

# Assessing the Relative Poverty Level of MFI Clients in Cebu and Misamis Occidental<sup>1</sup>

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## Introduction

This study aims to determine the extent to which Microfinance Institutions (MFIs) reach the poor. The MFIs selected for this study are two cooperatives, each one with a separate "microfinance program" aiming to reach poor clients. These cooperatives are the Cebu People's Multi-Purpose Cooperative located in Cebu City and the Paglaum Multi-Purpose Cooperative, whose main office is located in Plaridel, Misamis Occidental. Both are members of the Philippine National Confederation of Cooperatives (NATCCO). They are also part of the Socio-Economic Development through Cooperatives Project Financial Intermediation Component (SEDCO-FI) supported by the Canadian International Development Agency (CIDA).

In addition to their regular programs these two cooperatives have also developed microfinance programs to help the poor. In the Cebu People's Multi-purpose Cooperative this program is known as the *Pundok Disiplina Hulam* (PDH), while in Paglaum Multi-purpose Cooperative, this is known as the Paglaum Development Program for Landless People (PDP-LP). Both microfinance programs adopt a Grameen-type lending program, where borrowers are grouped into five members per group, undergo training and testing, and comply with certain requirements, e.g., attend weekly center meetings. The Cebu People's Multi-purpose Cooperative, however, has other types of microfinance programs, where borrowers are individuals. For purposes of this study, the microfinance clients included are those who are in the Grameen-type program in view of their uniquely different set of requirements for participation.

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A sample of approximately 500 households (200 client households, i.e., new members of the cooperative's microfinance program, and 300 nonclient households) was drawn from each of the study cooperatives. The survey included only new members on the assumption that their living standards have not yet been affected by MFI participation. The nonclient households include non-members of both the study cooperatives and other cooperatives or lending institutions residing in the cooperatives' area of operation.

This study uses a tool developed by CGAP (Consultative Group to Assist the Poorest) and the IFPRI (International Food Policy Research Institute) to assess the relative poverty of MFIs (Micro Finance Institutions). The CGAP/IFPRI tool is designed to obtain indicators on various dimensions of poverty. From these indicators, a poverty index is created using the principal component analysis method. This index is then used to compare the relative poverty of MFI clients and non-MFI clients in the study cooperatives.

## **The Study Cooperatives**

### ***Cebu People's Multipurpose Cooperative, Cebu City***

The cooperative was established in December 1972. Among its goals is to provide business-related services among cooperators geared towards establishing viable economic enterprises, especially among the poor. In its Statement of Commitment to Members, the cooperative states: "We will look for better ways to reach out to the un- or underserved in our field membership."

The cooperative currently covers four cities of Metro Cebu although there is a plan to cover the entire province. It currently has eight branches. As of 2002, the cooperative had 7,877 regular members and 17,165 associate members. Women constituted 75 percent of its regular membership and 90 percent of its microfinance program. The members are urban poor, mainly self-employed micro entrepreneurs, engaged in buying and selling, or market vending and artisans doing skilled work in various crafts.

The cooperative provides different types of loans, one of which is geared towards micro financing for small businesses – the *Pundok Disiplina Hulam* (PDH) program. This program adopts the Grameen Bank approach to lending to groups of women. To be eligible for PDH, a person must be, among others, 18-55 years of age, has a business, willing to undergo training and testing, and once given the loan, will pay the loan weekly and attend a weekly meeting.

In addition to credit services, the cooperative had provided its members a number of services. These include, on a cost sharing basis, providential assistance, health and medical, educational and burial assistance. It has also conducted a number of entrepreneurial trainings, in addition to assistance in marketing and product packaging, provision of market information and business development assistance.

### ***Paglaum Multipurpose Cooperative, Misamis Occidental***

In 1983, *Paglaum* Community Development Foundation was formed to provide social services (health and nutrition, education and community development services). In 1992, a livelihood arm was organized called the *Paglaum* Multipurpose Cooperative. Microfinance operations called the *Paglaum* Development Program for Landless People (PDP-LP) – a microfinance program for the poor using the Grameen Bank approach - was started in July 1999. The objective of the cooperative is “To uplift the quality of life of the under privileged - the poor.”<sup>2</sup>

The current areas of operations include eight municipalities and one city (Oroquieta) located in the northern half of the province of Misamis Occidental. It has a main office and two branches. About 86 percent of its members are self-employed. Women comprise 80 percent of its total membership.

The criteria for selection to the PDP-LP includes: the applicant must be a permanent resident of the barangay for at least 2 years; has a per capita income of not more than P500 a month, total marketable asset of not more than P 50,000, has no regular job, and is not a white collar employee, is between 18 and 60 years old and in good health, and if unmarried, she must be her family’s breadwinner.

To become a member, one must be willing to organize into groups of five; attend at least 24 hours of the Continuous Group Training (CGT); collectively pass the Group Recognition Test (GRT) and attend the graduation ceremony; be willing to attend the weekly center meeting, pledge to save at least P20 per week and repay the loan regularly and on time; and willing to abide by the other rules and regulations of *Paglaum*.

In addition to its microfinance program, the cooperative has other programs and services, which include: a savings program for children and youth; a farm level grain center post-harvest facilities for the farmers; economic activities (production assistance, farming, fishing and small scale multipurpose livelihood assistance, and health services through the cooperative’s Well Family Midwife Clinic. The *Paglaum* Community Development Foundation continues to provide services in health and nutrition, education, and community development.

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<sup>2</sup> Its specific objectives are: (a) to extend banking facilities to poor men and women; (b) to eliminate exploitation of the poor by money lenders; (c) to create opportunities for self-employment for the country’s vast unutilized and under utilized manpower resources; (d) to bring the disadvantage people within the folds of some organizational format which they can find socio-political and economic strength through mutual support; (e) to reverse the age old vicious cycle of “low income, low savings, low investment, low income” into an expanding system of “low income, credit, investment, more income, more credit, more investment, more income”; and (f) to strengthen organization’s program and services through continuous capital and saving mobilization-internal generation of funds.

## Methodology

### *Sampling Frame*

The objective of the survey is to compare MFI clients and non-MFI clients in the study cooperatives with respect to their standard of living. A poverty assessment tool developed by CGAP/IFPRI measures their standard of living. Comparison between MFI clients and non-MFI clients shall be made after eliminating the following confounding factors:

- The possibility that MFI clients' standard of living has been affected by the loan that the client currently has or previously obtained (hence, we selected the sample to include only *new* MFI clients); and
- The possibility that non-MFI clients' standard of living has been affected by their current or past *regular* membership in the study cooperatives or other cooperatives, or by their current or past *MFI* membership in other cooperatives (hence, in our sample, non-MFI clients must not include any of these types of households).

