

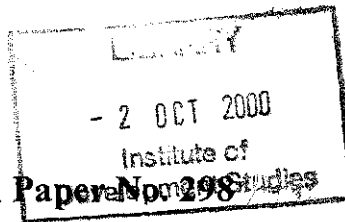
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**IMPACT ASSESSMENT  
OF MICRO-ENTERPRISE  
PROJECTS**

IDS Discussion Paper No. 298



**The Reme Project Series**

**INSTITUTE FOR DEVELOPMENT STUDIES  
UNIVERSITY OF NAIROBI**

IDS



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## **1. Background\***

The Department for International Development (DFID) and the British Aid for Small Enterprises (BASE) are supporting micro-finance projects in Kenya. The goal of the projects as set out in the logical framework is to provide additional employment and self-employment opportunities, especially for poorer people and increase their incomes through improvement in the production capacity of their micro-enterprises. For this goal to be attained, the capacity of private sector intermediary micro-finance institutions to promote micro and small enterprises (MSEs) on a sustainable basis is being developed. Indicators that help to measure progress toward attainment of the goal such as number of jobs created by the MSEs and growth of capacity of micro-finance institutions have been spelt out. However, to know how far this goal is being attained, impact assessment needs to be carried out.

This paper examines key issues that need to be borne in mind by those carrying out impact assessment. It considers the conceptual framework that guides assessment, research design, methods and techniques, gender relations and the problems of attribution and fungibility.

Noponen (1997:3) holds that most organisations establish monitoring and evaluation systems to help them learn from their experience and use the experiences to improve their performance, expand their operations or adapt some of their operations to local situations.

Evaluation has been defined by Scriven (1967), Glass (1969) and Stufflebeam (1974) as the assessment of merit or worth of a programme. The Joint Committee on Standards of Evaluation

(1981) defined evaluation as the systematic investigation of the worth or merit of some object. Suchman (1967:7) saw evaluation as referring to the processes of assessment or appraisal of value. According to Linchfield et al. (1974:4), appraisal refers to the process of analysing a number of plans or projects with a view to searching out their comparative pros and cons and the act of setting down the findings of such analysis in a logical framework.

These definitions show that the concepts "evaluation", "assessment" and "appraisal" are synonymous and are used interchangeably.

The concept "impact assessment", which is widely used in the literature on micro-enterprise refers to a type of evaluation or assessment that focuses on outcomes or effect of a programme (Oakley, 1987:31). Goldmark and Rosengard (1981:10) see impact evaluation as referring to the assessment of a small-scale enterprise's effect on its intended population. The assessment entails an analysis of the enterprise's viability and its interaction with and influence on the community as an outcome of an external programme of assistance. Goldmark and Rosengard caution that impact evaluations should not only describe financial or managerial changes occurring within the micro-enterprise and how far the changes are meeting development objectives, but also observe the changes that have taken place in the community.

Impact evaluation studies have become popular with donors and, as a corollary, have become a significant component of donor funding and, consequently, of recipient institutions (Hulme, 1997). Their objectives are:



- a) to figure out the effects of intervention in changing the conditions facing the target population (Oketch et al., 1991);
- b) to objectively justify continuing support to MSEs and also validate their choice of given modes of intervention; and
- c) as a stage in the project planning process, evaluation seeks to provide information pertaining to important implications of the planning process, i.e., it helps to establish what happened where particular options were taken up, whether anticipated effects occurred, who gained or lost, when the effects occurred and the efficiency of the investment in relation to resources used and benefits derived (Linchfield, et al. 1974).

To achieve these objectives, donors seek more information about programme effectiveness than is readily available from routine impact and monitoring systems of recipient institutions. Besides measuring the efficacy of programmes, donors often emphasise impact evaluations to meet the accountability demand of their home governments and thus justify continued support. To this extent, impact evaluations tend to be donor-driven (Hulme, 1997). Donor institutions such as DFID have legitimate interest in measuring programme impacts as in the case of the REME project.

Impact evaluation also exposes internal problems and constraints, and provides benchmark information for comparing, ranking and selecting sets of appropriate methods (REME Project Proposal, 1997).

These objectives place high demands on the quality and accuracy of data. However, given the context of developing

countries (limited numbers of professional researchers, few written records, illiteracy, communication problems, lack of respondent motivation and limited budgets), such evaluations might not generate accurate measurements of impacts, and caution has to be exercised when they are performed.

## **2. Impact Evaluation Frameworks**

Evaluation, assessment or appraisal can be carried out using the conventional or participatory approach. The conventional or traditional approach is based on the practice of "evaluation as a science". The participatory framework emerged as a result of the dissatisfaction of some researchers, educators and practitioners with the conventional approach. Outlines of the two approaches are presented below.

### **2.1 Conventional Evaluation**

The conventional evaluation follows the positivist scientific tradition. To follow the experimental method (say for a business training programme), it is necessary to randomly assign applicants between those receiving the "treatment" and joining the "control" group - though even in this case a distortion is introduced unless the control group can be given the training equivalent of a placebo. This presents obvious problems of motivation (how to encourage non-recipients to co-operate with interviewers) and ethics (whether agencies can justify allocating resources in such a transparently arbitrary manner). While these may not be inseparable (Sebstad, et al., 1995:51), the truly experimental approach has rarely been used in impact assessment. In a fast changing environment, ends (in terms of improved decision making) are unlikely to justify such ruthless means.

Quasi-experimental methods do not pretend to establish a true control, seeking instead to explain variation in the impact yardstick by statistical or econometric means (Moffitt, 1991 for a reasonably reader-friendly survey). Variation may be augmented by inclusion of a non-random control group, and indeed, if the control group is sufficiently similar to those receiving, then simple with/without comparisons may themselves be significant. Seeking to explain variation in changes in the value of chosen yardsticks over time further strengthens the analysis. See Table 1 for more details.

For project participants, the necessary data may be routinely collected on application forms (intake data) and variation may be enhanced by including rejected applicants too. In order to carry out programme evaluation an important foundation is the collection of systematic intake data, and its harmonisation across participating organisations. A further advantage of pooling data across programmes is that the high cost of data analysis is at least spread more widely across the programme. If this data is also similar to that collected through baseline surveys, then the Holy Grail (for econometricians) of a panel data set (including participants and non-participants in various programme components before and after they joined) looks achievable.

Narayan (1993) and Mikkelsen (1995) note that the conventional approach has the following features:

- it is carried out by outside experts;
- emphasises scientific objectivity achieved partly through the use of uniform procedures;

Table 1: Impact attribution within the positivist scientific tradition

	Client Group	Control Group
Pre-Project	[A] ... d1 ...	[B]
	d3	d4
Post-Project	[C] ... d2 ...	[D]

**Key**

- [A], [B], [C], [D] = Estimates of enterprise employment for each group in each time period.
- d1 = Difference in employment arising from non-random selection of client and control groups (selection bias).
- d2 = Difference in employment arising partially from project impact and partially from selection bias.
- d3 = Change in employment partially due to project impact, and partially due to other or *exogenous* events.
- d4 = Change in employment due to exogenous events.

Best estimate of impact attributable to the project =  $[C - D] - [A - B]$

Key assumptions

- Characteristics of client group and control group before the project were identical
- Control group completely unaffected by the project
- Exogenous events affecting client and control group are identical

Second best estimates of impact

1. A perfect control group is impossible to establish with non-experimental data (selection bias problem). "Comparison group" is often a more accurate term than control group. However, it may be possible to identify future or potential clients in non-project areas as a control group, but homogeneity of the two areas in other respects is then important.
2. As for best estimate, but with [A] and [B] based on respondent recall. Additional problem of recall bias (likely to be different also for client and control group).
3. No pre-project information at all. Very difficult then to attribute  $[D - C]$  to the project rather than to systematic differences in the samples arising from the selection process (selection bias).

