

# TESTING A METHODOLOGY TO ASSESS MICROCREDIT TARGET POVERTY IN BOSNIA-HERZEGOVINA\*

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## *Abstract\**

The aim of the work is to develop new tools for targeting the poor, tracking changes in poverty over time and reporting on people poverty in the contest of microcredit and microfinance interventions. The chosen methodology uses a poverty scorecard (Schreiner, 2006) applied to a rural context in Central Bosnia-Herzegovina where, since 2005, Schreiner, Matul and Kline, elaborated a scorecard method to rank clients of PRIZMA, a Bosnian MFI, by relative poverty and the likelihood that a client is poor by an absolute standard. The poverty absolute standard was derived from the LSMS (World Bank, 2002), the State Agency for Statistics in Bosnia-Herzegovina and the federation Statistical Institute and the Republica Srpska Statistical Institute. The methodology is based on a selection of seven household indicators, chosen to be strongly correlated to poverty status, local context and easy and inexpensive to collect. Then a scorecard is derived by assigning weights to reflect their correlation with poverty status. Finally, weighted indicators are added up to produce scores that can be ranked. We applied the methodology to a microcredit international cooperation intervention promoted by no-profit Italian stakeholders. Our purposes were both measuring the poverty profile in order to build a monitoring instrument to evaluate projects and tracking a model to be replicated from other actors.

*Keywords: microcredit, microfinance institutions, poverty scorecard, international cooperation, Bosnia and Herzegovina*

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## *Introduction*

Who is served by MFIs? What is the real outreach of a microfinance organization? If measuring target poverty and well-being should be 'the' final goal of each development practitioner and initiative, that's even more true in the field of microfinance. Few recent ideas have generated as much hope for alleviating poverty in low-income countries as the idea of microfinance. Microfinance promises both to fight against poverty and to develop the institutional capacity of financial systems through finding ways to cost-effectively lend money to poor household (Morduch, 2000).

But, unfortunately, consideration about people being served and the microfinance impact on their life is still very absent from 'best practices' conversation so that nine years after Morduch's "Microfinance Schism" (2000), tracking microfinance clients' poverty profile is still 'the' relevant, unresolved and forgotten issue.

Definitely poverty, defined either as a 'pronounced deprivation in well-being' (World Bank, 2000) or a lack of 'capability' to function in society (Sen, 1987) is a complex and multi-dimensional phenomena, difficult to capture. Methodologies are often too costly, time consuming and not reliable (Rogaly, 1996).

Nevertheless, it is very biasing to use easy-to use methods, as commonly happens in microfinance either within practitioners, auditors and donors.

Starting from a critic to the most commonly used method for calculating target poverty in microfinance, we explain why we have chosen scorecard method and how we readapted it in constructing our own methodology.

The second part of the paper focuses on describing the context, the methodology used and the results obtained. We applied the chosen methodology to a microcredit international cooperation intervention promoted by different no-profit Italian international cooperation stakeholders (NGO and Local Authorities). Our purposes are both measuring the poverty profile of the selected target in order to build a monitoring instrument to evaluate project effects on their well being over time and tracking a model to be replicated from other actors. In both cases, any further investigation in other contexts should take into account all the given modifications given the change in critical determinants for the analysis (as e.g. time, culture, country, etc..).

The selected interventions took place in the Municipality of Breza, with two microcredit funds: the first one addressed to a woman association, the other addressed to a association of work disabled people both aiming at improving members' income generating activities. Time considered is June-September 2008. The methodology was applied trough the construction and further administration of a questionnaire to each client's household in occasion of repayments meetings.

Eventually, conclusions and recommendations are addressed at the object of replicability of the experience at others similar realities.

## 1. *Loan size as ‘the’ poverty indicator in microfinance*

Today’s commonly and widely used proxy of clients’ poverty status, either by practitioners, donors and rating agencies, is loan size, usually calculated as gross loan portfolio divided for the number of active borrowers<sup>1</sup>. Nevertheless, loan size is a rough and indirect measure and its inaccuracy has been widely shown in the past<sup>2</sup>. There are at least six good reasons for not considering loan size as ‘the’ proxy of clients’ poverty.

### *a. First problem: different ways to calculate loan size*

Loan size is really a multidimensional concept. To best capture all aspects of loan size, it has been recommended<sup>3</sup> to calculate “dollar-years of borrowed resources,” which “measures the purchasing power provided by the loan and the time through which the borrower controls this purchasing power”, encompassing all other six aspects of a loan<sup>4</sup>. The “amount disbursed” (when the loan is given) and the “average balance” (as repayments are made) are commonly reported, but they are quite different measures – and neither reflects “term to maturity” or number, frequency and amount of installment payments en route to maturity. All are aspects of “loan size” which are important to both borrowers and lenders, as are interest rate, collateral/or joint liability requirements, etc., which are not reflected in the “loan size”. Complicated as this sounds, the measure is rather easy to calculate from aggregate portfolio data as the “average annual dollars outstanding” during the year, divided by the “number of loans disbursed in a year.” The units of measurement are “dollar-years per loan” rather than “dollars per loan.”<sup>5</sup>

### *b. Second problem: current loans of the borrowers versus first loans of current borrowers*

As Dunford (2002) mentions, a difference exists between the size of a borrower’s first loan from an institution and the size of subsequent loans to that same borrower. There is an underlying assumption in microfinance that borrowing increases a person’s earnings and so reduces poverty. If loan size increases as poverty reduces and if borrowing has real, positive impact on poverty, then the size of a borrower’s loan should increase over a succession of loans. Therefore, size of a borrower’s first loan from a microfinance institution is the loan size most reflective of the institution’s depth of outreach to the poor. So, rather than look at current loans of the borrowers, we need to look at first loans of current borrowers. Otherwise, we underestimate the depth of outreach of institutions that are having real, positive impact on the poor. However, this retrospective information about first loans is rarely available in the information systems of microfinance institutions. To retrieve it requires research into the archives or questioning of the borrowers themselves. It seems that even this first step – giving the loan size measure some real meaning as a poverty proxy – is rather complicated and likely to be expensive<sup>6</sup>.

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1 <http://www.mixmarket.org>.

2 Hatch & Frederick (1998) and Dunford (2002).

3 Schreiner (2001).

4 As shown by Schreiner (2001), at least seven aspects could be considered in calculating loan size: term to maturity, dollars disbursed, average balance, time between installments, number of installments, dollars per installment, dollar-years of borrowed resources.

5 Dunford (2002).

6 Dunford (2002) suggests to use ‘lot quality assurance sampling’ (LQAS), a sampling technique developed for quality control in manufacturing used to determine if a “lot” of manufactured items (e.g., an hour’s run of bolts) is sufficiently good quality to be put on the market. A very small sample of items is examined, each one classified as “good” enough or “not good” enough for the market. The manufacturer decides in advance what is the acceptable percentage of “not good” items in any “lot” going out to the market (e.g. 5 percent). Using charts based on binomial distribution of probabilities, the manufacturer can find a sample size that minimizes the risk of either throwing out a lot that has less than 5 percent bad items or okaying a lot that has more than 5 percent bad items. Using the LQAS framework, Joe Valadez, MkNelly et al., (2001) determined that only 19 randomly selected clients of a health service serving many thousands have to be observed or questioned in order to decide whether that health service is meeting pre-determined standards of performance. The same LQAS framework can be applied to determining whether or not a grantee’s microfinance service can be classified as “poverty lending” or not. The first loan sizes of 19 randomly selected current clients (preferably the average amount of loans outstanding to the borrower during her first year of borrowing) can be determined from records or from direct questioning. If it has been determined beforehand that X

*c. Third problem: loan size is often much more a reflection of the institution offering the loan than of the characteristics of the borrower*

Loan size (in all Schreiner's dimensions but expanding the concept to include interest rate and guarantee requirements, etc.) should correlate roughly with the average poverty level of borrowers. As the loan offered increases in one or more dimensions of "size," the "very poor" should be less likely to accept the offer. However, it doesn't follow that the better off will be less likely to accept loans as they get "smaller," especially when bigger loans are unavailable or are unattractive (due to higher interest and guarantee requirements). This means that loan size becomes less and less predictive of borrower poverty as the loan size gets smaller and smaller. The conclusion is that loan size is often much more a reflection of the institution offering the loan than of the characteristics of the borrower.

