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**Mission Report** 

# FROM A SHORT-TERM MISSION ON PREPARING A PROJECT PLAN FOR THE LABOUR FORCE SURVEY 2004/2005

19/4-30/4 2004

TA for the Scandinavian Support Program to Strengthen the Institutional Capacity of the National Statistics, Mozambique

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# List of abbreviations

INE	Instituto Nacional de Estatística, Mozambique
LFS	Labour Force Survey
ILFS	Integrated Labour Force Survey
IAF	Inquérito aos Agregadores Familiares
QUIBB	Questionário dos Indicatores básicos do Bem-estar
IDS	Inquérito Demográfico e de Saúde
ILO	International Labour Office

### **EXECUTIVE SUMMARY**

### (i) Summary of recommendations

The main objective of this short-term mission was, according to Terms of Reference, to assist INE in making a plan for the Mozambican Labour Force Survey (LFS) 2004/2005. This plan will be the base for preparing a budget for the whole survey and its different steps – from planning to reports and dissemination activities. Thus the expected result of the mission was a draft project plan for the LFS 2004/2005.

The short-term mission successfully resulted in a proposed Master Plan, "Standards and definitions for the Design and Implementation of the Labour Force Survey for Mozambique, 2004/2005", thus this is the essential document for INE's further work. The proposed Master Plan is enclosed as chapters 1-12 in this mission report, and they should be used together with INE's draft timetable and budget estimates.

It is vital to integrate this proposed Master Plan, chapters 1-12, in the work with implementing of the Mozambican Labour Force Survey 2004/2005.

- The Mozambican Labour Force Survey should be carried out as a continuous survey with data collection evenly distributed throughout an annual period.
- To ensure representative estimates at national and provincial level for both urban and rural areas the recommended sample size would be approximately 18,000 households.
- A pilot survey has to be carried out, primarily to test the questionnaire but also to test the logistics and to derive estimates of response burden.
- The draft questionnaire is to a large extent based on the experiences from the Tanzanian Integrated Labour Force Survey. Overall these experiences would be applicable for Mozambique. However, more work has to been done in order to fine-tune the questionnaire in terms of the structure and wording but also to ensure accurate measurement of both standard and local indicators.
- A clear IT-Strategy for the Labour Force Survey has to be defined and implemented.

#### (ii) Short-term mission activities

Ahead of the short-term mission, we as short-term consultants, participated in a debriefing meeting in Oslo (Statistics Norway) held 14<sup>th</sup> of April 2004. The main objective was to discuss the short-term mission with relevant people including both the previous and the new long-term consultant in social statistics.

When we commenced the short-term mission our main objective was to assist INE in making a Master Plan for the Mozambican LFS 2004/2005, and in doing so, we were involved in many different work activities.

Throughout the work process we wanted to make sure that standardization using best practices in international surveys would also be applied in the case of the Mozambican LFS. Furthermore, it was important to ensure that the whole work plan would be organised as a system of continuous quality checks.

INE already has weekly group meetings with both internal participants as well as representatives from the Ministry of Labour. During the mission we participated in these meetings, and also reflected on whether e.g. an advisory group should be organised as this could give more legitimacy to the LFS during the work process.

Contact with main users is important in terms of e.g. finding consensus on both standard and local definitions, identifying the needs for additional indicators and determining dissemination needs. Thus, during our mission we had different meetings with the Ministry of Labour.

As INE to a high extent has used experiences from the Tanzanian Integrated LFS (ILFS) to develop the Mozambican questionnaires, then during our mission we spend time on evaluating whether the "Tanzanian model" would fit both international standards and local Mozambican needs. Furthermore, we also gave advice in terms of wording and structure of the questionnaire.

Moreover, we also had to discuss the link to other topics than main LFS indicators, so we tried to look at informal sector, child work, poverty reduction and existing INE surveys.

Simultaneously with our mission a sampling expert was commencing a mission with the main objective to develop the sample design for the LFS. During our mission we had many discussions as matters like sample size and distributions are important in the overall considerations of logistics, work plan and budget.

Furthermore, we spend time on evaluating the data collection process and the process of data editing as these are important steps both in terms of developing guidelines for quality control, and in terms of realistic work plan and budget.

Carrying out an effective pilot survey is important as this will help to finetune the questionnaire and also help to evaluate logistics and response burden.

Both in terms of pilot survey and main survey we had many discussions in relation to logistics and budget considerations.

### **1** Summary of recommendations

It is vital to integrate the proposed Master Plan, "Standards and definitions for the Design and Implementation of the Labour Force Survey for Mozambique, 2004/2005", in the work with implementing of the Mozambican Labour Force Survey 2004/2005.

