



# The Spindle

connecting innovators for development

## Efficiency analysis in micro-finance projects

Micro-finance projects aim to help poor and excluded people to get access to financial services including loans, saving facilities, insurance and money transfer services. Micro financing has its roots in Bangladesh where in the seventies the Grameen Bank started providing micro credit to groups of excluded people. Many projects followed this example through providing micro-credit services to poor people or supporting the establishment of micro-credit schemes and institutions. Increasingly, micro finance projects tend to focus on developing the capacities of existing financial institutions to become more inclusive. This case explains how to analyse efficiency in micro finance projects.

The Partos Efficiency Lab, November 2017

This case is one of a series of ten that was produced in the framework of the Partos Efficiency Lab. See back cover for more information.

### Project at-a-glance

- Project type: Micro Finance project
- Geographic intervention area: Region in a country South Asia
- Project budget: EUR 1,2 million
- Budgeted for end-of-project evaluation: EUR 25,000
- Project Duration: 6 years

### Project objective

In the project area (total population 1,5 million) 70% of the people live below the poverty line of \$2 per day. They lack access to financial services and about three quarters of the poor households do not have a bank account. This hampers their opportunities to improve their livelihoods in many ways. Most households have one or more family members working abroad. For sending money back home they have to transfer their money through Western Union or Moneygram. These companies charge a lot more for transferring remittances than the regular banks. Furthermore, the households do not have access to credit or saving services which makes it hard to run a business or to access cash in case of emergencies. Poor households are exposed to a lot of emergencies as their incomes are not only lower than the incomes of the better off households, they are also more volatile.

Therefore, the objective of this project is to reduce vulnerability and enhance poor peoples' resilience through improving their access financial services. The theory of change is based on the assumption that through tapping microfinance services people from poor households are able to smooth consumption and build assets to protect against risks ahead of time and cope with shocks and economic stress events after they occur—leading to poverty alleviation.

The key outcome of the project is that by the end of the project period 0,7 million people (above the baseline) who belong to poor households, and especially women, who do not have access to financial services, will make use of financial services offered by financial institutions including services banks, credit unions, cooperatives, post office, or microfinance institution services. Out of these 0,7 million beneficiaries at least 0,4 million will be women.