*d. Fourth problem: loan size is an inappropriate indicator in international comparisons*

For international comparisons, it has become common to adjust the "loan size" measure by dividing it by the nation's per capita annual GNP. Schreiner (2001) allows that this can be done for "dollar-years of borrowed resources" as long as this measure is adjusted to match the annual time frame of the GNP measure. However, it has also be pointed out that useful comparison across countries depends on there being similar income distributions in the countries compared (a few rich people can change the income distributions substantially)<sup>7</sup>.

*e. Fifth problem: loan size as a measure of poverty is useless in absence of credit lending activity*

An even more fundamental flaw of loan size as 'the' proxy for poverty is the obvious fact that it is useless in absence of lending, as in a microfinance program of savings, micro-insurance or purely business development services (BDS). Exclusive use of loan size creates a distorting bias, if not an outright prejudice, against savings and non-financial service programs, no matter how effective they may be in reaching out to and meeting critical needs of the very poor. This bias is unacceptable, especially now as we realize more and more the importance of having a wide range of financial services (not only credit) and non-financial services for balanced micro-enterprise development (MED) for effective poverty reduction.

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percent of clients should have no more than Y dollar-years during their first year of borrowing, then the service (and the grant) can be classified as "poverty lending" or not.

<sup>7</sup> "Furthermore, the ratios are not good benchmarks of absolute depth of outreach [to the poor], whether across or within a country. An alternative might compare dollars disbursed with poverty-line income, perhaps adjusted for purchasing-power parity. The standards used to set the poverty line differ across countries, however; so median income might be a better benchmark. Unfortunately, data on median income are difficult to come by" (Dunford, 2002).

## 2. *Background: Short description of the context in which took place the survey: Breza city and the microcredit funds*

Our research was localized in a rural context in Central Bosnia-Herzegovina. Breza is a small Municipality of 13.846 inhabitants<sup>8</sup> in central Bosnia-Herzegovina<sup>9</sup>, 35 kilometers far from Sarajevo. The town gravitates on the capital and his relatively rich canton at the economic, social and cultural level, but is however part of the Zenica-Doboj canton, one of the poorer of the country. The territory is mostly hills, and a small part plain, thus suitable for some kind of agricultural activities. It is the proximity of the Sarajevo-Zenica corridor, one of the most important of the country, in which an highway is under construction. The town is also connected by railways, not working at the moment. The primary sector is by far the most important, and occupies the half of the working population. Another 27% is occupied by public sector, while 13% by SMEs. The latter have thus a secondary but significant role in the economy of Breza. Instead, agriculture occupies just 3% of the population. However agriculture is important, as activity made by household to integrate income. Unemployment, 38%, is much higher than the national rate of 29%, such as income per month, 598,67 km, on a national rate exceeding 600 km. Two banks and three MFIs work in the municipality.

Thanks to the intervention of some Italian governmental (Local Authorities) and non governmental (NGO) international cooperation actors, a microfinance program started<sup>10</sup>.

In January 2007 a rotative fund for women was launched. The “centar za žene” (women center) association of Breza, already active in the municipality, took charge of the management of the fund, opening an apposite partition in their bank-account and establishing rules. Beneficiaries are all women associate with “centar za žene”. The fund is managed by a commission, made up of three volunteers of the association, under the tutelage of directive board of the association. The lending procedure offers loans from 1000 KM up to 3000 KM (about 500 up to 1500 euros), with the special approval of the directive board, the compilation of a business plan, and the consensus of the commission. Total amount lent accounts at 172.960 KM (about 88.000 euros). Many businesses are in agriculture, or breeding, but many are also in other sectors. Return is from 12 to 24 months, depending on the amount, with a grace period from 2 to 6 months. The loans do not differ in other features. The commission, with the approval of the directive board, can modify these parameters. The commission is also liable of loans’ guarantees. In regulation is envisaged the solidarity group as a type of guarantee. This fund has lent 62 loans until December 2008, with many loans waiting. The normal amount is 3000 KM, with some loans of 100-200 KM, and one of 7000 KM. No one asked loan with solidarity group, nor collective project have been presented. The fund has an excellent accountancy, having no insolvency or arrearage in return. Promotion is made by word of mouth.

In 1998 started a rotative fund for invalids of work. The association “invalida Breza” (invalids of Breza) took charge of management, opening an apposite account and approving a regulation. In over ten years of activity they lent 161 loans, until December 2008. The total amount lent accounts at 193.600 KM (about 98.000 euros). Nearly all the loans are from 1000 to 2000 Km, two are of 700 km and one of 2600 km. No one asked for collective loans, but two brothers. The quasi totality of loans finance projects in agriculture or breeding. Promotion is made by word of mouth.

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<sup>8</sup> Updated at July, 10, 2008, source Municipality of Breza.

<sup>9</sup> Bosnia-Herzegovina had a pre-war population of 4.4 million, the war in the early to mid-1990s left 250,000 people dead or missing, and over 50 per cent of the population displaced. Significant displacement and the destruction of housing and production facilities led to a dramatic reduction in living standards and an equally dramatic increase in poverty (Chong 2002: 63). The devastation that war brought meant that Bosnia-Herzegovina’s loss of gross domestic product (GDP) exceeded that of any other transition country. Despite an estimated 23 per cent loss of the population as a result of death and migration, per capita GDP dropped from US\$2,000 in 1990 to an estimated US\$500 in 1995 (World Bank 1999: vi; 48). In response to Bosnia’s severe condition more than five billion dollars was invested in the five years following the end of the war (OHR 2000) with little or no formal assessment of actual need. However, donor funding is clearly diminishing in Bosnia-Herzegovina as other areas of the Balkans and other areas of the world capture attention. At the same time, there are estimated to be 42 registered financial service organisations in Bosnia-Herzegovina (Dunn 2003: 10). In a country of an estimated 3.5 million people, this has translated into the most competitive microfinance environment in the region and one of the more competitive environments in the world.

<sup>10</sup> For the fund for women participated Comune di Torino, Comune di Rivoli, cooperative ISoLa, ReTe Ong, Cesvi Ong. For the fund for invalids participated ReTe, Comune di Torino, Comune di Rivoli, Comune di Rivalta Torinese, Comune di Alpigiano, Provincia di Torino, ReTe Ong.

### 3. Selected Methodology

In our investigation path conducted in Bosnia-Herzegovina, we have been looking for alternative methods of evaluation, meeting a lot of interesting attempts made in literature, as in the case of Hulme (1997), Simanowitz (1997)<sup>11</sup>, Meyer-Nagarajan-Dunn (2000)<sup>12</sup>, but eventually we found in ‘poverty scorecards’ from Schreiner (2005)<sup>13</sup> an effective, simple but robust and affordable answer that, differently from other methods, better responded to all the relevant determinants in choosing a good poverty assessment method<sup>14</sup> in relation to the selected context.