- The Mozambican Labour Force Survey should be carried out as a continuous survey with data collection evenly distributed throughout an annual period.
- To ensure representative estimates at national and provincial level for both urban and rural areas the recommended sample size would be approximately 18,000 households.
- A pilot survey has to be carried out, primarily to test the questionnaire but also to test the logistics and to derive estimates of response burden.
- The draft questionnaire is to a large extent based on the experiences from the Tanzanian Integrated Labour Force Survey. Overall these experiences would be applicable for Mozambique. However, more work has to been done in order to fine-tune the questionnaire in terms of the structure and wording but also to ensure accurate measurement of both standard and local indicators.
- A clear IT-Strategy for the Labour Force Survey has to be defined and implemented.

### 2 Introduction

The Labour Force Survey in Mozambique 2004/2005 (LFS) is a complex data collection project to measure employment and occupation issues. The LFS will be undertaken in the whole country and will involve surveying a diverse population with respect to age, gender, language, education, and life experience. A need to standardize LFS procedures has been identified so that reliable survey results can be obtained for the whole country as well as within each province.

The objective of the LFS standards is to assure that the survey design and implementation and survey results satisfy minimum quality assurance goals.

The standards ensure that all contributors strive to achieve common goals, using sound methodology and operational practices, so that the sources of survey variability may be kept to a minimum and the comparison of survey results across provinces is both feasible and credible.

Standardization using best practices in international surveys is necessary if such surveys are to achieve their full potential. Two major recommendations for the conduction of LFS:

- In addition to the use of a carefully-constructed standardized measuring instrument, there is also need for a standardization of survey procedures. Best practices need to be established for all the components of the survey, and these practices need to be followed in every steps. The achievement of this standardization using best practices requires more than the specification of the practices to be followed. Careful monitoring is also required.
- 2) The organizations should have strong records in all aspects of survey research, including probability sampling, data collection, data processing and weighting.

In the LFS, as in any survey, it is a challenge to minimize potential survey errors which may be due to such factors as the variability of the characteristics to be measured, the sample design, the survey frame, the selection of the sample, the measurement instruments (i.e. the questionnaire), errors during data collection, processing problems, weighting and estimation difficulties, and so on.

# 2.1 Continuous Quality Improvement System: Some applications for LFS

Traditionally INE has relied on inspection of quality based upon some form of random or identified checks under the fielding, especially intensive for the first month of fielding, or after the survey are complied. This time a system for continuous quality checks will be used to ensure a total quality management approach.

Typically surveys consist of a number of separate, but interrelated operations that may either change or modify the ordinary outcome. An overall approach to a methodology for a continuous quality improvement system is inherent in reports from INEs quality project.

A brief description of the system is illustrated in the figure below.



### 3 Survey Team

### 3.1 Project Team

The LFS project group would possess substantial practical survey experience in survey management data collection, including interviewer training and non-response reduction, and data processing, including data capture, coding, and editing. A senior survey methodologist, responsible for the sample design and implementation, weighting and estimation, and regular data analysis should be available for the project when needed.

A data processing manager will be responsible for data capture, coding, editing, and tabulation of survey results based on a system for data storage based upon recommendation for a Continuous Quality Improvement System for LFS and test it in the forthcoming pilot.

Group meetings are currently held on a weekly basis.

#### 3.2 Steering Committee

A steering committee for the project is already inherent in the management structures for Division for Demographics. As the project team forms and begins its work, it may be relevant to consider establishing an external project advisory group dedicated to LFS only. An advisory group will offer several benefits. On purpose will be to help win the support and interest of important stakeholders, including own organization, and users. This support is critical since this is the first LFS in Mozambique, and especially if the survey can serve as a springboard for further initiatives to measure and improve labour force indicators. An advisory group offers a mechanism for keeping stakeholders informed and eliciting their feedback on the project and the survey results. It will also give the project and the project team enough legitimacy to encourage a decision structure with necessary room for actions. Furthermore, the group can serve as a key link to distribution channels for survey results and members may suggest dissemination strategies or provide access to information venues that would not otherwise be available. The advisory group or LFS Steering Commitee (LSC) should consist of the LFS survey manager, head of department, team leader for the Scandinavian program, and a representing from the Ministry of Labour.

Meetings should be held in front of pilot, after analysis of the pilot and 3-4 times during the fielding, before and after the dissemination.

