



boosting employment through
small enterprise development

STEPS TOWARDS IMPACT ASSESSMENT OF SEED INTERVENTIONS ON EMPLOYMENT

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InFocus Programme on Boosting Employment through
Small Enterprise Development (SEED)
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International Labour Organization



Abbreviations

BDS	Business Development Services
BI	Business Incubators
BPSC	Business Promotion and Support Services
FGD	Focus Group Discussion
GYB	Generate your Business idea
ILO	International Labour Organization
ICLS	International Conference of Labour Statistics
IFP/SEED	InFocus Programme on Boosting Employment through Small EnterprisE Development of ILO
IWEB	Improve your Work Environment and Business for Micro-manufacturers
ILO	International Labour Organizations
IYB	Improve Your Business
MSE	Micro and Small Enterprises
OD	Organisational Development
OLS	Ordinary Least Square (Analysis)
Q	Question
PRA	Participatory Rapid Appraisal
RDA	Regional Development Agencies
SED	Small Enterprise Development
SEED	InFocus Programme on Boosting Employment through Small EnterprisE Development of ILO
SIYB	Start and Improve Your Business
UNDP	United Nations Development Programme

Nekolera Gyange

I do my business – the name of a Ugandan radio programme promoting SMEs

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In order to test out some of the ideas and approaches being proposed as part of IFP/SEED's work on impact assessment, two field tests were conducted. It should be stressed that these were not impact assessments of IFP/SEED's SED activities, but rather pilot activities to develop and test out some of the appropriate methodologies that could be relevant and useful for ILO's work on assessing the employment impact of these interventions. The field tests were based on ILO's BDS work on Business Centres in Bulgaria, and on Radio Programmes in Uganda. The cooperation of Klaus Haftendorn and Merten Sievers, and Jim Tanburn and Gavin Anderson respectively is hereby acknowledged. However, it should be pointed out that all fieldwork was undertaken by independent consultants under the supervision of IFP/SEED's impact assessment team.

1. Introduction

Many different strategies for Small Enterprise Development (SED) have been developed over the past few years. Increasingly is being considered as key promoting employment on a large scale for disadvantaged people. This is also the theme of the ILO's InFocus Programme on Boosting Employment through Small Enterprise Development (IFP/SEED). Moreover, given ILO's mandate for creation of "decent work"¹ these SED interventions are not just intended to generate "more jobs" but also "better jobs". In particular IFP/SEED's Business Development Services (BDS) programmes aim to help micro and small enterprises to grow, and ultimately create employment and wealth.

However, little systematic work has been done to determine which interventions are most effective, and under what circumstances.² There is now an increasing interest in verifying the intended causal relationship between the small enterprise development (SED) programmes in general, and business development services (BDS) in particular, and different aspects of employment in targeted enterprises. The main objective of IFP/SEED's work is to investigate the impact of SED interventions on the quantity and quality of employment. A conceptual framework is required to facilitate the investigation of underlying mechanisms associated with the various types of SED interventions and their expected influence on the targeted enterprises. The purpose of the conceptual framework (Diagram 1) is to serve as a visual presentation of the main components involved in measuring impact. It has been prepared to embrace all SED interventions.

The conceptual framework is introduced in Section 2 of this paper. The definitions associated with measuring impact on employment are described in section 3. The methodological aspects are discussed in section 4, and the most common methods for information collection are highlighted in section 5. Section 6 deals with the selection of the survey sample, and section 7 contains a draft set of questions relating to employment issues. Methods for data analysis are suggested in section 8.

This paper deals with the practical implementation of an impact assessment survey. It should be emphasised that this paper is seen as a "living tool". It will be updated as new experiences and lessons are gained. Concepts and methodologies are being constantly tested and refined through the fieldwork carried out by IFP/SEED and others. Comments on this document are most welcome. Please send your views and suggestions to:

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¹Decent work means productive work in which rights are protected, which generates an adequate income, with adequate social protection. It also means sufficient work, in the sense that all should have full access to income-earning opportunities (International Labour Office, 1999, Decent Work: Report of the Director-General).

² ILO, 2000, Multi-Bilateral Programme of Technical Co-operation, Project Document, Measuring the Employment Impacts of SED.

2. Small Enterprise Development (SED)

Consider any enterprise - be it micro, small, medium or large. It uses human resources (knowledge, skills and attitudes), physical capital (buildings, facilities, machinery and tools,) material inputs and financial resources to produce its outputs. The amount of output produced is generally a function of the capacity of the enterprise and the expected or experienced demand for the goods and services that it produces or offers.

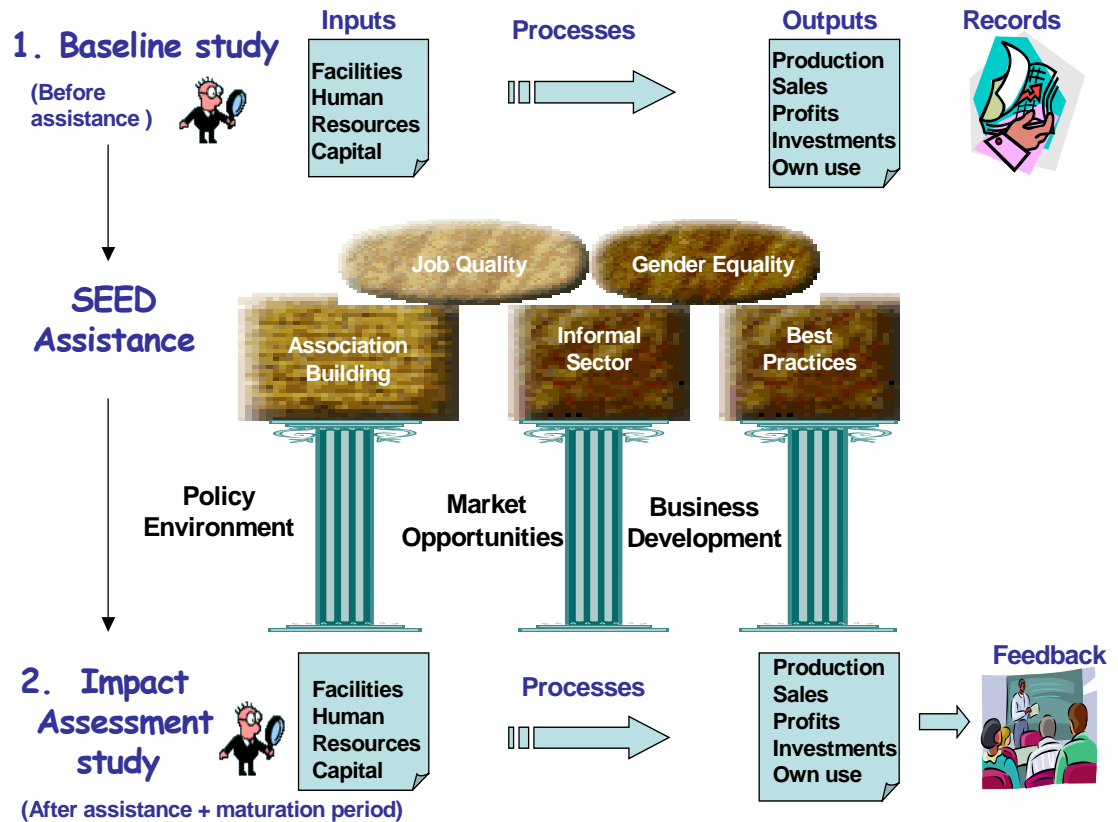
SED interventions are made by support agencies, BDS providers and others under the assumption that the targeted micro and small enterprises³ (MSEs) have some distinct characteristics that separate (and disadvantage) them from other enterprises, and this can mean that they face some serious constraints. These targeted MSEs may be new enterprises managed by less experienced staff and with limited access to information, credit and advice. They may also have problems stemming from the business environment in which they operate, such as access to supplies or a limited demand in the market. Due to a variety of problems which commonly affect MSEs, they can benefit from a range of support interventions in the form of business development services.

³ “Micro” and “small” enterprises are size categories that are usually defined in terms of the number of employees or the size of assets owned by the enterprise. The precise definition varies from country to country. The International Labour Recommendation 189 states, “Members should, in consultation with the most representative organizations of employers and workers, define small and medium-sized enterprises by reference to such criteria as may be considered appropriate, taking account of national social and economic conditions, it being understood that this flexibility should not preclude Members from arriving at commonly agreed definitions for data collection and analysis purposes.” A commonly used classification is, enterprises with 1-5 workers are micro and with 6-20 are small enterprises. Ideally, enterprises that are operated by the owner members of the family but without any regular employees should also be taken into account.

Business development services⁴ (BDS) assume that the MSEs are constrained in a number of ways, such as by information bottlenecks, or the lack of managerial, marketing and entrepreneurial skills. Experience has shown that finance alone is not enough to help small businesses to increase their profits and create more employment. They are frequently faced with saturated markets, outdated technologies, inadequate skills, and regulatory constraints. Business development services try to help to overcome these problems by facilitating access to markets; improving the availability of less expensive or higher quality inputs; introducing new or improved technologies and products; improving management and technical skills; and ameliorating or eliminating policy constraints, as well as facilitating enterprises to access appropriate financing mechanisms (see Diagram 1).

⁴ Business Development Services support micro, small and medium-sized businesses and are intended to increase income and employment. BDS categories include market access, input supply, technology and product development, management training and technical assistance, infrastructure and alternative financing mechanisms. According to the Business Development Services for Small Enterprises: Guiding Principles for Donor Intervention, February 2001, the Business Development Services include training, consultancy and advisory services, marketing assistance, information, technology development and transfer, and business linkage promotion.

Figure 1. Components of Impact Assessment in IPF/SEED Interventions



There is ample evidence from the field of industrial psychology that various interventions that improve working conditions and job quality can lead to increased labour efficiency and higher productivity (both in terms of quantity and quality), thereby promoting a stronger enterprise. This could lead to the small enterprise expanding its market, growing and requiring more staff.

The range of SED interventions promoted by the ILO's IFP/SEED programme - such as its Start and Improve Your Business (SIYB) programmes - give emphasis to promoting access to new markets (through new products, new distribution channels, new technologies, etc.); association building; and the business-to-business networking approach. These types of SED interventions have the same ultimate goals which include increasing market demand for the enterprise's products and services; giving enterprises wider access to markets; improving their effectiveness, productivity and competitiveness, and eventually creating more jobs.

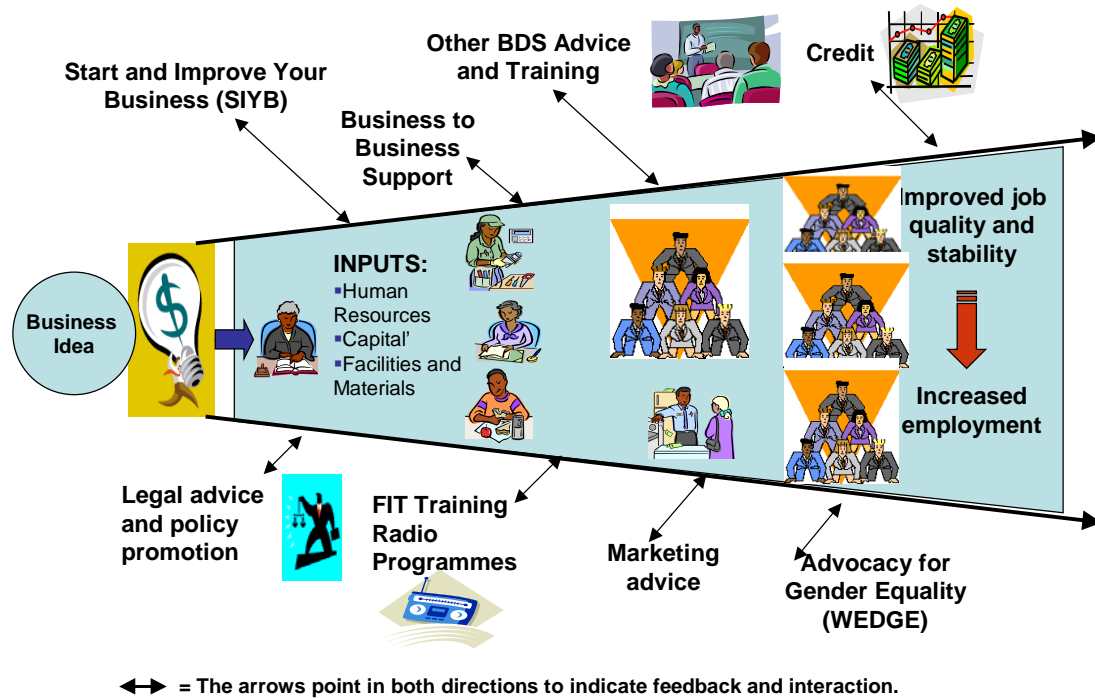
It is also expected that policy-related interventions can have a positive impact on enterprises' performance, and on their employment creation potential. Removing lengthy and time-consuming registration procedures or screening policies to eliminate anti-small enterprise bias, can create a more enabling environment for MSEs which helps them grow stronger, increases their productivity, and ultimately enables them to generate more employment.