The chosen methodology has been selected, observed and readapted from PRIZMA<sup>15</sup>, a Bosnian MFI, thanks to the numerous research study explaining<sup>16</sup> its experience.

With the help of CGAP and Ford Foundation, starting from existing information from its management information system (MIS) and collaborating with staff of the Microfinance Centre for Eastern Europe and Newly Independent States (Matul and Kline, 2003) to adapt participatory rapid appraisal (PRA) tools<sup>17</sup>, PRIZMA carried out an evaluation to assess the poverty level of clients relative to non-clients, incorporating the questions from the poverty assessment, to assess poverty more generally across the Country. In addition to contributing to PRIZMA’s understanding of the character of poverty, this research – highlighted areas of the country where poverty is most prevalent.

The methodology consists in a system developed as a scorecard, that specifically seeks to meet two overarching needs:

*Measure Poverty Status* enabling the organization to assess clients’ poverty status relative to other clients and non-clients across different segments of its clientele, to understand who is being served, who joins, stays, and leaves and to define targeting strategies, client and staff incentives, and product attributes.

*Monitor Change in Status Over Time* enabling the Organization to measure discrete change in clients’ poverty status and well-being over time.

PRIZMA’s system was designed on the following steps:

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<sup>11</sup> Simanowitz (1997) elaborated for C-GAP three Poverty Assessment Tools (PAT). CHI (CASHPOR House Index), check-list and Poverty Wealth Ranking (PWR). Nevertheless, every of each method present different sort of limitations. CHI, for example, as other visual indicators, is a cost-effective and powerful tool. However, it is only as good as the relationship between poverty and housing, where it is clear that living in a bad housing structure indicates poverty, and a better structure indicates (relative) wealth. Differently from CHI, PWR aims to draw out local knowledge and criteria on which to judge poverty. The ranking is based on the subjective views of the people in a community, who generate their own criteria with which to rank poverty or wealth. Scoring or ranking is facilitated by field workers, but is performed by members of the community. Visual factors may play a part in the assessment of poverty, but community members are free to choose those criteria that are important to them, which usually includes socio-psychological factors not visible nor easily accessed without a good understanding of the community. The ranking takes place in three parts: mapping, reference groups, and analysis. Given its power of transparency and empowerment, it’s a very good tool. Unfortunately many are the limitations: practice is more complicated than the idea, so facilitators need to be skilled and sensitive. Moreover, deliberate distortion of results by participants can make the results unusable and the process is very time and cost consuming.

<sup>12</sup> The method was based on the selection of three relevant proxies for poverty: the first proxy selected was per capita income (INPC) earned from all sources. The second was a housing index (HI), and the third was household size (HHSIZE).

<sup>13</sup> Schreiner (2005).

<sup>14</sup> Among the principle problems facing effective impact assessment are the following: (1) cost and confidence; (2) respondent motivation; (3) consultant and interviewer quality and availability; and (4) avoiding low-impact assessments. The key task for the designer is to select an approach that can meet the objectives of the specific assessment at an acceptable level of rigor, that is compatible with the program’s context, that is feasible in terms of costs, timing and human resource availability and that avoids the problems identified above (Hulme, 1997).

<sup>15</sup> Founded in 1997 by an international non-governmental organisation and registered locally in 2001, Prizma is still a relatively young institution with a great deal to learn and capacity to grow. PRIZMA has sought to better understand the multidimensional nature, complexity and dynamism of poverty, the daily challenges and vulnerability people face, client, non-client, and staff perceptions of the poor, and the landscape for financial services more generally (Kline, 2003). Prizma’s mission is to improve the well-being of poor and low-income women and their families, by providing long-term access to quality financial and non-financial services.

<sup>16</sup> Mutual-Kline, 2003; Schreiner, 2005. The survey they conducted in Bosnia-Herzegovina has been one of the first poverty scorecard method study, afterwards realized on others MFIs in different countries (Schreiner, 2005, 2006).

<sup>17</sup> Used for many years in the developing world and recently adapted to microfinance by MicroSave Africa, to the culturally specific context of Bosnia-Herzegovina.

### *Step 1-Agree Rationale*

Engaging staff from different levels and departments of the institution in discussions about the intent and purpose of assessing poverty, monitoring change in status over time, and the usefulness of such data to both developmental and institutional imperatives.

### *Step 2- Identify Data Sources*

Identifying a variety of data sources from which a few scorecard indicators will ultimately be selected.

PRIZMA's approach consisted in drawing on a number of sources to identify and triangulate the most robust and easily verifiable proxies for poverty status, including:

The Living Standards Measurement Survey (LSMS), 2002

The Consultative group to Assist the Poorest (CGAP) Poverty Assessment

The United Nations Development Program (UNDP) country data

Focus groups with poor people and staff (using adapted MicroSave tools)

Management staff input.

Thus, the Scorecard is a composite measure of household poverty based on some of the strongest and most robust non-income indicators proxies for poverty in Bosnia-Herzegovina triangulated using 2002 Living Standards Measurement Survey (LSMS)<sup>18</sup>, United Nations Development Program (UNDP) data, a Consultative Group to Assist the Poorest (CGAP) Poverty Assessment, and findings from internally-led focus group research.

### *Step 3-Develop Pool of Poverty Indicators that were:*

correlated with poverty, both in the past and in the future

appeared in the national survey, enabling linkage with absolute poverty line

kept data-collection costs low

took different values across clients

Finally the selected indicators correlated with the likelihood to be poor were seven:

Education of the female household head/spouse/partner

Household size

Location of residence

Ownership of car

Stereo CD player ownership

Average times eats meat each week with main meal

Average times eats sweets each week with main meal

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<sup>18</sup> The World Bank-inspired Living Standards Measurement Surveys (LSMS) feature multi-topic questionnaires and strict quality control. The flexible LSMS template is widely used.

Testing revealed that seven relatively strong indicators yielded a score that was very robust. More or fewer indicators could be employed, but seven was estimated to effectively balance the opportunity cost to staff and applicants of collecting this information with the accuracy of data collected<sup>19</sup>.

The seven indicators are ideally divided in two sets of indicators. The first three — education level, residence, and household size — reflect poverty risk categories. For example, if the female household head, spouse, or partner has primary level education or less, the likelihood that the household is poor increases significantly. The second four indicators measure change in household poverty status. Thus, in addition to contributing to the poverty risk profile of each new or renewal applicant's household, these second four enable Prizma to measure change in poverty status, or well-being, over time (Kline, 2003).

Additionally, it has to be noted that while four indicators - education of female household head/spouse/partner, household size, car ownership and stereo CD player ownership - were directly linked with national survey (LSMS), the other three indicators – location of residence, frequency in eating meat and in eating sweets, were collected differently, thus cannot be linked directly to LSMS's poverty measure. For location of residence, for example, Prizma classified clients as urban versus rural while national survey used a criteria of location by municipality while for frequency in eating meat and sweets Prizma, based on previous poverty-assessment survey (Henry et al., 2003) used the criteria of categories of frequency ('rarely'-'sometimes' and 'often' corresponding to 0-2; 3-5; 6-7 times per week) opposite to the LSMS criteria of recording spending<sup>20</sup>.