The content of the first meeting is to ensure the objects of the survey in the pilot. The second meeting would evaluate the pilot and give recommendations for the main survey. During the fielding some attention should be addressed to the ongoing field, but it is perhaps more important that the dissemination would get a well documented planning. The last meeting should evaluate the whole project.

### 3.3 Other users

When implementing a new survey (or adjusting an existing survey) it is important to ensure that at least the main users will participate in parts of the planning process.

In this project the needs of the main users are taken into account or consideration as far as these needs do not have a negative effect on the overall survey's framework, concepts and definitions. Fortunately, in most cases it would be possible to find consensus; in some cases the standard concepts and definitions could be adapted to the local conditions and still comply with the standard requirements maybe with some relaxation of criteria, whereas in other cases there are needs for both standard and local definitions.

Second, co-operation with the main users in an early stage of planning may also reveal needs for supplementary indicators, which are not covered by the usual survey framework. These potential needs may be relevant for the main survey provided that they could be implemented and integrated without affecting the existing indicators, and also provided that supplementary funding could be found for these additional needs.

Third, when co-operating with the main users it is important to determine their dissemination needs in order to take these into account or consideration at an early stage of survey planning. Dissemination is an important part of the process as insufficient dissemination in terms of user needs may affect the users' view of the overall survey even though the survey may actually provide high-quality data. However, even though co-operation with main users is an important part of the process, it should be emphasized that the role of a statistical office is, ideally, as an independent provider of high-quality standardized and reliable statistics, thus these conditions should not be overruled by local needs.

The main national user of the LFS would be the Ministry of Labour and branches under the Ministry of Labour like the National institution for employment and professional training. INE has already started the cooperation with the ministry through the working group meetings and separately meetings with the Ministry of Labour throughout the project.

INE is planning a workshop with the users in the beginning of May 2004. At this workshop INE expects to invite also the provincial government users. A workshop is also an appropriate way to include the provincial level in planning the dissemination in 2005/2006. With regard to the international users, then as the LFS' share the same conceptual framework throughout the world, then standard concepts and definitions could be derived to provide comparable data for the international users.

### 4 Survey Objectives

### 4.1 LFS framework, concepts and definitions

#### 4.1.1 Common conceptual framework

The main advantage of the LFS is to have a survey that is carried out in most countries throughout the world sharing the same conceptual framework based on recommendations from the International Labour Office (ILO). As the state of the labour markets in different countries throughout the world varies, then within the standard recommendations you would have interpretations to take these differences into consideration. However, even though standard concepts and definitions allow some space for interpretation, then the LFS' throughout the world share a basic common framework that ensures international comparable statistics with regard to labour market attachment and other labour market related issues.

#### 4.2 LFS framework in the Mozambican case

Within the framework of the LFS a basic requirement is to measure labour market attachment or labour status in a specific reference period (often limited to a reference week). INE's draft for the core LFS questionnaire is currently to a high extent based on the Tanzanian ILFS with regard to both structure of questionnaire and questions.

#### Coverage of the survey

Geographical the survey covers all 11 provinces in Mozambique. The persons covered are the civilian non-institutional population.

#### Periodicity of the survey

The survey is continuously from 1. August 2004 to 30. July 2005. No decision is taken on further surveys.

#### The reference week period

The reference period is the last 7 days.

#### Age limits for active population

In order to measure labour market attachment INE operates with a age limits for delimiting economic active population as 5 years and more.

In the Tanzanian ILFS, and thus in the draft for the Mozambican LFS, the target group for asking questions on labour market attachment is 5 years and more which is a very low age limit as the majority of countries use 14-15 years as the lower age limit.

"The minimum age limit adopted for measuring economically active population in surveys varies among countries (ILO, 1986). It may be as low as six (Egypt) or ten years (Brazil), or as high as 16 (Sweden, United States). The majority of countries, however, use 14 or 15 years as minimum age limit.", ILO (1990), p. 12.

In the case of Mozambique, even for interpretations of standard definitions, it appears that a low, lower age limit for delimiting economic active population may be appropriate instead of following the majority of countries were the norm is around 14-15 years (15 years in the case of the European Harmonized LFS'). This is mainly due to two important characteristics of the Mozambican labour market, which are also somewhat correlated; a) Agriculture constitutes a high share of the total employment, and b) participation rates for children are high.

"The United Nations Principles and Recommendations for Population and Housing Censuses specify that the minimum age limit adopted for census questions on economic activity should never be higher than 15 years. It is further mentioned that countries where a large proportion of labour force is engaged in agriculture (a type of activity in which, normally, many children participate) will need to select a lower minimum age than highly industrialised countries, where employment of young children is rare.", ILO (1990), p. 12.