Another example of a BDS support intervention is a radio programme discussing policies and regulations for the MSEs, spreading awareness, giving voice to entrepreneurs, and influencing policy. SED interventions can act at different points in the process of production and marketing.

2.1 Components of SED Interventions

The basic aim of most SED interventions undertaken by the ILO is to help MSEs to grow and become stronger, and create additional employment. Although the range of interventions is quite different in their approach to achieving this goal, the mechanisms through which they act are fairly standard (see Diagram 2).

Figure 2. Mechanisms through which SED Interventions Can Act



The SED interventions aim at improving the (a) productivity, (b) competitiveness, and (c) stability of the enterprise. All the three components might not be present in the same *intensity*, since the interventions are designed according to the priority needs of the SMEs that are targeted in the particular SED programme. Some interventions have a stronger effect on the productivity component, whereas others might be more geared towards improving factors which affect the competitiveness of the enterprise compared to other enterprises on the market. Providing information about the relative importance and combination of these factors will be one of the objectives of the impact assessment.

To measure changes in productivity requires gathering information relating to the internal activities of the enterprise itself; while in assessing competitiveness the productivity of the enterprise needs to be compared with the productivity of other enterprises producing the same or similar products. Consequently, in the latter situation information has to be gathered on the targeted enterprises as well as their competitors. It is possible that some of the growth in the sales and employment within participating beneficiary enterprises comes *at the expense of* other enterprises (not targeted by the intervention) that sell similar products, thus resulting in what is referred to as a *displacement effect*.

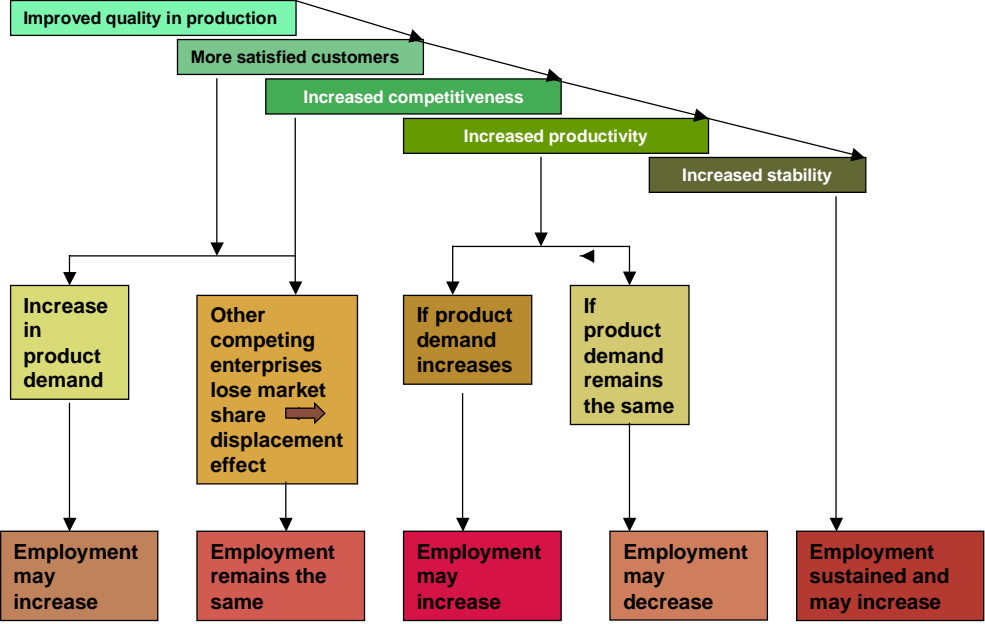
Enterprises that benefit from SED interventions are expected to show stronger business performance and stability, and hence have better chances of stability and survival. These more stable enterprises are likely to offer greater *job security* for their workers, and this is an important component of the ILO's concern with job quality.

2.2 Mechanisms Leading to Employment

The expected impact of the SED interventions on employment is illustrated in Diagram 3⁵ explaining how the different components result in an increase or decrease in employment. The combined effects of these components should lead to a net employment gain.

⁵ For the time being the indirect effects have not been integrated into this diagram.

Figure 3. What Mechanisms Lead to Employment?



The improved competitiveness of targeted enterprises compared to other enterprises may also lead to generating more employment. If the products and services produced by the targeted enterprises are better in terms of their prices, quality, packaging or any other aspect, the demand for them is likely to increase. This increase in demand is likely to lead to increased production. Depending on the labour intensity of the production technique that is used, the increase in production should lead to an increase in the use of labour - one of the inputs used (see Diagrams 1 and 2). For example, a labour-intensive enterprise is more likely to generate more employment in response to a specific increase in output, as compared to a more capital-intensive enterprise. However, the increase in the demand for products of the intervention-targeted enterprise(s) may also result in a decline in the demand for other non-targeted enterprises which are engaged in producing competing or substitute goods and services. This is the displacement effect in action. The employment generated by the increased competitiveness within targeted enterprises can, therefore, be ambiguous in the context of the broader sector or the wider economy.

SED interventions may also lead to an increase in the productivity of the enterprise, such as through increased labour productivity, changes in the usage of materials, or by more effective productive techniques and equipment. As IFP/SEED is mainly concerned about the impact of the SED interventions on employment, labour productivity is a major focus of our interest. However, in reality an integrated approach to total factor productivity needs to be applied, embracing all of the inputs (such as labour, capital and materials), as well as by taking account of several dimensions of demand (such as customer satisfaction).

If the total production of the enterprise remains the same after the SED intervention, an increase in labour productivity might actually lead to a reduction of staff within the enterprise. However, the overall effect on employment generation will also be greatly dependent on the extent of any increase in market demand for the products of that enterprise. The improvements in labour productivity might be able to accommodate a small increase in market demand without creating additional employment. But if the increase in the market demand is beyond the current level of capacity of the enterprise, it would be expected to require more workers and thereby generate additional employment.

The stability of the enterprise means that jobs remain in existence for a longer time, thus providing job security for the workers. Stability is not to be confused with the sustainability of the enterprise. Stability of the enterprise implies “sustainability of a job”. Increased stability also implies increased prospects for expansion of the enterprise that could ultimately result in increased employment. The stability component is the only direct effect that contributes to sustainable employment.

3. Employment Definitions

3.1 Employment Aspects

Employment takes many forms. It includes people who are paid employees, self-employed or own-account workers⁶, apprentices and unpaid family workers. Students, homemakers or retired workers who are mainly engaged in “non-economic activities” may from time to time do some paid work.⁷ Some people might work full-time or part-time, while others might work intermittently as seasonal workers or as daily casual labourers. People such as conscripts⁸ or persons constructing houses for their own use are also to be considered as “employed”, although they are not paid.

In the case of MSEs, especially those in the developing countries, there may be a large extent of “unpaid” and “family labour”, and in some cases the workers might be engaged in seasonal or multiple activities. To be able to measure the impact of SED interventions on employment, it is necessary to decide on a definition which can be used as a *unit of measurement* across different countries and interventions.

The number of hours or days that workers may be employed in an MSE enterprise might vary from a couple of hours per week, to five full working days or more. Given such varied employment situations, defining employment raises several issues that need to be addressed, including:

1. Should we focus on: (a) the time dimension as per the number of working hours, or (b) on the income or remuneration dimension as termed “paid work”, or the “value of work” in cases where it was paid according to time or production?
2. How many hours does one have to work in order to be counted as employed?
3. Should the definition used be linked with the one used in national statistics?
4. Is “income generated” a better measure than the total number of hours worked?
5. Is a person “employed” even if he/she generates no income (in cash or in kind)? In other words, is SED interested in enumerating (or generating) “unpaid employment”, and should it be measured and included as a positive aspect of SED impact assessment?
6. Are we interested in long-term or short-term employment? Some SED interventions might generate a decrease in employment in the short term (for example, in the case of

⁶ Their work does not always qualify to be included in the GDP calculations.

⁷ The above footnote also applies to categories of homemakers and retired workers.

⁸ Conscripts are usually paid in food and lodging, as well as through a small allowance.

⁹ Also see, Ueda, Takafumi and Tanburn, Jim. 2000. Measuring Employment Impact of SED: Report on the Expert Meeting, 22 May 2000, Geneva.

labour-saving devices), but may increase the overall productivity or competitiveness of the enterprise, and generate a positive impact on employment in the long-term.

7. How should situations where individuals have more than one job be dealt with?
8. Should any increase in the number of hours at work be compared to the worker's previous status at work? For example, is it better if an individual changes status from being unemployed to becoming employed; or experiences a reduction in underemployment; or increases the number of his/her hours at work in an existing job?
9. The person's own perception about whether a specific increase in hours worked constitutes more or better employment might be assessed based on their previous situation and status.
10. Besides the quantity of employment, which qualitative aspects of employment need to be considered?

In attempting to define a unit of measurement for employment, it will be an advantage if this unit can be used to compare the results of an impact assessment with other relevant studies, both at the national and international levels. At the same time, it should be a meaningful measure at the local, project and individual level. The unit selected should allow for comparisons over time, as well as with other economic or policy assessment indicators (national account data, or unemployment definitions or levels). It should also allow for comparisons across different SED interventions, and for links to impacts on poverty, vulnerability, human development and gender equality assessments at different levels.

3.2 International standards

It is important to decide on a commonly used unit of measurement, applicable both in the local context, as well as enabling international comparisons. The Thirteenth International Conference of Labour Statisticians (ICLS), Geneva, 1982, agreed on an international standard for use in defining and measuring employment and unemployment: ***“employed” is defined to comprise all persons above a specific age who during a specified brief period (either one week or one day), did some work for pay, profit or family gain (i.e. were in some paid employment or self-employment).*** For practical reasons, “some work” may be interpreted as work that lasted for at least one hour during the period of observation. Also regarded as “employed” are persons who were temporarily absent from such work, e.g. because of illness, vacation, etc.

The main purpose of the “one-hour” criterion is to cover all types of employment that may be performed during the reference period. This may include short-time work, casual labour, stand-by work, and other types of irregular employment. It is also fundamental in defining the unemployment situation, as definitions of employment and unemployment are interrelated.

Alternative criteria for the minimum hours have been proposed or used in the labour surveys of different countries¹⁰.

¹⁰ For instance, a “majority criterion” has been adopted in some countries, meaning that a person must have been working most of the time during the reference period to be considered employed (e.g. Syrian Labour Force Sample Survey - see

Definitions of Employment

In the ICLS resolution concerning statistics of the economically active population, employment, unemployment and underemployment, adopted by the Thirteenth International Conference of Labour Statisticians (Geneva, 1982), employment is defined as follows:

The “employed” comprise all persons above a specific age who during a specified brief period, either one week or one day, were in the following categories:

Paid employment: (1) “at work”: persons who, during the reference period performed some work for wage or salary, in cash or in kind; (2) “with a job but not at work”: persons who, having already worked in their present job, were temporarily not at work during the reference period but had a formal attachment to their job;

Self-employment: (1) “at work”: persons who, during the reference period, performed some work for profit or family gain, in cash or in kind; (2) “with an enterprise but not at work”: persons with an enterprise, which may be a business enterprise, a farm or a service undertaking, who were temporarily not at work during the reference period for some specific reason.

The international standard further specifies that, for operational purposes, the notion of “some work” may be interpreted as work for at least one hour. The distinction between paid employment and self-employment is meant to emphasise that employment covers not only work for wage or salary, but also work for profit or family gain, including production for own consumption. The distinction also permits the use of an appropriate terminology for each of the two types of employment.

The International Classification of Status in Employment (ICSE-93), adopted by the Fifteenth International Conference of Labour Statisticians (January 1993), gives an internationally accepted set of definitions for the following which are listed in the appendix to this paper: paid employment; self-employment; employees; employers; contributing family workers; workers not classifiable; owners-managers of incorporate enterprises; regular employees with fixed term contracts; regular employees with contracts without limits of time; casual workers; workers in short-term employment; workers in seasonal employment; outworkers; contractors; employers of regular employees; core own-account workers; franchisees; share-croppers; communal resource exploiters and subsistence workers.

A review of the various national practices indicates that a vast majority of countries apply the one-hour criterion in their labour force surveys, although some still require a higher number of hours for unpaid family workers to be regarded as “employed”. The data from those surveys which do not make exceptions for unpaid family workers, show that the proportion of persons working only a few hours per week is not substantial. Where data are available, it is usually found that the proportion of persons working, say, less than five hours a week does not exceed a few percentage points of the total employment. This means that raising the one-hour criterion in the definition of employment by a few more hours is in practice not likely to substantially change the resulting number of employed persons (Husmanns, Mehran and Verma, 1990)¹¹.

ILO, 1986, pp. 157-159)¹⁰. A “one-day criterion” was used elsewhere, meaning that a person must be working at least one day during the reference period to be considered employed (Malaysia, 1983)¹⁰. Or an “x-hour criterion” has also been adopted, meaning that a person must have been working x-hours or more during the reference period to be considered employed (e.g. 13 hours in the Austrian Mikrozensus - see ILO, 1986, pp.15-16)¹⁰.