Other indicators associated with the likelihood to be poor, as for example, the indicator of refugee status was strongly correlated with poverty but, in 2001, Prizma's management believed that this correlation would have disappeared in the future. For reasons as the mentioned, some indicators appearing in the survey were considered but ultimately excluded due to the absence of those criteria believed necessary, that are the following (Matul and Kline, 2003):

*Essentiality* that means strong proxy for risk of being poor in a given context

*Critical Importance* that means indicators:

- Simple and clear to use
- Easy to collect
- Easy to verify
- Non-income (indirect)
- Universal applicable (all regions, rural and urban, business and non-business, etc.)
- Sensitive to change
- Long-term
- Can be asked to clients without any intimidation or offence

*Desirability* that means indicators that

- Can serve as means of targeting
- Already collected
- Can be leveraged for other institutional needs (e.g., credit scoring, marketing, etc.)

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<sup>19</sup> Given that the Institution was already collecting four of the final 7 indicators in its routine application process, the additional data collection was minimal.

<sup>20</sup> If all household were the same size and if all people ate the same amount, then frequency (measure by Prizma) would be perfectly correlated with spending (measured by the survey) (Schreiner, 2006).

#### *Step 4- Defining indicators weights*

Once selected the indicators, relative weights were assigned to each indicator's answer for measuring simple ranges for each indicator that are most reflective of poverty status.

Four of the seven indicators (ownership of car and stereo cd player, education and location of residence), had two possible answers ('yes' or 'not'; 'urban' or 'rural'; 'primary' and 'more than primary'). Weights of 0 were given to values correlated with greater poverty, weights of 1 with less poverty. The two food indicators had values of 'rarely', 'sometimes' and 'often' with weights of 1,2 and 3. Finally, household size was divided in six classes (1, 2, 3, 4, 5, 6 or more).

This operation is essential in constructing the answering options of the clients in the questionnaire to be administrated.

#### *Step 5 - Develop Simple Scorecard*

Consolidate indicators into a simple composite scorecard. Even before any steps are taken to link scorecard scores with the national poverty line or international \$1 or \$2 per day, scores can be used internally as a relative measure of clients' poverty status to, for example, compare branches, products, or field staff. This is an intuitive process, as a household that has a score of "1" can clearly be estimated to be poorer than a household with a score of "4". The Scorecard provides a relative measure for the Organization to assess its depth of outreach in each area of operation (Schreiner 2001) enabling to rank clients by relative poverty score. For example, a household that has a composite score of two can clearly be said to be poorer than a household that has a score of four.

#### *Step 6 -Determine Means and Frequency of Collecting Data*

It has to be determined how often to collect data, based on need, cost, and time. Additionally, it is critical to determine how to best collect data in a simple manner with the least bias and possibility of error. In PRIZMA's approach one of the chosen criteria was the client's comfort in answering the questions; PRIZMA sought questions in which clients were more comfortable in reporting some information, and decided to incorporate select indicators into the Institution's simple application paperwork, such that every individual's household poverty status can be assessed at entry and again at the end of every product cycle. To mitigate bias, questions were inserted in the Institution's one page application form where they appeared most natural to ask (e.g., meat and sweets consumption asked in the context of household cash-flow used to assess repayment capacity, etc.). Variations on question sequence and placement were tested with field staff and applicants, which reduced staff members' sensitivity to questions and helped mitigate bias among staff and applicants alike. The modest additional data captured on the application form is entered in the Institution's management information system (MIS) daily in the same manner as other data collected to support the loan underwriting process.

#### *Step 7- Develop Reporting Formats*

Identify means to report on the poverty level of client households. Prizma's approach was to ensure Institution's MIS can report on any individual's household poverty status and client poverty percentages across segments at the end of any product cycle and over time (trend). Ensuring such reporting at the individual household level and in aggregate provides critical information to serve Prizma's broad developmental and evolving institutional management decision- making needs.

#### *Step 8-Determine Means to Ensure Quality Control*

If an institution seeks to assess the poverty level of client households accurately, it will need to ensure that data is high quality. Using aggregate poverty level data simply requires a minimum assurance of data quality. Thus, an approach, such as LOT Quality Assurance Sampling (Valadez 1991), which yields a 'yes' or 'no' answer to the question of whether data collected meets a minimum quality standard, could help ensure that quality control is cost-effective.

#### *4. Our methodology*

PRIZMA's methodology seemed to us very well fitted to the conditions we were dealing with in Breza. In particular four reasons convinced us:

Country specificity: our knowledge of the regional contest, made well evident how the seven question of PRIZMA touch some key point of the Bosnian way of life.

Simplicity: this scorecard is possible to use even without any help of technical personnel

Comparability: the scorecard is easily comparable over years or with different populations in other geographical area in Bosnia-Erzegovina.

Effectiveness: from the results described in PRIZMA's articles expected effectiveness was very high

Thus in the august 2008 we prepared a questionnaire with 41 questions, in which the core were the seven question of PRIZMA. The seven questions were inserted at the beginning of the questionnaire, just after questions about gender and age (see annex 1).

Other questions were posed to investigate other issues not concerning this article, or to double check some key issues of the seven questions.

In preparing the questionnaire our effort was to pose every question in the clearer and less ambiguous way possible. We were working with people very unused to answer this kind of questions, and thus possibly suspicious. We chose for some open answers in most cases. This led to some difficulties, for three main reasons:

First of all, probably favoured the respondents to skip some questions, a fact which occurred quite often.

Second, some questions resulted in the end to be ambiguous, being misunderstood by respondents, even if apparently very clear.

Third and last, this add the work to re-categorise the open answers to calculate the scores, and sometimes to interpret answers being written in bad calligraphy or being not immediately intelligible. Moreover some respondents added brief comments, nuancing the answer in a difficult-to-categorize way.

This led to a situation of incertitude or lack of data. We resolved incertitude by interpreting were possible the unclear answers. For the lacking data, that turned to be significant, it was necessary to minimise some errors with statistic methods in a way we will explain in details after.

To administer the questionnaires, we initially organised some meeting. This was aimed at explain clearly how to fulfil questionnaire, and to be sure that no influences were made on respondents while fulfilling. Three attempts were made but failed, reaching to collect just few questionnaires. Finally we were compelled to administer questionnaires when beneficiaries went to pay back loans rates, thus charging the managers of the funds of administering questionnaires.

This last solution was not optimal, for the risk of "influence" in the fulfilling of the questionnaires, but it turns to be the only one viable and allows us to collect 59 questionnaires for invalids and 30 for women, on a total respectively of 161 and 62 loans. This sample seemed to us large enough to represent the overall population of every fund token in consideration.

Another possible threat was the language. Even if one of us is fluent Bosnian-croatian-serbian speaker, to translate a questionnaire is needed a very precise knowledge of languages and of some technical words. Anyway we solved this problem easily having contacts from long time with a very skilled and experienced interpreter.

Sometimes we had the impression they could falsify the answers<sup>21</sup>, but finally we think however that no significant falsification in data has been done, if any.

Very important has been the previous knowledge of the local contest and of persons in charge of the management of the funds. One of us has lived in Breza for several months, working also with the managers of the funds. This fact has significantly smoothed the work. During the work local staff offered full cooperation and even advices on how to solve problems and difficulties<sup>22</sup>.

### *Notes on statistics about the methodology*

For the calculations of the Prizma scores we referred to the paper by Matul and Kline (2003); for the subpopulation of women we had 19 complete questionnaires out of 28, that is 32.1% of missing data, while for the invalid subpopulations we had 38 complete questionnaires out of 59 (35.6% of missing data).