Only [A] or [A-C] available. Problem is that this may be influenced as much by exogenous factors as the project. However, if there is some variation in the level of "treatment" (i.e. involvement with the project) then some statistical analysis of impact may still be possible. But multi-collinearity may then be a problem; for example because the biggest users may also have been initially the most prosperous.

- usually done upon completion and sometimes mid-term to establish accountability and to show whether funding should be continued;
- seeks to establish what has happened in the project from the time of inception or conception to the date the assessment is done;
- relies on a logical framework that outlines objectives and outcomes including indicators of success;
- uses measurements to quantify outcomes in ways that ensure reliability and validity of data collected; and
- requires that data be systematically collected, analysed and reported in a document that contains data, evidence and results.

One limitation of the conventional methods is that they are difficult to effect where clear objectives have not been formulated from the outset of a programme of intervention. However, their major limitation is their reliance on outside experts and consequently their inability to mobilise and involve stakeholders in the assessment process. Noponen (1997) adds that standard quantitative evaluations are often divorced from the needs, the indigenous knowledge and the values of development organisations and their constituent communities. Korten (cited in Noponen, 1997) says that the quantitative approach often fails to consider complexity of the development process, and hence fails to conceive the 'process' view of the project.

## **2.2 Participatory Evaluation**

Participatory evaluation stems from the qualitative inquiry tradition, which tends to focus on a smaller sample, making it possible to concentrate available skilled (interpretative) research power more intensively. Truth resides less in valid

statistical inference than in careful examination and cross-checking of plausible explanations.

In the case of quasi-experimental approaches, cost constraints generally make it necessary to pre-select a smaller number of variables, and exclude those that cannot be collected through relatively mechanical interviewing methods. Qualitative inquiry, in contrast, is more open to unexpected changes, and unexpected reasons for those effects. It can also probe into issues beyond the reach of the pre-coded questionnaire. Such work can also be more adaptive, and is hence less prone to turning into expensive mistakes, or what Chambers (1983:52) described as *survey slavery*.

The main criticism levelled at qualitative research is that small sample sizes limit the scope for generalisation. However systematic selection of case studies or stereotypical observations from larger survey frames (e.g. through wealth and health ranking exercises) can go a long way to overcome this.

The contrasts between positivist impact assessment and more qualitative approaches should not be overdrawn. For the approaches are more generally complementary. Case studies are already well established at the design or pilot stage in the scientific tradition, for example. Qualitative research may also be used to probe reasons for different impacts, while more formal surveys seek to establish their relative magnitude. The sharper dichotomy may not be between qualitative and quantitative approaches, but between good and bad research practice within either tradition.

Participatory approaches (generally peddled under an acronym beginning with "P" such as PLA, PAR, PRA etc.) may be viewed simply as an extension of the range of techniques available for case-study research in the tradition of qualitative inquiry. These include for example various forms of collaborative activities (walks, plays, production of pictures and models) and ranking exercises.

However, in their fully worked out form, participatory approaches represent a more fundamental methodological departure. For they question the power relationship between researchers, project staff and respondents. This in turn entails a reappraisal of their respective levels of understanding, and knowledge requirements. To the extent that decisions are decentralised, then so is the target audience of impact assessment. At the extreme, more formal ways of establishing truth then become less important than truth based on personal trust.

In the case of credit, for example, this approach may be linked to the movement towards decentralising loan screening to borrower groups. If borrowers have a better appreciation of the capacity of their peers to repay loans, then they are also likely to have a better understanding of the impact of the loans on their income and well-being. Moreover, if they have a stake in a peer group or financial institution themselves, they may also have an incentive to help monitor the health (or what some have referred to as *client sustainability*) of its other members. Some micro finance programmes, for example, already ask members of their borrowing groups routinely to rank the health of their peers' overall livelihood position. This lays the monitoring foundation for an approach to evaluation that is rooted in borrowers' and lenders' shared vested interest in

enhancing not just the short-term financial viability of loan contracts but also the underlying strength of its clients' livelihoods.

But this example also illustrates the limits to participatory impact assessment. Individual borrowers may be able to assess the risks of loans within their own peer group. But some form of collective decision making (democratic or otherwise) is needed to take into account "covariant risk" and "fallacy of composition" problems across programmes, such as might arise if different groups all decided to invest in the same line of business. There may also be limits to empowerment (and hence participatory impact assessment) to the extent that specialist knowledge, if required, about market trends (new technology, new sources of competition, changing regulation etc.) may not be available.

Participatory evaluation emphasises the analysis of social benefits. It is seen by Mikkelsen (1995:167) as concerned with adaptation and adjustment of a project based on conditions set by the participants. Narayan (1993:2) holds that participatory evaluation is a management tool that helps in reaching stated objectives. She adds that it is a systematic way of learning from experience and drawing from lessons to correct and improve on going and future activities. Mikkelsen (1995:167) notes further that participatory monitoring and evaluation (PME) has two main purposes of being: (a) a management tool that enables people to improve their performance, and (b) an educational process in which participants increase awareness and understanding of factors that affect their situation thereby increasing their control over the development process.



Some of the features of participatory assessment noted by Narayan (1993:2) are collaborative decision-making, a problem-solving orientation, capacity building, use of multiple methods and use of experts. Each is briefly explained.

- **Collaborative decision-making** is emphasised in all aspects of a programme between all stakeholders including women, children, the poor and junior programme staff.
- **In a problem-solving orientation**, participants are assisted to learn and understand their problems and situations and to take timely actions. The participants are also encouraged to be creative and effort is made to understand their local knowledge and use it as a basis for programme activities.
- **In capacity building**, beneficiaries are involved in data collection processes, share knowledge gained and use it as a basis for their actions. Educational forums such as workshops, field days and so on also help to build the beneficiaries' capacity.
- **Multiple methods** are shortcut methods of sampling, data collection and analysis, which permit creativity and facilitate learning and sharing of experiences among various participants. People define and carry out the work, which may include mapping and drawing and sorting out pictures. The tasks release energies and enthusiasm of the participants. The methods are derived from many disciplines and are adapted to meet specific tasks at hand. And, if the methods that are available are found to be unsuitable, new ones are created. Such use of multiple methods and different stakeholders partly helps to ensure validity and reliability.
- **Experts experienced in facilitation** with a strong belief in human potential and with ability to listen serve as facilitators in decision making relating to the purpose of

evaluation, methods of data collection and analysis, field implementation, etc. They help to merge specialised expertise with local experience, indigenous knowledge and learning systems. The experts share ideas with stakeholders, help them to consider options and encourage them to take a lead in the evaluation process. Whereas outside experts dominate the conventional framework, in the participatory framework, local stakeholders dominate as evident from the following remarks (Mikkelsen 1995:169) "...beneficiary assessment...by amplifying the voice of the people for whom development is intended...empowers...(them)...to help themselves. It is an instrument to create dialogue...and calls for understanding between managers and beneficiaries." Noponen (1997:31) explains this point further by pointing out that participatory methods are based on the assumption that the poor are capable of investigating, analysing and planning for their own situations. He adds, "...the roles of outsiders including development organisations are to act as convenors, facilitators and catalysts for development activities..." "The participant community becomes not only the data gatherers but also the analysts and archivists. They collect, analyse, act upon and own their data.... The assisting development organisations and donors(s)...also benefit when participants share with them their learnings — their data, analyses, revised strategies and achievements."

When using a participatory framework the following steps, which were proposed by Feuerstein (1995), are observed:

- stakeholders of a programme agree to use a participatory approach
- a small group is selected to plan and organise the evaluation

- objectives of the assessment are agreed upon
- evaluation methods are selected
- an evaluation plan is prepared showing why, how, when and where the assessment is to take place and who is to be involved
- evaluation methods and tools are tested and the evaluatees are trained in interviewing and in collection of other data needed and about the objectives and methods used
- information and facts are collected
- the facts and information are analysed
- the results are prepared in written, oral or visual form for presentation to different groups connected with the programme
- programme participants decide how the assessment results are to be used and how they can help to improve the performance and effectiveness of the programme

To be sure, the participatory framework that we have outlined is ideal. As Noponen (1997:331) has observed, many techniques, which are claimed to be participatory, are hardly so in so far as they extract information from participants and rarely involve them in the assessment process.