¹¹ Husmanns, R., Mehran, F., and Verma, V. 1990. *Surveys of economically active population, employment, unemployment and underemployment*, An ILO manual on concepts and methods, ILO, Geneva.

3.3 Defining Employment in MSEs

To be able to measure the impact of SED interventions on employment in MSEs, we could use one of the above-mentioned criteria. However, none of these criteria really fits in measuring the different types of work that may be created in micro or small enterprises. Unpaid family workers and apprentices who benefit from working in the enterprise in terms of increased family income and on-the-job training respectively, might be classified as unemployed if we use paid employment as the criterion. Situations in which workers are supplying products or services on an ad hoc basis, for example a milkman supplying milk thrice a week to an ice-cream maker, also present difficulties regarding whether they should be classified as workers or not.

Besides some of the issues mentioned above, the term employment is further complicated. It implies the presence of an employer and an employee¹² and some sort of contract. Such a contract could include conditions like the number of hours worked, the wages paid, the duration of the employment, etc. Entrepreneurs might hide or fail to mention the work done by casual labour, or not disclose new work created which is being sub-contracted to somebody else. A person may have additional jobs elsewhere, either with or without this being known to or registered by the main employing enterprise. In order to catch all types of work generated by the MSEs, it is proposed that the impact on the enterprises is measured in terms of “jobs” rather than in terms of “employment”¹⁴.

According to the International Standard Classification of Occupation, 1988,

A job is a set of tasks and duties executed, or meant to be executed, by one person.

The definition of a job is more flexible than that of employment, as a fixed number of hours do not have to be specified in order to define it. Moreover, it allows us to consider all types of employment. In developing economies, many MSEs employ workers in the informal sector (such as casual labourers and unpaid family workers), and it is crucial to cover all these categories under one definition. Using “job” to measure employment would render it comparable not only with the different interventions and countries, but also with the national and regional statistics collected within the country. Experts believe that there is only a marginal difference between the number of jobs and the number of workers. Therefore, the “number of workers” will ultimately provide a good estimate of the employment situation in the enterprise. However, it is important to realise that no single criterion can capture the complexities of the employment realities in MSEs in developing countries.

¹² This is not true for the own-account workers.

¹³ Even if we use a quasi-experimental approach and have a control group, the questionnaires would be prepared for the entrepreneurs and the workers.

¹⁴ Preliminary discussions with Mr. Eivind Hoffmann and Mr. Ralf Hussmanns at the STAT /ILO, revealed that in the case of MSEs close to 90 per cent of the enterprises will give the same answer when asked for the number of jobs in their enterprise and the number of workers in their enterprise.

To reflect the true picture, the information on the “number of workers in the enterprise” needs to be supplemented with additional information on:

- The number of hours worked per person per week;
- Remuneration in the form of wages per hour or per production unit;
- The conditions at the workplace;
- Employment security or the duration of employment (“employed since when”);
- Employment status and the type of employment contract (i.e. if it is part-time or full-time, seasonal, contractual, or casual, etc.)
- Status of previous employment.

Lessons from measuring impact of BDS services in Bulgaria:

Information on the number of employees, their contractual arrangements and their wages was perceived to be extremely sensitive in Bulgaria. The entrepreneurs were afraid that information would not remain confidential and somehow reach the authorities. Only a few enterprises agreed to disclose such data to the survey team, who were quite familiar with the areas and the enterprises. Other problems were that there had been changes in the management of some enterprises. Also the BDS service provider had experienced a turnover in staff, thereby weakening their institutional memory. Availability of proper records at the BDS provider appears to be a prerequisite for complementing and verifying the data from the enterprises. The most important factor is nevertheless that the respondents can be assured of confidentiality and complete anonymity. Thus, it may not be appropriate to use local staff familiar with the BDS provider or the enterprises.

4. Evaluation Methodology

4.1 Evaluations Concepts

- Evaluations include monitoring, project evaluation and impact assessment. Each of these evaluations has a different purpose. Monitoring is designed to assess if a programme is being implemented according to the plan. A programme or project evaluation assesses the effects and impacts of programme performance, focussing on an analysis of progress made towards the achievement of the objectives¹⁵. However, when the evaluation focuses on the direct and indirect impacts on the targeted beneficiaries of the project or programme with respect to a set of indicators derived from the objectives, this is an impact assessment. The type of evaluation that we choose depends on the programme and the purpose for which it is being evaluated. Formative evaluations focus on how to strengthen or improve the programme that is being evaluated, whereas summative evaluations examine the overall effects or outcomes of a programme. An impact assessment is therefore a type of summative evaluation. However, it is common to come across impact assessment studies that tend to confuse several types of evaluations.

4.2 Impact Assessment Designs

The concept of “impact assessment” refers to a type of evaluation or assessment that focuses on outcomes or effects of a programme¹⁶, such as an SED programme. Goldmark and Rosengard¹⁷ stress that the impact assessment should not only focus on the financial and the managerial changes occurring within the micro-enterprise, but also on how far the changes are meeting development objectives.

The use of Proxies

Within MSE literature, some 14 methods have been identified as proxies to define and estimate profits¹⁸. Based on the findings of a large survey¹⁹, a group of five proxies was

¹⁵ Joint Committee on Standards of Evaluation cited in Brinkerhoff, R.O., Brethoneer, D.M., Hluchyi, T. and Nowakowski, J.R. 1983. Program Evaluation: Source Book/Casebook, Evaluation Centre, Western Michigan University.

¹⁶ Oakley, P. 1988. Strengthening People’s Participation in Rural Development, Society for Participatory Research in Asia, Occasional Paper Series No. 1.

¹⁷ Goldmark, S.G. and Rosengard, J. 1981. Evaluating Small Scale Enterprise Promotion: State-of-the-Art Methodologies and Future Alternatives. Washington: Development Alternatives, Inc.

¹⁸ Daniels L. 2001. A guide to measuring microenterprise profits and net worth. Small Enterprise Development Vol. 12 No 4.

selected, with each one was covered by several questions (up to 32). Two criteria - accuracy and cost - were used to assess the effectiveness of the proxies. Accuracy was measured by five methods:

- The percentage of cases that could be estimated by the business owners;
- The ease with which they answered the questions for each proxy;
- The percentage of cases with positive profits;
- The level of variation within each proxy compared to other proxies;
- The correlation of each proxy with the other measures.

Cost was measured by the time needed to calculate each proxy. The sensitivity of the questioning was assessed by collecting written comments from the entrepreneurs. There are trade-offs in using proxies, as a higher level of accuracy may require a greater amount of questions, time and resources.

The components included in the best proxy for profit were:

- Household consumption out of the products and services of the business, and time period;
- Use of part of the money from the business for self and for the household, and time period;
- Money left after purchases for the business and use for own consumption, and time period.

The components included in the proxy for net worth were:

- The value of machinery, equipment, tools, buildings and land owned and used;
- Total value of raw materials and supplies if everything is sold today;
- Total value of finished products in hand;
- The value of outstanding debts (including what customers owe the enterprise; what other enterprises owe to the enterprise, and what family and friends owe), and
- Credits received.

Impact assessments can also observe the changes that have taken place in the wider community. Recent studies²⁰ go further and look at the impact on the household level – an important dimension if one is also trying to determine effects on poverty reduction. It would be expected that the family of the entrepreneur will benefit first from increased profits arising from the impact of an SED intervention, especially if they have many unmet basic needs. The conceptual framework used by several programmes therefore includes indicators of impact at the following levels: individual, enterprise, household, and community²¹.

¹⁹ A meta-survey was carried out on ten studies with sample sizes of between 94 and 5,620 entrepreneurs in each

²⁰ Daniels L. 2001. A guide to measuring microenterprise profits and net worth. Small Enterprise Development Vol. 12 No 4.

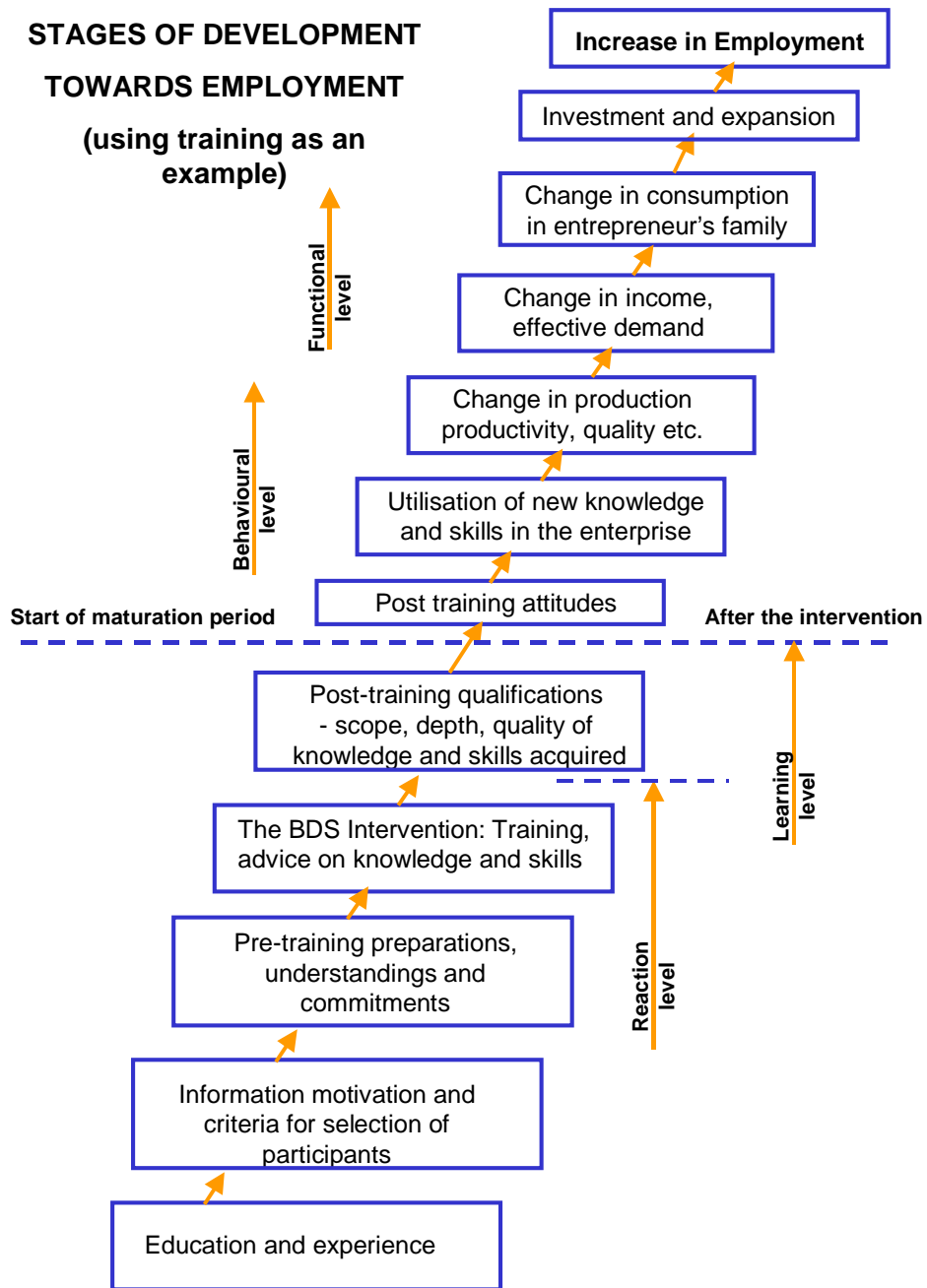
²¹ Assessing Impacts of Microenterprise Services (AIMS) Management Systems International. Conceptual Framework: Levels and Domains of Impact.

The *maturation time* until impacts on employment can be seen will vary according to the nature, type and intensity of the SED intervention. It will also vary according to a number of internal and external factors, such as the general economic climate in the country during the maturation period.

The move towards expansion and employment generation is a process that can be measured at different phases ranging from: exposure to information, learning, trying it out in practice, to application and habit formation as illustrated below. (See diagram 4: Stages of Development towards Employment.)

**STAGES OF DEVELOPMENT
TOWARDS EMPLOYMENT**

(using training as an example)



Indicators of change in consumption:

The main overall assumption made in most of the ILO's SED programmes is that the particular SED intervention will lead to increased employment. However, before the need for recruiting more staff arises there is a chain of events which is likely to take place. This chain may be longer in the case of MSEs in developing countries where many are still struggling to survive below the poverty line. Once an MSE entrepreneur starts realising an increased profit, there is no guarantee that he or she will immediately think of investing it in the business. There may be many other more immediate basic needs to be financed and provided for. As an example, the entrepreneur may decide to use profits from the enterprise to pay off personal debts; provide better food and housing; invest in the schooling of children; provide for the living expenses for a diseased relative's children who might be HIV/AIDS orphans; pay for sickness or funeral expenses, or even buy a new television. Catering for such needs – as perceived by the entrepreneur - will often take precedence over consolidating or expanding the business. Therefore, such non-business priorities may result in a delay in any intended employment generation effect. After satisfying basic needs, the entrepreneur may then be able to reinvest profits in the form of better raw materials, more effective tools and machinery, or improved production and working facilities. Business investments of different kinds are likely to be made before recruiting additional staff. This is why it is important to measure other indicators of positive impacts, in addition to the employment generation effects. In this phase of developing and testing methodologies, the IFP/SEED focus is on measuring the extent to which the SED interventions, and in particular SED interventions, lead to an impact on the quantity of employment and the quality of employment.