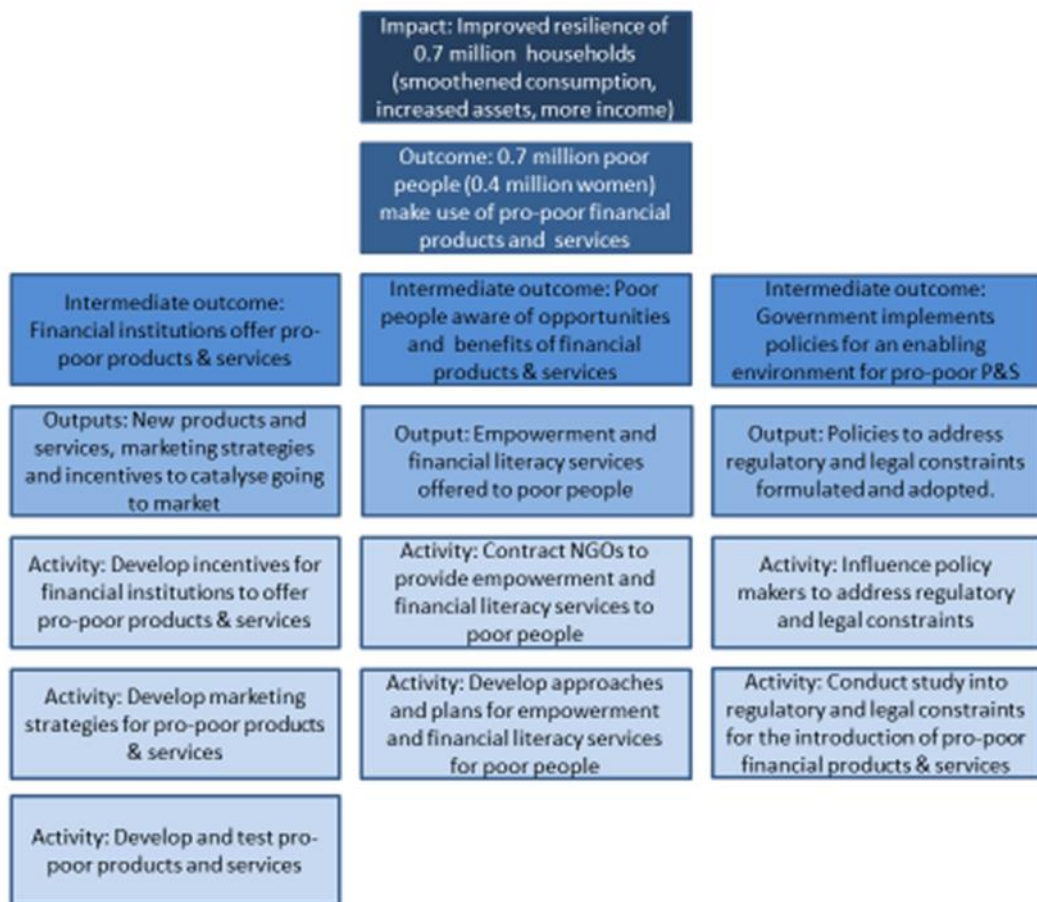
### Project approach

The project is based on the theory that existing financial institutions need a catalytic boost in order to develop financial services reaching out to the poorest people. This boost consists of three components.

1. The development of new financial products and services especially designed to target the poor and developing the capacity of financial institutions to market these new products and services. Financial institutions will be provided with grants or soft loans as a catalyst that will trigger the provision services to the poorest people.
2. The project will create demand for the financial products and services through empowering the target group and through providing them with financial literacy services. Local NGOs will be contracted to provide these services.
3. Creating a conducive environment through taking away legal and regulatory barriers that make it hard for financial institutions to reach out to poor households.

## Theory of Change

The figure below is a graphic representation of the theory of change.



## Project organisation

The project management is composed of a director, a management support unit and four thematic units. One thematic unit for each outcome.

The project has 27 staff. 22 are involved in project work. 5 staff including the director in project management and administration. Each staff member is provided with office space, a computer and a mobile phone. The project has two cars and 10 motor bikes.



### Recommended approaches for assessing efficiency

#### Notes on applicable tools and methods, Pol de Greve

#### Remarks on the case

The microfinance case description provides limited information on the budget breakdown by costs and cost centres. The 3 core components of the project are:

- Product development – target: financial institutions
- Empowerment and financial literacy – target: poor people
- policy influencing – target: authorities

The ToC has little details on the pathway of change i.e. the sequence of connected outcomes that depicts how the long-term is reached through different stages (from early to intermediate changes), that together would be required to realise the desired impact(s). It would be advisable to further develop and detail the ToC that was presented in the case, in order to provide a more detailed picture of the assumed sequence and interrelatedness of outcomes at different stages of the pathway(s) of change.

As compared to interventions related to MFI and micro-finance service delivery, the programme activities that relate to policy influencing / enabling environment are characterised by quite different dynamics, processes, targets and outcomes, rather intangible (policies and regulations). Combining the two components in a single assessment will be extremely challenging, whatever approach one may choose. The cost related to policy influencing will be included in the efficiency assessment, thereby assuming that the outcomes of policy work will contribute to (and be reflected) at impact level.

#### General observations on measuring social and financial performance of MFIs

There is a wealth of expertise, knowledge and evidence on measuring / monitoring social and financial performance of MFIs with due emphasis on aspects of efficiency, effectiveness and impact. In principle, well-established methods of measuring performance of MFIs can be used for efficiency assessments at either level 2 (comparative analysis) or level 1 (single intervention assessment).

In many documented cases, a differentiation is made between financial and social performance of MFIs. Financial performance measurements are used to assess microfinance institution (MFI) in terms of its financial returns. Financial performance is often considered a yardstick used by investors to conduct due diligence and assess the status of an investment. Accounting standards, finance sector regulations and reporting requirements differ from country to country, however, several common financial performance indicators are used by most MFIs. A possible classification is to consider financial indicators for:

- sustainability and profitability of the MFI such as return on equity, return on assets or profit margin,
- asset and liability management e.g. current ratio or yield on average gross loan portfolio,
- portfolio quality e.g. portfolio at risk, loans at risk or write-off ratio,

- efficiency e.g. cost per client (or loan) or operating expense ratio.