To achieve the needed comparison and to eliminate the confounding factors, it is necessary to distinguish between MFI client households and non-MFI client households. Included, as sample MFI client households are households where there is one or more new PDP-LP or PDH MFI client(s). A new MFI client is defined as one who has been a member of the cooperative for less than six months (or alternative cut-off period of membership).

Excluded as MFI client households are the following (to eliminate confounding factors):

- Households where there is somebody who is an old PDP-LP or PDH MFI member (more than six months or whatever is the cut off period) in the household, even if there is a new PDP-LP or PDH MFI member;
- Households where there is somebody who is currently a regular member of the cooperative or a member of another MFI (i.e., non-PDP-LP or PDH) or of any other cooperatives in the area; and
- Households where there is somebody who was previously a regular member or a member of another MFI (i.e., non-PDP-LP or PDH) or member of any other cooperatives in the study area.

On the other hand included as non-MFI client households are households that do not possess the characteristics above, i.e., they are households that do not have a new PDP-LP or PDH MFI member; households that have an old PDP-LP or PDH MFI member; households that have a current regular or other MFI member of other cooperatives; and households that have previous regular or other MFI member of other cooperatives in the study area. Finally, non-eligible households are households that are not eligible for inclusion into the sample either as MFI client or non-MFI client households.

Note that if the non-MFI client households were defined without the above restrictions, the resulting sample of non-MFI client households would tend to be “richer” on average

than when such restrictions were imposed. The implication is that in comparisons of relative poverty between MFI clients and non-MFI clients, the inclusion of “richer” non-MFI clients into the control group would bias the comparison in the direction of showing that relatively more of the “poor” are being reached by the MFIs. But such conclusion will be subject to the objection that the non-MFI client households chosen to represent the comparison group were richer on average as a result of positive effects on levels of living of past membership in the study cooperatives or current membership in other cooperatives. It is to eliminate this bias that the non-MFI client households were defined as above.

### ***Cebu People’s Multipurpose Cooperative***

In each of the study cooperatives, electronic copies of the list of members were obtained together with the date of registration by type of membership. These data were encoded into separate working files to facilitate tabulation.

In Cebu, only the branches that had new MFIs (less than 6 months membership duration) were included in the study. For each branch the MFIs were tabulated according to their area of residence. Only areas with at least 6 eligible MFIs were included. In these areas artificial clusters were created, the number of which is a multiple of 6. These area clusters were treated as the sampling areas, where 6 eligible MFI clients and 9 eligible non-MFI clients were chosen by random sampling. For MFI clients, sample clients were drawn from the list, while sample non-MFI clients were drawn from the area cluster through random walk. Area cluster sketches were made before sample selection. A total of 34 area clusters in 14 areas consisting of 204 eligible new MFI clients form the sampling frame (Annex Table 1).<sup>3</sup>

### ***Paglaum Multipurpose Cooperative***

As of February 2003, of the total 3,598 PDP-LP members, 267 were clients who became members for nine months, from June 2002 to February 2003. However, these clients were spread out in 58 *barangays* (villages) in eight municipalities and Oroquieta City.

All the eight municipalities and Oroquieta City covered by the *Paglaum* Multipurpose Cooperative were included into the sample. However, only *barangays* in each municipality/city with six PDP-LP members were included in the final list of *barangays*. This was done to reduce costs. In effect these *barangays* constitute this study’s “universe.” However, this approach also reduced the number of new members to 192. To obtain more MFI clients the cut-off period was extended to 14 months.

As what was done in Cebu, to maximize the inclusion of the limited number of eligible PDP-LP clients into the sample, the *barangays* were divided into artificial clusters

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<sup>3</sup> Alternative cluster sizes were considered, i.e., clusters of 10 MFIs each. However, this approach yielded less MFIs than those that could be included into the sample, i.e., only 180 new MFIs. Because we wanted to ensure that we get enough new MFI clients to reach the 200 new MFIs required for the study, smaller cluster size of six was chosen.

containing eligible MFI clients in multiples of six. For example, a *barangay* with 12 but less than 18 eligible PDP-LP clients is divided into two area clusters. Six PDP-LP clients and 9 non-clients were chosen from each cluster by random sampling for a total of 15 household interviews per cluster. This provides the ratio of two client households per three non-client households. A total of 39 clusters in 26 *barangays* consisting of 234 eligible new (14 months) MFI clients formed the sampling frame for the survey (Annex Table 2). Had the sample been restricted to only those who have been members for only 9 months, we would have gotten only 138 cases using the above procedure.<sup>4</sup>

### ***Survey Instruments***

To identify whether households selected in the sample are truly eligible as either new MFI client or non-MFI client, a series of questions were asked regarding the household’s membership in cooperatives and credit history. A separate interview (filtering) instrument was prepared for this purpose. The Living Standard Interview Instrument was applied only to those who were eligible either as MFI client or non-MFI client.

With some modifications to suit local conditions, the Living Standard Interview Instrument used was the one recommended by CGAP/IFPRI. It was designed to obtain information on several dimensions of poverty, namely: human capital, food security and vulnerability, housing, and household assets.

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<sup>4</sup> In both areas, the basic sampling design is that of PPS (probability proportional to size). The selected sample households have equal probability of being chosen into the sample. This approach facilitates statistical analysis since the sample observations will be self-weighting. The probability of selection of the household into the sample are as follows:

For MFIs:

$$\frac{B}{P} \times \frac{MFI}{B} \times \frac{CH}{MFI} = \frac{CH}{P}$$

where

P= number of households in the “universe”

B= number of households in each barangay “cluster”

MFI=number of eligible MFI client households in each barangay “cluster”

CH=number of eligible MFI client households to be selected in the barangay “cluster”

Similarly for non-MFI clients:

$$\frac{B}{P} \times \frac{NMFI}{B} \times \frac{NCH}{NMFI} = \frac{NCH}{P}$$

where

NMFI=number of eligible non-MFI client households in barangay “cluster”

NCH=number of eligible non-MFI client households to be selected in the barangay “cluster”

## **Results of the Relative Poverty Assessment**

### ***Characteristics of the Sample<sup>5</sup>***

MFI clients in Cebu compared to their non-MFI clients do not differ significantly in terms of the benchmark indicator of per capita expenditures of clothing. With respect to the other indicators, however, MFI clients tend to have higher level of education (some high school and beyond) among adults (See Figure 1a). They also tend to have better housing indicators in terms of the quality of walls, extent of electrical use, quality of cooking fuel used, and quality of latrines. They also tend to have better food security. One indicator that tends to distinguish MFI clients and non-MFI clients is the distribution of adults by occupation. Among MFI clients, a much larger proportion of adults (46%) are self-employed in non-farm enterprise compared to only 23% among non-MFI clients. On the other hand, non-MFI clients tend to have higher proportion of adults in the domestic worker or salaried worker categories (See Figure 2a).