The following questions are relevant:

1. Are there any changes in the following key variables: employment, working environment, production, sales and profits?
2. Is there a causal relationship between the SED programme's interventions and the identified quantitative and qualitative changes?
3. If so, can we attribute these impacts directly to the programme interventions?
4. What external variables that impact on the enterprise also need to be measured?
5. Has the entrepreneur and the household benefited financially from the enterprise?

Results of the impact assessment of a SED programme tend to be specific to a certain place, at a specific time, and with certain types of people. The same programme, when implemented in another country or region with a different group of people or at another point of time, might give very different results. Therefore, in generalizing any results of an impact assessment from one particular study to the overall programme intervention, one has to be cautious. Certain precautionary steps can be taken, such as drawing a representative sample from the population. Another step is to use the "theory of proximal similarity" more effectively, and this could be done by describing in detail how the context of one study differs from the other, and providing data on the degree of similarity between various groups of people, places, and even time periods.

An effective impact assessment also requires a proper research design, as defined as an overall framework or plan for an investigation, with three main elements:²²

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

It is clear that we are mainly but not exclusively interested in a summative evaluation, since our main goal is to assess the impact of the SED interventions on employment and the conditions of employment. This implies that the “enterprise” is chosen as the basic unit of analysis. To investigate whether a cause and effect relationship exists between a SED intervention and the quantity and the quality of employment within the MSE, we may choose from the four major groups of evaluation designs.²³

I. Experimental Designs

The experimental design is the most scientifically rigorous and reliable approach. It is suitable for comparing the group that receives the intervention, “the treatment group”, with a group of similar characteristics called the “control group”, according to a set of impact indicators. The underlying logic is that since the treatment and control groups are similar, and face the same external factors, the differences between them arise due to the effects of the SED intervention. This is discussed in greater detail in the section on “Attribution of Impact”. The crucial element of the experimental design is to have a random selection of the treatment and the control groups. Random means that every one has an equal chance of being selected in either group (treatment or control). Statistically, this is a way of ensuring that the two groups will have similar characteristics. Usually when a programme or project provides a particular SED intervention such as management training, it is possible that some specific criteria for selecting participants are used, or that the programme attracts only certain types of entrepreneurs and individuals. The selection criteria, or the self-selection by the entrepreneurs to participate in the programme, give rise to a certain type of selection bias. In an experimental design the group of entrepreneurs is first identified, and then some of them are randomly selected for the programme. A group of non-participants is used as the control group. Such a process endeavours to ensure that there is minimal selection bias and strengthens the causal inferences.

This design is not used very much, mainly because project planners do not normally design their programmes to enable evaluations using experimental design. There is also a concern that such an evaluation would be costly and difficult to administer, especially if it is applied on a large scale. In addition, there is an ethical concern involved in assigning enterprises to different groups, and thereby possibly denying the enterprises belonging to the control group access to the intervention. It is also frequently hard to maintain all of the experimental conditions as enterprises may be statistically equivalent in the beginning of the programme, but later some of them might refuse to participate or may drop out of the

²² Singleton, Jr., Straits, B.C., Straits, M.M. and R.J. Allister, 1988. *Approaches to Social Research*. New York: Oxford University Press.

²³ Tronchim, W. (2000). *The Research Methods Knowledge Base*, 2nd Edition. Atomic Dog Publishing, Cincinnati, OH.

programme. Finally, the nature of the services provided to enterprises may change over time. There is also normally a so-called spontaneous replication or “spill-over” from those entrepreneurs who participate in the programme to the control group, as the latter may hear about the programme and its approaches (e.g. new production methods), and introduce them in their own enterprises also. Although experimental design strengthens the likelihood of causal inferences, it also creates operational and procedural complexities. Other types of designs - not dealt with here - requiring a rigorous approach include econometrically-oriented perspectives, such cost-effectiveness and cost-benefit analysis.

II Quasi-experimental Designs

In a quasi-experimental or non-random design, the assignment of the two groups (treatment and control) is not random, and the control group is constructed. Different methods and techniques are used to ensure that the two groups are as equivalent as possible in relation to relevant characteristics. This can include propensity score ranking in which the comparison group is matched to the treatment group based on a set of observed characteristics, or by using the predicted probability of participation given observed characteristics. A good control group should come from the same economic environment as the treatment group. Special instrumental need to be measured in order to assess the similarity of the groups. It is important to analyse in advance the possible characteristics which could be different in the two groups. The advantage of using this approach is that, to the extent that two the groups are similar, the observed differences between the groups can with a high degree of confidence be attributed to the impact of the programme.

One type of BDS intervention is a radio programme aimed at MSEs. In the impact assessment pilot study carried out by IFP/SEED on such a radio programme in Uganda, four characteristics were used to match a control group with the treatment group. However, it was found that entrepreneurial experience as reflected in the time since an enterprise had been registered, was also an important characteristic to be considered. Those who listened to a radio programme supporting MSEs (the experiment group) had less entrepreneurial experience than the non-listeners (the control group).

III. Longitudinal designs

Longitudinal design means measuring the impacts repeatedly over relatively long periods of time. Ideally, the data collection starts before the implementation of the programme, and the process is repeated after a period considered reasonable enough for producing the expected results. It is often referred to as the “before and after” type of comparison. The initial performance of the enterprises that will receive the treatment is compared with their performance after the assistance is rendered. The difference is attributed to the intervention. However, external (especially economic) forces and internal factors within the enterprises could also cause these changes in performance, regardless of the effect of any SED intervention. The “before-after” design might be adequate when there is a very direct and close causal connection between the programme and specific outcomes. It should also be necessary to assess the impact of external factors rather carefully in this type of design. A variety of strategies can be used to measure “before and after”. Only one group is used in the study with the “before” situation serving as a yardstick against which changes are measured. This is the case when baseline studies are used as a “before” measure.

A second variety is when the “before” measure may be taken in one group, and the “after” measure on a different and presumably equivalent group, like in the quasi-

experimental design. Sometimes, the “before and after” may be measured both on the experimental (treatment) group and the control group. Finally, there may be more than one experiment group and/or more than one control group, in cases where there is a variation in the intervention or in the background situation, for example for the same programme being implemented in different geographical areas.

IV. The Proxy Pre-test Designs

A proxy pre-test design looks like a standard “before and after” design, but there is an important difference. The pre-test measurement in this design is collected after the intervention has been made by requesting the respondents to recall their memory of the pre-test situation. Information with reference to this “before” situation is based on estimates. When the respondents answer the questions on the basis of memory recall, it is called recollection proxy pre-test design. Archived records can also be used as a stand-in for the pre-test information, in which case it is an archived proxy pre-test design. Good memory recall is thus an important prerequisite for the reliability of data collected by means of this design.

A difficulty in the practical implementation of the recollection proxy design is that the respondents may not remember the situation prior to the programme. Recall errors or distorted estimations may occur. It is possible to solve this problem by using the enterprise’s written records as a “stand in”, or in practice a combination of the two. However, lack of maintained records by many MSEs is a common constraint, thus negating the value of the stand-in information. Furthermore, the MSEs may be reluctant to make such written information available to outsiders.

In Bulgaria, where IFP/SEED tested this methodology in an impact assessment of BDS services provided by business centres, it was difficult to rely on recall information to form the baseline data. Although the respondents did not complain about having to provide information regarding past performance, they were not able or willing to recall actual figures regarding wages, number of employees, expenses, profits, etc. This phenomenon is especially true with micro and small enterprises which often operate within the shadow economy, as in Bulgaria. Their records do not reflect actual numbers, but only the minimum levels they reported for tax and social insurance purposes. They are afraid the information they disclose will be provided to the tax authorities.

4.3. Experiences with the Proxy pre-test design in SED

A proxy pre-test design has recently been used in two IFP/SEED surveys in Uganda and Bulgaria. The MSEs which had received assistance were compared with a control group (although not a “pure” control group) of MSEs who had not been assisted. This was found to be a good alternative to a more expensive survey based on a random sampling of enterprises – those which had and those which had not received support. The proxy-experimental design represents a more immediate, albeit less accurate approach. Provided that the various pitfalls are avoided, the methodology is well suited for several purposes. It is an advantage if personnel who have formal training as well as experience in social science research are involved, especially during the planning phase, the training of the interviewers, and in the interpretation of the findings. Below are some of the critical aspects requiring special attention in the use of this design.

4.3.1 Sampling

One of the greatest challenges is the construction of the samples of reasonably equivalent enterprises for the “experiment” and the “control” groups. While the target beneficiary or (experiment) group is a given under quasi-experimental group design, a lot of effort needs to go into identifying matching enterprises for the control group. It is necessary to carefully identify the important key variables. It is a great advantage if right from the beginning the SED programmes carefully record all the data pertaining to the enterprises they assist, including when assistance was first provided, and the type and intensity of the assistance. This will assist in later impact assessments.

There seems to be a tendency (as noted in the recent IPF/SEED studies mentioned above) that those companies seeking assistance are also the ones in most need of it. This means that they may not be comparable in all important aspects. There may be variables which differ, such as enterprise experience, education and levels of confidence. Nevertheless, even if the control group differs from the MSEs getting SED assistance, it can to some extent serve as a “control” for the influence of external factors such as the general economic climate and progress in the MSE sector. In other words, some type of control function may be fulfilled, even if for unknown or uncontrollable reasons the groups were not equal in all respects. However, the importance of ensuring that the two groups are as similar as possible cannot be over-emphasized.

Bulgaria:

While it is an indication of initiative to seek assistance from a Business Centre (BC), the ILO’s survey team was of the impression that there was a tendency for those enterprises experiencing most problems to be the ones to approach the BCs for support. The starting point of the assisted enterprises in terms of business performance was thus perceived as lower compared to the control group. This calls for extra care to be devoted to matching the beneficiary target group and the control group in terms of as many characteristics as possible.

Uganda:

A similar lesson was gained in the impact assessment of the radio programme, Nekolera Gyange, promoting MSE development in Uganda. Findings on the background characteristics revealed that listeners (the treatment group) had shorter experience as entrepreneurs, and they had more problems in running their businesses. In other words, they were in greater need for assistance than the control group. Thus the non-listeners did not serve very well as a control group. In addition to the other variables used to make the two groups equivalent, entrepreneurial experience, entrepreneurial success and the level of self-confidence should be added in future studies.

The best way to assess impact is nevertheless by means of comparing the actual performance following the SED treatment with a baseline study that has been carried out, in such a way that it is affordable and can be undertaken at suitable intervals. The ILO’s Start and Improve Your Business (SIYB) Programme has institutionalised the use of baseline studies in some of its country programmes.

If there is no baseline recorded, the second best option is to use a control group which is as similar as possible to the group of targeted MSEs. It is important to include a sufficient number of enterprises in the study to make up for any attrition, especially in areas severely affected by the impact of HIV/AIDS, and when the maturation time is long.

The selection process for the treatment and control groups must be properly recorded. This will enable a gradual accumulation of experiences so that a standard approach can be developed and subsequent replication can take place elsewhere. There should be records kept on selection criteria, the procedure, adherence to selection criteria, and various constraints encountered. Each assisted enterprise should have an equal chance of participating in the impact evaluation. This is the case also for enterprises which for one reason or another have not participated throughout the programme period, as drop-outs also may have something to contribute regarding their perception of the programme.

Bulgaria:

The survey team was constrained by the availability of reliable records on enterprises assisted at the business centres (BCs). Staff turnover at the BCs resulted in a weakening of the institutional memory. Also, some enterprises disagreed with the BC staff as to their classification as assisted or not.

4.3.2 Memory Recall

The main drawback with the recall proxy pre-test design is that it is based on memory or estimates to construct a baseline, against which the current situation is compared.

Bulgaria:

Enterprises did not want or were not able to provide accurate information about investments, profits, expenditures, and wage levels - considering it a company secret. They tended to report that employees were socially insured at the minimum salary, and managers were insured at twice the minimum salary.

A further problem arises as people are generally unwilling to provide financial information. Other (proxy) indicators may need to be developed and used in place of actual financial figures so as to measure growth. This is especially true for micro and small enterprises, which often operate within the shadow economy.

It is also important to ensure respondents' anonymity. This may be difficult if the survey is carried out by local interviewers who may already be familiar with respondents and with the BDS providers. The more familiar they are, the more difficult it may be to motivate the respondents to reveal their financial information. This is a drawback which cancels out advantages of using a research team who is very familiar with the people in the target areas. In assessing the impact of the ILO-supported Business Centres' support services in Bulgaria a number of lessons were learnt. Similar issues were experienced in the impact assessment in Uganda²⁴. It was occasionally difficult for the respondents to remember financial data compiled two years ago.

