Negros Women For Tomorrow Foundation (NWTF):

Progress out of Poverty Index® (PPI®)

Case Study Series

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Contact Information:

Progress out of Poverty Index
www.progressoutofpoverty.org
ppihelpdesk@poverty-action.org

Introduction

In 2005, Grameen Foundation introduced the Progress out of Poverty Index (PPI) with the support of the Consultative Group to Assist the Poor (CGAP) and the Ford Foundation. Mark Schreiner of Microfinance Risk Management, L.L.C. developed the PPI, a ten-indicator composite index that produces estimates of individuals' poverty likelihoods and tracks changes in those likelihoods over time. The PPI resonated well with Grameen Foundation because of the characteristics it shared with the Grameen Bank 10 Point System, a set of easily observable indicators that helps Grameen Bank track the movement of its clients out of poverty. The PPI is now managed by the nonprofit organization Innovations for Poverty Action (IPA).

Negros Women for Tomorrow Foundation (NWTF) in the Philippines was one of the first MFIs to adopt the PPI. The lessons learned from NWTF's implementation process can help lead the way for other organizations as they use the PPI. This case study provides an overview of why and how NWTF adopted the PPI. It also details how the organization is using the results to shape its products, services, and recruitment and management processes, enabling it to reach a greater number of poor borrowers as efficiently as possible.

NWTF at a Glance

History: Started in 1984 as an NGO; opened a commercial bank in 2005
Status: Fully financially-sustainable, microfinance institution
Active clients: 79,813
Loan portfolio (USD): $10,650,967
Financial Products and Services: loans, savings and microinsurance
Non-Financial Products and Services: medical services, scholarships, training services

Negros Women for Tomorrow

Negros Women for Tomorrow (NWTF) has more than 70,000 clients and operates 37 branches spread throughout the Visayas region, comprising six major islands of the Philippines. The region has a 51 percent poverty rate. In such a complex operating environment, targeting the poorest and tracking their progress out of pov-erty have been serious challenges faced by the MFI.

NWTF management recognized various shortcomings in its primary targeting tool—the housing index section of its means test.

Management also needed the ability to compare data at the branch level so that it could assess a client's progress out of poverty, and evaluate the unique products and services that may have distinguished the social performance of one branch versus another. Perhaps most importantly, NWTF management sought a tool that was objectively benchmarked to national and international poverty lines using national-level household income and expenditure data.

Implementing the PPI throughout the NWTF branches would meet NWTF's information re-quirements; each branch would be connected to the head office and data would be gathered and analyzed seamlessly. But before any of this could be possible, the PPI had to become operational.

In two years' time, NWTF is now reaping the benefits of using the PPI. From the time of the initial testing period to today, NWTF has:

- Integrated the PPI into its operations in all 37 branches, replacing the housing index as its client targeting tool
- Set a target of 90 percent of entering clients to be below the poverty line, ensuring that it is reacting out to the poorest of the poor
- Refined its census approach to data-gathering to test every entering and existing client at every loan cycle, giving it comprehensive results to analyze
- Adjusted its initial loan size and loan cycle period, and provided pre-payment options to be more suitable for the poor
- Compared data by branch to understand what products and services are most effective
- Collected information on other indicators (such as repayment rates, savings balances, age, type of business, number of entrepreneurial activities, and whether the client is in a rural or urban setting) to use as it refines its products and services
- Worked to fully automate PPI data collection and analysis for all of its branches

Here is the step-by-step process that NWTF followed to test and fully implement the PPI.

NWTF Before the Progress out of Poverty Index

Because the area of Visayas has a high prevalence of poverty, prospective clients were initially deemed relatively easy to identify. NWTF aimed to focus on the poorest of these, or the "bottom poor". To identify this segment of the population, NWTF used a means test, or "Client Profile Index" to gather baseline data on a prospective client's socio-economic status. Loan officers administered the test and took about 15-30 minutes to complete it. It consisted of four sections: Personal Data, House Index, Family Assets and Expenditures, and Social/Family Health Status.