In many cases, the conventional and participatory approaches are used in combination. The challenge for those concerned with participatory impact assessment is to move toward increased use of participatory techniques as ideally conceived and to combine these with conventional methods as need arises.

### **3. Research Design in Impact Evaluation**

Impact evaluations are based on conceptual designs or frameworks. Singleton et al. (1988) define a research design as an overall framework or plan for an investigation. Nachmias

and Nachmias (1981) add that a design is a logical model of proof that guides the investigator in the various stages of the research.

### 3.1 Choice of Research Design

To choose an appropriate research design, the researcher must in effect anticipate all of the subsequent stages of the research. Preliminary decisions have to be made regarding the nature of observations needed to meet the research needs. Thus the purpose for which research is conducted has important implications for the structuring of the entire research activity, i.e. whom or what to observe, when to observe, how to collect, collate, describe and analyse the data.

### 3.2 Elements of a Research Design

Generally, as observed by Greer (1969), Singleton et al. (1988) and Hulme (1997), three main elements are distinguished in a research design.

- a) Specification of units or levels at which impacts are to be assessed;
- b) characteristics (variables) of the entities to be observed, and
- c) the types of relationships anticipated between various characteristics.

#### 3.2.1 Units of analysis

The entities (objects or events) under study are the units of analysis. Researchers are concerned with identifying whom or what will be studied. Common units of analysis include the household, the enterprise or the institutional environment (Hulme and Mosley, 1996). Occasionally, researchers may

choose to investigate at the individual level (Goetz and Sen Gupta, 1996).

Each unit of analysis has advantages and disadvantages, relative to the others. The choice of units to focus on depends on a number of factors. Suffice it to say, however, that the purpose for which a study is undertaken dictates whom or what will be described, compared and analysed and, therefore, what the appropriate units of analysis will be.

In the REME Survey for instance, the focus is on measuring the effectiveness of private sector intermediary institutions to deliver desired services and, consequently, on the benefits accruing to beneficiary enterprises and households. In this regard the choice of three units of analysis, i.e. household, enterprises and institutions, is justified.

In principle, there are no limitations to the selection of units to be used in a study. Nonetheless, once a selection has been made, subsequent operations including the level of theorising, have to be in tandem with the units selected. Besides, and as Robinson (1950) observes, it is important to accurately identify the unit(s) of analysis. Confusion over units may result in false conclusions and, in effect, drawing of fallacious inferences. Robinson goes ahead to identify two such fallacies:

- i) the **ecological fallacy**, where group properties are used to make inferences on individual behaviour; and
- ii) the **individualistic or atomistic fallacy** (also reductionist fallacy), where individual attributes are used to make inferences about groups.

### 3.2.2 Variables

While the researcher observes the units of analysis in the process of the study, it is in establishing the relationships between the characteristics of the units that the scientists are primarily involved. Singleton et al. (1988) define variables as characteristics of units that vary, i.e. take on different values, categories and attributes. When observing individuals as would be the case for beneficiaries in the REME Survey, any set of characteristics that may differ for different beneficiaries such as age, sex, marital status, level of education, income, *inter alia*, are variables.

The assumption behind intervention programmes is that they are seen as prompting changes in knowledge, attitudes and behaviour patterns in ways that lead to the achievement of desired outcomes or at least, make them more probable.

In this regard, impact studies evaluate the difference in the values of key variables. All changes are assumed to be influenced by mediating processes (specific characteristics of the agent/beneficiary and of the socio-economic and demographic environments) that influence both the behavioural changes and the desired outcomes (Sebstad et al. 1995).

In any one study, there is an array of variables and the key variables to be investigated, depending on the choice of the evaluation team. Generally, distinction is made between two main schools of thought: the intended beneficiary school and the 'intermediary' school (Hulme, 1997). The intermediary school focuses on intermediary institutions and especially on their operations (Hulme, 1997). The two key variables in this school are institutional outreach and institutional sustainability (Yaron et al. 1997). The intended beneficiary school, on the

other hand, seeks to assess the impact on intended beneficiaries, be they individuals, households or enterprises (Hulme, 1997). In this regard the REME Survey, given its choice of variables falls within the intended beneficiary school of thought.

### 3.3 Relationships

The researcher's ultimate aim is to make sense of reality by discovering enduring relationships about phenomena (Batte, 1971). Much research therefore is directed at identifying, developing and testing relationships. A researcher, having decided what to observe and ignore and having identified the variables that are anticipated in terms of relationships, has to decide what kinds of relationships to test. Such decisions inevitably derive from the researcher's expectations about how variables are related to one another. Babbie (1983) cautions, however, that researchers are not concerned with any kind of relationships. Rather, they are interested in relationships between variables where changes in one variable are accompanied by predictable changes in the other(s) (see also Leik, 1972).

In actual research, such perfect relationships are rare. To the researcher, therefore, the focus is not so much on whether a given pair of variables are perfectly related, as on how strongly they relate. In the REME Benchmark Survey, for instance, observations were made of the relationships between a number of variables anticipated to impact on the performance of MSEs, with a view to testing them during the impact evaluation. Even then emphasis will not be on testing perfect relationships but on the extent to which given sets of variables combine to explain the MSE sector.

### 3.4 Causal Relationships

At the heart of any impact evaluation is the attribution of specific effects or impact to specific causes, i.e. interventions (Hulme, 1997). It is instructive to note from the onset that the issue of causality has been hotly debated. On the shortcomings of "attribution" (Kevlinger, 1973) argued that the concept of cause ought to be expunged from social science research pursuit while others (Blalock, 1964) have maintained that to think causally is very helpful, especially when working with causal hypotheses.

Without getting lost in this debate it is imperative, however, to note that the issue of causality is relevant, especially given that during the REME impact evaluation, focus will be directed towards identifying factors that contribute to the growth, stagnation or retrogression of MSEs. This in itself implies causality. The question to pose therefore is: what kind of evidence supports the belief that a causal relationship exists?

Social scientists identify three main types of evidence that are required to establish causality. These are:

- i) Association (the pattern of change in one variable must be related to changes in another). For example, "Are changes in levels of education followed by changes in management of MSEs?"
- ii) Direction of influence, i.e. a cause must precede its effect.
- iii) Non-spuriousness, i.e., association must not be attributable to extraneous variables. For example, "Is good management of MSEs among highly educated entrepreneurs necessarily due to their high level of education?"



The point to emphasise here is that since researchers (as in the case of the REME impact evaluation) will inevitably deal with relationships between variables, and they may also have to contend with cause-and-effect relationships, they have to exercise caution in order to provide adequate evidence that the relationships between the variables are indeed causal.

### 3.5 Choice of Methodology

An impact evaluation team can choose from a variety of methods - sample surveys, focus group discussions and other rapid appraisals, participant observations, case studies, etc. Since the 1980s, impact studies have increasingly moved away from single method approaches to multiple approaches (Hulme, 1997). For any impact evaluation, therefore, the issue is not so much what method to choose, but rather what combination of methods to opt for. Since different approaches have relative advantages and disadvantages, the choice of approach(es) will be contingent on a number of factors. Little (1997) identifies five such factors:

- objectives and purpose of the assessment;
- the use to which information will be put;
- levels of accuracy and reliability required;
- complexity of the program; and
- resources (human, financial and time) available.

The appropriate method, or combination of methods, will therefore be one that best fits the needs of the study, taking into account the available resources and any other constraints that may be faced.

## **4. Tools and Techniques**

### **4.1 Stakeholder Analysis**

There has been a growing recognition over the last decade that effective development practice involves the active management of the processes of project implementation and policy formulation (Grindle and Thomas 1991, Rondinelli 1993). There is a need both during formulation and during the implementation of projects to maintain an iterative process of reflection between experiences in implementation and the objectives of the project.