²⁴ IFP/SEED, Impact Assessment Study of SED on Employment - *Nekolera Gyange*: a Radio Programme supporting MSEs in Uganda

Experiences from Bulgaria

- The maturation period selected started two years ago and was compared to another point of time which was one year back. As both reference periods depended on memory recall, it would have been easier to select the current situation as the second reference period.
- Detailed quantitative data were requested pertaining to the number of employees; different salary intervals; records on sales, profits, etc. This was possible in Bulgaria since the enterprises are required to compile quarterly accounts, but such detailed information is difficult to gather with a reasonable degree of reliability in many situations.
- Information pertaining to so-called “proxy indicators” should be used to probe and verify the quantitative data, for example in terms of type of investments made, or purchases of equipment and raw materials. Information collected on proxies can provide useful additional information. It is also less sensitive to ask about physical items and expenditures, as compared to incomes and profits, and the items are more observable.
- It was not necessary that the respondent’s name be recorded on the questionnaire, and preferable not to have people familiar to them carrying out the interviews. Anonymity should be ensured in order to get sensitive and reliable information. The choice of enumerators is crucial, as well as the importance of avoiding possibilities

4.3.3 Intensity of Exposure

The intensity of exposure to the intervention must be carefully recorded and measured. In the case of BDS services it is important to investigate:

- The type of assistance the enterprises have received;
- How frequently this assistance has been provided;
- The duration of the assistance received;
- Some records should also be kept of the consistency and quality of the BDS support (e.g. different trainers have different skills and different records of effectiveness);
- What has been paid for this assistance (if applicable);
- If the enterprise has received similar assistance elsewhere during the observed period.

These aspects of intensity of exposure can be even more complicated in SED interventions such as radio programmes supporting MSEs, as indicated in the box below.

Uganda:

The consultants implementing the survey were accustomed to carry out radio listener surveys. They defined listeners as entrepreneurs who had listened to the programme at least twice in the past three months. However, using that definition those who were labelled as “non-listeners” could very well have listened to the programme since it started eighteen months prior to the study. In addition, listening only twice may be too low a threshold for qualifying as an intensive “listener” in the context of an impact assessment. The impact of such infrequent listening may be questionable. The extent to which people had listened - or the intensity of the intervention - was felt to be the most important variable to measure and relate to the impact variables in the survey.

There are several approaches available for measuring the impact of radio programmes or campaigns. The different stages are comprised of several steps from exposure to behaviour consolidation. This approach could be simplified as warranted to diagnose the gradual progress towards the desired behaviour change, ultimately expected to lead to an expansion of the business and increased employment.

While it is necessary to measure exposure to information or advice given by a radio programme or by the staff of any SED programme, the impact of this exposure in terms of adoption rate or use is also of interest. In impact assessments of radio programmes, sometimes only the first three or four steps listed in the table above are assessed. In Bulgaria the perceived usefulness of all types of assistance used by each entrepreneur was investigated. Yet, information relating to the last stage of continuous practical application has not been captured. While it may be easy to add one more dimension to the questions in the questionnaires (for example in the form of a rating scale), focus group discussions and other forms of qualitative approaches could also be well-suited for collecting of this type of information.

4.3.4 Maturation Period

The time taken by the SED interventions to result in a “mature level” of impact on employment is different for different interventions. For instance, experts working with SED interventions that focus on job quality and improving working conditions believe that it is feasible to investigate the impact six months after the completion of the training intervention. For SED interventions such as business training, 12 months is considered a reasonably good maturation period. The expected length of this period depends among other factors on (i) the need for assistance (i.e. the level at which the enterprise was at before the intervention); (ii) the type of assistance required, and (iii) the intensity of assistance provided.

The selection of the maturation period requires some preparatory investigations, depending on prevailing economic and other conditions warranting consideration. If an enterprise receives a minimum of assistance, say only once or twice, the impact will be less and likely to take a longer time to appear and mature than when more continuous help is provided. Similarly, where the SED intervention provides assistance in many different aspects, it is likely to yield a quicker and stronger response. Apart from the short-term and

medium-term impact on those receiving the targeted treatment, the programme might be interested in measuring the long-term impact for which the time-lag between the intervention and the measurement of impact may be longer than one year.

The time frame is likely to differ, not only according to the general economic climate in a specific country during the maturation period, but also according to the different economic conditions of one particular country compared to another. A general recession may easily jeopardise or slow down the expected impact. The maturation period must therefore be decided based on the prevailing conditions, which may also change during that period. It is necessary to record such changes from the time of the first intervention. Another aspect - sometimes forgotten – is that all the enterprises receiving assistance should have the opportunity to go through the maturation period before the impact is assessed. Therefore, since enterprises enter a programme at different points of time, it may be necessary to wait for, say, one or two years to measure the overall impact in order to allow for the last ones to receive assistance to complete the maturation period.

4.3.5 Attribution of Impact

External factors should also be included in the survey to facilitate the difficult problem of attribution of impact. Factors such as recessions or periods of economic growth, political turbulence, or fluctuations in harvests, etc. have strong impacts on enterprise development – often more than the programme interventions themselves. Unless these external factors are considered and included, there is a great risk of misinterpreting the findings.

If during the maturation period, the economy of a given country has declined and shrunk by six per cent, while the targeted enterprises have had a reduction by three per cent and the control group reduced by five per cent, then there appears to be a positive impact attributed to the SED programme. On the other hand, if the general growth from the beginning of the maturation period has been up – say by nine per cent, and the control group has increased its profits by seven per cent, and the target group by five per cent, there is growth - but the impact arising from the SED intervention is not positive. Also, while one sector is struggling to make ends meet, another one may be managing well or benefiting in a period of overall recession.

It is generally easier to find what you want to see or expect to see, when carrying out research or doing impact assessments. Thus, there is a risk of survey teams seeing a correlation between the intervention and employment growth, but they may be too eager to attribute the growth in employment to the support intervention provided. A connection does not say anything of the causative factors. It could be that the intervention caused the employment growth, but it could also be attributed to other factors. It is necessary to be vigilant and investigate all likely causes before conclusions are made. Frequently, there is a combination of reasons accounting for the change. An additional challenge is to assess the extent to which each of the underlying causes accounts for the observed change. There may frequently be forces working in the opposite directions. Some influences may be difficult to ignore altogether since they may have a more long-term impact. The rule of the thumb is to a priori investigate as many aspects as possible in order to eliminate their effects one by one.

5 Assessment Methods

5.1 Qualitative Methods

Qualitative methods emphasise the importance of observation, the need to retain the phenomenological quality of the evaluation context, and the value of subjective human interpretation in the evaluation process. The focus is on understanding processes, behaviour and conditions as perceived by the participants. Below is a table illustrating the differences between qualitative and quantitative approaches.

Although qualitative methods use relatively open-ended methods during design, collection of data and analysis, qualitative data can also be quantified. Since the qualitative methods require more staff than for example the administration of a questionnaire, sample sizes are usually smaller and the statistical analysis may require non-parametric methods (if $N < 30$) since statistical methods such as calculation of percentages are based on the assumption of a normal distribution of data. Qualitative information is nowadays almost always collected by means of participatory methods, some of which are described below.

5.1.1 Participatory methods

It is important that all relevant stakeholders of any SED programme get involved in the planning of its impact assessment. As consumers of the services provided, the entrepreneurs themselves are naturally the key stakeholders to be consulted, especially during the preparation of the survey instruments, procedures, times and the venues for tentative focus group discussions or other events related to the impact assessment procedures.

Participatory methods give central importance to all of the evaluation participants, especially the clients of the programme. Participation is a feature of all methods, more so in qualitative methods and in the so-called participatory methods. After all, who can assess the quality of a programme better than the participants themselves? The underlying principles of participatory approaches are that these methods and tools are superior in capturing complex realities, assessment of needs (“felt needs”), establishing priorities for development activities, focussing formal surveys on essential aspects, and identifying conflicting aspects or interests. In addition, the participants will also increase their knowledge and awareness of all the aspects dealt with as a result of having analysed them in a participatory manner. There is a rapidly developing range and variety of participatory appraisal methods to choose, from as illustrated below.

In general, the participatory methods involve multiple sources of information including direct observation, interviews, documents, etc. However, it is difficult to generalise from the results and seek significance beyond the specific enterprises that are studied. An illustration of how qualitative methods can be used to complement the quantitative studies is shown below, as used by the ILO’s IFP/SEED in its impact assessment exercise on the MSE radio programme in Uganda.

In Uganda, two focus group discussions were organised to investigate how the entrepreneurs perceived the radio programme, and to see if it had an impact on the employment situation in their enterprises. Two separate focus group discussions were held with about 13 participants in each. They had listened to the programme from almost every time it was aired or a minimum of twice in three months. The participants were micro and small entrepreneurs that had 1 to 9 workers in their enterprises. The enterprises were selected from both rural and urban areas. They were engaged in a range of businesses from construction, restaurant, car garage, hair salon, dry cleaner, furniture/hardware store, and selling vegetables, clothes, etc.

Most of the participants said that they had learnt how to manage and plan their business better through the radio programme. It also educated them on better allocation of funds and how to save money. The programme had helped in establishing contacts between some of the participants and new suppliers and customers, thereby removing supply bottlenecks and widening the markets for their products and services. Participants also said that they had learnt how to manage their employees better, and to consult with other employers on various business matters. One of the strongest benefits from the programme was the inspiration that the participants derived from listening to successful entrepreneurs who were invited to the programme. Most participants felt that Nekolera Gyange helped them improve and strengthen their business which led to business expansion and hence a need for more workers.

Mali Joseph, who sells vegetables, said that he was able to save money as a result of advice from the Nekolera Gyange programme. The savings helped him get his own vegetable stall, and it is now necessary for him to hire more workers. The participants also said that the programme taught about personnel management, and how to improve their working conditions. Some entrepreneurs had introduced leave periods for their employees; given free medical treatment; introduced payment of wages on time and on a regular basis; increased salaries; provided lunch; provided transport and housing allowances, etc. These improvements were inspired by the programme.

It is a general perception that focus group discussions are genuinely participatory, but observations of the degree of participation by different members may vary considerably. The facilitator should be aware of the most common constraints to participation and prepare, time, venue, seating arrangements and the checklist with questions to suit both women and men, as well as more and less eloquent entrepreneurs.

5.2 Choice of Methods

Experimental and quasi-experimental designs have causal inference, but are also more expensive and in practice more difficult to implement²⁵. Non-experimental and participant-oriented methods are relatively inexpensive but cannot establish a strong causal relationship. Therefore, the choice of methods must be based on the purpose of the evaluation, the contextual framework, information available, practicability, costs and time available. The scientific experimental methods are difficult to use in cases where the objectives of the research or impact assessment methodology have not been formulated from the outset of the intervention. Such assessments are also normally (and preferably) conducted by outside experts.

There has been a gradual move from primarily quantitative to more qualitative methods which require that the staff are involved in the impact assessment and appropriately trained in the use of qualitative and participatory methods. However, there is sometimes confusion among programme planners and implementers in relation to some of the following aspects.

²⁵ Even if a random selection of the treatment group and the control group is made, a few dropouts can render the groups non-random and hence introduce a bias.

Method and content: A large-scale survey can focus on quantitative as well as qualitative aspects, although it has traditionally been used to capture mainly quantitative data. Therefore, people still associate some approaches - especially surveys by means of questionnaires - with a quantitative focus. Similarly, focus group discussions (FGDs), which in essence are more participatory process-oriented methods, can also be used for collecting quantitative information. These methods are merely instruments which may suit different purposes to different degrees.

Degree of participation and role of project officers: Some claim that outsiders might lack the ability to mobilise the people targeted by the intervention into participating in the assessment studies. This point is emphasised by Noponen (1997)²⁶ who highlights the risk that standard quantitative evaluations do not really take the needs, the indigenous knowledge, and the values of development organisations and their constituent communities into account. While again, the traditional execution of an evaluation by outside experts may have had these flaws, there is nothing preventing outsiders from using programme staff to mobilise participants to take part in an evaluation exercise. The pros and cons with using external or internal evaluators need to be carefully considered. While internal evaluators may be able to mobilise the participants with greater ease, they may occasionally also be “too close for comfort”. They may be too involved in the programme to be able to elicit honest replies and make objective records of the findings. If a SED programme is likely to continue, the participants are also therefore likely to be in a dependency situation towards the programme staff. They probably know each other, and it is difficult if not impossible to assure the respondents of anonymity.

Degree of scientific rigour and method: There is a prevailing perception that experimental and longitudinal studies, as well as large sample surveys, are automatically more scientifically rigorous. However, while a good design is a necessary prerequisite for scientific rigour, in itself it is not sufficient. Higher quality in the execution (not to be mixed with qualitative aspects compared to quantitative in relation to qualitative aspects and numbers), may be easier to accomplish (and at a lower cost) in a small survey. As scientifically rigorous methods are costly, it has frequently meant that only a small sample size is taken. Qualitative analysis probes deeper into issues beyond the reach of pre-coded questionnaires, thus being able to identify unexpected changes and unexpected reasons for these effects. Such methods give flexibility to the survey process and are less likely to turn into expensive mistakes and “survey slavery” as described by Chambers (1983).²⁷

Hulme (1997) points out that an impact evaluation can be carried out by a variety of methods ranging from sample surveys, focus group discussions, rapid appraisals, participant observations, case studies, etc. Since the 1980s there has been a move away from the single method approaches to multiple approaches.²⁸ In reality, most good evaluators are familiar

²⁶ Noponen, H. 1997. Participatory Monitoring and Evaluation: A Prototype Internal Learning System for Livelihood and Micro-credit Programs, *Community Development Journal* 32 (1).