As we had a considerable amount of missing data, which might lead to a major bias in terms of final results, we decided to estimate the values corresponding to the missing items in the questionnaire via model fitting. As all the variables were dichotomic or categorical (ordinal), we decided to fit several generalized linear models (McCullagh and Nelder, 1989), on the complete data, thus excluding records in the dataset with missing observations. The response variables were, in turn, those with missing data, while the covariates were all the other variables used to compute the Prizma score previously described.

Specifically, we fitted ordinary logistic regression models with response variable “education” and “household assets”, and multinomial logistic regression model with response variable “meat consumption” and “sweets consumption”.

After fitting the model, we estimated the missing values by predicting them using the model itself. Before predicting we ensured that the model fitted well the data, evaluating the agreement between predicted values of the complete data and observed complete data.

The main limitation of such an approach is that records with more than one missing variable could not be estimated via the prediction method. However, this strategy led us to relevantly reduce the impact of missing data in our dataset: 2 out of 28 for women (7.1 %) and 4 out of 59 for invalid (6.8%).

The impact on the scores was very low in terms of difference of distribution of the poverty index associated with the score: in particular, no difference was found in women (identical distribution) and little difference in invalid (almost identical, see results).

### *Vegetable garden and breeding*

After calculating incidence of such “habits” in both populations, we evaluated whether there was an association between these two variables. As these were binary variables, we calculated the Odds Ratio (Pagano, 2000), a measure that enabled us to understand if being a “common breeder” (i.e. being used to breed animals in life) was associated with an increased, or reduced, probability of keeping a vegetable garden, testing them at the 0.05 significance level.

An OR of 1.76, as for the women population, can be simplistically being interpreted as an almost two-fold increase in the probability of keeping a vegetable garden, given that one is a “common breeder”. As the relative p-value is of 0.65, thus not statistically significant, we’re not led to refuse the hypothesis of no association between these variables. As for invalid the OR is 4.36, with a p-value of 0.023, not only we can

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<sup>21</sup> An episode during the meetings led us to think that some respondents could understand why these questions were posed. During one of the meeting we initially tried to organise one respondent asked why we were asking about CD player or meat consumption. Before we could answer, another respondent said laughing that the reason was to measure poverty. We don’t think that posing these questions between others is a better strategy than posing them in the same block, being these questions very different from the others, and very different from “normally expected” questions in this kind of questionnaire.

<sup>22</sup> As well has been very helpful the cooperation that Italian NGO ReTe and his project management in loco gave us. Accomodation, internet connection, contacts with UTL (Unità Tecnica Locale, office for cooperation of italian embassy) in Sarajevo, as well as advices and help has been provided by them.

say that there's a relevant increase in the probability of keeping a vegetable garden given that one is a "common breeder", but also that this association is statistically significant.

When relating the variables "vegetables garden" and "breeding" to the poverty index described in the previous paragraph we evaluated whether there was a "dose-response" relationship, i.e. if the strength of association increased (decreased) with the increase of the values of the index of poverty. We found such an increase (decrease) to be statistically non-significant, mainly due to sparse data. In particular, for women there's a reduced probability of both having a vegetable garden and of being a breeder if one is not in the lowest category of the index ("very poor and poor"). For the invalid subpopulation the relation is the same for vegetable gardens, not for breeders, where we can see a slight increase in the probability of being breeders given that one is considered not in the lowest category (OR = 1.30 for "vulnerable non-poor" vs "poor and very poor" and OR = 1.35 for "non-poor" vs "poor and very poor").

### *Vegetable garden, breeding and place of residence*

To understand whether there was a link between keeping a vegetable garden and/or being a common breeder and the place of residence (Breza vs neighbouring villages) we computed the appropriate Odds Ratio, testing them at the 0.05 significance level.

We found that for women the fact of living in the villages outside Breza is not associated with a change in the risk of having a vegetable garden nor of being a breeder when compared to women living in Breza City (Vegetable garden: OR = 0.9, p-value=1; Breeder: 0.44, p-value=0.4).

On the other side, for invalid people we found that both situations were associated with the place of residence. In particular, people living in Breza City faces a relevant decrease in the risk of having a vegetable garden or being a breeder when compared to people living in the outside villages (Vegetable garden: OR =0.127, p-value=0.001; Breeder: OR =0.08, p-value=0.009).

### *Occupational rate*

In computing non-occupational rate, we excluded from the basis of the rate the housewives (10 women and 7 invalid), retired people (5 in subpopulations of invalid), 1 who declared himself "war invalid" and missing data (2 in women and 3 in invalid).

The rates are calculated per 1000 person-years.

### *Restitution and poverty index*

While all women returned money with no particular difficulty, for invalid this did not happen. So we calculated the Odds Ratio of having difficulties in returning money given the poverty index. Also in this case we had problems in detecting relevant differences because of sparse data, so we can make no conclusion in terms of statistical significance. It looks like non-poor subjects meet less difficulties in returning the money when compared to very poor ones (OR = 1.516, p = 0.7), but this should be investigated with a larger dataset, as it seems to be a contrasting conclusion.

## 5. Data results

### a. How we proceeded

Phase 1: in a first phase results of questionnaires have been firstly inserted in an excel file “as they were”, that means maintaining the most possible data as founded in the questionnaires.

Phase 2: Then we copy-pasted the seven questions in another file, where we re-categorised them strictly in coherence with the PRIZMA methodology.

For example answer for “meat consumption”, that was investigated with this question: “How many times per week do you eat meat as main dish?”, were re-written as follows:

From 0 to 2 times per week: *rarely*

From 3 to 4 time per week: *sometimes*

From 5 times per week: *often*

Phase 3: from the re-categorized table we calculated the scores, by building a spreadsheet that automatically assigned points to every answer, strictly in coherence with the PRIZMA methodology, and from this calculated the scores for every respondent.

Phase 4: As in PRIZMA’s methodology, poverty status has been divided into 3 categories (‘poor and very poor’, ‘vulnerable non poor’ and ‘non poor’) each one associated with a score’s range.

Score Range 0-2: associated with category ‘poor or very poor’

Score Range 3-4: associated with category ‘vulnerable non poor’

Score Range: 5 and more associated with category ‘non poor’

Phase 5: in the end we calculated the median score of both funds, both for the ‘before’ (ex-ante) and ‘after’ (ex-post) correction version. Median score has the double purpose first to quickly compare the situation of these funds with other funds, secondly to understand approximately which is the overall poverty level of every fund.

We put two tables, one for each fund (tab. A: women fund clients and table B: invalid fund clients)

Additionally, for each table we put the ‘before’ (ex-ante) and ‘after’ (ex-post) correction version to see how significant can be the incidence of non-respondents.

### b. The scores: are the two funds targeting the poors?

Results seem to show that the two funds don’t have a good performance in terms of depth of outreach. If we look at results we can see that the percentage of “poor and very poor” is very low.