In Misamis Occidental, MFI clients have significantly higher per capita expenditures on clothing than non-MFI clients. They also tend to have higher levels of education (some high school and beyond) among adults (See Figure 1b). On housing, little differences exist, except for quality of roofing, which is better among MFI clients than non-MFI clients. MFI clients tend to have better food security. With respect to occupation of adults, like in Cebu, the MFI client households tend to have a higher proportion (52%) of adults as self-employed in non-farm enterprise compared to only 25% among non-MFI client households. Non-MFI client households, however, tend to have higher proportion of adults in casual worker and domestic worker categories than the MFI households (See Figure 2b).

### ***Poverty Index***

The procedure adopted for developing a poverty index was that recommended by CGAP/IFPRI. The poverty index consists of a set of indicators that best describes levels of well-being. This model uses proxy indicators that replace conventional data on income and expenditure commonly obtained in expensive and complex national family income and expenditures survey. Only one question on household consumption is included in the survey: per person expenditure on clothing. This variable is used as a benchmark indicator. Bivariate correlations were made to measure the strength of association between this benchmark indicator and the other indicators representing different dimensions of poverty, i.e., human capital, food security and vulnerability, housing, and household assets. The correlations coefficients are shown in Annex Table 4.

Using Principal Components Analysis, a poverty index was constructed based on a number of these highly correlated indicators (See Annex Table 5). In the construction of

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<sup>5</sup> Annex Table 3 summarizes the characteristics of MFI and non-MFI clients in the two study areas.

the index, only the non-MFI clients were used, as they are the representative control group. The resulting poverty index was then applied to the total sample.<sup>6</sup>

### ***Poverty Groups***

The sample population was divided into three poverty groups. First, the non-MFI clients were evenly divided into three groups of equal numbers (terciles), the first group being the poorest, the second group the less poor, and the third group the least poor. The MFI clients were then classified into these three groups according to the range of values assigned to the non-MFI clients. The results are shown in Figures 3a and 3b. In both areas, the data show that MFI clients tend to be overrepresented among the less poor and least poor groups than in the poorest group. The difference in the distribution of relative poverty between the MFI clients and non-MFI clients are statistically significant.

In the case of Misamis Occidental, it might be noted that because there were relatively few “new” MFI clients (i. e., those who became clients during the last six months or less), we had to include MFI clients who have been clients for up to 14 months. Data on these older clients may already reflect a positive wealth effect of their loans from the cooperative, and hence may bias the comparison. To examine if this is indeed the case, relative poverty levels were estimated for MFI clients that were clients for six months or less, clients for nine months or less, clients with less than two cycles, and the total sample of MFI clients. The results show that irrespective of the categories of MFI clients used, the conclusion remains that MFI clients are less represented among the poorest category of households and overrepresented among the less poor and least poor categories (See Figure 4).

### ***Poverty Ratios***

The MFI outreach to the poor can be assessed at the sample area, province/city, and national levels. Computing a number of ratios as shown in Table 1 does this. Ratio 1 shows the percent of MFI clients who are as poor as the poorest one-third of the non-MFI population. This is computed by dividing the percentage of MFI client households that belong to the “poorest” category by 33 percent, which is the percentage of non-MFI client households who belong to this group. The ratios for Cebu and Misamis Occidental are 0.60 and 0.67, respectively, which show that the proportion of the “poorest” households among the MFI clients is less than in the non-MFI client sample.

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<sup>6</sup> Alternative indicators for constructing the poverty index were explored: (1) housing indicators only, and (2) the benchmark indicator per capita expenditures on clothing. In general, the results with respect to relative poverty using either of these indicators are similar to the results using multiple indicators approach described earlier, namely that MFI clients tend to be overrepresented among the less poor and least poor categories, and underrepresented in the poorest category. Housing indicators appear to be useful indicators in assessing relative poverty given that they are much easier to obtain from household surveys. The use of a single indicator, namely, only the expenditure on clothing, did not appear to perform well in Misamis Occidental. The use of a single indicator was not recommended by CGAP/IFPRI for the simple reason that it does not capture the multiple dimensions of poverty.

Ratio 2 shows the percent of MFI clients who are as rich (“least poor”) as the richest one third of the non-MFI client population. This is computed by dividing the percentage of MFI clients that belong to the “least poor” category by 33 percent. The ratios are 1.06 and 1.24 for Cebu and Misamis Occidental, respectively. These ratios indicate that there are relatively more MFI clients falling into the “least poor” group than the non-MFI clients, especially in Misamis Occidental.

Ratio 3 shows the relative poverty of the provinces (as well as the cities in the case of Cebu) where the sample areas are located compared to the country as a whole. Relative poverty was estimated using a similar approach to estimating relative poverty in the study areas. First, using data from the 1999 Annual Poverty Indicator Survey (APIS), a poverty index for the whole country was constructed based on multiple indicators representing human capital, housing conditions and household assets. The resulting index was then applied to the province of Cebu and Misamis Occidental, and for the cities of Cebu and Mandaue (See Figure 5). For Cebu and Misamis Oriental Provinces, the ratios are greater than 1 (namely, 1.14 and 1.35, respectively), which show that there is a relatively higher proportion of poor people in these provinces relative to the country as a whole. This is especially true for Misamis Occidental. On the other hand, the ratios are less than 1 for Cebu City and Mandaue City, indicating that these cities have relatively lower poverty rates than the country as a whole.

Conversely, Ratio 4 reflects the extent to which the richest 1/3 of households in the Philippines is represented in the study provinces and cities. The ratios show that the richest 1/3 of Philippine households is less represented in Cebu and Misamis Occidental Provinces and overrepresented in Cebu City and Mandaue City.

Ratio 5 compares the poverty rate in Cebu and Misamis Occidental Provinces relative to the official national poverty rate estimated by the National Statistical Coordination Board (NSCB) for 2000. Cebu has the same level of poverty as the national average while Misamis Occidental shows a much higher level than the nation as a whole.

Ratio 6 compares the Human Development Index for the province where sample areas were drawn and the National Human Development Index. The provincial population where the sample households were drawn has a lower Human Development Index than the country as a whole. Again this is especially true for Misamis Occidental.

## **Discussion**

The aim of the study was to determine the extent to which MFIs reach the poor. The poor within the respective study areas (classified as the “poorest” group in our relative scale) was defined to be the lowest 33 percent of the poverty scale of the non-MFI client group. In Cebu, the data show that 20 percent of the MFI clients belong to this “poorest” category. Is the current reach of the poor by the two MFIs the same as what is expected? Why are the MFIs not reaching a larger share of the poor than they are reaching at present?