²⁷ Chambers, R. 1983. *Rural Development: Putting the Last First*. London: Longman.

²⁸ 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.

with different methods and combine them as the need arises. Little (1997) identifies five factors that can help in choosing appropriate methodologies²⁹:

- The objectives and purpose of the assessment;
- The intended use of the information;
- The levels of accuracy and reliability required;
- The complexity of the programme; and
- The resources (human, financial and time) available.

The methodology which is finally chosen can therefore be a combination of methods that best suit the purpose of the study, taking the available resources and constraints into account. In fact, triangulation, which means using at least three complementary methods, has become the general practice. Mixed methods are frequently developed in order to prepare a tailor-made approach that can optimally capture the impacts of a specific programme or project.

²⁹ Little, P. 1997. *Research Design for Program Evaluation: Regression Discontinuity Approach*. Newbury Park, Calif: Sage

6. DESIGNING THE SURVEY

6.1 Background

The main features of the SED BDS programme will determine the type of evaluation that is possible. It is unusual that programmes or projects are planned according to a scientific research design prepared in advance. As an example, the ILO's SIYB Programme has been able to institutionalise a standard procedure in some countries for preparing baseline surveys prior to programme interventions. This facilitates an assessment of impact over time.

As the various forms of development assistance get increasingly multidimensional and interdisciplinary, there is also an increase in the number of aspects requiring consideration. Most likely, the aspects that one would like to measure in the future are not included in baselines as they are designed today. There is likely to be a gradual expansion of the impact assessment content, as new studies are carried out. Nevertheless, it is important to explore the availability of data on those aspects not covered at the inception of a programme. Even if the programme has not gathered information on all topics, data may still be available either inside or outside the programme itself.

Before an evaluation plan is made, it is essential to make a short summary of the programme or project in order to get an overview of the key components, and identify the main questions that the impact assessment should be designed to answer.

6.2 Purpose

The purpose will determine the design, methods and content of the impact assessment (IA). Why is the IA being undertaken? Usually there are several purposes of varying degrees of importance. A process-oriented research design will require some flexibility and allow for in-depth studies or further statistical calculations as indicated by preliminary findings. This is a situation that has to be planned and budgeted for. While there may be a need to focus on specific angles of individual programmes, a core of standard variables (indicators) will enable the accumulation of data for developing "best practices", thus enabling and facilitating comparisons.

6.3 Choice of Design

The feasibility and implementation of the IA survey are important factors that will determine the design.

- Costs are one of the major factors in deciding which type of survey instrument is used. Quasi-experimental designs are, for example, generally more expensive than single group designs, and in some cases there might be no budget for them. In such situations a more cost-effective but a less rigorous approach has to be selected for the impact study.

- Time is another important factor, and each stage of the survey needs to have a proper allocation of time to ensure that the survey can be completed on time.
- The skills of the personnel conducting, managing and supervising the survey are also an important consideration. In some regions, it might be difficult to find people with appropriate skills, thereby limiting the survey process.

Attributing the impact to a particular programme, and establishing the causal links are central to any impact assessment. The underlying assumptions are that the characteristics of the treatment and control groups were as identical as possible before the project. The control group is supposed to be completely unaffected by the project, and the exogenous events affect the treatment and the control group in the same manner and to the same degree.

The changes in the performance of the targeted enterprises, however, could be due to external factors or internal factors within the enterprise, and not necessarily due to the SED intervention alone. This problem of attribution makes it difficult to establish if the observed changes in an enterprise are induced by the SED programme itself, or as a consequence of other possible causes arising in the physical, economic, political or policy environment. The truth will often lie somewhere in between. Most of the past ILO impact studies used for measuring the impact of the SED programmes used some kind of single group design. These took the form of either a measurement of outcomes after the programme was administered (see Table 6, row I), or the form where the baseline data was also collected from a sample of participants (see Table 6, row II).

Table 6: Two types of Single Group Designs			
	Pre-test for participants only		Post-test for participants only
I.	No measure	SED Intervention	Outcomes measured
II.	Baseline measured		Outcomes measured

Such impact studies relying on single group design tend to provide unreliable information, as it becomes difficult to verify if the outcome were caused by the SED intervention exclusively, or some other factors which occurred independently of the programme.

When both the baseline and the post-intervention data are collected for the group of targeted enterprises (Table 6, row II), the post-test performance of the participants is affected by the fact that they tend to be better prepared for the programme than they would have been in the absence of a pre-test (e.g. as in Table 6, Row 1) as the pre-test itself influences their subsequent attitudes and behaviour towards the SED intervention. Participants dropping out from a selected random sample can also render the sample non-representative and introduce bias into the results.

Another problem is the “regression to the mean” that the use of single group designs introduces. Trochim (2000) gives an example where in the pre-test stage the sample of participants was selected from the lowest 10 per cent of microenterprises in terms of their

business performance. This did not imply that this category of enterprises would still constitute the lowest 10 per cent in the subsequent post-test stage. It is likely that some of the microenterprises might move to a higher category of small enterprises by the time the programme is completed. Then the means of the post-test averages will increase, even for those enterprises which never got the programme intervention.

The Quasi-experimental Design:

To overcome these problems it is suggested that a quasi-experimental design should be used for impact assessment of the SED programmes. The quasi-experimental design compares a participant group with a similar group of non-participants, which constitutes the control group. It differs from the experimental design due to its lack of random selection of the groups. Information is collected for all the enterprises with reference to at least two points of time: “before” and “after” the programme is implemented. The baseline data, which is collected just before the SED intervention is made, is used to compare changes in the employment situation and the business performance of the enterprises between the pre- and post-programme period (see Table 7).

Table 7: Quasi-experimental design		
Pre-test		Post-test
A. Measure baseline for group of <i>participants</i> that will receive the intervention	SED intervention	C. Outcomes measured for the <i>participants</i> group that received the intervention
B. Measure baseline for the <i>control</i> group		D. Outcomes measured for the <i>control</i> group

The quasi-experimental design ensures that the differences between the participant and the control group can be attributed to the programme intervention and not to other factors. The underlying logic is that the control group is exposed to the same history, maturation and similar drop-out rates and regression to the mean. See Table 7 for a better understanding of the measurement of impact of a SED intervention. Assume that the measures A, B, C and D are the observations for the number of workers within the enterprises for particular groups at particular points of time.

$C - A =$ Change in employment partially due to project impact, and partially due to other or exogenous events;

$D - B =$ Change in employment due to exogenous events;

$A - B =$ The difference in the number of workers arising from a non-random selection of client and control groups (selection bias);

$C - D =$ Difference in the number of workers arising partially from the project impact, and partially from the selection bias.

The best estimate of impact attributable to the project can therefore be calculated as “the difference between the post-intervention measure of the impact indicator (e.g. number of people employed) for the participants and the control group” minus “the difference between the pre-intervention measure for the same indicator for the participant and the control group”.

Consider two similar groups of enterprises: one that receives the SED intervention (treatment group), and the other that does not receive the intervention (control group). Suppose the number of workers at the time of the baseline survey was 500 for the treatment group and 550 for the control group. Then by the end of the SED maturation period, there is an increase to 770 workers in the treatment group and 650 in the control group. The impact on the employment would be calculated as follows:

$$\text{Impact on employment} = (770 - 500) - (650 - 550) = 270 - 100 = 170$$

So the real impact on employment is 170, and not 270 (770-500) because we can see that the control group showed an increase of 100 workers (650-550) even without receiving any intervention. Another logic applies to a second calculation of impacts, as shown below.

Best estimate of impact attributable to the project = (C-D) - (A -B) (see Table 7)

$$\text{Impact on employment} = (770-650) - (500-550) = 120 + 50 = 170$$

Chitere et al. (1999)³⁰ suggest that the best estimate of impact attributable to the project is the difference in employment arising partially from the project impact, and partially from the selection bias, minus the difference in employment arising from non-random selection of client and control groups (selection bias). The choice and structure of the control group is important.

6. 4. The Survey Sample

6.4.1 Respondents

a) Classification of the MSEs

We need to define and describe clearly the MSEs that are the focus of our assessment. For the purpose of comparing different programmes it might be an advantage to use one system of classification, rather than different ones for different countries. It is suggested that the “number of workers” will be the basis for classifying MSEs. Enterprises with up to 5 workers may be defined as microenterprises, and those that have between 6 to 20 workers may be defined as small enterprises. Depending on the nature of services provided by the SED intervention, the respondents could either be the entrepreneurs or the workers or both. In any case, there is a need to collect information about the enterprise, the entrepreneur and the workers.

b. Respondents

We suggest that the owner or the main manager of the enterprise will be chosen as the respondent to the questionnaire as he/she is in the best position to answer the questions.

6.4.2 Choosing the Control Group

In the quasi-experimental design we have to select the participants and the control group non-randomly, so that they are as equivalent as we can make them. The reliability of the impact assessment results delicately hinges on variables of the participant and control group that can have an independent impact on the performance of the enterprise. These variables could be capital, scale, sector, size, location, or sex of the entrepreneur.

To ensure a degree of equivalence between the participant and the control groups, it is suggested that the enterprises in the control group be selected on the basis of similarity with the treatment group in terms of:

- The sector to which they belong;
- The size of the enterprise in terms of number of workers, sales, etc.;
- The sex of the entrepreneur (male, female or joint ownership);
- The level of education of the entrepreneur;
- The business experience of the entrepreneur;
- The level of interest and commitment to receive the SED support;
- The time since the enterprise was registered, and
- The rural-urban and regional configuration.

Care should be taken to ensure that the treatment and the control group reflect the same proportions with respect to these key criteria. The implementation of the quasi-experimental design can also pose practical problems. It assumes the availability of such information for all the enterprises from which the control group to be selected. In cases where we do not have an existing database with the relevant information, lists of the enterprises might have to be prepared and similarity sought with the participant group.

In Bulgaria the lists of enterprises and individuals that received support of the business centres were easily obtained from the business centres. For selecting a control group to match the supported unemployed individuals, a list of unemployed was obtained from the local labour bureau. The list of the unsupported enterprises had to be prepared by using the snowballing technique.

Preparing lists to select a sample of listeners and non-listeners in the case of the radio programme in Uganda proved more difficult. No lists existed, so grids were placed on the map where the radio programme reached. Areas with a concentration of micro and small enterprises (MSEs) were identified. The filter questions that determined whether the respondent was a listener or a non-listener were directed to the MSE in these areas of concentration, and a list was prepared. The final sample was randomly selected from these lists. The critical step in this sequence was the procedure used to identify areas of concentration of MSEs, and if MSEs in "high concentration areas" could be considered representative of all MSEs. However, all the steps were not described and recorded with regard to the Identified and selected, but this should be a prerequisite in constructing samples.

It is possible that the control group enterprises might interact with the participant group and discuss the SED programme, a so-called “spill-over” or spontaneous replication. The subsequent diffusion of knowledge might then lead to imitation by the enterprises in the control group and hence affect their post-test performance. The existence of the two groups might also generate a competitive attitude in the control group; as a result the post-test results might get affected. Both the diffusion and the rivalry effects work in the direction of equalising the post-test performance between the two groups. In contrast to these effects, the enterprises in the control group might also get demoralised, especially if they are aware of the programme, interested in participating, and unable to do so. The impact assessment should include a question or two attempting to measure how the entrepreneur felt he/she was affected by belonging to the group he/she was assigned to.

Increasingly, BDS service providers have to deal with the ethical issue of a person’s right to service, especially when constructing the control group. Even though rigorous techniques require the presence of a comparison group, the persons assigned to this group might feel that their equal right to services is being curtailed. In such cases, the BDS providers might feel responsible for not providing their services to the control group, and may make available another programme or service to them which has distorting effects on the post-test results. The effect of such problems can be minimised by selecting or isolating the two groups at a sufficient distance from each other. Where possible, the control group should be chosen from a region which is similar to the region in which the programme is implemented in terms of the level of economic development, socio-cultural factors and infrastructural facilities. Higher costs and the lack of any suitable alternative regions from which the control group can be chosen, are some of the practical problems that one can face.

In Trinidad and Tobago, for instance, the ILO’s Improve Your Working Environment and Business (IWEB) for micro-manufacturers and the Managing People Programmes, focussing on training entrepreneurs to improve the working conditions in their companies, were to be implemented in Port of Spain. However, within Trinidad it is difficult to find a city comparable in development and other characteristics to Port of Spain. Therefore the impact assessment survey was forced to select the control group from the same city.

There are several other important issues that have to be considered while choosing the sample from among the treated population.