The House Index (as part of the Client Profile Index) was used as the targeting tool; a potential client's score on the House Index alone determined her eligibility to join NWTF. Answers to questions such as the structural condition of the house, roofing and wall materials were scored. Of a possible score of 20, prospective clients with households scoring 10 or less were eligible to join. Branch managers monitored House Index scores carefully, since they comprised the sole eligibility criterion.

Gomby Maramba, Manager of the Research and Development Department

Introducing the PPI

NWTF managers were enthusiastic about introducing the PPI because of a major shortcoming they perceived in the means test. According to Gomby Maramba, Manager of the Research and Development Department of NWTF, the means test wasn't accurately representing the actual poverty levels of the country. "For example," he noted, "we cannot assume that the people who are poor in India (where the House Index in the means test was developed) are the same as the poor in the Philippines. The PPI is more representative of our poor, because it is based on our own [Philippines] national data." Maramba is correct. The PPI is customized for each country, whereas the means test and House Index are not based on empirical analyses of household poverty. Furthermore, housing conditions are weak predictors of poverty in the Philippines. As a result, the questions in the PPI are not as subject to error as those in the means test. In addition, Maramba noted, making comparisons—or tracking progress—through the means test was impossible; whereas the PPI provides an accurate snapshot of the likelihood that a client is above or below the poverty line. These snapshots can be compared within an institution, or across institutions and countries.

There were, however, other key issues that NWTF management had to consider in switching to the PPI: How cost-effective would it be to administer? What would the MFI do with the new information the PPI generated? How would the MFI account for drop-outs going forward? The central question was, would the PPI serve as an effective replacement for NWTF's means test and, especially, its House Index?

Implementing the PPI: The Process

• **Creating the PPI.** For the Philippines, the PPI is based on analysis data from 38,014 Philippine households surveyed in the government's 2002 Annual Poverty Indicator Survey (APIS). Indicators from the original survey are ranked according to how well (statistically) they predict poverty. The ranked indicators are then further narrowed to select indicators that are verifiable, socially acceptable to ask, and likely to change with change in poverty level. Responses to each indicator are then weighted and scored according to their predictive value in the underlying survey. The sum of the indicator responses is the PPI score. PPI scores range from 0-to-100; 0 is most likely to be below the poverty line and 100 is least likely to be below the poverty line. Scores can be easily computed in the field with nothing more than a pencil and paper. Each score is then associated with the likelihood that an individual is above or below a poverty line.

• **Training to Use the PPI.** Once the PPI was created, the next step was to train the MFI management and staff in its use. In July 2005, Grameen Foundation held a training workshop, hosted by NWTF, to assist five MFIs in understanding the capabilities of the PPI, learn how to implement the index and rate its results, and ensure support for the PPI from management. The training resulted in an action plan to integrate the PPI into NWTF's operations. The action plan addressed the following implementation issues: staff training and supervision; quality control and audit concerns; and the incorporation of existing client selection tools, loan applications and exit surveys.

Key characteristics of the plan were:

> 1. Piloting the PPI with entering and existing clients before expanding it to all branches
> 2. Testing clients at entry and re-loan
> 3. Training loan officers in PPI administration

• Testing the PPI. NWTF implemented its pilot plan immediately after training. The MFI chose to census-test the PPI at its branch in Cauayan, focusing on all clients (NWTF was able to compare these new data with the results from the same sample of clients tested in 2003 for an impact study).

Pilot results showed that it took five-to-eight minutes to administer the PPI. Clients were generally receptive to field staff asking the questions. In a few cases, field staff had to explain some points related to the PPI in general and to some of its indicators specifically. These included clarifying that the tool was not being used to determine collateral in the event of a loan default; and, why it was important to know the number of children in the household and how many of them went to school. Clients sometimes had difficulty counting the number of children aged 0-to-17 or 6-to-11 (school age) in the household, but were able to do so with the help of field staff.

Some definitions of the PPI indicators were unclear to field staff, including the definitions for salaried employment and the composition of wall materials . These issues were addressed in subsequent training materials.