To answer these questions, one needs to examine the selection criteria adopted by both MFIs. According to the managers of the MFIs, the MFIs specifically avoided lending to those with no steady income – who are likely to be the poorest of the poor. Moreover, the target clientele of the MFIs are the enterprising poor, not necessarily the poorest of the poor. MFIs tend to finance non-farm activities rather than agricultural activities, and of these non-farm activities, the MFIs do not finance start-up activities.<sup>7</sup> In both MFIs the purpose of the loan is to support non-farm micro enterprises that generate daily or weekly income. Hence, only those households that are currently engaged, or planned to engage, in such activities, and where such activities can generate sufficient income that could pay the loan on a regular (weekly) basis are selected. Indeed, as the data on occupation shown earlier reveal, a large proportion of adults among MFI clients are self-employed in non-farm enterprises compared to non-MFI clients. The ratio is close to two to one in favor of MFI client households. Self-employment in non-farm enterprises might not only generate daily or weekly income but might also earn higher returns than subsistence agriculture or casual work. Hence, these households are less likely to belong to the poorest group.

Viewed from the above perspectives, one may expect that MFIs will not reach all who are in the “poorest” category. Thus, it could be expected that the MFIs share of the “poorest” category in our relative poverty scale will be less than the share found in the non-MFI client population. Some households will simply not qualify for a loan according to the criteria set by the MFIs.

On the other hand, the fact that the MFIs did in fact reach the “poorest” group (20 percent of the MFI clients in Cebu and 22 percent in Misamis Occidental are in the “poorest” category) suggests that there are aspects in the selection process that tend to ensure that the poor can also take part in the MFI program. One aspect relates to the nature of the Grameen Bank approach to lending. In this approach, to be eligible for a loan, one must undergo training and testing and willing to attend weekly meetings, and to abide by a number of other rules and regulations. One could argue that the non-poor are less likely to put up with such requirements than the very poor. Another aspect in the selection process that helps to reach out the poor is the eligibility criteria related to per capita income, household assets, and type of employment. In the case of Misamis Occidental, for example, the stated criteria for eligibility to the program include: per capita income of not more than P500 per month, marketable assets of not more than P 50,000, and the applicant is not a white collar employee.

It should also be noted that our comparison of the poverty level of MFI and non-MFI clients are based on relative terms. The entire sample was arbitrarily divided into three poverty groups. It is possible, however, that a large proportion of the entire sample is “poor” based on official income thresholds such as those used by the NSCB. We cannot test this proposition directly, since our data do not contain detailed income or expenditure data such as those obtained by the Family Income and Expenditure Surveys. However, as the poverty ratios above show, Misamis Occidental is a relatively poor province compared to the nation as a whole. Its poverty rate in 2000 is 53 percent higher than the

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<sup>7</sup> Based on interviews with the managers of the two study MFIs during the start of the study, and confirmed during a meeting to discuss the results.

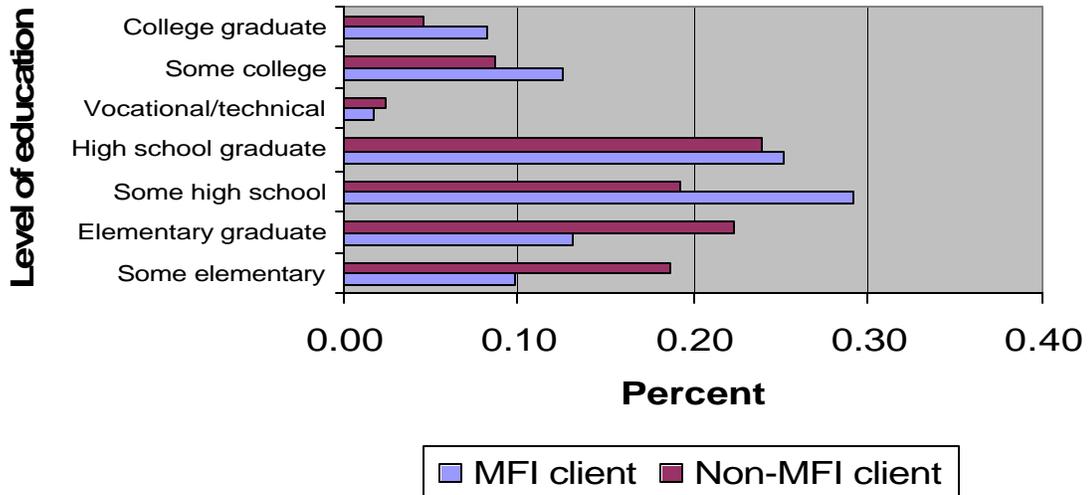
national average. Our own estimates using a constructed poverty index based on the APIS 1999 also show that households in Misamis Occidental are overrepresented among the poorest 1/3. In the case of the Cebu sample households, although the cities where the sample was drawn tends to be “richer” than the average household in the nation, the specific areas in the cities where the sample households were drawn are likely to be the “poorer” segments of the cities, i.e., the urban poor.

The above discussion suggests that there are different types of “poor”. What is being reached by the MFIs are the enterprising poor, i.e., those engaged in non-farm activities that only need operating capital rather than start up capital to sustain their activities. The other categories of “poor”, such as those in agriculture, or the truly indigent, will have to be reached by other programs, e.g., agricultural programs or social welfare programs, respectively, that are suited to their special needs.