#### **4.1.1 Why do stakeholder analysis?**

Stakeholder analysis is one approach, which can be used in conjunction with other key project management techniques, to improve management insight into potential threats and contributions to the effectiveness of a project. It is closely associated with goal orientated management tools such as GTZ's ZOPP or DFID's logical framework (Shields 1993), since it helps clarify the basis of risks and critical assumptions which are required if a project is to achieve its objective.

Stakeholder analysis can be used to identify those individuals or groups whose interests may be affected by a project and who in turn may use their influence to affect the formulation or implementation of a project. As with the logical framework it makes best sense if this management tool is used throughout the lifetime of a project to continually appraise whether the project is achieving its objectives, and how interests are evolving during implementation in relation to the project. If a stakeholder analysis has not been conducted at the point of formulation of a project or policy, it is certainly a useful tool during review or evaluation stages.

Recognising that different people have a stake in projects and can have different interests, also has implications for processes of evaluation and impact assessment. From this perspective, the process of evaluation is seen as one which is essentially contested and, at the least, is a process of negotiation (Majone, 1989). As such exercises in evaluation and impact assessment fundamentally involve persuasion, and debates over what is appropriate evidence and argument. A stakeholder analysis may serve to make more transparent or to demystify what power lies behind certain data and argumentation during evaluations.

#### **4.1.2 *Doing stakeholder analysis***

The aim of a stakeholder analysis is to identify those whose interests will be or are being affected by the planned intervention, whether project or policy, and to assess the potential influence they may have on the project. The techniques used to identify the stakeholders can range from the formal to the informal. Project formulators and implementers should be expected to be aware of who are likely to constitute the cast of stakeholders. However, this can be supplemented by the use of group consultations and semi-structured interviews during project formulation.

Stakeholder analysis has some affinity with the notion of a participatory approach to development. Apart from its more instrumental, managerial function the analysis can also be used to improve stakeholder participation in the design and implementation of interventions. However, there is also potential conflict between the process of carrying out a stakeholder analysis and the principle of participation. In particular, where a stakeholder analysis is politically sensitive, the potential for and value of more participatory methods for identifying stakeholders and their influence will be limited.

Recognising the political nature of stakeholder analysis requires the researcher to exercise a degree of diplomatic judgement about the extent and nature of participation in the analysis.

Once a cast of stakeholders has been identified, it is common to have systems of categorisation. These are rough and ready, but can be useful as a starting point of analysis. For example, the UK Department for International Development (DFID) personnel categorise stakeholders as:

- **Primary:** those ultimately affected by a project. These people may be affected positively (beneficiaries) or negatively (e.g. people displaced by an infrastructure project).
- **Secondary:** those involved in delivering the development intervention (for example, officials of aid agencies, governments, NGOs etc.). This would include both those who are involved in decision-making in the project/policy process and those who may have been excluded from it.
- **Key:** those who may be indirectly affected by the project, but who may exercise a large degree of influence, which can affect the intervention (for example, local elites, religious leaders).

Thus, in the case of a micro-finance project the primary stakeholders would be the intended beneficiaries; the secondary stakeholders would be the staff of the organisation or organisations delivering the financial services and the staff of the agency responsible for funding the project. Key stakeholders might include, local moneylenders or traders whose clientele would be affected by the project, government officials who may have a positive or negative view of the project, and local religious leaders who regard the project as improper.

Having identified and categorised stakeholders the next step in a stakeholder analysis is to assess their interest in and potential impact on the intervention. Once again a range of formal and informal research techniques may be used to gather information on the ways in which different stakeholders have an interest in a project and the ways in which they might influence a project. As above, the same caveats about the need for diplomatic approach must be applied. The narrative that is produced of the types of interests of different stakeholders can then be translated into key assumptions in the project logical framework. For example, if a new project requires the staff of a development agency to change their work patterns in a way which they are likely to regard unfavourably, then the assumption might be that the project can only achieve its objective if negotiations are carried out with staff which result in them accepting the new work patterns.

While the initial categorisation of stakeholders as primary, secondary and key seeks to assess the centrality of the stakeholders to the project, it is also useful to assess both their importance in the policy objectives of the funding agency and the amount of influence that different stakeholders can bring to bear on a project. In this respect the analysis can be advanced using a simple matrix to locate stakeholders. The vertical axis of the matrix ranks stakeholders in terms of their 'importance' to the project while the horizontal axis ranks the amount of 'influence' they may bring to bear (see Table 2). In this diagram, 'importance' is different from the initial categorisation exercise of primary, secondary and key. Importance here means the extent to which the needs and interests of a particular group of stakeholders are regarded as a priority by the funding agency.

**Table 2: Stakeholder Matrix**  
*(Illustrated using the case of a proposed private sector population project in Pakistan)*

High Importance	A *5 *4 *3	B *2 *1
Low Importance	C *7	D *6
	Low Influence	High Influence

**Cast of Stakeholders\*:**

Secondary Stakeholder: 1=Ministry of Population Welfare; 2=Pharmaceutical companies and distributors; 3=Development funder

Primary Stakeholders: 4=Lower-middle income groups; 5=Women.

Key Stakeholder: 6=Islamic clergy; 7=Traditional birth attendants.

Source: 'Guidance Note on Stakeholder Analysis' DFID, 1995.

This matrix is used as an impressionistic tool to rank the importance and influence of stakeholders in relation to each other. Those stakeholders in quadrant B have both high importance and high influence and are therefore crucial to the project. In quadrant D, the stakeholders have high influence, even though they are of no particular importance to the project. Stakeholders in quadrant A are regarded as of importance to

the project, but have low influence. The stakeholders in quadrant C are of low importance and also have low levels of influence. In the case project above, the reaction of the Islamic leaders to the project is crucial, since although they have no direct importance for the project their influence, if used against it, could be damaging. The primary stakeholders, however, are of high importance to the project but have relatively low influence. In particular, women have lower levels of influence than the general, lower-middle income target group, even though they are of greater 'importance' or are a higher priority for the funding agency.

Stakeholder analysis is a processual tool, which seeks to provide information with which development interventions may be better managed. The analysis proceeds from the recognition that even if all the actors in a project share the same broad objective (for example, to make a positive development impact), there are likely to be, for each stakeholder, more detailed interests and objectives underlying this. Clarifying what these different detailed objectives might be for each category of actor, and then considering the extent to which these objectives are consistent with each other, is a key part of effective policy or project management.

#### **4.2 Wealth Ranking**

Wealth ranking is a technique for sorting clients or "observations" along a scale or into groups according to an agreed criterion. This section considers how it can be useful, the steps involved in carrying it out, and its strengths and limitations.

#### 4.2.1 *The uses of wealth ranking*

There are two applications of wealth ranking which may be said to be the most important.

One of them is to understand how different stakeholders understand *wealth* in relation to a client group, and the nature of variation in wealth within it. For example, in some rural areas ownership of cattle may be regarded as a more important indicator of wealth than control of land. Aspects of wealth that are not obvious to outside researchers may be identified in this way.

The other one is to obtain a continuous measure of wealth within the group that can be used in sample selection or quantitative analysis. This measure may incorporate components of wealth that it is hard to measure using survey questionnaires (such as power and status). It permits inferences to be drawn about the extent to which a programme provides a better service to more or less wealthy clients.

There are other possible uses of wealth ranking. For example, it may be used to understand diverse local perceptions of another key variable, such as business potential or vulnerability. This might be useful, for example, in a study of why some businesses grow and others do not. It may also be used to rank and measure variation in the performance of *groups* of clients, such as borrowing groups or even bank branches. This is useful in studying the extent to which stakeholders (including staff at different levels of an organisation) have consistent views as to what constitutes good performance (e.g. repayment rates, deposit mobilisation, group solidarity and self-reliance). It can also be used as part of a stratified sampling procedure for a survey, or in identifying focus groups. For example, *health*



ranking of savings groups might be used to ensure that focus group discussions were held with a representative sample of healthy and unhealthy - as defined by the organisation itself.