Results: An Expanded Profile of NWTF Clients

Through implementing the PPI, NWTF learned that:

• While NWTF was reaching a majority of poor clients with its services, 41 percent of its entering clients were found to be above the poverty line.

• "Old" clients, those with five years or more in the program, were significantly more likely to be above the poverty line than were the entering clients. (Unknown was whether this denoted a "success" rate of clients moving further out of poverty during the five-year period or whether the poorer clients were dropping out of the program. Subsequent PPI testing on exiting clients will shed light on this important issue.)

The percentage of entering clients who were above the poverty line was higher than NWTF expected.

"This was a big surprise," says Maramba. Previous testing in 2003 had shown that only two percent of entering clients were above the poverty line. While there were signs in subsequent years that NWTF might not be serving its non-poor target as much as it sought to do, says Maramba, management never thought the result would be as high as 41 percent above the poverty line. And NWTF trusted these new results because it trusted the accuracy of the PPI. "Since it is benchmarked to the national household survey, I think it is more accurate than any other tool for measuring poverty," he says.

PPI scores are easily computed in the field with nothing more than a pencil and paper. Now, Gomby can easily calculate the poverty levels of NWTF's clients.

Given these results, NWTF set a new target of 10 percent of entering clients to be above the poverty line. To work toward that goal, the MFI used the PPI score analysis to create an eligibility priority system with three bands: First priority to enter, second priority to enter, and ineligible. Six months after changing eligibility requirements, 25 percent of NWTF's entering clients were above the poverty line (down from 41 percent). The PPI is thus proving to be an effective targeting tool for NWTF.

Maramba noted that without the PPI, his organization would not have been able to set such high goals and ensure that they were meeting them. "The PPI is fast and cheap. We can make adjustments easily. Other tools take longer to compare, and we don't know how accurate their results are," he explains.

Scoring by branch was of particular interest to a large MFI like NWTF. For example, the PPI results will be analyzed over time to compare movement out of poverty for each branch, enabling management to investigate what a branch with higher movement out of poverty was doing to achieve such results. NWTF could then use that information to replicate a successful branch's results across the whole organization.

Challenges and Solutions

• Data Interpretation. While NWTF field staff found the PPI easy to administer, there was some confusion about interpreting the corresponding poverty likelihood. In addition, the field staff administering the PPI and NWTF management tend to use the poverty likelihoods differently: field staff use the scores to target clients;while management sees the scores as representing the poverty likelihood, how that likelihood changes over time, and how these data can inform additional outreach, products and services.

• Costs and Benefits. NWTF tracked the basic costs of implementing the PPI so that it could determine the resources needed to integrate the tool into operations. The costs would represent 1.4 percent of the annual operating budget, and the cost per client would be $0.50 per year. Hardware and software costs were low, as the data were entered into existing computers and could be analyzed using a simple spreadsheet program.

This cost analysis does not include the increased benefits of using the PPI, which have not yet been quantified. By integrating financial indicators with social indicators, for example, MFIs should be able to meet clients' needs better. This should lead to increased client retention, better defined market position, and time and cost savings. Expected benefits for management are:

1. A clearer assessment of an entering client's poverty profile, improving targeting
2. Information on the rate at which clients are moving out of poverty as scores change over time, helping the MFI achieve its mission
3. Improved products and services, meeting clients' needs better
4. Accurate poverty reporting for external audiences, such as investors, donors and specialized rating agencies, leading to increased investment