"It should be emphasised that the purpose of setting a minimum age limit for measurement is not to cover in extenso each and every child and young person engaged in some economic activity, but to ensure that all those with non-negligible participation in economic activity be covered.", ILO (1990), p. 12.

#### **Employment definition:**

With regard to employment, the standard definition is the following:

"According to the 1982 international definition of employment (ILO, 1983b), the "employed" comprise all persons above the age specified for measuring the economically active population, who during a specified brief period (one week or one day) were 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 job attachment to their job;

-self-employed (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 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 standards further specify that, for operational purposes, the notion of "some work" may be interpreted as work for at least one hour.", ILO (1990), p. 70.

Furthermore, with regard to temporary absence:

"The international definition of employment, specifying certain principles for ascertaining temporary absence from work, differentiates between paid employment and self-employment. In the case of paid employment, these principles are based on the notion of "formal job attachment", which is to be determined, depending on national circumstances, according to one or more of the following criteria:

- The continued receipt of wage and salary;
- An assurance of a return to work following the end of the contingency, or an agreement as to the date of return;
- The elapsed duration of absence from the job which, wherever relevant, may be that duration for which workers can receive compensation benefits without obligation to accept other jobs.", ILO (1990), p. 72.

#### **Unemployment definition:**

With regard to unemployment, the standard unemployment definition is as follows:

"The international standard definition of unemployment (ILO, 1983) is based on three criteria to be satisfied simultaneously. "without work", "currently available for work" and "seeking work". Accordingly, the "unemployed" comprise all persons above the age specified for measuring economically active population who during the reference period were:

(a) "without work", i.e. were not in paid employment or self-employment, as specified by the international definition of employment;

(b) "currently available for work", i.e. were available for paid employment or self-employment during the reference period; and

(c) "seeking work", i.e. had taken specific steps in a specified recent period to seek paid employment or self-employment.

Special provisions are made for persons without work who have made arrangements to start at a date subsequent to the reference period (future starts) and for persons whose employment contract is temporarily suspended (lay-offs).

It should be noted that the international standards, in formulating these three criteria, do make any reference to institutional or legal provisions, such as receipt of unemployment insurance benefits or registration at a public employment exchange. The criteria are intended to refer exclusively to the person's activities during a specified reference period.", ILO (1990), p. 97.

In the case of the Tanzanian ILFS the seeking criterion is being relaxed which might also be appropriate for Mozambique. However, the questionnaire would cover active steps of job-search, even though this currently might not be relevant when deriving the standard unemployment definition in the case of Mozambique.

"Seeking work is essentially a process of search for information on the labour market. In this sense, it is particularly meaningful as a defining criterion in situations where the bulk of the working population is oriented towards paid employment and where channels for the exchange of labour market information exist and are widely used. While in industrialised countries these conditions are largely satisfied (most workers are employee: public labour exchanges, newspaper employment advertisements, etc., are common, and many people refer to them in searching for jobs), this may not be the case in developing countries.

In many developing countries, most workers are self-employed, often in household enterprises. Labour exchanges and similar organisations are not fully developed and are often limited to certain urban sectors or to particular categories of workers. In rural areas and in agriculture, because of the extent of the localities and the nature of the activities, most workers have more or less complete knowledge of the work opportunities in their areas at particular periods of the year, often making it unnecessary to take active steps to seek work because they believe that no work corresponding their skill is available in their area or at particular times of the business cycle.

Because it was felt that the standard definition of unemployment, with its emphasis on the seeking work criterion, might be somewhat restrictive and might not fully capture the prevailing employment situations in many countries, the 1982 international standards introduced a provision which allow for the relaxation of the seeking work criterion in certain situations. This provision is confined to situations where "the conventional means of seeking work are of limited scope, where labour absorption is at the time inadequate, or where the labour force is largely self-employed". This provision should not be confused with the exception cited earlier concerning future starts, which is embodied in the standard definition of unemployment.

The seeking work criterion has been relaxed in the national labour force surveys of many countries, and in these countries the unemployment figures now include persons without work who are available for work but have not actively sought work.", ILO (1990), p. 106-107.

#### Underemployment and threshold for full-time employment

Underemployment would be a main indicator in Mozambique, thus it is important to be able to derive a standard definition of this concept, and furthermore also apply a threshold for usual full-time employment which is applicable in the Mozambican case. Thus, we find that it relevant to refer to the ILO-definitions of this.