#### 4.2.2 *Doing a wealth ranking*

Five steps for carrying out a wealth ranking can be distinguished:

1. *Defining the community boundaries and units for ranking.* A key issue here is that it must be possible to identify individuals with a good knowledge of all the units that are to be ranked. It is also good ethical practice that all units (or at least their legitimate representatives) should be consulted and agree to the exercise. Once the community has agreed, the name of each unit for ranking within that community should be written clearly on to a large piece of card, and each should be given a code number.
2. *Explaining the exercise to the community.* This is a necessary step for ensuring voluntary participation. It may also help in eliciting understanding of what criterion should be used for ranking, and identifying key informants for the next step.
3. *Sorting.* Ideally, at least three individuals should be asked to sort the cards into piles of units that are similar with respect to the agreed criterion. For example, when asked to sort businesses according to their strength, one informant may sort them into piles of businesses that (a) employ other people, (b) rely on family members, (c) rely only on the labour of the owner. Another might use a different criterion of business health and arrange the cards into a different number of

piles. One pile might consist of units the key informant has no knowledge of. Thus the facilitator can learn a lot from talking with and observing each key informant as they do the sorting. In some cases, there may be a strong preference for sorting the cards out collectively, because each informant has complementary information. However, better information is almost always obtained when sorting is done separately, and the results then combined.

4. *Aggregation.* Individual rankings into piles can be turned into a combined continuous ranking score using the following simple arithmetical methods. A score (out of 100) is worked out for each pile by dividing the pile rank (1, 2, 3 ..... ) by the total number of ranked piles, and then multiplying by 100. The average score for each unit can then be worked out for all rankings by different key informants, so long as there are at least two.
5. *Ranking.* Where an average ranking is needed, rather than individual scores, then the data can be re-sorted by score, and groups formed by identifying the largest jumps in the scores working down from the highest to the lowest.

#### 4.2.3 *Strengths and limitations*

The potential strengths of wealth ranking are to be found in its use for empowerment, its data quality, cost effectiveness, and flexibility.

Members of the community can understand the exercise for themselves and usefully learn from it. It works through rather than around group structures. People with poor literacy and numeracy skills can also be involved. Moreover, important data can be obtained that is not easily measurable or easy to obtain by other means. The exercise can also be quick, yields useful information itself, does not require interviews with each individual unit and can improve the reliability of sampling. Finally, with imagination, it can be used in many different ways and for a variety of purposes. It can also be fun.

The limitations of wealth ranking have to do with its scope, loss of information in aggregation, and abuse. It is difficult to use for large groups because key informants cannot be found with adequate knowledge of all units within it. This is particularly true in urban areas, where neighbours' knowledge of each other is often very little. In addition, the relative importance of different factors that influence the wealth or health of a unit may be lost. The ranking is also subjective in its dependence on the views of key informants and other methods (e.g. participant observation, questionnaire based surveys) may expose some bias if these are not chosen carefully enough. Gender bias, for example, may result from key informants all being of the same sex. Furthermore, the potential of the technique to be empowering will not be realised if it is used in a narrowly extractive way. Indeed, if step 2 is carried out in a cursory way it may increase suspicion and hostility, or raise false expectations.

## 5. The Problems of Attribution and Fungibility

### 5.1 Attribution

At the heart of all social science research is the issue of what constitutes truth, proof or valid evidence. This also applies to the more applied field of impact assessment but with some distinctive twists. Firstly, the work is more explicitly and specifically oriented to particular forms of action, and hence the task is not just to establish "truth for truth's sake", but truth of a kind that particular decision-makers or actors accept and can act upon. Generally, there is a manifest demand for evidence of impact in order to inform decisions about how best to provide a particular service, or whether it deserves more support.

Secondly, and closely linked to this point, is the issue of optimal ignorance - or the problem of having to be *efficient* in marshalling evidence within predetermined time and resource constraints (Moris and Copestake, 1993). Keynes' dictum that "it is better to be roughly correct, than precisely wrong" certainly also applies. In the era where process rather than blue-print project cycle rhetoric is on the ascendancy, more latitude exists for learning by doing and delay than in the past perhaps. But the need to justify data collection activities and expense in relation to decisions and action nevertheless remains.

Thirdly, and in contrast to more open or naturalistic research, impact assessment is generally guided in advance by a clearer set of criteria against which impact is to be judged. In relation to SMEs two of the most widely cited are income generation and employment generation, whether in general or in relation to particular target groups, such as women or the poor.

These differences of emphasis have an important bearing both on the methodology for seeking to attribute impact to a particular intervention, and on *who* needs to learn. They can be further explored by distinguishing between three broad approaches to attributing impact: positivist science, qualitative inquiry and participatory inquiry.

## 5.2 Fungibility

A brief note is worth making about fungibility. Money is said to be fungible or interchangeable because it is difficult to attribute the decision to spend it on a particular good or service, to a particular source of money. If you think of a household budget as a 'black box', then coins go into it from different sources (according to the household's livelihood portfolio) and are then taken out for different expenditure purposes. When an expenditure is made, the origin of the coins taken out of the box is indistinguishable as they are all the same.

The link between fungibility and attribution can be illustrated using the case of micro-finance credit, where a loan of X is taken, and an investment of Y is made on a fixed asset. The lender, and even household members might link the two in their minds. They may even formally do so by *hypothecating* a newly purchased asset as collateral for the loan. But it remains possible that Y would have been purchased even if X had not been secured. It may thus be that the real effect of X at the margin has been to permit expenditure Z. For example, while the business required the purchase of a bicycle, this would have been purchased even if the loan had not been taken. A sacrifice would have been made of not purchasing new clothes for children going to school. Having received the loan both the bicycle and the new clothes have been purchased. Even where the value of Y is so large relative to overall household

income, that it could not have been purchased without extra finance, it is possible that in the absence of loan X the household would have availed some other source of finance. The true marginal impact of access to the new loan then hinges on the difference in loan terms between the two sources of finance, as well as the effect on household behaviour of having access to a higher total amount of credit.

The fungibility of loans makes it difficult to attribute a specific impact to a particular micro-finance intervention. This is particularly the case where the financial affairs of enterprises are not readily distinguished from the financial affairs of the owners' household, family and other creditors. The main implication for impact assessment is that it is necessary to look beyond business specific criteria of impact and investigate criteria at the household, individual and community levels too.

## **6. Gender Relations in Impact Assessment**

Analysis of gender relations in project impact assessment is very important. However, very few studies have addressed the impact of micro-finance on gender. In doing this, researchers are encouraged to use both quantitative and qualitative approaches employing triangulation, i.e. using mixed methods and data sources in studying the same phenomenon (Brydon and Chant, 1988). Studies of this nature elsewhere have used combinations of focus group discussions, surveys, questionnaires, informal interviews, participant observation and PRA techniques (Mayoux, 1997:22).

This section outlines indicators that have been used in other studies and key analytical and methodological problems.

**Table 3: Indicators Used in Existing Impact Studies**

Type of Impact	Indicators Used
Access	Reaching particular target group level of demand for services e.g. number of loans applied for, repeat loans, level of savings, women's control over loan use.
Economic Impacts	Repayment levels, use of loans for women's economic activity, increase in women's income, women's access to and control over assets, etc.
Welfare Impacts	Decreased household economic vulnerability, improvement in women's and household nutrition, increase in women's and family health, increase in women's and child literacy, increased domestic harmony.
Social/Political impacts	Increased confidence and assertiveness role in household decision-making, household and community perceptions of women's role, access to networks, wider political activity.