*Table A- WOMEN'S FUND ASSESSED SCORES*

<i>Client number</i>	<i>Ex-ante Score</i>	<i>Ex-ante poverty status</i>	<i>Missing data</i>	<i>Ex-post Score</i>	<i>Ex-post poverty status</i>	<i>Missing data</i>
1	5	non-poor	no	5	non-poor	no
2	6	non-poor	no	6	non-poor	no
3	3	vulnerable non poor	yes	3	vulnerable non poor	no
4	6	non-poor	no	6	non-poor	no
5	2	poor and very poor	yes	2	poor and very poor	no
6	6	non-poor	no	6	non-poor	no
7	<b>5</b>	<b>non-poor</b>	<b>yes</b>	<b>5</b>	<b>non-poor</b>	<b>yes</b>
8	6	non-poor	no	6	non-poor	no
9	4	vulnerable non poor	no	4	vulnerable non poor	no
10	3	vulnerable non poor	yes	3	vulnerable non poor	yes
11	5	non-poor	no	5	non-poor	no
12	5	non-poor	no	5	non-poor	no
13	5	non-poor	no	5	non-poor	no
14	7	non-poor	no	7	non-poor	no
15	6	non-poor	no	6	non-poor	no
16	4	vulnerable non poor	no	4	vulnerable non poor	no
17	2	poor and very poor	yes	2	poor and very poor	no
18	4	vulnerable non poor	no	4	vulnerable non poor	no
19	<b>7</b>	<b>non-poor</b>	<b>yes</b>	<b>7</b>	<b>non-poor</b>	<b>no</b>
20	6	non-poor	no	6	non-poor	no
21	9	non-poor	no	9	non-poor	no
22	4	vulnerable non poor	no	4	vulnerable non poor	no
23	6	non-poor	no	6	non-poor	no
24	4	vulnerable non poor	yes	4	vulnerable non poor	no
25	3	vulnerable non poor	no	3	vulnerable non poor	no
26	<b>5</b>	<b>non-poor</b>	<b>yes</b>	<b>5</b>	<b>non-poor</b>	<b>no</b>
27	4	vulnerable non poor	yes	4	vulnerable non poor	no
28	4	vulnerable non poor	no	4	vulnerable non poor	no

*Table B- WOMEN'S FUND SCORES RESULTS*

Before correction		After correction	
poor and very poor	2	poor and very poor	2
vulnerable non-poor	10	vulnerable non-poor	10
non-poor	16	non-poor	16
Median score	5	Median score	5

For women target, 2 out of 28 are poor or very poor thus showing a very weak capacity to reach the poorest. Moreover the majority of beneficiaries are non poor, and the median score is 5 (non poor) underlining a weak capacity even in reaching “vulnerable non-poor”.

*Table C- INVALIDS' FUND ASSESSED SCORES*

<i>Client number</i>	<i>score ex-ante</i>	<i>ex-ante poverty status</i>	<i>missing data</i>	<i>score ex-post</i>	<i>ex-post poverty status</i>	<i>missing data</i>
1	4	vulnerable non poor	no	4	vulnerable non poor	no
2	4	vulnerable non poor	no	4	vulnerable non poor	no
3	6	non-poor	no	6	non-poor	no
4	5	non-poor	no	5	non-poor	no
5	2	poor and very poor	yes	3	vulnerable non poor	no
6	7	non-poor	no	7	non-poor	no
7	<b>5</b>	<b>non-poor</b>	<b>yes</b>	<b>6</b>	<b>non-poor</b>	<b>no</b>
8	4	vulnerable non poor	no	4	vulnerable non poor	no
9	4	vulnerable non poor	no	4	vulnerable non poor	no
10	3	vulnerable non poor	no	3	vulnerable non poor	no
11	2	poor and very poor	yes	2	poor and very poor	no
12	6	non-poor	no	6	non-poor	no
13	5	non-poor	no	5	non-poor	no
14	6	non-poor	no	6	non-poor	no
15	5	non-poor	no	5	non-poor	no
16	4	vulnerable non poor	yes	5	non-poor	no
17	3	vulnerable non poor	no	3	vulnerable non poor	no
18	<b>3</b>	<b>vulnerable non poor</b>	<b>yes</b>	<b>4</b>	<b>vulnerable non poor</b>	<b>no</b>
19	5	non-poor	no	5	non-poor	no
20	4	vulnerable non poor	no	4	vulnerable non poor	no
21	2	poor and very poor	yes	3	vulnerable non poor	no
22	<b>3</b>	<b>vulnerable non poor</b>	<b>yes</b>	<b>4</b>	<b>vulnerable non poor</b>	<b>no</b>
23	2	poor and very poor	yes	3	vulnerable non poor	no
24	<b>5</b>	<b>non-poor</b>	<b>yes</b>	<b>6</b>	<b>non-poor</b>	<b>no</b>
25	<b>5</b>	<b>non-poor</b>	<b>yes</b>	<b>6</b>	<b>non-poor</b>	<b>no</b>
26	2	poor and very poor	yes	3	vulnerable non poor	no
27	<b>3</b>	<b>vulnerable non poor</b>	<b>yes</b>	<b>4</b>	<b>vulnerable non poor</b>	<b>no</b>
28	<b>6</b>	<b>non-poor</b>	<b>yes</b>	<b>6</b>	<b>non-poor</b>	<b>no</b>
29	3	vulnerable non poor	no	3	vulnerable non poor	no
30	5	non-poor	no	5	non-poor	no
31	5	non-poor	no	5	non-poor	no
32	1	poor and very poor	no	1	poor and very poor	no

33	4	vulnerable non poor	yes	4	vulnerable non poor	yes
34	6	non-poor	no	6	non-poor	no
35	6	non-poor	no	6	non-poor	no
36	6	non-poor	no	6	non-poor	no
37	6	non-poor	no	6	non-poor	no
38	<b>5</b>	<b>non-poor</b>	<b>yes</b>	<b>6</b>	<b>non-poor</b>	<b>no</b>
39	4	vulnerable non poor	yes	4	vulnerable non poor	no
40	3	vulnerable non poor	no	3	vulnerable non poor	no
41	1	poor and very poor	no	1	poor and very poor	no
42	4	vulnerable non poor	yes	4	vulnerable non poor	yes
43	4	vulnerable non poor	no	4	vulnerable non poor	no
44	5	non-poor	no	5	non-poor	no
45	4	vulnerable non poor	yes	5	non-poor	no
46	3	vulnerable non poor	no	3	vulnerable non poor	no
47	7	non-poor	no	7	non-poor	no
48	6	non-poor	no	6	non-poor	no
49	6	non-poor	no	6	non-poor	no
50	6	non-poor	no	6	non-poor	no
51	4	vulnerable non poor	no	4	vulnerable non poor	no
52	4	vulnerable non poor	no	4	vulnerable non poor	no
53	<b>5</b>	<b>non-poor</b>	<b>yes</b>	<b>5</b>	<b>non-poor</b>	<b>no</b>
54	7	non-poor	no	7	non-poor	no
55	5	non-poor	no	5	non-poor	yes
56	6	non-poor	no	6	non-poor	no
57	<b>6</b>	<b>non-poor</b>	<b>yes</b>	<b>8</b>	<b>non-poor</b>	<b>no</b>
58	2	poor and very poor	yes	2	poor and very poor	yes
59	5	non-poor	no	5	non-poor	no

For invalids the discourse is analogue. Here we have some differences after statistical correction, but results are nevertheless similar, putting in evidence a very weak capacity in reaching the “poor and very poor”, and a weak capacity toward the “vulnerable non poor”. The “non-poor” are here, as well as in the women fund, the absolute majority.

*Table D- INVALIDS' FUND SCORES RESULTS*

Before correction		After correction	
poor and very poor	8	poor and very poor	4
vulnerable non-poor	21	vulnerable non-poor	23
non-poor	30	non-poor	32
Median score	5	Median score	5

We conclude that in applying the PRIZMA's methodology, results show that the two microcredit funds are not effective in reaching the poors.