- Can we get a list of all the MSEs from which we can draw a sample? (For the radio programme in Uganda, the list of MSEs had to be generated from scratch for both listeners and non-listeners.)
- What information do we have about our respondents? Do we know more than their contact address? (In SIYB, Sri Lanka for example, the profile of each respondent was documented carefully with a photograph and a short bio-data.)
- Can the respondents be located? Some microenterprises may be very difficult to locate as they move their place of doing business (for example, mobile vendors), and the entrepreneurs might be very busy and therefore unavailable, or they might have migrated to another place.

- Some of the sample of treated population might refuse to respond. If response rates are low, even a well-designed survey will be ruined.

▪ 6.5. Survey Instrument

6.5.1 Initial Considerations

A survey involves interviewing respondents by means of a questionnaire, or by interviews using closed, semi-closed, or open questions. Before deciding which kind of methods to use, the characteristics of the population and its accessibility have to be considered.

- Are the entrepreneurs that we are trying to reach literate? (In Bulgaria the entrepreneurs were literate, so the surveyors left the questionnaire with them to fill in. In Uganda and Sri Lanka on the other hand, the surveyors had to read out and fill in the questionnaire.)
- What language do they speak? It is necessary to translate the questionnaire into the language of the respondents, or else different enumerators may translate the questions differently. Care should also be taken to use the same vocabulary as the respondents normally use, and to use the same pronunciation. (The questionnaire used in Bulgaria was prepared in Bulgarian; the one used in Sri Lanka was in Sinhala and Tamil; and the questionnaire for the radio programme in Uganda was translated to Luganda.)
- Will entrepreneurs cooperate by responding to the questionnaire? (The Bulgarian interviewers experienced this problem, especially on the financial and taxation questions.)
- Are there some special gender-related problems? (In a survey of 150 women entrepreneurs in Pakistan the interviewers faced special gender-related problems. It was difficult to find and retain female surveyors who were willing to make field visits to survey even women entrepreneurs. Many interviews took more than one sitting as the women entrepreneurs had multiple engagements, like picking up children from schools, phone calls and unexpected visitors - a common practice in Pakistan. Sometimes women entrepreneurs hesitated to answer certain questions, and tried to buy time for consultation with others. This was true for questions like who signs the legal documents; total investment in the business; monthly profits, etc. They normally sought help of their male family members - husband, father or brother - who may or may not be present at the time of the interview. The usual response to such questions was, "Let me consult and then I will tell".)
- Are there any geographic problems, in the sense that the programme to be assessed is spread over a wide geographical area? (In the SIYB impact assessment in Papua New Guinea, the respondents were spread all over the country, sometimes in very remote corners, thereby posing a practical problem to the data collection process.)
- Will the sampled respondents be willing to participate in the survey? The response rate can be enhanced by getting the enterprises to agree to cooperate and comply with data collection at the time of their participation in the programme. The respondents' cooperation can also be enhanced by sending them a letter informing them of the purpose of the survey, indicating possible benefits that they might receive, encouraging their participation, and assuring them of confidentiality. (Several references have already been made to the issue of confidentiality as experienced during the impact assessment exercise in Bulgaria.)

Bias might also be introduced into the data due to a number of reasons.

- Respondents generally want to look good in the eyes of the surveyor and might try to answer all the questions that they are asked, even if they are not sure of the answer or don't know it.
- The interviewer might also distort the interview by making the respondent uncomfortable, or by leading and prompting their answers.
- Respondents may be reluctant to reveal information that is sensitive for one reason or another. For example, financial information pertaining to profits and wages, etc. usually require confidentiality. The minimum requirements for motivating the respondents to actually participate in a survey are summarised in table 8 below.

6.5.2 Survey Variables and Questions

A number of factors need to be taken into account when formulating questions.

- a) The first step is to identify and analyse the issues the survey is designed to investigate. This exercise will provide a description of the central concept (employment) broken down into different aspects, which will then become the study variables. (This exercise is carried out in a very similar way as the preparation of “a problem tree” in project planning.)
- b) An important step is also to establish working definitions. For example, the concept of “employment” needs to be defined in terms of the variables chosen. Another important definition is that of the participant in the programme. What degree of intensity of the intervention should a person have been exposed to in order to qualify as a participant?
- c) What intervening (external) variables can be identified and need to be studied? These can be ones that either promote or hinder the employment impact of the particular SED intervention, or simply be correlated with other external variables which may do so, thus serving as a proxy for these. Data on some of the external variables such as economic growth, recession or inflation, infrastructural developments (such as roads or markets), etc. can be collected through other sources than the questionnaire, but the impact of inflation (as an example) on an enterprise can also be probed through the survey instruments.
- d) The result of steps a – c above will provide a list of different variables. The next step is to select which ones need to be compared with each other, based on assumptions about the impact of the intervention and the external influences. This list of planned comparisons will constitute the basis for the plan regarding statistical analysis and presentation. The plan indicates what to do with the data once it has been gathered. It includes for example the cleaning and coding and determining the comparisons (cross-tabulations) to make. (A common mistake is for the questionnaire to be prepared and data gathered before the choice of statistical analysis has been made.)
- e) The list of variables will serve as a plan for choosing the survey methods and preparing the draft questions. While it may suffice to have only one question to measure a variable, it may often be necessary to construct several questions to capture the underlying assumption accurately. The pre-testing process will reveal the quality of the questions.

a) The Core Variables

Although there is always a need for an individualised approach for a specific programme or project, the inclusion of a standard set of core variables is recommended. This needs to be broken down into sub-variables and questions. Below are some core variables and sub-variables relating to jobs and employment.

Table 10: Abstract from Core Variables as used in World Bank studies ³¹	
Variables	Sub-variables
Quality of work	Remuneration (salary, working hours, fringe benefits, equal opportunities); Job security; Social Protection; Safety & health concerns; Human Resources Development; Management and organisation and Freely chosen work.
Employment – Job creation	Paid and unpaid regular and temporary workers

b) Designing the Questions

Before constructing the questionnaire instrument, it is necessary to determine the coverage and content of the questions, choose the appropriate response format, and decide which questions to ask. Some MSEs are owned and managed by entrepreneurs who may have little formal education and training. Therefore the questions should address issues on which they can be expected to have information, and they should be worded in a clear, simple and unambiguous style. Sometimes, the respondent might need to consult records to answer the questions. However, where possible such questions should be avoided, as they might involve a substantial amount of time. Generally, it is recommended that a questionnaire should have an implementation time of not more than thirty to forty minutes.

The questions may be closed requiring only a tick for the chosen alternative, open-ended, or completely open. Closed questions are more easily quantified and more suitable for quantitative analysis. Open-ended questions, and even more so, open questions allow respondents to reply in their own words. Question alternatives must be mutually exclusive, exhaustive and easy to review. It is an advantage if the questions and their alternatives have been pre-coded i.e. supplied with a number next to each alternative to facilitate computerisation and statistical analysis.

If scales are used indicating the extent of, say, benefit, care should be taken to have symmetrical and balanced scales, so that positive or negative aspects are not the only ones available to choose from. One should also mix the times positive alternatives are listed first compared to when negative alternatives are mentioned first, in order to avoid a so-called “response-set” tendency in replying, and to stimulate further thoughtful answering. However, for compilation purposes, throughout the questionnaire the numerical values should be assigned in such a way that higher values mean a positive rating, even for question alternatives which have been “turned around” to avoid a “response set”. There is also a risk of a “central tendency” in case there is a middle neutral alternative available, and it can be

³¹ * Used by World Bank in Living Standard Measurement Studies

avoided by creating a form of “forced choice”, such as offering an even number of choices with no mid-point.

The question sequence should follow a logical progression. Screening questions and filters should be introduced wherever necessary to ensure that only the relevant questions are asked to each respondent, and to promote a good flow of the questionnaire. Structured response formats are preferable as they help the respondent to answer more easily. It is also easier for the analyst to accumulate and summarise responses more efficiently. This also reduces the scope of error on the part of the surveyor.

In the case of structured response formats, care should be taken to ensure that all the alternatives are covered; the wording is impartial; the form of response is easy and uniform, and the list of options is not too long. The time period referred to by various questions should be clearly specified in the questions to avoid any misinterpretation. Sensitive questions, especially ones requesting information about financial and tax details of the enterprise should come towards the end, since they are likely to raise suspicion at any early stage and that may influence or deter the respondent. Moreover, when practical survey questions are asked to report “continuous measures” (e.g. number of workers, annual sales in dollars, etc.), the questions should not demand a lot of calculation effort or depend on memory recall on the part of the respondent.

6.5.3 More examples of Proxies

Some standard indicators used in SED are related to employment, production, sales and profits. These are rather broad terms which can be measured in many different ways. There are many expectations that indicators are expected to fulfil. First they should specify:

- Target group for whom?
- Quantity how much?
- Quality how well?
- Time by when?
- Location where?

There are many additional requirements of good indicators. The table below shows the good qualities that one may hope for. Since it is not possible that a single variable fulfills all these requirements, it is usually necessary to combine a number of variables to serve as an indicator.

The use of proxy indicators is a cost-effective way of measuring impact. Proxies are general indicators that may be used to assess the level of economic activity in the project area. For example, by assuming that opportunities for small firms grow in tandem with spending in the local economy, it allows evaluators to avoid the expense of sampling and interviewing a representative collection of non-project enterprises. If the general level of economic activity in the project area increases by 20 per cent over the project life, the evaluator can assume that assisted enterprise activity (and income) would also have increased by 20 per cent even without the project’s support, but simply as a result of normal growth in the local economy.

This method is not only cost-effective, but also minimises the displacement problem. It is likely that some of the growth in employment and sales within participating enterprises comes at the expense of other enterprises (not targeted by the intervention) that sell similar products, thus resulting in a displacement effect. The displacement effects are especially noticeable when a number of small enterprises compete with each other for a fixed volume of demand. In that case, the assisted enterprises are likely to do well, whereas the control group enterprises are likely to contract. Evaluators might attribute this difference between the treatment and the control group to the benefits from the SED programme, but it could merely be a result of a redistribution of a fixed market demand. Comparing the benefits of the treatment group (the enterprises participating in the SED programme) in terms of their economic growth with the growth in the general economy - and not only the control group which may contain companies negatively affected by the displacement effect – helps to minimise this problem.

Mc Clelland and Winter³² developed an innovative approach by comparing the communities where training was available with towns of similar level of economic activity with respect to their electricity consumption. Electricity consumption was used as a “proxy” measurement of industrial activity. It is common for respondents not to be able to remember information on annual business profits accurately. Liedholm (1991) found that profits were overestimated by 47% and only 21% of estimates were within 25% of the derived profit figures³³.

The value of products consumed, plus money from the enterprise used by the household, plus money left over appeared to be the best proxy for profits in a scientific study³⁴ discussed in section 4.3.2 above.

Developing suitable cost-effective impact assessments is one of the main areas of future interest and challenge for BDS providers, donors and governments supporting small enterprises. Unless cheap and efficient tools for IAs are developed, the IAs will not be carried out as often as warranted due to various financial and time constraints.

³² Mc Clelland, D and Winter, D. 1971. *Motivating Economic Achievement*, Free Press, New York.

³³ Daniels L. 2001, op cit.

³⁴ *ibid*

7. Sample Questions

7.1 Survey and question design

- a) Core information collected in a survey should be used for both the baseline and the post-intervention data collection. For retroactive studies, the information has to be collected for both the pre-test and the post-test period. For such studies, some of the sample questions should be asked for two time periods - “before” and “after” the interventions - by making appropriate adaptations in the questions to refer to the relevant time periods.
- b) The sample questions aim to collect information that can be used to characterise the quantitative and qualitative employment situation.
- c) The questions can be adapted to local circumstances.

7.2 Pilot testing

The success of any survey depends largely on the achieved response rate and the quality of data obtained. Therefore, before carrying out a survey, it should be pilot tested with a small group of respondents who are willing to give feedback. The pilot test is a check for how well the survey will work, and provides a chance to correct any shortcomings in the questionnaire instrument, such as eliminating ambiguities in relation to terminologies (e.g. on “jobs”, job security and remuneration) and improving the logical sequencing, streamlining the questions, and reducing the overall interview time.

The sample questions below may be altered according to local requirements. Once finalised, each question needs to be numbered in a consecutive order and each alternative supplied with a code number. Include also a code for no reply (#99). It is advisable to consult a statistician before proceeding to the coding and pre-testing stages.

7.3 Draft Sample Questions On Employment Matters

1. Do you think you would have found an alternative paid work in ~~the community~~ without attending this programme? (Pick one suitable option)

1=No, I would not have found work till now if I had not attended this programme; 2= I would have found work but would have earned less; 3= I would have worked in worse condition with fewer benefits; 4= both 2 and 3 are relevant; 5= I would have been in the same situation as now or even better.