Note – within each category, there are many other possible indicators – the ones mentioned above are among the most commonly used indicators within each category.

Sound finances and good returns are important indicators of success; however, social performance is the other important benchmark to assess performance of MFIs. A provider's social performance refers to its effectiveness in achieving its stated social goals and creating value for clients. If a provider has strong social performance measurement practices in place, it is more likely to achieve strong social performance<sup>1</sup>.

Social performance is always context-specific and will have many dimensions. The ToC of the earmarked (or ongoing) investment programme as well as the underlying mission and vision of the MFI (and of the donor / investor) determine the key objectives of the MFI and the programme in terms of social value creation. These (intended) social values will inform the perspective, approach and methods for assessing social performance. Without imposing any specific approach, entry points for the assessment of efficiency and effectiveness of social value creation could include

- Breadth of outreach e.g. the number of active clients or accounts, # of clients per product category, (voluntary) savers as % of borrowers, % of clients using other services than loans, etc.
- Depth of outreach e.g. the social inclusiveness i.e. proportion of service delivery for poor people<sup>2</sup>, percentage of female clients, same for youth, % of small loans in total portfolio<sup>3</sup>, % of clients selected with poverty targeting tools, etc.

## Level 2 tools and methods

Level 2 tools and methods compare the efficiency of interventions with alternatives or benchmarks with the purpose of selecting those interventions producing the largest net benefit with available resources.

All methods in this group can also be conducted ex-post for accountability and learning purposes, i.e. to verify or correct ex-ante results and to improve assumptions for subsequent ex-ante application. As indicated, MFIs typically create blended values (sometimes referred to as “double bottom line” approach). They need to measure both their financial and social performances to ensure that they not only make a profit and are sustainable but that they also positively benefit the lives of their clients (social value creation).

Possible level 2 methods include:

- Cost-Effectiveness Analysis – Cost-Utility Analysis
- Cost-Benefit Analysis
- Social Return on Investment
- Multi-Criteria Decision-Analysis (MCDA)

### Cost-Effectiveness Analysis / Cost-Utility Analysis

Note – it is (for some arguably) assumed that Cost-Effectiveness Analysis is the general term for an economic analysis that compares the relative costs and outcomes of different courses of action and that Cost-Utility Analysis can be classified as a form of CEA (CUA term is often used in health economics). CEA compares different kinds of interventions with similar, but not identical, effects on the basis of the cost per unit achieved. Typically, the CEA is expressed in terms of a

<sup>1</sup> Ibid - [www.microfinancegateway.org](http://www.microfinancegateway.org). There is no single formula for successful SPM. However, the sector has recognized a set of core management practices that constitute “strong” SPM. These practices form the [Social Performance Task Force Universal Standards for Social Performance Management](#).

<sup>2</sup> Possibly using GINI coefficient to give a picture of social distribution in clientele

<sup>3</sup> Numeric categorisation of “small” has to be established context-specifically

ratio where the denominator is the non-monetary unit of benefit created and the numerator is the cost associated with producing this benefit.

In the case of MFIs, CEA is seldom used in level 2 assessments because it is not possible (and basically also not quite plausible) to capture the ultimate outcome / impact of MFI in a single non-monetary unit of outcome/impact. As a matter of fact, the impact of this MFI programme is a reduction in vulnerability and an enhancement of poor people's resilience, which according to the ToC is assumed to be demonstrated through smoothed consumption, increased assets and improved income of poor households. There is no obvious or logic method for blending outcomes in these areas into a single impact measurement that would be required for a CEA at programme level. Resilience is a complex multi-faceted concept that does not lend itself easily to an assessment of effectiveness beyond aspects of economic resilience (income and assets). Other methods (like SROI) provide better options in this respect.