*The contest: urban or rural?*

Is not so easy to define the contest of Breza as rural or urban. For sure the villages not immediately near the main center are to be defined as “rural”, for the socioeconomic features they present. For what concern the “mjestne zajednice” (the administrative units in which municipality is divided) immediately near the center, as well as for the center, some features are similar to rural contest while others to urban.

For this reason we tried to set the problem asking to respondents if they have or not a vegetable garden or livestock. This because we presumed that a large majority having one or both the two assets may describe a more rural contest. We expected that the majority of respondents have one or both the two assets. Here the results:

*Table E*

<i>Possess of livestock and/or vegetable garden for invalid's fund</i>		LIVESTOCK	
		I have	I don't have
VEGETABLE GARDEN	I have	<b>14</b>	<b>18</b>
	I don't have	<b>4</b>	<b>23</b>

*Table F*

<i>Possess of livestock and/or vegetable garden for women's fund</i>		LIVESTOCK	
		<i>I have</i>	<i>I don't have</i>
VEGETABLE GARDEN	<i>I have</i>	<b>3</b>	<b>5</b>
	<i>I don't have</i>	<b>5</b>	<b>15</b>

Results were quite different from expected for women: the majority don't have nor livestock nor vegetable garden. For invalids proportions are different: the relative majority still don't have nor one nor the other, nevertheless the absolute majority has at least one of the two assets. This is consistent with the fact that between women the proportion of beneficiaries from the center is higher than for invalids. As shown in tables below, the “risk” to have vegetable garden or breeding or both is much lower for people living in Breza “center”. This question has so a good effectiveness in identifying who is from rural or from urban contest. Nevertheless is a question more, and thus a cost in doing this kind of investigation on a big scale. The problem can be solved with an initial assessment of rural or urban places for the overall country, possibly conducted also with this question.

Table G

<i>Probability to possess breeding for resident in Breza "center" and in villages</i>	BREEDING			
	Yes		No	
	num	%	num	%
<i>Breza "Center"</i>	1	0,053	18	0,947
<i>Villages</i>	14	0,4	21	0,6

Table H

<i>Probability to possess vegetable garden for resident in Breza "center" and in villages</i>	VEGETABLE GARDEN			
	Yes		No	
	num	%	num	%
<i>Breza "Center"</i>	4	0,211	15	0,789
<i>Villages</i>	24	0,685	11	0,314

Table I

<i>Probability to possess both vegetable garden and breeding for resident in Breza "center" and in villages</i>	VEGETABLE GARDEN & BREEDING			
	Yes		No	
	num	%	num	%
<i>Breza "Center"</i>	1	0,053	18	0,947
<i>Villages</i>	10	0,286	25	0,714

### c. Unemployment rate

We tried also to calculate the unemployment rate between the respondents. This has been done to once more double check the results in term of poverty. Being unemployed persons of course more exposed to poverty, we calculated the unemployment rate, than we confronted with the rate of the Breza municipality.

*Table L-women unemployed rate*

Housewives		employees		unemployed		Missing	
n	%	n	%	n	%	n	%
10	0,357	10	0,357	6	0,214	2	0,0714
Women unemployment rate			37,50%				

Unemployment rate for women is different from the data of Breza, of 30,8%, but in our opinion not to a relevant extent, being the difference less than 7% points.

*Table M-invalids unemployment rate*

Housewives		Retired		employees		unemployed		Missing	
n	%	n	%	n	%	n	%	n	%
7	0,119	5	0,085	32	0,542	12	0,203	3	0,051
Invalids unemployment rate				27,9					

Unemployment rate for invalids is not significantly different from the data of Breza. These results reinforce in our opinion the thesis that the two funds are not reaching the “poor and very poor” part of the population.

Nevertheless the results have to be taken carefully, because the question on unemployment was not clearly excluding or including informal, not registered business or employment. Someone may consider himself as employee even if doing little not registered business. On the other side someone may consider his work as not a real one being not registered. The overall result is thus uncertain.

### d. Confrontation with the loan size criteria

Using the loan size proxy criteria, considering that women’s fund average loan balance is 1900 KM (about 968 euros) and invalid’s average loan balance is 1750 KM (891,61 euros), it’s possible to make a comparison with microfinance Bosnian benchmark<sup>23</sup> noting that the two different methods can lead to similar conclusions. This comparison could lead to further investigations.

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<sup>23</sup> In dollar terms the average outstanding loan size is \$937 (euros 710,09 at 30 March 2009) with a depth of outreach of 76%, much higher compared to the MFIs worldwide (54%). These results were based on a study conducted by MFC on the information from eight Bosnian microcredit organizations (BOSPO, EKI, Mikra, Mikrofin, Partner, Prizma, Sunrise, Women for Women) creating a profile of a Bosnian MFIs was created (MicroBanking Bulletin, 2008).

## 6. *Conclusions*

Our contribution very far from being exhaustive, aims at stimulating the debate on microfinance social performance analysis in comparison with widespread financial performance organizations' analysis; thus our hope is that the present work will led to further investigations in searching for innovative, simple, robust and affordable social performance assessment methodologies.

Implications of clients poverty profile analysis such as the present work, are very interesting either from a social perspective and from an organizational perspective. In particular, it helps investors, donors and stakeholders in disclosing to what extent the organization is alleviating poverty and the organization in understanding and demonstrate more clearly the extent to which it is reaching its target and filling is social mission. For this reason, this kind of analysis, can stimulate organizational learning and stronger strategic positioning.

Eventually, as we are in the field of human development and this system does not capture all the aspects of the complex dynamics of poverty, the optimal strategy would be to integrate the scorecard method with others, non-quantitative methods (as e.g. focus group sessions) to best capture all aspects of clients' well-being and quality-life.

With regards to a poverty scorecard evaluation, we can underline what follows:

### *a. National surveys data availability*

In the case of a scorecard methodology, the availability of a preliminary recent household national, contest-specific surveys is necessary. The more recent and more contest specific the survey, the more reliable the results.

Results on clients' profile can be very helpful in understanding the concrete nature of the mission and vision of the organization, stimulating reflections among management staff on strategic positioning, products delivering and outreach.

### *b. Power of a scorecard*

The additional value of scoring poverty status is that a score is stronger than any individual indicator on its own, enabling an institution to assess poverty status of any individual's household with a high degree of accuracy. The Scorecard consolidates robust, non-income poverty measures into one aggregated indicator, which offers many benefits. It is now widely acknowledged that it is very difficult to collect reliable, high-quality data on income and expenditure of poor households. This is particularly true in the case of microfinance applicants, whose perception that the provision of such information may determine whether they receive service or not provides a strong incentive to underestimate, overestimate, or withhold critical information to assess their true status. Though the risk of error exists in all data collection, clients are less likely to misrepresent non-income data indirectly correlated with their status, especially demographic information that is easy to verify.

Moreover, while the use of one indicator on its own may provide a sufficient proxy for poverty status for one geographic area or social status group, combining a few very strong indicators into one aggregate score mitigates rather than compounds the risk of error across heterogeneous groups. Thus, a composite score offers a more accurate proxy for the poverty status of client households than any one indicator would on its own.

Additionally, the score offers more chances to:

- Make useful comparison through space and time and shows an high level of re-adaptability: because the scorecard draws on non-economic data, it is appropriate for measuring the household poverty status of clients of any financial or non-financial service organization. Thus, while indicators will necessarily vary by region or country, the scoring approach itself should be applicable in any context.