The definition of "visible underemployment" is the following:

"According to the international definition "persons visibly underemployed comprise persons in paid employment or self-employment, whether at work or not at work, involuntarily working less than the normal duration of work determined for the activity, who were seeking or available for additional work during the reference period".", ILO (1990), p. 123.

In the definition of visible underemployment a full-time employment threshold is applied, thus it is important to apply a threshold that applies for Mozambique. The threshold is set at 40 hours per week.

"The international standards adopted by the Thirteenth ICLS in 1982 specify that, for the purpose of classifying persons as visibly underemployed, normal duration of work for an activity should be determined "in the light of national circumstances as reflected in national legislation to the extent it is applicable, and usual practices in other cases, or in terms of a uniform conventional norm"." , ILO (1990), p. 124.

Another concept in relation to underemployment is "invisible underemployment" which is defined as follows:

"Compared to visible underemployment, which is a statistical concept directly measurable by labour force and other surveys, invisible underemployment is "primarily an analytical concept reflecting a misallocation of labour resources or fundamental imbalance as between labour and other factors of production (ICLS, 1982)." The characteristic symptoms of invisible underemployment, as indicated in the international standards, might be "low income, underutilisation of skill, low productivity". The comprehensive study of invisible underemployment involves analysis of a wide variety of data.", ILO (1990), p. 143.

### 5 Sample Design

When implementing LFS it is important to develop methodology that will be suitable for measuring labour market attachment both in terms of sampling design and estimation procedures. To develop a suitable sampling design and estimation procedures, we have to consider both the common LFS-framework as well as local conditions trying to integrate these two dimensions in the best way.

Within the LFS-framework it is crucial to produce reliable estimates for the reference period (often delimited to a reference week). In order to do so, you need to ensure that your estimates will provide a reliable reflection of an average reference period (often delimited to a reference week) over a certain time period, e.g. a year, a quarter or even a month. Thus, it is crucial to represent all seasonal variation throughout the specified time period, so an average reference period, in this certain time period, would actually be an average of all seasonal variation in all the reference periods throughout the specified time period. E.g. if the reference period is a week and the observed time period is a year, then you need to distribute and represent all 52 weeks equally in order to capture all seasonality throughout the year.

Another aspect that you need to consider is whether your main objective is to; a) be able to derive reliable structural estimates, e.g. for an annual period, or b) be able to estimate changes from one time period to another, e.g. between consecutive quarters, or c) estimate both changes and structural estimates. On one hand, if the main objective is a) reliable structural estimates, then an equal distribution of the reference periods would be the main focus in order to represent all seasonality. On the other hand, if the main objective is b) reliable estimates of e.g. quarterly changes, then you should consider a (rotating) panel design as an overlap between the quarterly sub-samples would improve precision of the estimates of quarterly changes due to the correlation between quarters.

The objective for the LFS in Mozambique is to derive reliable structural annual estimates, thus only an equal distribution of the reference periods throughout the year would be of importance.

### 5.1 Sample frame

The sample frame is based on the cartographic inventory and list of dwellings for the whole country, obtained from the 1997 National Population and Household Census.

### 5.2 The sample

A self-weighted stratified multi-stage area sample with probability of greater then zero for all elements of the population is used. The ultimate sampling unit in the sample design is the household.

In case of absence from home or non-response, the ultimate sampling unit (households) are replaced due to substitution rules.

### 5.3 Sample size

The sample size required for LFS must be inflated to account for expected non-response and any design effect associated with the sample design used. We will be assuming a 95% response rate for the survey. The calculation on design effects is based upon data from QUIBB.

For considerations on required sample size, the following assumptions are made:

- (i) The design effect
- (ii) The response rate is 95 %.
- (iii) Need for estimates on both national and provincial level
- (iv) Need for estimates on rural and urban level

In order to achieve this, INE have to field roughly 18,000 households.

### 6 Questionnaire

Mainly the questionnaire is built on the ILFS from Tanzania. The survey provides information on employment, unemployment, hours of work, duration of unemployment, industry, occupation, status in employment, level of education, usual activities, informal sector, child work and household income

#### Informal sector

INE is planning to implement an Informal Sector Survey, thus INE also want to have a link between LFS and questions on informal sector. The sequences of questions on informal sector in the LFS questionnaire are inspired by the Tanzanian ILFS. Fortunately, in the Tanzanian ILFS you find supplementary questions to determine informal sector, both for main and second job. In the case of Tanzania, for dissemination purposes, they apply the following definition of informal sector:

"The informal sector is part of household enterprises of unincorporated enterprises owned by households. Informal enterprises are not separate legal entities; they do not keep a complete set of accounts; the activities may be carried out inside or outside the owners home, and At least some of the goods and services produced should be for sale", Integrated Labour Force Survey 2000/01, p. 14.