2. Have you had any assistance (from anybody who normally does not work for your enterprise) working on certain tasks or products in the past one

Q1. Only use this question in an evaluation of an employment promotion programme

month? 1= Yes 2=No <i>With this question we attempt to capture the amount of work sub-contracted to others outside the enterprise.</i>	
3. How much did you pay for this work that was sub-contracted to someone outside your enterprise? <i>(State the amount in local currency)</i>	

Employment situation in the enterprise

1. How many workers are working in your enterprise at present? (Including unpaid, relatives and family workers and the owner of the enterprise)	
2. How many of the total workers are paid? _____ out of a total of _____ workers	
3. How many of the total workers are unpaid relatives and family workers? _____ out of a total of _____ workers	
4. How many of the total workers are unpaid apprentices? _____ out of a total of _____ workers	
5. How many of the workers are permanent? (A worker who has a verbal or written contract for working for more than 6 months should be counted as a permanent worker.) _____ out of a total of _____ workers	
6. How many of the workers are temporary? (A worker who has a verbal or written contract for six months or less but more than one month is a temporary worker.) _____ out of a total of _____ workers	
7. How many of the workers are casual? (Casual workers are those that have a verbal or written contract for a period of one month or less.) _____ out of a total of _____ workers	
8. What is the total number of paid workers in your enterprise, including yourself? Of these; how many are women? How many of the total paid workers work in the following categories? What is the average number of hours worked by the unskilled full time workers? What is the average weekly wage of these unskilled full-time workers? <i>(Answer these questions in the respective order, in the appropriate boxes given below.)</i>	
Total number of paid workers	<p><i>Using interval categories for the number of hours and average wages was found to be one of the most useful and simple ways of collecting information on these two variables. By multiplying the number of workers with the average number of hours we can get a good approximation of the total number of labour hours worked in an enterprise. The product of the average wages and the number of workers is expected to be a good indicator of the labour cost within the enterprise.</i></p>
Out of these; number of women workers	
Out of the total paid workers: How many work in the following categories?	
Work more than 40 hours or more per week	
Work from 30 to less than 40 hrs per week	

Q3 and Q4 try to capture the unique situation of the family enterprises and the on-the-job training for unpaid workers.

Q5 – Q7 explore the job security issue which is central to the quality of employment within the enterprise.

Work between 20 to 30 hrs per week	
Work for 20 or less than 20 hrs per week	
Out of the total paid workers how many are earning in following categories?	
Make a few “interval categories” for the “earnings per month” or the “wages per week”. The choice of the exact categories would depend on the region and the country.	
The Entrepreneur	
1. If the answer to question 6 is yes, what are the average hours per week that you work for them? If you are working on more than one job (for someone else and for yourself,) add the total number of jobs and hours.	
2. Have you decreased some other activity (agriculture, paid work or job) to increase working time in your business? 1=No 2=Yes <i>(If the answer is no: Go to Q 10)</i>	
3. How much loss in income did you have from decreasing the time in this other activity (paid work or job)? (State amount in local currency) <i>Calculate the average per month, over the last six months.</i>	
4. Did you have a paid job immediately before working in this enterprise? 1=No 2=Yes <i>(If the answer is “No”, go to Q 12).</i>	
5. What was that last job?	
6. What was the average income per month from your last job? <i>(State the amount in local currency).</i>	
7. Do you pay yourself a wage for your work in your enterprise? 1= No 2 = Yes	

8. Analysing Data

An effective Impact Assessment exercise should be able to answer some of the following questions:

1. Did the SED intervention lead to growth in the number of enterprises and employment, and/or a decreased failure rate of MSEs?
2. What kind of employment has been generated? Are the jobs that are generated of decent or reasonable quality?
3. Is the type of employment generated short-term or long-term?
4. Does the impact on growth vary with respect to the types of SED intervention, the sector to which the enterprise belongs, or the size of the enterprise?
5. What are the characteristics of workers hired by the MSEs with respect to gender, skills and income level?
6. Are there any differences in the take-up and impact of the SED intervention between women and men entrepreneurs?
7. Are there any gender-related difficulties experienced by the entrepreneurs?
8. Did the SED intervention increase the welfare or lead to a reduction in poverty of the workers in the enterprise?
9. To what extent do the answers to these questions depend on other factors, such as the macro-economic situation and policy environment at the time?

The generic questionnaire does not yet attempt to answer all of these questions. There is scope for adaptation to meet particular needs and requirements.

The data analysis should be as rigorous as is possible subject to the skills of the agency carrying out the analysis. However, the final report should be presentable, attractive and easy to understand.

The data analysis involves four major steps:

- Cleaning and organising the data for analysis (data preparation)
- Describing the data (descriptive statistics)
- Testing Hypothesis and Models (inferential statistics)
- Analysis and interpretation of the findings

Data preparation involves checking the data for accuracy, encoding the data and entering into the computer, and developing and documenting a database structure. Descriptive statistics are used to describe the basic features of the data in a study by providing simple summaries about the sample and the measures. They simply describe what the data shows. Inferential statistics investigate questions, models and hypotheses. Therefore, inferential statistics are used to make inferences from our data to more general conditions and situations. Since quasi-experimental designs collect information on control groups, they enable a more complex and sophisticated

analysis which provides scientifically rigorous evidence of the impact of the treatment, - SED intervention in our case. Hypothesis tests based on differences in proportions or means, and hypothesis tests based on multi-variate regression tests, are some of these analytical tools. Non-parametric tests can be used to determine if the differences found between smaller groups of respondents are statistically significant for example results from ranking exercises carried out during FGDs comprising groups of entrepreneurs with and without SED assistance.

The survey teams are advised to consult a local statistician for assistance in the statistical analysis of the data. The analyses described below can be carried out by various statistical computer programmes such as EPI 6 and others.

Appendix A

Employment definitions

Paid employment are jobs for which the incumbents holds explicit (written or oral) or implicit employment contracts, which give a basic remuneration, not directly dependent upon the revenue of the unit for which they work. (This unit can be a corporation, a non-profit institution, a government unit or a household). Some or all of the tools, capital equipment, information systems and/or premises used by the incumbents may be under the direct supervision of, or according to strict guidelines set by the owner(s) or persons in the owners' employment. (Persons in "paid employment jobs" are typically remunerated by wages and salaries, but may be paid by commission from sales, by piece-rates, bonuses or in-kind payments such as food, housing or training).

Self-employment refers to jobs with a remuneration directly dependent upon the profits (or the potential for profits) derived from the goods and services produced (where own consumption is considered to be part of profits). The incumbents make the operational decisions affecting the enterprise, or delegate such decisions while retaining responsibility for the welfare of the enterprise. (In this context "enterprise" includes one-person operations.)

Employees are all those workers who hold the type of job defined as "paid employed jobs". Employees with stable contracts are those "employees" who have had, and continue to have, an explicit (written and oral) or implicit contract of employment, or a succession of such contracts, with the same employer on a continuous basis. "On a continuous basis" implies a period of employment, which is longer than a specified minimum determined according to national circumstances. (If interruptions are allowed in this minimum period, their maximum duration should also be determined according to national circumstances.).

Regular employees are those "employees with stable contracts" for whom the employing organisation is responsible for payment of relevant taxes and social security contributions and/or where the contractual relationship is subject to national labour legislation.

Employers are those workers who, working on their own account or with one or a few partners, hold the type of job defined as a "self-employment job", and in this capacity, on a continuous basis (including the reference period) have engaged one or more persons to work for them in their business as "employee(s)" during the reference period. It should be noted that during the reference period the members of this group may have engaged "employees" of producers' cooperatives which are not to be classified to this group.)

Contributing family workers are those workers who hold a "self-employment" job in a market oriented establishment operated by a related person living in the same household, who cannot be regarded as partners, because their degree of commitment to the operation of the establishment is not at a level comparable to that of the head of the establishment, in terms of working time or other factors to be determined by national circumstances. (Where it is without pay in an economic enterprise operated by a related person, who does not live in the same household, the requirement of "living in the same household" may be eliminated.)

Workers not classifiable by status include those for whom insufficient relevant information is available, and/or who cannot be included in any of the preceding categories.

Apart from these, further classifications can also be introduced.

Owner-managers of incorporate enterprises are workers who hold a job in an incorporated enterprise, in which they:

- a. Alone, or together with other members of their families or one or a few partners, hold controlling ownership of the enterprise; and
- b. Have the authority to act on its behalf as regards contracts with other organisations and the hiring and dismissal of persons in “paid employment” with the same organisation, subject only to national legislation regulating such matters and the rules established by the elected or appointed board of the organisation. Different users of labour market, economic and social workers are best classified as “paid employment”, while their authority in and responsibility for the enterprise corresponds more to persons in “self-employment”, because these workers receive part of their remuneration in a way similar to persons in “paid employment”, while their authority in and responsibility for the enterprise corresponds more to persons in “paid employment”, and in particular to “employers”.

Regular employees with fixed term contracts are “regular employees” whose contracts of employment specify a particular date of termination.

Regular employees with contracts without limits of time are “regular employees” who have contracts of employment lead to the classification of the incumbent as belonging to the groups of “casual workers”, “short-term workers” or “seasonal workers”; or be workers whose contract of employment will allow the employing enterprise or person to terminate the contract at short notice and/or at will, the specific circumstances to be determined by national legislation and custom.

Casual workers are workers who have an explicit or implicit contract of employment, which is not expected to continue for more than a short period, whose duration is to be determined by national circumstances. These workers may be classified as being “employees” or “own-account workers” according to the specific characteristics of the employment contract.

Workers in short-term employment are workers who hold explicit or implicit contracts of employment which are expected to last longer than the period used to define “casual workers” but shorter than the one used to define “regular employees”. These workers may be classified as “employees” or “own-account worker” according to the specific characteristics of the employment contract.

Workers in seasonal employment are workers who hold explicit or implicit contracts of employment where the timing and duration of the contract is significantly influenced by seasonal factors such as the climatic cycle, public holidays and/or agricultural harvests. These workers may be classified as “employees” or “own-account workers” according to the specific characteristics of the employment contract.

Outworkers are workers who: (a) hold explicit or implicit contracts of employment under which they agree to work for a particular enterprise; but (b) whose place of work is not within any of the establishments, which make up that enterprise. These workers may be classified as being in “paid employment” or in “self-employment” according to the specific terms of their contract. They may be classified as “employers” if they engage other workers on terms as described under “employer”.

Contractors are workers who (a) have registered with the tax authorities (and/or other relevant bodies) as a separate business unit responsible for the relevant forms of taxes, and/or who have made arrangements so that their employing organisation is not responsible for relevant social security payments, and/or labour legislation applicable to e.g. “regular employees”; but who (b) hold explicit or implicit contracts which correspond to those of “paid employment”. These workers may be classified as in a “self-employment” job or as in a “paid employment” job according to national circumstances.

Workers who hold explicit or implicit contracts of “paid employment” from one organisation, but who work at the site of and/or under instructions from a second organisation which pays the first organisation a fee for their services, may be classified separately from other “employees”, and according to whether the primary organisation is a temporary work agency or another type of enterprise.

Work gang (crew) members are workers who are members of a group of workers who have been engaged as a group on terms corresponding to those of “paid employment” and where the employing organisation has entered into a contract only with the crew leader or with an organising agent for the crew, and not with the individual worker.

Countries may need and be able to classify separately workers participating in public or private employment promotion or job training schemes on terms of employment, which correspond, to “paid employment” jobs. This group of workers may be designated employment promotion employees. Workers who receive support from such schemes to establish their own business should be classified as being in a “self-employment” job as “employer” or “own-account worker” as appropriate.

According to national circumstances, countries may decide to classify as apprentices or trainees, workers who hold explicit or implicit contracts of “paid employment” which specify that all or part of their remuneration should be in the form of training for a trade or profession. When identifying apprentices and trainee employees separately, countries may also need and be able to distinguish between those who hold a formal training contract and follow a formal programme combining work experience with practical and theoretical instruction, and those who do not.

Employers of regular employees are those “employers” who during the reference period have engaged at least one person to work for them in their business on explicit or implicit terms such that this person will be classified as having a job as a “regular employee”.

Core own-account workers are those “own-account workers who work predominantly for the market independently of specific conditions imposed by the suppliers of credit, and who rent or own their own equipment and other means of production.

Franchisees are workers who have explicit or implicit contracts with the owners of certain means of production (land, buildings, machinery, trade marks, etc.), holders of operational licenses or suppliers of credit, which to a significant extent determine how the business is operated and require the payment of a specific part of total sales. “Franchisees” who engage “employees” on a continuous basis should be classified as “employers”.

Sharecroppers are workers who hold a “self-employment” job, and in this capacity have explicit or implicit contracts with the owners of certain means of production (land, buildings, machinery, etc.) or suppliers of credit or raw-materials, which to a significant extent determine how the business is operated and require the payment in the form of a part of the total production.

Communal resource exploiters are workers who hold a “self-employment” job, and in this capacity use a natural resource (e.g. land, fishing grounds, hunting and gathering areas) to which there are no individual property rights, but for which their community or State may have certain management responsibilities.

Subsistence workers are workers who hold a “self-employment” job, and in this capacity produce goods and services, which are predominantly consumed by their own household and constitute an important basis for their livelihood.

Countries may need and be able to supplement a national classification by status in employment with the type of organisation with which the incumbents are employed, in particular whether “employees” are employed in the private or the public sector, or whether the employing organisation is partly owned by foreign individuals or organisations (for example, a “joint venture”) or fully owned by foreigners.

Appendix B

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