In this case, assessing efficiency on the basis of cost per unit (i.e. household reached with financial services) does not seem to have much relevance except in level 1 partial (financial) efficiency measurement such as cost per loan or cost per client. Therefore, CEA is not considered to be a very useful tool for efficiency assessment of micro-finance programmes.

### **Financial and Economic Cost-Benefit Analysis**

A CBA looks at (incremental) financial costs and benefits of the programme. Costs are related to the 3 key activities i.e. product and service development by MFI, empowerment and financial literacy services for poor people by local NGOs and policy influencing (presumably by NGOs) PLUS presumably, incremental operational and overhead cost incurred by the implementing organisation for programme implementation ((over and above regular expenditure). Financial benefits for the target population (the poor) are expected to be generated from having access to financial services even though the case description is not clear on what outcomes might be associated with the different financial services that will be provided.

Possibly, direct or indirect benefits from access to MFI services may arise from financial returns on business investments (farming, retailing, processing, others?) funded through loans obtained from the MFI, reduced expenses from having access to formal credit services instead of informal sources (like traders), savings from using cheaper cash transfer services for remittances, interest from savings, etc. The exact benefit stream and its financial worth (price or value / willingness to pay) is not presented in the case description but needs to be determined in consultation with the target group and other stakeholders.

In case reliable estimates of incremental costs and benefits can be generated, there is some potential for using CBA to assess efficiency and effectiveness of programme investment even though monetary benefits will represent only a portion of the overall impact.

In order to establish incremental benefits in an ex-post assessment, reliable baseline data and/or control group must be available. In the ex-ante situation, programme managers (and funders) must ensure that provision is made in the project formulation, planning, and budget for carrying-out a baseline as well as an ex-post CBA (or other way of Efficiency assessment).

### **Capturing Blended Values – Social Return on Investment**

Development programmes create blended values, i.e. the changes that they generate, may take many forms e.g. financial, economic, social, environmental, etc. Micro-finance projects are no different, on the contrary they typically create a range of tangible financial as well as intangible non-financial values. In the present case, impact is expected in terms of improved resilience of

target population. As indicated above, Resilience is a complex multi-faceted concept that may encompass different values (enjoyed by some or all members of the household) such as improved asset base, higher and/or more regular household income, improved health, improved educational levels, personal security (e.g. physical or legal), social capital, empowerment of men, and so on.

Methods such as Social Return on Investment (SROI) allow to capture this kind of blended value creation for multiple stakeholders. SROI accounts for stakeholders' views of impact, and puts financial 'proxy' values on those impacts identified by stakeholders which do not typically have market values. The result of SROI assessment is a single cost-benefit ratio and measurement of effectiveness that is based on / includes the financial and non-financial costs and values of the programme. Technically speaking, SROI calculation is similar to CBA (and NPV), i.e. outcome calculated on basis of discounted costs and benefits<sup>4</sup>. The same conditions thus apply as far as possibility to apply SROI is concerned.

By way of example: in documented SROI assessments, non-monetary outcomes were captured and monetised

- Livelihood in terms of changes in income or asset base at household level, or as a way to educational and health development (see below) of individual and household members.
- health in terms of reduced health care expenses, income from working days not lost due to health problems, valuation of the enjoyment of good health;
- education as future improved income stream, social status, enjoyment of having access to (higher) education;
- (women) empowerment can be captured (proxy) as a way to educational, economical and health development (see above points)

Areas such as empowerment (as an end in itself) or personal security are more challenging and may be difficult to monetise (at individual level<sup>5</sup>). Therefore, in SROI the numeric assessment (ratio calculation) needs to be completed with a narrative section that provides details on principles used for monetisation of intangibles and lists and describes values that could not be monetised (but are generated by the programme).