• Information Systems. NWTF contracted a local programmer to develop a simple DOS program that branch encoders used to input PPI data into computer systems. NWTF is working to
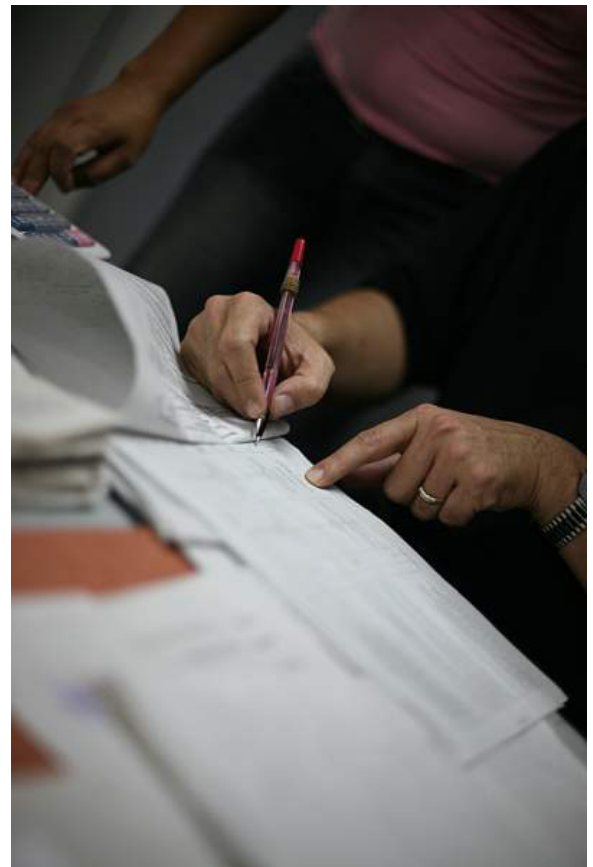
complete the implementation of an automated MIS solution in all its branches, enabling the DOS solution to link the PPI database to the MIS database.

For NWTF, the first step of integrating the PPI with the MIS has been the biggest challenge, and it will have the biggest reward when the information from all 37 branches can be collected efficiently. Maramba explains: "We are operating on six different main islands and some smaller islands. A lot of our branches don't have the Internet. We have to hire people to go around to the branches and collect data, which is costly for us because we have to hire additional staff."

Timing was a problem, for technical reasons; as the PPI was being introduced, the branches were also setting up an MIS solution. As a result, branches were launching two different programs simultaneously, with the PPI database solution ahead of the MIS implementation.

• Management and Staff Response. NWTF management and staff were pleased with the administration of the PPI and with the range of information gleaned for the following reasons:

1. Loan officers found the PPI easy to explain to borrowers. "Seven of the ten questions on the PPI can be verified on the spot," Maramba explains. "And the others can be easily verified by talking with neighbors or other observations."

2. The research team found the PPI easy, quick and inexpensive as well as accurate. (With 90 percent confidence, estimates of groups' overall poverty rates are accurate to within +/-1 percentage point.)

3. Management, too, found the PPI easy to administer and inexpensive. Directors were also pleased to have poverty likelihood information at the branch level.

Going Forward: Planning for the Future

• **How NWTF Will Use the PPI.** NWTF has now integrated the PPI into all 37 branches. It has already used the PPI to change its eligibility requirements for entering clients, making it easier to reach the "bottom poor". Its current goal is to have only 10 percent of their entering clients above the poverty level.

NWTF plans to PPI-test all entering and all existing clients every year. As indicated, these data will permit valuable time series data on movement out of poverty, repayment rates. NWTF will look at performance by branch so that it can get a deeper understanding of organizational performance across its branches.

NWTF anticipates that, with continued use of a newly automated system for the PPI, the cost as percentage of operating budget will go down, below the current 1.4 percent.

• **How NWTF Structures First Loans for the Poorest.** NWTF has made its initial loan terms more suitable for the "bottom poor". By stretching the loan term, weekly payments are smaller. NWTF has found that smaller amortizations are more manageable for the bottom poor. The MFI also offers the option to pre-pay loans for those clients capable of handling greater cash flow.

By comparing data by branch, NWTF is able to assess how the "bottom poor" are being served during various loan cycles, and to adjust its products and services accordingly.

• **Refining Analysis of PPI Results.** In addition to the poverty analysis of PPI results, NWTF also has collected information on additional indicators for each client, including: age, type of business, number of entrepreneurial activities, number of loan cycles, and rural or semi-rural setting. NWTF's goal is to see how poverty varies by different indicators.

Maramba foresees the possibility of client profiling to target and serve NWTF's clients better. He explains: "We will have a large data bank of PPI results. We could see how the indicators relate to each other, and pick out the ones that tell us the most. We could create client profiles on a per-branch basis. Profiling the lower-risk clients could minimize our costs, and we would monitor the bigger-risk clients more closely."