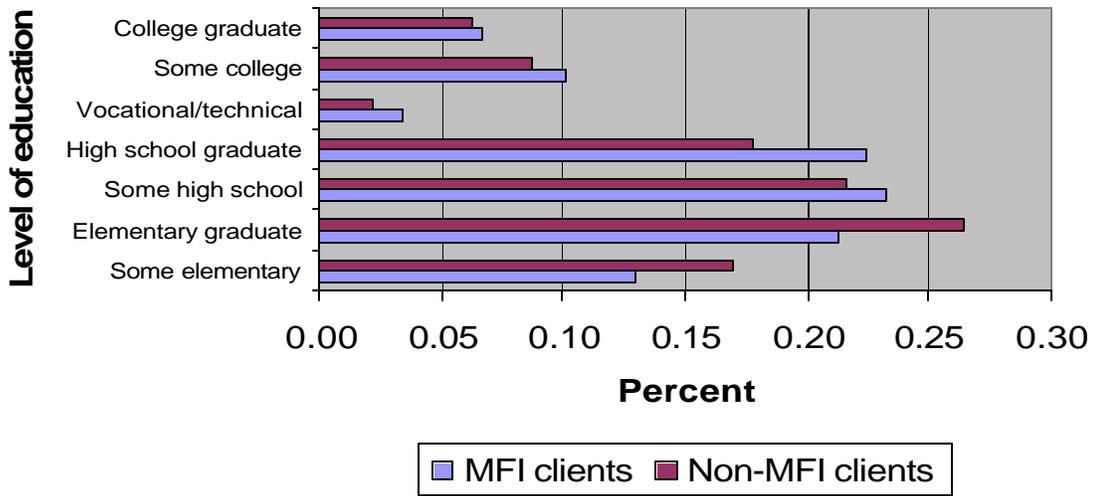
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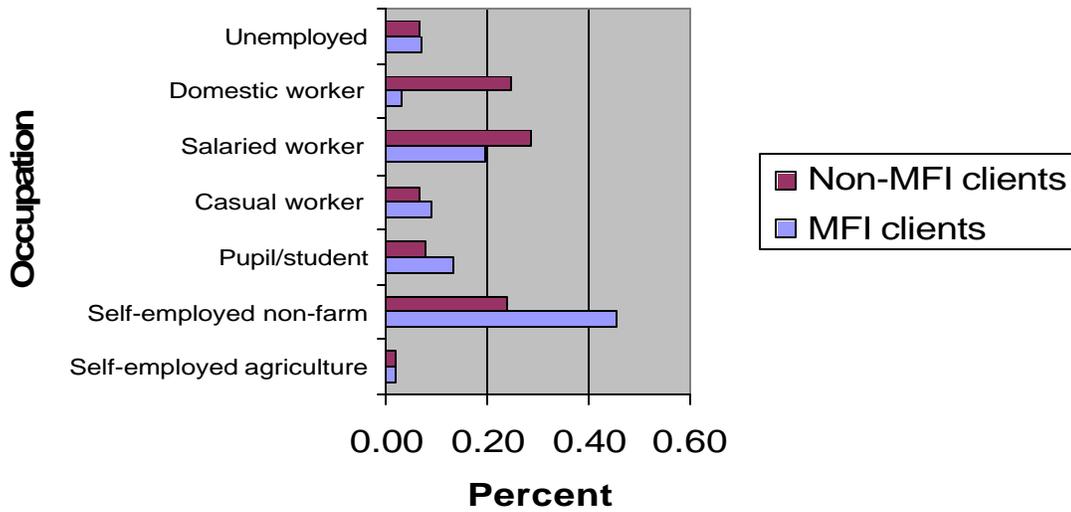
**Figure 1a: Percent of adults by level of education, Cebu**



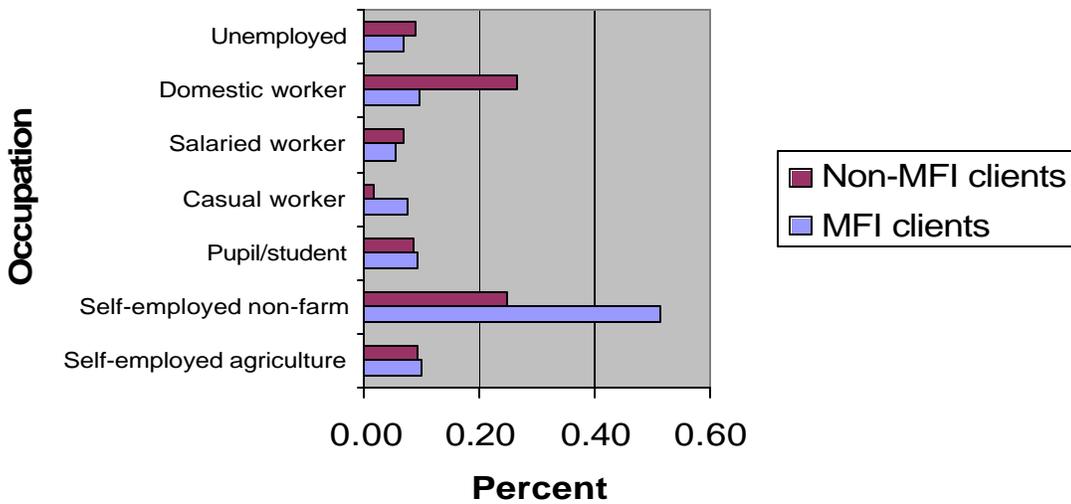
**Figure 1b: Percent of adults by level of education, Misamis Occidental**



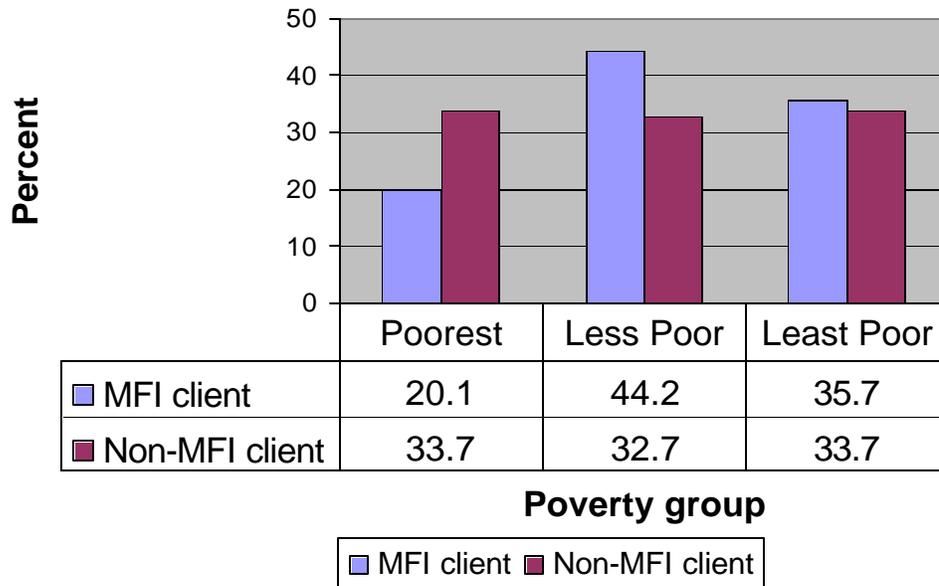
**Figure 2a: Percent of adults by occupation, Cebu**