### **Multiple-Criteria Decision-Analysis (MCDA)**

A MCDA scoring model calculates total scores for different intervention alternatives based on a set of weighted criteria. MCDA facilitates decision-making in the face of incomplete data and uncertainty. As such, they can be used to complement (rather than replace) other methods. In the present case, some comparative criteria could include

- Inclusiveness of access to financial services for marginalised, women, youth, elderly
- Expected welfare impact for households
- Profitability of service delivery (and potential to re-invest profits in community)
- Embedment in community and representativeness of governance set-up
- Expected effects of improved policies in terms of conducive environment to access services

The criteria should be developed in a participatory process that involves decision makers and other stakeholders. The main advantage of this approach is that the decision-making process is

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<sup>4</sup> Taking into consideration: deadweight and attribution

<sup>5</sup> At state level empowerment may be reflected in government budget shifts aimed at strengthening social and economic position of women and realising their rights

transparent to the decision-makers and to stakeholders. It is also systematic in the sense that criteria, weights and scores can be critiqued separately, leading to more informed decisions. Social rating, an approach of MCDA that specifically focuses on social performance (source - CGAP) is presented in the box below.

Example of social rating – leading questions (respective weight to be determined)

- How well are an institution’s products, systems (e.g. internal control, MIS), and policies (e.g. human resources) aligned to the mission?
- What is the risk of mission drift incurred by the institution?
- What proportion of the financial institution’s clientele is poor?
- What is the social profile of clients in terms of access to basic services, educational level, access to financial services, financial education?
- What is the quality of financial services provided?
- What is the extent of the corporate social responsibility towards internal staff, community and environment?

CGAP Microfinance Gateway - <https://www.microfinancegateway.org/>

### Applicable level 1 tools and methods

Level 1 tools and methods identify efficiency improvement potential in a single intervention. In contrast to level 2 analysis, the principal purpose of level 1 analysis is to improve the efficiency of the intervention at hand (rather than choosing the most efficient interventions from a pool of options).

Level 1 methods and tools that are applicable to this project include:

- Unit costs and other partial efficiency indicators
- Follow the money
- Financial analysis
- Comparative ratings by stakeholders

### Measuring social and financial performance of MFIs - benchmarking of unit costs

In section 2 of this paper, general principles of social and financial performance measurement of MFIs were discussed. These included unit costs, financial ratio's and other quantitative indicators of efficiency and effectiveness. Reference is made to section 2 above or details.

### Follow the money

A simple approach with high potential for identifying cost saving potentials in the project at hand is the “follow the money” approach. In this approach, the evaluator systematically disaggregates total project expenditures and, for each (important) budget item, conducts additional analysis to determine the appropriateness of procurement procedure and whether there is cost-saving or outcome generation potential (e.g. water yield, # potential). This very much coincides with the (respectively) “economics” and “efficiency” aspects within the 4E Value for Money concept.

### Financial analysis

One approach to financial analysis at programme level calculates the discounted net present value (NPV) from a financial perspective. Net Present Value is a way to value an investment taking into account the time factor of money. Conceptually and technically this is similar to the CBA method of level 2 but in a “stand-alone” mode. A related measurement, is the Internal Rate of Return (IRR). IRR is the discount rate that makes the net present value of a particular project equal to zero. Generally



speaking, the higher a project's internal rate of return, the more desirable it is to undertake the project. IRR is also an appropriate method for comparative (level 2) assessment.

### **Comparative ratings by stakeholders**

A participatory method that can be useful in the case of MFI is to ask or systematically survey stakeholders for their opinions and preferences regarding available project design choices. Questions can directly aim at partial efficiency or, if cost considerations are difficult to assess by stakeholders, at effectiveness (which the evaluator can then complement with information on costs). For example, we can ask the potential users to compare between different financial services (and sub-categories different like kinds of loans), loan conditions that determine accessibility and affordability, or different modalities for delivery (physical branches, mobile banking, e-banking, etc). Comparative ratings may not immediately serve the purpose of assessing efficiency and effectiveness but can be used to complement such assessment and is particularly relevant in an ex-ante programme formulation stage (to inform programme design).

### **Conclusion**

Applicability of methods:

- General: Le mieux est l'ennemi du bien (La bégueule, Voltaire, 1172)
- Rely on well-established methods for social and financial performance management of MFIs.
- Use renowned sources such as CGAP for inspiration

In addition - time and resources permitting:

Level 2: Preferably SROI to capture blended value creation  
MCDA e.g. for social rating of different models

Level 1: Financial analysis – see general

Add comparative rating for finetuning model design