Source: Mayoux, 1997:23 Box 7

In assessing economic and welfare impacts of micro-finance programmes, there exist both analytical and methodological problems. Financial data is normally available e.g. numbers of loans to women, repayment rates, activities for which loans were given and at the same time background information on women and effectiveness in targeting. According to Mayoux (1997), investigating economic impacts for both women and men can be highly problematic for the following reasons:

- ◆ **Fungibility problem:** Due to fungibility of capital, tracing the destination of loans and savings withdrawals is difficult.

- ◆ **Attribution problem:** Difficulties in assessing the degree to which any changes in incomes or consumption are due to micro-finance services, other income sources or other external factors.

- Restrospective surveys may be unreliable due to imperfect recall activities of such incomes or use of credit and welfare. Difficulties will be experienced in identifying appropriate parameters for comparison.

- If the analysis is based on statistical correlation, proving the direction of causation will be problematic.

- ◆ **Problem of interviewee motivation:** There may be lack of interest and unwillingness to answer lengthy questions.

- ◆ **Problems in measurement:** Further attribution difficulties may be realised in assessing welfare factors such as health and nutritional status since there are many other factors apart from income which may affect these, making attribution difficult.

#### **6.1 Assessing Social/Political/Cultural Dimensions of Empowerment and Decision Making within the Household.**

The assessment of social/political and cultural dimensions of empowerment and decision making at the household level and impact of micro-finance have the following constraints (Mayoux 1997:24).

- ◆ **Interviewee motivation:** Women may give short “correct” answers reinforcing stereotype views, and their answers may vary between interviews.



- ◆ **Difficulties in assessing sensitive information** on access and control over incomes and assets (participant observation or group discussions).
- ◆ **Answers to questions about power and status** are qualitative and those about family are subjective. There may be a range of equally valid perspectives. Furthermore, women's and men's interpretation of their contribution to welfare or decision-making may be radically different and may be significant in indicating change or lack of change in gender relations.
- ◆ **External indicators** may not correspond to those of women themselves thus failing to reflect the significance of women's own choices and empowerment strategies.

Mayoux (1997:65, citing Hashemi and Schuler, 1993) states the following empowerment indicators:

- Freedom of mobility
- Ability to make small purchases
- Ability to make larger purchases
- Involvement in major household decisions
- Relative freedom from domination by the family
- Political and legal awareness
- Involvement in political campaigning and protests
- Economic security and contribution to family support

## **6.2 Access to Programmes**

It is important to note that there is lack of detailed study of the impact of particular programme strategies. Furthermore, impacts are generally assessed for the programme as a whole and effects of particular strategies only assessed incidentally

(Exceptions are studies of the Grameen Bank, BRAC and SCF in Bangladesh). It is possible that negative impacts may give an indication of a programme's gender awareness level and accountability rather than other problems. It is possible that due to lack of systematic research on gender awareness, negative rather than positive trends may be emphasised. According to Mayoux (1997) existing patchy evidence does permit some preliminary conclusions about women's access to programmes and their impacts on women's lives.

#### **6.2.1 *Reaching the target groups***

Many programmes reach thousands of women and further expansion is anticipated in most programmes (Mayoux, 1997: Appendix 1). But available evidence indicates continuing widespread barriers to women's access in many programmes because of programme regulation and targeting services, which are dominated by men. In addition:

- women generally receive lower loan amounts than men;
- many programmes exclude the poorest women by focusing on existing women entrepreneurs with proven business records;
- available evidence indicates that women's groups are excluding the poorest and the most disadvantaged women particularly in cases where group leaders are responsible for ensuring/disbursing loans; and
- there is a linkage between women's access to programmes and employment of female staff.

#### **6.2.2 *Demand***

It is generally believed that micro-finance services address the needs of many women due to the many programmes reporting high levels of demand for credit by women. This is not

necessarily true since there are some programmes that face problems in attracting rural women.

### **6.2.3 *Women's control over loan use***

Research indicates that registration of membership in women's names does not necessarily mean women's control over loan use or participation in decisions about its use. In Bangladesh for instance, the findings pointed out that women were more likely to retain control over loan use when the investment was in traditional women's work e.g. livestock and poultry and marketing goods from the household.

Lack of a clear relationship between women's membership and women's role in decision about loan use is easily established. Evidence exists supporting the fact that in many cases, women themselves choose to hand their loan over to their husbands. In some cases, women said that loan usage was a joint decision regardless of who used it.

### **6.2.4 *Economic impacts***

- ◆ **Repayment:** This is the proxy indicator used for increased income. Evidence indicates the existence of high levels of female repayment compared to those of men in the initial programme stages and this has led to progressive targeting of women. However, as we mentioned before, higher repayment rates of loans issued to women may not necessarily indicate either use of loans by women or that women have benefited substantially. There are cases of increased domestic violence resulting from tensions over loan repayment.

- ◆ **Use of loan for economic activity:** There are difficulties in tracing the usage of loans and savings withdrawals. Loans and savings may be combined with loans from other activities and loans and savings are also used for consumption. Studies giving a clear distinction for all loans between use for production and use for consumption have to be treated carefully. Evidence indicates that all programmes have contributed to setting up of new economic activities for some women while expanding existing activities for others.
- ◆ **Increase in incomes:** Cases exist of increased incomes and of successful women entrepreneurs. However, women's choices about activity and their ability to increase incomes are seriously constrained mainly by lack of access to other resources for investment, responsibilities for subsistence, lack of time and low levels of mobility and constraints which limit access to markets.

As mentioned above, women's control over income earned from loan is not necessarily related to loan use. But this is generally determined by the existing arrangements within the household and varies by culture. Studies indicate that the highest level of control over both loan and income was reported in Vietnam, women being generally in charge of household financial management. Generally, men and women may have radically different expectations and different views on their respective rights and responsibilities. There exists negotiation and conflict in the control of household income.

#### **6.2.5 Welfare impacts**

Welfare of women and their families is the key issue. Due to the gender division of labour and responsibility within the

family, women take care of child-related responsibilities, and male ill health. They forego food in situations of scarcity. Data supports the fact that much of women's increased income or loans is spent on household consumption and children's welfare. Even in cases where women controlled most activities and incomes (as in Vietnam), men still had more avenues for luxury expenditures. There are cases where women's increased contribution to family welfare has considerably improved domestic relations while in other cases it has intensified tensions.

#### **6.2.6 Social and political impacts**

There is evidence indicating that programmes have had wider social and political contributions to empowerment as a result of both economic activities initiated and more focused gender strategies. It is important to note that women vary significantly in what they want and expect from programmes. Some are more committed to social and political empowerment, while others want access to micro-finance services, including:

- increased confidence;
- access to networks;
- wider political activity;
- role in decision-making; and
- positive household and community perceptions of women's role.

### **7. Project Impact Indicators**

Before accurate and high quality information can be given as regards the status of an intervention program there has to be a selection of appropriate indicators capable of tracking impact. The choice of indicators will depend, among others, on what

the concerned parties want to find out and what the information will be used for.

Sebstad et al. (1995) introduced a practical, conceptually grounded approach to analysing the impacts of micro enterprise interventions such as financial intermediation through village banking, solidarity groups and other organisational mechanisms; market intermediation through subsector programs and economic policy and regulatory reforms; and enterprise intermediation through management training, technical assistance, technology services, and the promotion of business association.

Their preliminary framework used the household as a starting point for analysis thus departing from conventional approaches to the study of impacts. A rationale for this approach is that micro enterprises exist as part of a larger portfolio of household economic activities, and that decisions with respect to micro enterprises - whether made jointly or individually vis a vis other members - can be understood more clearly when considered in relation to options and trade-offs within the overall household economy. These decisions have broader implications for households because micro enterprises depend to varying degrees on their households for capital, labour and other inputs. According to them, a household approach not only improves our understanding of dynamics and impact at the enterprise level, but also allows us to widen the impact lens to consider impacts beyond the enterprise.