Thus, as the Mozambican LFS is based on the Tanzanian questionnaire, in the case of Mozambique you will be able to derive the same concept. This seems to be a good starting point for having a link to the planned informal sector survey, so the LFS will be able to give overall estimates on informal sector and hopefully also be able to delimit the target group for the Informal Sector Survey, which could be helpful in the further work with planning the Informal Sector Survey. However, you need to look more thoroughly on accurate delimitation of the target group in terms of wording, skip patters, structure and concepts.

#### Child work

With regard to child work the LFS questionnaire is similar to the Tanzanian ILFS as child work is included as a supplementary module to be asked to the target group 5-17 years.

#### **Poverty indicators**

A main supplementary topic, which is vital in the case of Mozambique, is poverty reduction - within the Action plan for the Reduction of Absolute Poverty 2001-2005 (PARPA). It is important that the Mozambican LFS would be able to cover these indicator needs. These indicators are covered by including family situation and education in the LFS.

#### **Other INE surveys**

The LFS questionnaire has been evaluated in terms of to which extent the "Tanzanian model" would fit the requirements in light of both the standard LFS framework and the local Mozambican case. This approach was due to the fact that INE's first questionnaire draft was to a high extent based on these experiences, meaning that the link to previously conducted surveys by INE has had lower priority, even though they already have experience with selected employment related questions from QUIBB, IAF and IDS. Thus, we have not been able to look into the matter of consistency between INE's current draft for the LFS and their previous experiences with asking employment related questions. Roll-Hansen (2004) has mentioned this issue. However, consistency of time-series is of importance but we find it equally important to make sure that the Mozambican LFS would follow the common LFS guidelines of course adjusted to the Mozambican labour market.

### 7 Data collection

Face-to-face interviewing is the obvious modus for LFS in the case of Mozambique. However, the biggest difficulty with face-to-face interviewing and measurement error is the interviewer themselves. Interviewers affect response in a way similar to the clustering effect in the cluster sample we use, because interviewers affect responses through their individual performance patterns when conducting interviews. They each ask the questions in their own style and at their own pace; each may have his or her own way of recording the information, particular with regard to open-ended questions, as for occupation.

Interviewer effects or the extent to which interviewers influence data occur because of a complex combination of personality and behavioural traits, which manifest themselves in an interviewer setting. There are two ways of addressing this source of errors - through reduction or measurement of interviewer variance. Reduction of interviewer variance will be achieved through standardization of performances so they can complete their tasks in a uniform way. The project group will also be able to focus on interviewer effects in the proposing of a integrated continuous Quality Improvement System and the development procedures for the interviewer-administrated questionnaire.

#### Non-response rate

No single activity is enough to control or minimize non-response. Two main topics:

- Procedures that can reduce the level of non-response
- Procedures that can reduce the level of missing data in otherwise complete questionnaires

As is customary, we distinguish between two forms of non-response- *unit noresponse* and *item non-response*. Unit non-response refers to the failure to obtain questionnaires or data collection forms for a member of the sample. Item non-response refers to the failure to obtain a specific piece of information from a responding member of the sample. Item non-response is often used interchangeably with the term *missing data*. INE has strategies for reducing the levels of both forms of non-response. Under the interviewer recruitment and training INE will identify and utilize those interviewers and field supervisors who are uniform in their performances. Bilingual interviewers will be recruited to meet demands from non-Portuguese speakers.

Further, the administration of the questionnaire will be clear and easy by emphasizing that the flow following the natural inclination of people (e. g., to read from left to right) and by using consistent graphical devices to emphasize the intended path.

The issue of non-responding reduction will also be a part of the supervision of the fieldwork and the training of the interviewer and numerators.

### 8 Data processing

Prior to estimation the data must be edited. Data editing is an iterative and interactive process that should include procedures for detecting and correcting errors in the data. Data editing must be repeated after the data are imputed, and again after the data are altered during disclosure risk analysis. At each stage, the data must be checked for:

- Credibility based on range checks to determine if all responses fall within a prespecified reasonable range.
- Consistency based on checks across variables within individual records for noncontradictory responses and for correct flow through prescribed skip patterns.
- Completeness based on the amount of nonresponse and involves efforts to fill in missing data directly from other portions of an individual's record.

Some guidelines are given under in light of process orientation to reduce potential bias, ensure consistent estimates, and simplify analysis, by substituting values for missing (i.e., imputation) or inconsistent data in a data set (i.e., edits).