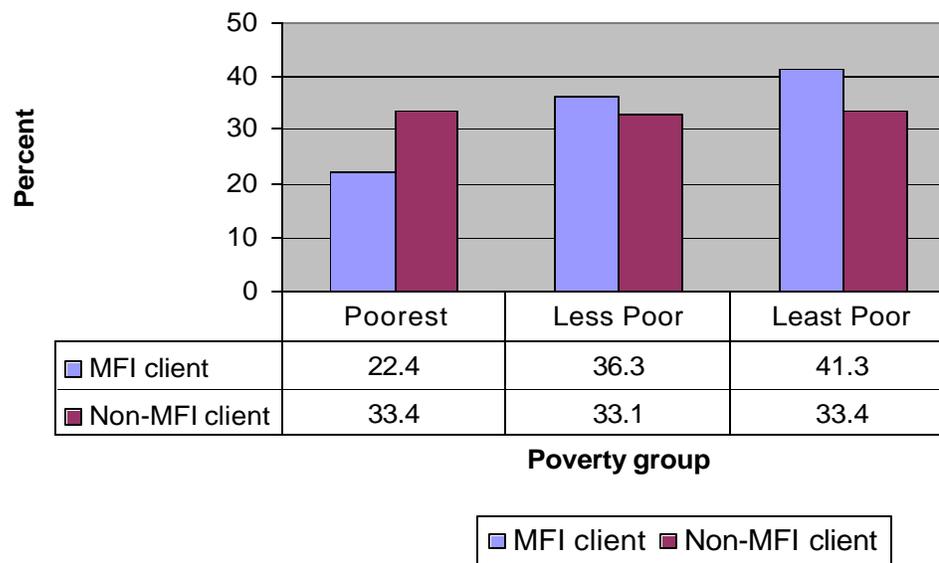
**Figure 2b: Percent of adults by occupation, Misamis Occidental**



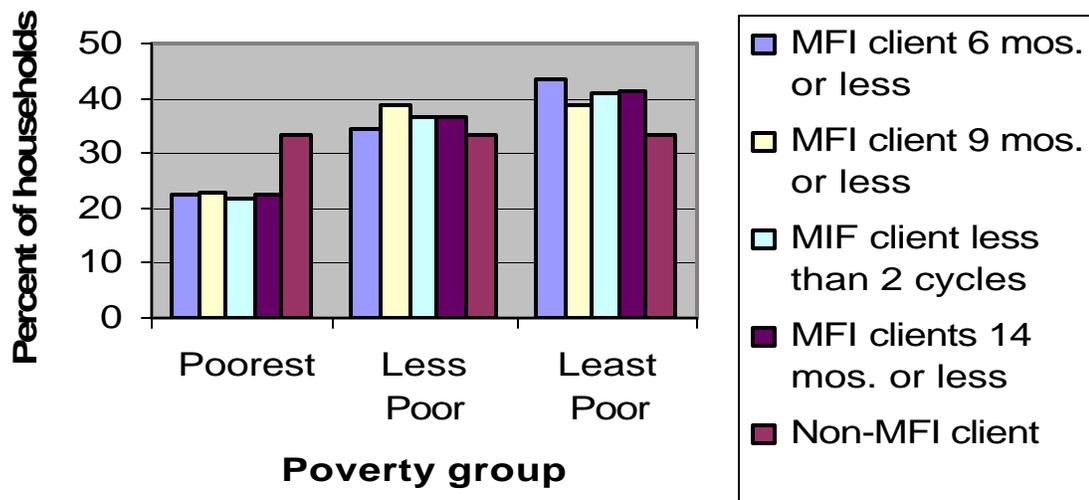
**Figure 3a: Distribution of Households by Poverty Group: Cebu**



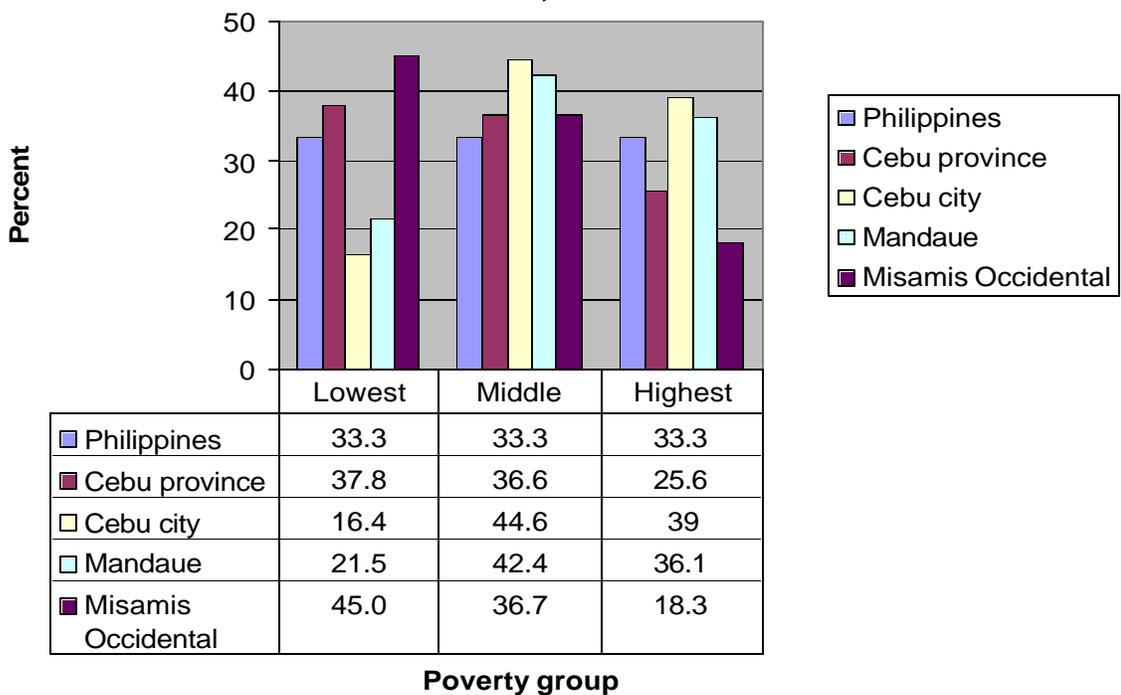
**Figure 3b: Distribution of Households by Poverty Group: Misamis Occidental**



**Figure 4: Relative poverty: Misamis Occidentals 2003**



**Figure 5: Relative poverty - Cebu and Misamis Occidental, APIS 1999**



**Table 1: Poverty Ratios**

Percentage/Ratio	Poverty Index Based on Multiple Indicators			
	Cebu sample	Misamis Occidental sample		
% of MFI client households who are as poor as the poorest 1/3 of the non-MFI client population	20.1	22.4		
<b>Ratio 1</b>	0.60	0.67		
% of MFI client households who are as least poor as the least poor 1/3 of the non-MFI client population	35.7	41.3		
<b>Ratio 2</b>	1.06	1.24		
Additional percentages/ratios	Cebu Province	Cebu City	Mandaue City	Misamis Occidental Province
% of province/city households who are as poor as the poorest 1/3 of the Philippine households in 1999*	37.8	16.4	21.5	45.0
<b>Ratio 3: Ratio of provincial/city to national poorest families 1999</b>	1.14	0.49	0.65	1.35
% of province/city households who are as rich as the richest 1/3 of the Philippine households in 1999*	25.6	39.0	36.1	18.3
<b>Ratio 4: Ratio of provincial/city to national richest families 1999</b>	0.77	1.17	1.08	0.55
% of province/city families who fall below the national poverty threshold in 2000**	28.7			43.4
Official national poverty rate (families) 2000**	28.4			28.4
<b>Ratio 5: Ratio of poor families in province/city to national poverty rate</b>	1.01			1.53
Provincial Human Development Index (HDI) for year 2000***	0.704			0.663
National Human Development Index (HDI) for year 2000****	0.754			0.754
<b>Ratio 6: Ratio of provincial HDI to national HDI</b>	0.93			0.89

Sources:

\* Bottom-third provincial and bottom-third national poverty index estimated by authors based on 1999 Annual Poverty Indicator Survey using multiple housing and wealth indicators similar to the ones used in this study.