In order to explore how micro enterprise interventions affect change within the parameters of their conceptual approach, Sebstad et al. identified "impact paths" for households, enterprises, individuals and for communities. To measure

change along each of these paths, they identified domains of impact, markers of change within each of these domains, and mediating processes that influence change. These domains of impact of MSE interventions can be analysed at the household-enterprise, individual and community levels.

The following section focuses on domains of impact of MSE interventions.

## **7.1 Domains of Impact at the Household Level**

### **7.1.1 *Changes in household income***

Changes in household income can be viewed in terms of the amount, sources and seasonality of household income, which may significantly affect how households meet the basic needs of members and accumulate surplus income to invest later.

### **7.1.2 *Expenditures on household consumption***

Food and debt repayment are typical household consumption items. Increased expenditures on food may suggest improved nutritional status and well being of household members and an overall reduction in the indebtedness of a household may have a direct bearing on its level of security.

### **7.1.3 *Assets***

Assets include savings or financial capital; productive investments, such as micro enterprise activities, which generate future flows of income; real property such as land and housing and infrastructure; other physical assets such as jewellery, machinery, and durable household goods as well as other components of production. Other assets that are more intangible, though nonetheless important include: human capital, which includes education, skills training, work

experience, health as well as all the other qualities of humans that make them resourceful in a variety of situations.

## **7.2 Domains of Impact at the Enterprise Level**

### **7.2.1 Resource base**

The resource base of a micro enterprise can be considered in terms of capital, labour, assets, and inputs.

- ◆ **Capital:** Sources of finance for fixed or working capital can include savings, retained earnings, or loans from informal or formal sources.
- ◆ **Labour:** Micro enterprises depend largely on their households for labour. However, depending on the size, type of enterprise, and stage of development, they may also use labour from outside the household, including full-time wage employees, apprentices, part-time workers, casual labour, or seasonal workers. Skill levels vary and workers can be either unpaid or paid on a daily, monthly, or piece-rate basis.
- ◆ **Assets:** At the enterprise level, assets can be divided into three groups: fixed assets, including land, premises, machinery, equipment and tools; current assets, including raw materials, unfinished products, goods for sale, supplier credit, customer debt, cash in bank, and cash on hand; and intangible assets including security of tenure and access to on-site services. The productive capacity of an enterprise is influenced to a large extent by the size, composition, and quality of the asset base.
- ◆ **Inputs:** Inputs of production include raw materials for the production of micro-enterprise goods or services or



stock for sale by micro enterprises. The productive capacity of an enterprise is further influenced by the mix, source, quality, availability, and price of inputs.

### **7.2.2 Production processes**

Production processes can be analysed in relation to the volume, mix and quality of outputs. They are influenced by the use of technology, including equipment, tools, products, processes, materials, and skills. Changes in the use of technologies affect productivity and profitability of micro enterprises by: increasing the pace of production; reducing labour time; substituting cheaper materials; lowering fuel costs; increasing efficiency; improving the selection and organisation of equipment, tools, and labour; or improving the quality, consistency, and reliability of outputs.

### **7.2.3 Management**

Management, including both formal and informal practices related to record keeping, cash management, use of bank accounts, debt management, and inventory and stock control, influences costs and efficiencies at the enterprise level. It also reflects the capacity of an enterprise to plan ahead.

### **7.2.4 Markets**

Markets are critical in determining the viability and profitability of a micro enterprise. Access to markets is influenced by market information available to a micro entrepreneur, or by the location of an enterprise relative to its market. Access is affected by the time and spatial constraints of a micro entrepreneur, and by the availability, costs and reliability of transport. Access also depends on the capacity of individuals or groups to overcome barriers to entry in markets controlled

by monopolies, elites, or particular ethnic or gender groups. The stability of markets depends on the subsector of activity and is influenced by economic conditions and policies. Market size is determined by ease of entry, the level of competition, and linkages of the market to growth sectors of the economy.

#### **7.2.5 Financial performance**

The financial performance of an enterprise can be measured by changes in the amount and stability of income. Income is the basis for measuring enterprise profitability, which represents the relationship between enterprise outputs and the market. Sebstad et al. (1995) advised however that income should be measured with consistency and care, and should be used in conjunction with other indicators to provide a fuller picture of change.

### **7.3 Domains of Impact at the Individual Level**

Individual level impacts are important because benefits accrue to individuals through their direct participation in micro enterprise programs and because there are collateral benefits and effects to other individuals in the family. Three kinds of impact relevant to micro enterprise programs were identified: Control over own resources; greater leverage in household decisions; and involvement in the community.

#### **7.3.1 Control over own resources**

Within this domain it is important to observe whether individuals have achieved greater control over their own resources, including their labour time, their labour power, their assets, their means of production (land, tools, and work space), their output, and the proceeds of their output. This is particularly relevant for women who, generally speaking, have

much less control over resources and over their own labour than men as a result of their reproductive roles and obligations.

### **7.3.2 *Leverage in household decisions***

Greater leverage in household decisions implies greater access to household resources such as labour and capital, which may be needed within one's micro enterprise activity. There is widespread evidence that an expanded economic role of women significantly affects their overall status and bargaining position within the households (Brydon and Chant 1988; Hillhorst and Oppennoorth 1992).

Hashemi and Schuler's (1993) study of Bangladesh women mentioned three areas of decision-making that reflect empowerment within the household: the ability to make small purchases, such as items used in daily food preparation; the ability to make large purchases, such as food for the household, or household utensils; and involvement in major decisions, such as whether to buy land or to purchase livestock. These three areas of decision-making affect not only the welfare of the individual, but in all likelihood the welfare of other household members.

### **7.3.3 *Community participation***

A third kind of impact addresses the relationship of the individual to the community. In those societies where traditional gender relations prevent women from moving about freely, their options are severely limited by lack of information and access to services. Knowledge of one's right within society frequently is obtained through others. Such knowledge helps one to make better decisions that will affect one's future and the future of one's dependants.

Through social networks and civic organisation, individuals become linked to the wider community through which they become knowledgeable about economic options and opportunities. Those who have gained such information, particularly women, may also see their status within the household improve as a result.

#### **7.4 Domains of Impact at the Community Level**

The impacts of micro enterprise interventions at the community level include both primary and secondary effects of changes, which occur at the household, enterprise, and individual levels. Primary effects result directly from micro enterprise interventions as in the case of employment of non-family workers. Secondary effects are more diffuse; many result from the forward and backward linkages of enterprises receiving micro enterprise assistance.

##### **7.4.1 *Net increases in employment at the community level***

While many micro enterprises rely primarily on family labour at start-up, with increased profits they become more able to hire paid labour. The transition to paid labour is an important one, which has implications for the individual and community. Net changes in employment within communities is a primary impact of micro enterprise interventions.

Measuring increased employment at the enterprise level is relatively straightforward, while at the community level it is challenging. Sebstad et al. (1995) suggested obtaining proxy measures of net change in employment by studying the employment history of new workers in micro enterprises, to find out if they were previously employed, and if so, whether their status has changed (from unpaid to paid; part-time to

full-time; or casual to regular). This type of information can show both increases in unemployment and changes in the quality of employment.

#### ***7.4.2 Net increases in income at the community level***

One way to estimate the economic benefits of micro enterprise interventions to communities is to estimate how much new money is coming into the community from the outside (through the sale of goods and services outside the community) and how much is being retained that formerly left (through the local purchase of inputs of consumer goods).

#### ***7.4.3 Forward and backward linkages to other community businesses***

Net increases in both employment and income at the community level can be achieved through primary changes at the enterprise level, or through secondary changes in other community enterprises that micro enterprises buy from (backward linkages) or sell to (forward linkages). Identifying new linkages is relatively straightforward and this information can be obtained through interviews with micro enterprise owners. Assessing income and employment effects of new business activity stimulated through forward and backward linkages is more complicated and not practical in the context of most impact assessments.