The structure of the fielding procedures at INE is complex. The questionnaire will be evaluated in several steps before send off to the head office. On all this steps the questionnaire could run into errors. Too ensure high security and less risk for errors at this step an ideally approach would be to have an electronic document reception on provincial level. When this not seems to be possible to work out at the moment due to insufficient in the IT-network between the provincial offices and the head office in Maputo, a second-best solution is to carry out questionnaire reception at the head office. A common approach to receipt and control of survey documents is to create from the master sample file an Assignment Control File or a physical list that contains a record for each sample unit and provides details on expected documents to be returned. For each sample unit we need fields or columns for sample ID, interviewer identification, returned questionnaire and notes. Document control should start as soon as data collection begins and the first questionnaire is received.

#### **Document grooming**

Document grooming is a systematic, independent review of the questionnaire prior to data capture. The objective of grooming is to make sure that information is legible for data capture. It is important to verify: sample ID number, all variables and written responses for clarity and that the data for key variables has been provided.

Supervisors will perform some of these activities during field collection. Further, the processing staff at the head office will groom the questionnaires received too prepare them for data capturing.

#### Data capturing documents

Before data capturing will start INE would develop a detailed data capture specification. A data capture specification should be built to include an automatic conversion of the response category codes to the required output values that are described on the Record Layout for the LFS. The specification

should include question number, allowable values, input value and output value. To reduce the number of data capture errors, a 100% verification of the scanned data is required.

#### Clean-up

After the data capture stage INE will clean up the data file. The purpose of the clean-up stage is to identify any cases that require some type of intervention and to identify cases that will not require editing because they are non-response. This is done on the electronic file after the capture and will make it possible to make corrections at the record level, such as:

- identify and resolve duplicate records
- identify and finding missing records
- reviewing status code assignment
- identify non-response cases

There are several of reasons for this step, but one important is to build a system for systematic interviewer feedback on proper coding rules during the data collection.

#### Creation of response and non-response files

Once all records have been captured and all problems resolved, its time to prepare a response and non-response file for processing. Use the survey data file to create a new file which includes all records with a status "01" and one that only includes records with status not equal to "01".

#### Reports

At the end of the post-collection processing step a summary report, including information from each processing step, should be generated and used for the next processing steps. The following is an example:

1	2	3	4	5	6
# of records captured	# records dropped	# response record	# non- response records	# number of missing records	Total # of records on non-respons file (4+5)

#### **Pre-edit process**

The pre-edits process consists of modifying the data at the individual variable level. Variables may be dropped, re-coded, re-sized or left as they are. Several of the questions include "Other - specify" as a response category. Processing this fields consist of reviewing the content and making decision on whether the answer should have been included in another answer category or if they should stay in the "other" category. In some cases this process can influence the flow of a questionnaire, and therefore becomes a critical part of processing. In the pilot we should look at the number of times "Other specify" is selected as a response.

In all cases, the answers provided in the "other" category will be verified and recorded to the appropriate field if required. This process will be handled at

different times. The field procedures used by INE force this activity to take place as a part of the grooming in field. A second approach would be to process "other" during the pre-edit stage at the head office. This would mean that the 'write-in' response would be data captured and the values reviewed as part of the coding process.

Because the pre-edit involves several questions it is important to plan and document this process thoroughly to ensure complete coverage of all actual variables.

The first step is to use the Response Data File and run frequency counts on all variables that would be processed. This information is important throughout the pre-edit phase to verify the number of cases updated as a result of each step. It is also used to identify any variables that have values outside of acceptable ranges, and verify their validity. In order to identify the type of transformation required on each variable, create a spreadsheet with all variables in the Response Data File listed in it. The next step is to define operation to perform on each variable. Develop a program to execute the preedit rules. When all rules have been applied, run frequency counts on all variables that have been processed. Compare to frequency counts run before the process to identify possible problems with the process.

#### **Coding process**

In the LFS it is several questions without an exhaustive list of answer categories. Instead of providing an extremely long list of answer categories that would provide questionable results, we ask a few questions that are 'written-in' on the questionnaire and will provide us with enough detail on the response to code it at a later date.

The coding process involves assigning a code of these 'write-in' fields. The process will be used to coding to a standard for industry and occupation. Files for coding should be prepared in the pre-edit step from the Response Data File and sent to the staff of coders. Once coding is completed these codes would have to be captured. Therefore the best strategy is to perform coding before data capture if possible.

