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## **Discussion Paper BRIEFS**

Food Consumption and Nutrition Division of the International Food Policy Research Institute

Discussion Paper 111

### An Operational Tool for Evaluating Poverty Outreach of **Development Policies and Projects**

Manfred Zeller, Manohar Sharma, Carla Henry, and Cécile Lapenu

The operational tool assesses the

poverty level of project beneficiaries

in relation to the general population

in the intervention areas.

The reduction of poverty is an explicit or implicit objective of most development policies and projects. However, the lack of simple, low-cost tools for assessing whether a project or institution reaches the poor results in either no project monitoring or monitoring activities that use simple but crude descriptions of project beneficiaries (such as the share of women, farm size, or occupation of program beneficiaries), or in rapid or participatory assessments that are not well-suited for within- or between-country comparisons.

This paper describes an operational tool developed over the past two years by the International Food Policy Research Institute (IFPRI) with technical and financial support from the Consultative Group to Assist the Poorest (CGAP). The tool was designed to assess the poverty level of project beneficiaries in relation to the general population in the intervention area with the intent of providing transparency of poverty focus. To be useful to policy analysts, donors, and development practitioners, the tool must meet reasonable time as well as cost constraints, i.e., the evaluation procedure must be possible to complete in a few months, and the average cost per assessment should not exceed US\$10,000.

#### Reviewing the Tools Available and Choosing/Modifying One That Appears to Work Best

Although computation of a poverty line based on household expenditures may provide valid assessment of poverty outreach of an institution in comparison with existing national benchmarks, it is, in practice, often unfeasible due to the associated high costs, skill levels, and time frame required.

Rapid assessment and participatory appraisal methods are useful for targeting services by specific development programs, but provide results that are difficult to compare between communities, and also

require trained staff and considerable investment of time.

The method chosen by the authors constructs a poverty index based on a range of indicators that describes different dimensions of poverty and for which credible information can be quickly and inexpensively obtained. Data are collected through random sample surveys of new participants and nonparticipants.

A sample size of 200 new participant households and 300 nonparticipant households is recommended, where the latter are randomly selected from the same geographical area.

#### How the Tool Was Modified and Tested

The indicator approach elicits information on different dimensions of poverty that have been found to be robust across geographic and cultural settings. The choice of the indicators to include in the methodology was preceded by the following working steps:

- Identifying a large number of indicators that reflect poverty levels powerfully and for which credible information can be quickly and inexpensively
- Designing a survey methodology that facilitated the collection of information on these indicators from households living in the operational area of the MFI, and
- Applying a suitable statistical methodology for summarizing information contained in the various indicators into a single summary index that could be used to make poverty comparisons between households.

The initial compilation of indicators for this approach was based on a detailed review of results of large, indepth surveys on household economics as well as of indicators and methods used by MFIs, famine early warning systems, and national monitoring systems for food security, nutrition, and vulnerability.

The survey questionnaire collects household-level information on the following dimensions: demographic structure and economic activities, footwear and clothing

> expenditure, food security and vulnerability, quality of housing, and ownership of land and selected assets.

> The poverty index is constructed using the sta-

tistical method of principle

component analysis. The method is applied to determine the mix of indicators that can most effectively combine to measure a household's relative poverty status. The most appropriate combination and weighting of indicators will be unique to the area surveyed and will reflect the local conditions describing poverty. In countries where poverty is extreme, indicators capturing chronic hunger tend to differentiate the relative poverty of households, while in areas with higher incomes, accumulation of consumer

assets tends to contribute more significantly to distinguishing relative poverty differences between households.

#### Testing the Tool

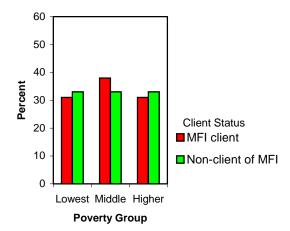
The tool was tested in collaboration with microfinance institutions in four case studies: one in Latin America, two in Sub-Saharan Africa, and one in Asia. The authors found that the tool had the following advantages: (1) it identifies and/or constructs a small set of indicators that are powerful descriptors of poverty and applicable across relatively diverse socioeconomic settings; (2) the chosen indicators are such that reliable information on them can be collected quickly and inexpensively; (3) the tool offers an objective method for summarizing overall poverty information and unambiguously ranking households by their relative poverty levels; and (4) it recommends computation of three simple ratios that facilitate quick comparison of the poverty outreach of development policies and projects even across international boundaries.

The methodology is also conducive to straight-forward reporting of results that can be readily interpreted by nontechnical individuals, as illustrated in Figure 1, which compares the percent of clients to nonclients within three relative poverty terciles. The graph indicates that the institutions new participants are overrepresented within the lowest poverty tercile and underrepresented in the highest tercile. This indicates that the microfinance institution in this case study is reaching a larger share of the poorest households than what is found within the general population.

#### Caveats

A disadvantage of the method presented here is that it does not provide information on the absolute level of poverty. However, in many cases, it is relative rather than absolute poverty that is of concern to policymakers or evaluators. Further, many summary measures used in development policy to measure absolute poverty, such as

Figure 1. Distribution of client and nonclient households across poverty groups



the cutoff of US\$1–2 per day used by the World Bank and other international organizations, are essentially arbitrary, and the merits of using such measures are not clear in many cases. More precise measures of absolute poverty based on the poverty line and the basic needs concept are riddled with problems relating to the definition of the representative basket of basic needs in a country. Poverty is an inherently relative concept, and the tool developed in this paper is indeed aiming to measure relative poverty. Therefore, the tool, and the poverty outreach ratios it generates, allows evaluating, at low cost, the poverty targeting efficiency of development projects.

A manual describing the field research and data analysis process for using this tool is available at CGAP's website under <a href="http://www.cgap.org/publications/other">http://www.cgap.org/publications/other</a>.

Keywords: poverty measurement, microfinance institutions, principle component analysis, Asia, Africa, Latin America

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