\*\* Official national and provincial poverty rates. Poverty threshold based on per capita income measure. (NSCB ([www.nscb.gov.ph](http://www.nscb.gov.ph)))

\*\*\* Provincial HDI: HDN and UNDP, *Philippine Human Development Report 2002*.

\*\*\*\* National HDI: UNDP, *Human Development Report 2002*.

Annex Table 1: Sampling Frame and Actual Sample for Cebu, April 2003

Branch	Area of residence	No. of PDH clients	Sampling Frame	Actual Sample	
			No. of clusters of 6 MFIs per cluster	MFI	Non-MFI
<b>Mandaue</b>					
	Casili	11	1	4	9
	Pagsabungan	16	2	12	18
	Consolacion, Cebu	10	1	6	9
	Tribunal	7	1	6	9
<b>Pasil</b>					
	Pardo	64	10	58	83
<b>Tabunok</b>					
	Bulakao	14	2	12	18
	Lawaan	26	4		
	Pook Talisay	10	1	30	45
	Laqtang	15	2	12	18
<b>Talamban</b>					
	Canduman, Mandaue	19	3		
	Canduman Housing	17	2		
	Canduman Sun Flower	15	2	42	59
	Talamban	8	1	5	8
	Guba, Cebu City	14	2	12	18
<b>Total members</b>		<b>246</b>			
Total clusters			34		
Total areas			14		
Total sample HHs			204	199	294

Annex Table 2: Sampling Frame and Actual Sample for Misamis Occidental, April 2003

Municipality/city	Barangay	PDP-LP		Sample Frame	Actual Sample	
		Total PDP-LP members	Total PDP-LP members from Jan 2002-Feb 2003	No. of clusters at 6 MFIs per cluster for Jan 2002-Feb 2003 MFIs	MFI	Non-MFI
Plaridel						
	Panalsalan	93	12	2	12	18
	Catarman	38	10	1	6	9
Lopez Jaena						
	Sibugon	47	40	6	34	54
	Katipa	59	21	3	18	27
	Eastern Poblacion	22	6	1	6	9
	Western Poblacion	39	8	1	6	9
	Molatuhan Alto	26	7	1	6	9
Sapang Dalaga	Bitibut	40	9	1	6	9
Panaon						
	Poblacion	63	10	1	6	9
	Sumasap	34	7	1	6	9
Calamba						
	D'ban	42	11	1	5	9
	Calaran	21	9	1	4	10
Aloran						
	Caputol	44	13	2	11	18
Oroquieta City						
	Mobod	83	6	1	3	9
	Pines	58	11	1	6	9
	Langcangan Proper	68				
	Binuangan	9	6	1	5	9
	Senote	21	10	1	6	9
	Talairon	110	14	2	12	18
	Talic	76	8	1	6	9
Baliangao						
	Misom	36	10	1	5	9
	Landing	33	12	2	12	18
	Sinian	30	18	3	18	27
	Punta Miray	32	6	1	6	9
Jimenez						
	Butuay	21	8	1	6	9
	Tabo-o	30	9	1	6	8
	Palilan	15	7	1	6	8
<b>Total members</b>		3598	288			
Total clusters				39		
Total sample areas				26		
Total sample HHs				234	223	350

Annex Table 3: Differences between MFI and Non-MFI Clients: Cebu and Misamis Occidental, 2003

Indicators	Mean values: Cebu			Mean values: Misamis Occidental		
	MFI	Non-MFI	t-values	MFI	Non-MFI	t-values
1. Per capita expenditures on clothing	787	665	1.774	601	341	5.221**
2. Average age of adults	34.1	33.7	0.532	37.3	38.9	-1.773
3. Number of children per household	1.95	1.91	0.275	1.84	1.67	1.335
4. Family size	5.36	4.71	3.582**	4.89	4.47	2.6355*
5. Child dependency ratio	0.70	0.81	-1.668	0.72	0.68	0.756
6. Number of meals eaten in past two days	6.00	5.94	2.502*	5.95	5.97	-0.795
7. Number of days luxury food 1 was served	2.22	1.81	2.454*	0.84	0.77	0.644
8. Number of days luxury food 2 was served	0.17	0.23	-0.916	0.33	0.19	2.396*
9. Number of days luxury food 3 was served	1.44	1.02	2.783*	0.52	0.43	0.955
10. Number of days inferior food was served	0.04	0.18	-3.064*	0.17	0.25	-1.620
11. Number of days food was not enough past month	0.38	0.72	-2.110*	0.52	0.83	-1.847
12. Number of months food was not enough past year	0.39	1.04	-3.382**	0.82	1.23	-1.923
13. Frequency of purchase of staple 1	2.64	2.68	-0.323	3.38	3.06	2.235*
14. Frequency of purchase of staple 2	1.93	2.03	-1.088	2.21	2.25	-0.419
15. Frequency of purchase of staple 3	1.67	1.79	-1.380	2.73	2.69	0.218
16. Weeks of stock for food staple	0.92	1.07	-1.551	1.77	1.48	2.087*
17. Amount of additional income spent on food	243	286	-3.057*	239.26	290.2	-3.894**
18. Ownership status of house	3.98	3.80	1.177	3.96	3.91	-0.313
19. Number of rooms per person	0.64	0.61	0.515	0.76	0.83	-1.521
20. Quality of roofing	5.67	5.58	1.183	4.95	4.59	2.948*
21. Quality of walls	4.54	4.23	2.681*	4.15	4.04	1.157
22. Structural condition of house	2.56	2.51	1.009	2.52	2.49	0.559
23. Extent of electrical use	2.52	2.33	2.932*	2.33	2.21	1.402
24. Quality of cooking fuel	3.63	3.35	1.909*	1.21	1.29	-1.028
25. Quality of drinking water	5.83	5.64	1.522	5.64	5.67	-0.195
26. Quality of latrines	3.22	2.79	3.416**	3.57	3.36	2.067
27. Percent of adults who can write	0.99	0.98	0.379	0.99	0.98	1.656
28. Percent of adults with some elementary education	0.10	0.19	-3.466**	0.13	0.17	-1.708
29. Percent of adults elementary graduate	0.13	0.22	-3.813**	0.21	0.26	-1.905
30. Percent of adults with some high school	0.29	0.19	3.883**	0.23	0.22	0.678
31. Percent of adults high school graduate	0.25	0.24	0.462	0.22	0.18	1.953*
32. Percent of adults with vocation/technical training	0.02	0.02	-0.679	0.03	0.02	1.201
33. Percent of adults with some college education	0.12	0.09	2.033*	0.10	0.09	0.781
34. Percent of adults college graduate.	0.08	0.05	2.599*	0.07	0.06	0.267
35. Percent of adults self-employed in agriculture	0.02	0.02	-0.109	0.10	0.09	0.608
36. Percent of adults self-employed in non-farm enterprise	0.46	0.24	8.249**	0.51	0.25	9.913**
37. Percent adults pupil/student	0.13	0.08	3.375**	0.09	0.08	0.580
38. Percent of adults casual worker	0.09	0.06	1.608	0.08	0.02	-4.041**
39. Percent of adults salaried worker	0.19	0.28	-3.460**	0.05	0.07	-1.165
40. Percent of adults domestic worker	0.03	0.25	-11.916**	0.10	0.27	9.670**
41. Percent of adults unemployed/not working	0.07	0.06	0.454	0.07	0.09	-1.506
42. Per capita value of appliances & electronics	1446	2817	-5.972**	1161	1186	-0.138
43. Per capita value of transportation	436	1411	-2.796*	893	960	-0.175
44. Per capita value of land	1332	8878	-3.602**	7466	9713	-0.837
45. Per capita value of livestock	295	553	-1.848	1023	850	0.985
46. Per capita value of total assets	3509	13659	-4.694**	10544	12710	-0.746
Sample size	199	294	493	223	350	573