#### ***7.4.4 Civic participation***

Groups or associations organised to benefit the larger community or public interest represent an additional community level impact. Such groups may form to overcome a common obstacle or they may evolve from socially oriented groups that recognise their common interests. Hence, a fifth

community level impact is the degree to which micro enterprise interventions enable entrepreneurs to mobilise for the purpose of promoting change to benefit the wider community.

### **7.5 Conclusion**

This section has focused on Sebstad et al.'s (1995) indicators of impact of micro enterprise interventions which are seen as very comprehensive. However an impact study does not have to focus on all the variables identified by Sebstad et al. What NGOs think is important to track will depend on the specific intervention, the aim of a particular inquiry, what information is considered essential, the location of the program, available resources and manpower and commitment to evaluation.

## **8. General Conclusion**

This discussion has brought out the importance of impact assessment for MSEs and the conventional and participatory frameworks and their complementarity in impact-assessment. Of the tools used in impact assessment, stakeholder analysis and wealth ranking were discussed in detail. Issues in impact assessment such as attribution, fungibility and gender relations were examined with emphasis on MSEs. In short, the tools of impact assessment have been laid out. It is now up to the researchers and practitioners to use them to provide the information needed to design and implement better MSE interventions.

## Notes

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## References

- Babbie, E. 1983. *The Practice of Social Research*. Belmont, Calif.: Wadsworth.
- Batte, T.F. 1971. *Reasoning and Research: A Guide for Social Science Methods*. Boston: Little, Brown.
- Blalock, H.M.Jr. 1964. *Causal Inferences in Non-experimental Research*. Chapel Hill, NC.: University of North Carolina.
- Brydon, L. and S. Chant. 1988. "Women in the Third World, Gender Issues in Rural and Urban Areas," cited in Sebstad Jennefer et al., "Assessing the Impact of Microenterprise Interventions: A Framework for Analysis." USAID Managing for Results, Working Paper no. 7, March. Washington: Management Systems International.
- Chambers, R. 1983. *Rural Development: Putting the Last First*. London: Longman.
- Feuerstien, M.T. 1988. *Partners in Evaluation: Evaluating Development and Community Programmes with Partici pants*, cited in Mikkelsen, B. (1995) *Methods of Development Work and Research*. New Delhi: Sage Publications.
- Greer, S. 1969. *The Logic of Social Inquiry*. Chicago: Aldine.
- Glass, G.V. cited in Brinkerhoff, R.O., Brethower, D.M., Hluchyj, T. and Nowakowski, J.R. 1983: *Program Evaluation: Source Book/Casebook*, Evaluation Centre, Western Michigan University.



- Goetz, A.M. and Sen Gupta, R. 1996. "Who Takes the Credit? Gender, Power and Control Over Loan Use in Rural Credit Programmes in Bangladesh" *World Development* 24 (1), 45-63.
- Goldmark, S.G. and Rosengard, J. 1981. "Evaluating Small Scale Enterprise Promotion : State-of-the-Art Methodologies and Future Alternatives." Washington: Development Alternatives, Inc.
- Grindle, M.S. and Thomas, J.W. 1991. *Public Choices and Policy Change*. Baltimore: The Johns Hopkins University Press.
- Hashemi, D. M., and Schuler. 1993. "Defining and Studying Empowerment of Women: A Research Note From Bangladesh," cited in Sebstad, Jennefer et al., "Assessing the Impact of Micro enterprise Interventions: A Framework for Analysis." USAID Managing for Results, Working Paper no. 7, March 1995. Washington: Management Systems International.
- Hillhorst, Thea and Harry Oppenoorth. 1992. "Beyond Barriers and Bias: Financing Women's Enterprise," cited in Sebstad, Jennefer et al., "Assessing the Impact of Micro enterprise Interventions: A Framework for Analysis." USAID Managing for Results, Working Paper no. 7, March 1995. Washington: Management Systems International.
- Hyman, Eric and Kirk Dearden. 1996. "A Review of Impact Information Systems: NGO Micro Enterprise Programs." Assessing the Impact of Microenterprise Services (AIMS). Washington: Management Systems International.

- Hulme, D. and Mosley, P. 1996. *Finance Against Poverty*. London: Routledge.
- Hulme, D. 1997. "Impact Assessment Methodologies for Micro Finance: A Review." Prepared for the virtual meeting of the CGAP working group on impact assessment methodologies.
- Joint Committee on Standards of Evaluation* cited in Brinkerhoff, R.O., Brethoneer, D.M., Hluchyi, T. and Nowakowski, J.R. 1983 *Program Evaluation*, op.cit.
- Kevlinger, F.N. 1973. *Foundations of Behavioural Research*. New York: Holt, Reinehart and Winston.
- Leik, R.K. 1972. *Methods, Logic and Research in Sociology*. Indianapolis : Bobbs-Merrill.
- Little, P. 1997. *Research Design for Program Evaluation: Regression-Discontinuity Approach*. Newbury Park, Calif: Sage.
- Majone, G. 1989. *Evidence, Argument and Persuasion in the Policy Process*. New Haven: Yale University Press.
- Mayoux L. 1997. "Women's Empowerment And Micro-Finance Programmes: Approaches, Evidence and Ways Forward" Draft Overview Paper For Pilot Project: Micro Finance Programmes and Women's Empowerment: Strategies For Increasing Impact.
- Mikkelsen, B. 1995. *Methods for Development Work and Research: A Guide for Practitioners*. New Delhi: Sage Publications.

- Moffitt, R. 1991. "Program Evaluation with Non-Experimental Data." *Evaluation Review* 15(3):291-314.
- Moris, J. and Copestake, J.G. 1993. *Qualitative Inquiry for Rural Development: A Review*. London: IT Publications.
- Nachmias, D and Nachmias, C, 1981. *Research Methods in the Social Sciences*. New York: St. Martins Press.
- Narayan, D. 1993. "Participatory Evaluation: Tools for Managing Change in Water and Sanitation." World Bank Technical Paper No. 207. Washington: The World Bank.
- Noponen, H. 1997 "Participatory Monitoring and Evaluation : A Prototype Internal Learning System for Livelihood and Micro-credit Programs." *Community Development Journal* 32 (1).
- Oakley, P. 1988. Strengthening People's Participation in Rural Development, Society for Participatory Research in Asia, Occasional Paper Series No. 1.
- Oketch, H.O. Mutua, A.K. and Dondo, C.A. 1991. "Micro enterprises Credit, Employment Incomes and Output: Some Evidence from Kenya." Nairobi: Ernst and Young Inc. and USAID.
- Research Monitoring and Evaluation (REME) 1997. Proposal for Baseline Study. University of Nairobi, IDS.
- Robinson, W.S. 1950. "Ecological Correlations and the Behaviour of Individuals." *American Sociological Review* 15:351-357.

- Rondinelli, D.A. 1993. *Development Projects as Policy Experiments*. London: Routledge.
- Scriven, M. cited in Brinkerhoff, R.O., Brethower, D.M., Hluchyj, T. and Nowakowski, J.R. 1983. *Program Evaluation*, op. cit.
- Sebstad, J. Barnes, C. and Chen, G. 1995. "Assessing the Impacts of Micro Enterprise Interventions: A Framework for Analysis." Washington D.C., USAID.
- Shields, D. 1993. "What is the Logical Framework? A Step by Step Users Guide." *The Rural Extension Bulletin* Number 1, April.
- Singleton, Jr., B.C. Straits, M.M. Straits and R.J. Allister, 1988. *Approaches to Social Research*. New York: Oxford University Press.
- Stufflebean D.K. "Meta-Evaluation" cited in Brinkerhoff, R.O., Brethower, D.M., Hluchyj, T. and Nowakowski, J.R., *Program Evaluation*, op.cit.
- Suchman, E.A. 1967. *Evaluative Research*. Hartford: Russell Sage Foundation.
- Yaron, Jacob et al. 1997. "Dynamics of Microenterprises: Research Issues and Applications." GEMINI Working Paper No. 18. Washington: Development Alternatives, Inc.