visited	Min. nb of L.Os needed	Nb of L.Os to train					
Cluster 1	S-cluster1	01CCV	197	17%	56	22	3	5					
		03PCA	175										
		04PSK-1	34										
Cluster 1	S-cluster2	06PTK	144	11%	36	14	2	5					
		08PEK	115										
		04PSK-2	34										
Cluster 2	S-cluster3	05PCT	232	16%	52	13	4	8					
		07PCC	114										
		10BTB	158										
Cluster 2		12BMC	92	10%	34	16	2	4					
		09SRP	170										
		13KTH-1	116										
Cluster 3		11KPC	174	12%	39	19	2	4					
		13KTH-2	116										
		14TKO	250										
Cluster 4		15KPT	291	22%	74	50	1	3					
		TOTAL	-						114	2412	100%	332	151
Sample size calculation (using RAOSOFT)													
Margin of Error (%)	Confidence Level	Population Size	Sample Size										
5	95	2412	332										
<p>Note: in order to reach the partners affiliated to all branch, district and satellite offices, we should be concerned of the area of function of the L.Os to be trained.</p>													

Appendix 2 – Schedule and Scorecards Collection

Date	Branch visited	Nb of L.O.s to train	Nb of L.O.s trained	Nb of scorecards needed	Nb of scorecards collected
25/06/2012	01CCV	5	4	56	60
25/06/2012	06PTK	5	4	36	60
25/06/2012	07PCC	8	5	52	56
25/06/2012	14TKO	3	2	74	44
26/06/2012	11KPC	5	4	40	129
27/06/2012	09SRP	4	4	39	177
03/07/2012	10BTB	4	4	34	108
TOTAL	-	34	27	332	634

Appendix 3 – Data collection and analysis

STAGE 1 One column per branch, all scores are listed one by one

	A	B	C	D	E	F	G	H	I	J
3		BRANCHES	01CCV	06PTE	07PCC	05SEP	10DTB	11EPC	14TKO	TOTAL
4		NO OF SCORECARD	56	36	52	33	34	40	74	332
5			25	75	62	27	74	56	46	-
6			20	63	80	32	75	53	57	-
7			23	32	51	20	30	55	23	-
8			45	42	63	51	65	45	30	-
9			76	36	47	43	33	30	53	-
10			40	24	47	26	36	54	40	-
11			52	53	33	34	55	37	63	-
12			30	50	32	30	55	49	51	-
13			30	43	55	24	46	35	44	-
14			22	50	60	20	33	35	35	-
15			50	43	43	37	33	44	47	-
16			37	41	43	30	63	45	54	-
17			27	33	32	24	63	40	51	-
18			70	23	51	35	50	33	43	-
19			47	43	71	45	46	23	55	-
20			47	47	42	10	16	46	31	-
21			24	26	65	20	42	67	52	-
22			66	35	33	34	32	60	37	-
23			43	60	57	40	20	42	46	-
24			43	62	30	45	23	60	34	-
25			34	51	30	61	36	75	40	-
26			43	53	53	21	60	47	61	-
27			37	33	47	45	63	33	30	-
28			43	46	42	43	60	07	71	-
29			43	33	71	30	50	24	47	-
30			27	53	40	47	36	63	53	-
31			41	47	60	30	41	51	55	-
32			34	41	66	71	56	37	67	-
33			60	52	63	63	66	64	40	-
34			70	01	73	53	40	53	67	-
35			56	53	66	74	26	61	72	-
36			43	45	04	55	32	40	45	-
37			46	40	77	56	32	45	45	-
38			70	56	64	54	61	57	26	-
39			51	50	33	64		45	52	-
40			57	50	57	63		43	67	-
41			54		41	53		67	54	-
42			36		54	30		45	24	-
43			55		77	75		57	53	-
44			25		60			45	75	-
45			74		33				60	-
46			56		33				41	-
47			07		51				52	-
48			40		53				54	-
49			30		63				36	-
50			53		42				67	-
51			51		50				55	-
52			71		76				53	-
53			57		76				20	-
54			43		75				32	-
55			36		50				36	-
56			53		53				54	-
57			63		53				43	-
58			45						51	-
59			62						56	-
60			60						43	-
61									33	-
62									57	-

POVERTY DISTRIBUTION

TOTAL

01CCV

06PTK

STAGE 2 A summary table, one column per branch, the score cards are counted by score interval

VLOOKUP $=((D5*\$L5)+(D6*\$L6)+(D7*\$L7)+(D8*\$L8)+(D9*\$L9)+(D10*\$L10)+(D11*\$L11)+(D12*\$L12)+(D13*\$L13)+(D14*\$L14)+(D15*\$L15)+(D16*\$L16))/D25$												
	A	B	C	D	E	F	G	H	I	J	K	L
1												
2												
3												
CLUSTERS	Cluster 1			Cluster 2	Cluster 3	Cluster 4	Cluster 5	TOTAL	LIKELIHOOD			
	S-cluster 1	S-cluster 2	S-cluster 3									
5	0 4	0	0	0	0	0	0	0	85.8%			
6	5 9	0	0	0	0	0	0	0	73.6%			
7	10 14	0	0	0	0	0	0	0	68.1%			
8	15 19	0	0	0	1	1	0	2	56.1%			
9	20 24	3	2	0	5	0	1	2	45.3%			
10	25 29	5	1	0	3	3	1	4	34.3%			
11	30 34	4	1	3	5	5	0	9	21.9%			
12	35 39	5	4	6	5	5	7	6	13.4%			
13	40 44	5	6	6	3	2	4	6	9.4%			
14	45 49	10	5	4	4	3	10	8	3.5%			
15	50 54	6	5	6	3	2	3	13	4.0%			
16	55 59	6	6	7	3	3	5	13	2.4%			
17	60 64	2	3	4	4	5	3	4	0.0%			
18	65 69	3	0	7	0	3	4	5	0.0%			
19	70 74	5	0	3	2	1	0	3	0.0%			
20	75 79	1	1	5	1	1	1	1	0.0%			
21	80 84	0	1	2	0	0	0	0	0.0%			
22	85 89	1	0	0	0	0	1	0	0.0%			
23	90 94	0	1	0	0	0	0	0	0.0%			
24	95 100	0	0	0	0	0	0	0	0.0%			
25	TOTAL	56	36	53	39	34	40	74	332			
26	$=(D11*\$L11)+(D12*\$L12)+(D13*\$L13)+(D14*\$L14)+(D15*\$L15)+(D16*\$L16)/D25$						16.0%	11.2%	6.8%	9.1%	9.3%	
27												
28	POVERTY DISTRIBUTION TOTAL 01CCV 06PTK 07PCC 09SRP 10BTB 11KPC 14TKO											

The final line “poverty distribution” is the likelihood of poverty obtained as a weighted average of the likelihoods from the column on the far right had side.