\*Significant at the 0.05 level.

\*\* Significant at the 0.001 level.

**Annex Table 4: Correlation of Variables with Per Capita Expenditure on Clothing**

	<b>Variables</b>	<b>Cebu</b>	<b>Misamis Occidental</b>
	<b>Human Capital</b>		
1	Average age of household adults	-.126**	-.133**
2	Percent of household adults who can write	.127**	.053
3	Percent adult with some elementary education	-.204**	-.170**
4	Percent adult elementary graduate	-.121**	-.206**
5	Percent adult some high school	.011	.011
6	Percent adult high school graduate	.047	.095*
7	Percent adult with vocation/technical education	.067	.077
8	Percent adult with some college	.160**	.222**
9	Percent adult college graduate	.248**	.172**
10	Percent adult self-employed in agriculture	-.015	.005
11	Percent adult self-employed in non-farm enterprise	-.028	.034
12	Percent adult pupil/student	-.017	.144**
13	Percent adult casual worker	-.004	-.091*
14	Percent adult salaried worker	.134**	.095*
15	Percent adult domestic worker	-.092	-.051
16	Percent adult unemployed	-.026	-.106*
17	Number of children per household	-.196**	-.030
18	Family size	-.135**	.031
19	Child dependency ratio	-.168**	.048

	<b>Food Security</b>		
1	Number of meals in past two days	.035	-.027
2	Number of days luxury food 1 was served	.260**	.255**
3	Number of days luxury food 2 was served	.074	.160**
4	Number of days luxury food 3 was served	.224**	.226**
5	Number of days inferior food was served	-.083	.114**
6	Number of days food was not enough in past month	-.127**	.134**
7	Number of months food was not enough in past year	-.104*	-.137**
8	Week of stock for food staple	.154**	.141**
9	Frequency of purchase of staple 1	.129**	.146**
10	Frequency of purchase of staple 2	.059	-.048
11	Frequency of purchase of staple 3	.001	.008
12	Amount of additional income spent on food	-.035	-.036

	<b>Housing</b>		
1	Number of rooms per person	.094*	-.051
2	Structural condition of house	.166**	.142**
3	Quality of latrines	.112*	.125**
4	Quality of drinking water	-.045	.044
5	Quality of dwelling walls	.119**	.101*
6	Quality of roofing	.054	.147**
7	Extent of electrical use	.182**	.181**
8	Quality of cooking fuel	.158**	.128**
9	Ownership status of house	.009	.017

	<b>Household Assets</b>		
1	Per capita value of appliances & electronics	.121**	.159**
2	Per capita value of transportation assets	.102*	.008
3	Per capita value of landholdings	.048	-.022
4	Per capita value of livestock	.089*	.042
5	Per capita value of household assets	.081	-.007

\* Significant at the 0.05 level.

\*\* Significant at the 0.001 level.

**Annex Table 5: Indicators Used to Construct Poverty Index  
(Multiple Indicators)**

**Cebu**

1. Child dependency ratio	-.387	-.390
2. Percent adult with some elementary education	-.370	-.383
3. Percent adult college graduate	.363	.386
4. Number of days luxury food 1 was served	.460	.477
5. Number of days food was not enough past month	-.384	-.380
6. Weeks of stock of food staple	.440	.436
7. Frequency of purchase of staple food 1	.441	.406
8. Number of rooms per person	.462	.445
9. Quality of walls	.532	.515
10. Structural condition of the house	.538	.529
11. Extent of electrical use	.589	.581
12. Quality of cooking fuel	.531	.523
13. Quality of latrines	.531	.513
14. Per capita value of appliances & electronics	.480	.467
15. Per capita expenditure on clothing		.460
KMO value	.691	.706
Total variance explained	21.9%	21.5%

**Misamis Occidental**

1. Percent of adults elementary graduate	-.333	-.349
2. Percent of adults with some college	.329	.346
3. Percent of adults college graduate	.505	.505
4. Percent adults salaried workers	.284	.285
5. Number of days luxury food was served	.388	.407
6. Number of days inferior food was served	-.378	-.377
7. Number of days food was not enough past month	-.383	-.384
8. Weeks of stock of food staple	.652	.638
9. Frequency of purchase of staple 1	.633	.620
10. Structural condition of house	.442	.439
11. Quality of walls	.587	.571
12. Quality of roofing	.583	.572
13. Extent of electrical use	.548	.546
14. Quality of cooking fuel	.391	.392
15. Per capita value of appliances & electronics	.625	.617
16. Per capita expenditures on clothing		.409
KMO value	.712	.720
Total variance explained	23.6%	22.9%