- *Assesses Change over Time*: in addition to providing external stakeholders verifiable information about who the institution is reaching in terms of poverty status, the System enables analysis of more or less discrete change in poverty status over time. While this approach does not assume attribution, measuring change in household poverty status over time does provide important signal on which to make inferences about outcomes of medium- to long-term service provision and highlight areas for further investigation. Our purpose is to return to administer the questionnaires after a year to assess clients' changes in their poverty status.

While this system does not, on its own, capture the complex, dynamic, multidimensional, and context-specific nature of poverty in Bosnia-Herzegovina, it does enable the Organization to understand and demonstrate more clearly and on a regular basis the extent to which it is (a) reaching who it seeks (and claims) to be reaching and (b) fulfilling its social mission. Additionally, it is stimulating organizational learning and, in turn, stronger strategic positioning and development of sound operating policies and pro-poor products and service.

Last, but not least, no poverty-targeting tool can be 100% effective, and the cost of obtaining the last few percentage points usually outweighs the benefits. Thus, a tool should be based on the minimum amount of information needed to achieve the minimum level of accuracy desired ("optimal ignorance"). The scorecard method presents a good level of optimal ignorance.

### *c. Implementation level*

At an implementation level, starting from our experience we suggest to:

- Keep the method simple but robust, that means following the simplest path possible, which still yields the strongest, verifiable information. Inquisitive people naturally want as much information as possible, but complexity threatens the integrity of any system and pursuing many indicators, which yields significant information, will lead to a significant higher opportunity cost to clients and staff alike. In short, it is cost-effective to select as few indicators as is necessary to maintain the integrity of the system to provide the institution just the information that it needs.
- Focus all field-level training on the collecting of accurate information rather than on an exhaustive understanding of poverty indicators or poverty assessment theory.
- Whenever possible, a good assessment methodology should be piloted before full implementation. The questions that it must answer should refer to what are the objectives of the assessment; how is the information to be used and by whom; what level of reliability is required; how complex is the program, and what resources (money, human and time) are available.
- The method we used is simple and intuitive but presents some difficulties for a non-expert user that can be solved with an expert help just for the first time. The cost and time to adopt this scorecard approach is concentrated in the design phase; after this, the process is relatively automatic. Minimal new data needs to be collected within most existing application procedures and captured in an automated management information system (MIS). Such simple data collection requires no specialized training or skills among field staff. Anyway attention is needed for three critical steps:
  - o Building a good questionnaire. In this sense, given our experience we recommend to clearly define all indicators, to formulate non ambiguous, simple questions ensuring simple and consistent wording the way the questions are asked to clients across all branches and loan officers and use a defined set of limited options as possible answers (multiple closed choice) in order to be sure that outputs are comparable and results can be aggregated;
  - o Building a good spreadsheet;
  - o Choosing the more suitable way to collect the answers to make this operation comfortable for clients. Thus recommendation is to place sensitive questions where they are most natural and logical in terms of the flow of questions and to pre-test questions on a sample of clients to identify the most effective wording and placement of questions.



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## Anketa za korisnike mikrokreditnog fonda

N.B. Ova anketa je anonimna i služi isključivo za prikupljanje statističkih podataka sa ciljem određivanja uticaja mikrokreditnog fonda kojima upravljaju Centar za žene i Udruženje invalida rada Općine Breza. Svi prikupljeni podaci će biti povjerljivi i objavljeni samo u cjelini. Podaci će služiti kako bi se izvršila uporedba između ekonomske situacije pojedinih korisnika ovog fonda i ekonomske situacije stanovništva u Brezi te kako bi se odredio uticaj fonda na korisnike kao i mišljenje o efikasnosti ponuđenih usluga.

Molimo anketirane da na slijedeća pitanja odgovore iskreno i potpuno kako bi se osigurala efikasnost ispitivanja. Ukoliko vam treba više prostora za odgovore, molimo vas da koristite poleđinu stranice te da u tom slučaju naznačite broj pitanja.

1. Dob?

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2. Pol?

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3. Imate li automobil? da  ne

4. Koja je stručna sprema tvoh muža/tvoje žene?

5. Koliko članova broji vaša porodica? \_\_\_\_\_

6. Da li imate CD plejer? da  ne

7. Opština/mjesna zajednica u kojoj živite?

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8. Koliko puta sedmično jedete meso za glavno jelo? \_\_\_\_\_

9. Koliko puta sedmično jedete slatko za glavno jelo?

10. Koje je vaše zanimanje?

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11. Da li ste zaposleni na puno radno vrijeme?

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12. Da li li članovi tvoje porodice rade? Ako da, u kojem sektoru?

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13. Da li rade puno radno vrijeme?

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14. Koji su drugi izvori primanja koje imate vi odnosno članovi vaše porodice (bašta, stoka, prodaja ili konzumiranje domaćih proizvoda)?

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15. Jeste li penziji? Ako da, da li imate dodatna primanja (bašta, stoka, prodaja ili konzumiranje domaćih proizvoda)?

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16. Koja je vaša stručna sprema?

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17. Da li ste imali bilo koji oblik stručnog usavršavanja? Ako da, koji?

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18. Planirate li to uraditi? Ako da, koju vrstu stručnog usavršavanja?

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19. Da li se bavite privatnim poslovanjem ili ste zaposleni kod nekoga? \_\_\_\_\_

20. Imate li svoju firmu? \_\_\_\_\_

21. Ako da, imate li zaposlenih? Koliko?

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22. Ako radite u nekoj firmi, koliko ona broji zaposlenih?

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23. Jeste li podizali pozajmnice u drugim kreditnim agencijama (banke, mikrokreditne organizacije) ? Od kojih?

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24. Jeste li ikada tražili kredit od drugih? Koga? \_\_\_\_\_

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25. Jeste li član nekog udruženja u brezi ili negdje drugo? Kojeg?

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26. Da li neka od njih vode mikrokreditni fond? Koji? \_\_\_\_\_

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27. Da li ste od toga imali koristi?

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Pozajmnica koju ste primili od “Centra za žene” ili “Udurženja invalida” vam je poslužio za:

Pokretanje posla

Pokretanje nove firme

Širenje posla

Ostalo. Navesti: \_\_\_\_\_

Nabavku opreme ili materijala za posao

\_\_\_\_\_  
\_\_\_\_\_

22. Da li ste uspjeli u svom pokušaju?

\_\_\_\_\_

23. Koja biste ulaganja napravili kada bi imali dovoljno sredstava? \_\_\_\_\_

\_\_\_\_\_

24. Ako ste pokrenuli novi posao, da li ga vodite vi ili imate partnere? \_\_\_\_\_

25. Ako ih nemate, je li to zato što ih ne želite ili zato što ih ne možete naći?

\_\_\_\_\_

26. Jeste li uspjeli vratiti pozajmnicu u predviđenom roku? \_\_\_\_\_

27. Jeste li uspjeli ostvariti dobit? \_\_\_\_\_

28. Jeste li uspjeli zaposliti ikoga? Ako da, koliko? \_\_\_\_\_

29. Jeste li saradivali sa nekim? Ako da, sa koliko njih?

\_\_\_\_\_

30. Jeste li podijeli zaradu? \_\_\_\_\_

31. Da li o vama mikro kreditni fond dobro funkcioniše? Zašto?

\_\_\_\_\_

\_\_\_\_\_

32. Može li funkcionisati bolje? Kako? \_\_\_\_\_

\_\_\_\_\_

33. Jeste li imali poteškoća sa mikrokreditom? (procedura, vrijeme, rukovodstvo, organizacija...)

\_\_\_\_\_

\_\_\_\_\_