However they are used, the rich data provided by the PPI will assist NWTF to target eligible populations better and track movement out of poverty, enabling the MFI to provide the kinds of products and services that meet clients' needs better and promote faster movement out of poverty—NWTF's ultimate goal ■

Appendix

A. Progress Out of Poverty Index for the Philippines

B. Category Likelihoods According to the Philippines PPI Score

Appendix: A

Progress Out of Poverty Index® for the Philippines

Indicator	Values				Points
1. How many people in the family are aged 0 to	?5 0	3 or 4 7	1 or 2 16	Zero 27	
2. Does the family own a gas stove or gas			No 0	Yes 13	
3. How many television sets does the family		Zero 0	1 9	?2 18	
4. What are the house's outer walls made of?		Light (cogon, nipa, or sawali, bamboo, anahaw) 0		Strong (iron, aluminum, tile, concrete, brick, stone, wood, asbestos) 4	
5. How many radios does the family own?		Zero 0	1 3	?2 10	
6. Does the family own a sala set?			No 0	Yes 9	
7. What is the house's roof made of?		Light (Salvaged, makeshift, cogon, nipa, or anahaw) 0		Strong (Galvanized iron, aluminum tile, concrete, brick, stone, or asbestos) 2	
8. What kind of toilet facility does the family have?		None, open pit, closed pit, or other 0		Water sealed 3	
9. Do all children in the family of ages 6 to 11 go to school?	No 0		Yes 4	No children ages 6-11 6	
10. Do any family members have salaried employment?			No 0	Yes 6	

Source: Calculations based on the 2002 APIS.   Total:

Category Likelihoods According to the Philippines PPI Score

PPI Score	Below the Poverty Line		Total Below National Poverty Line	Total Above National Poverty Line	Between National Poverty Line and $4/Day/PPP	Total Below $4/Day/PPP	Total Above $4/Day/PPP
	Bottom Half Below National Poverty Line	Top Half Below National Poverty Line					
0-4	85.0%	14.3%	99.3%	0.7%	0.4%	99.7%	0.4%
5-9	79.7%	12.8%	92.5%	7.5%	4.4%	96.9%	3.2%
10-14	61.9%	30.0%	91.9%	8.1%	6.3%	98.2%	1.8%
15-19	70.5%	22.9%	93.4%	6.6%	4.5%	97.9%	2.1%
20-24	53.2%	24.4%	77.6%	22.4%	12.8%	90.4%	9.5%
25-29	42.4%	34.4%	76.8%	23.2%	14.4%	91.2%	8.8%
30-34	35.2%	42.6%	77.8%	22.2%	13.1%	90.9%	9.2%
35-39	23.8%	24.8%	48.6%	51.4%	23.1%	71.7%	28.3%
40-44	22.2%	26.1%	48.3%	51.7%	22.6%	70.9%	29.1%
45-49	16.5%	17.1%	33.6%	66.4%	27.0%	60.6%	39.4%
50-54	12.6%	21.8%	34.4%	65.6%	18.6%	53.0%	47.0%
55-59	8.4%	14.2%	22.6%	77.4%	19.8%	42.4%	57.7%
60-64	4.7%	5.4%	10.1%	89.9%	20.6%	30.7%	69.4%
65-69	2.5%	7.6%	10.1%	89.9%	14.5%	24.6%	75.4%
70-74	1.7%	5.2%	6.9%	93.1%	11.8%	18.7%	81.2%
75-79	1.6%	2.2%	3.8%	96.2%	4.5%	8.3%	91.7%
80-84	0.7%	1.4%	2.1%	97.9%	2.4%	4.5%	95.5%
85-89	0.0%	0.0%	0.0%	100.0%	0.8%	0.8%	99.2%
90-94	0.0%	0.0%	0.0%	100.0%	0.2%	0.2%	99.8%
95-100	0.0%	0.0%	0.0%	100.0%	0.7%	0.7%	99.3%

Source: Microfinance Risk Management, L.L.C. based on the 2002 APIS.