Coding verification can be achieved by sorting the completely coded file by the code. Once codes are grouped it is easy to identify' write-in' fields that are very different from others. Another method would be to re-code 20 % of all work from different coders and compare results. Any differences in coding would be reviewed and corrective action taken.

The timing of the coding should be during the fielding to ensure feedback procedures for proper information collection in the field.

#### Editing

The definition of editing is applying rules to identify flow problems, collection problems or processing problems. Any data that do not fit the rules will require further investigations, corrections, or explanation. Editing rules should be based on expert knowledge of the subject matter, the structure of the questionnaire or other related surveys or data.

The flow edit replicates the flow pattern of the survey questionnaire. Fields that are skipped because of flows are converted to blanks, and fields that

skipped because of non-response should be set to 9's (not stated). For LFS a top-down approach would be appropriated to use. This approach follows the flow of the questionnaire from the starting point. If the answers to the first question require a skip of 3 questions then the 3 questions skipped would be set to blank without looking at their contents.

The consistency edits process examines consistency between different variables. INE have appropriate procedures for consistency tests. A supervisor goes back to the dwellings immediately after the interview with a list of conditions that are to be reviewed.

An edit failure report should be produced for records failing the abovementioned consistency edits. After review of the edit failure and the values involved, a decision to take corrective action or leave the record as is would be appropriate. However, it is should not be possible to perform any type of imputation. What is expected is a report on problems during fielding, coding and processing.

#### **File construction**

The final data file must be exactly as described in the record layout based on the questionnaire and processing tools developed in front of the survey.

#### **Derived variables**

The main purpose of deriving variables is to increase the analytical value of the microdata file by providing useful variables that are in accordance with already existing common unique definitions or concepts.

#### **File validation**

The file validation processes consist of benchmarking and/or qualifying the information collected in LFS compared to other sources of comparable data at the individual variable level. For the LFS it would be preferable to do the file validation in separate occasions during the data collection. To ensure an effective dissemination process INE should start the tabulation and writing process on data collected in 2004. This approach will give more time to planning the dissemination and performance of the tabulation.

Data validation is a 2-step process. First INE should validate the variables used to post-stratify the sample. Second INE should validate other important variables for which good sources of data exist and compare LFS results with those from other data sources.

### 9 Weighting and estimation

LFS uses a probability sample design. As such, the estimates produced from the survey should be weighted estimates. The weighting procedures are to be carried out using the 'clean' data file, i.e., the file resulting from the editing process. The survey weights will be appended to each respondent record on the clean survey file.

### 10 Quality assurance checks

Several quality assurance checks are mentioned earlier in this report. Others will be included after completion of the control system and the pilot.

### **11 Pilot**

To ensure high quality in the LFS INE accomplish a pilot in May-July 2004.

### **11.1 Survey Objectives**

Pretesting objectives include the most serious problems affecting reliability and validity that a researcher would want to know about and address. We have focus on five broad categories:

- Respondent comprehension
- Burden and interest; interviewer tasks
- Other questionnaire issues; sampling
- Coding and analysis
- Logistics

The issues in the first two categories are primarily concerned with whether respondents and interviewers can perform their designated tasks.

We want to know if respondents understand the words, terms, and concepts being used. Do they understand the question or the task being asked of them and the answer choices from which they are to select? Does the respondent's interpretation of what the question is asking coincide with what we want the question to measure? Does the respondent use different response categories or choices than those offered in the question? Are respondents attentive and interested in the questions? It is also important to look for the comprehension of the heterogeneity of respondents' ability to give valid responses to questions in the LFS questionnaire due to characteristics like gender, age, education and literacy level during the pilot.

The complexity of the interviewer tasks is also important to focus on. Do interviewers have difficulty pronouncing words or reading particular sentences? Do interviewers leave out words or modify the question wording in other ways? Do interviewers read the question and probe in a neutral manner? Do interviewers follow skip patterns and other instructions correctly? Do interviewers record complete answers? Is adequate space provided? Are there any other tasks interviewers have difficulty performing? The training program for interviewers seems to take care of some of these challenges, so also the intensive period of supervision when fielding still is in the very first beginning. In light of a continuously quality improvement system it is important to specify some indicators for how well the interviewer perform their tasks during the whole period of data collection.

In the phase of questionnaire development we have also given other questionnaire issues some attention. Do the sections of the questionnaire and the questions within sections have a logical flow? Are the skip instructions correct? Is there evidence of context effects? Since the questionnaire is translated from English, we have also emphasized the important of a comprehensive translation. The best way to take care of these translation criteria is to translate back and forth after the first translation from English to Portuguese. Sampling, coding and analysis would also achieve attention in the pilot. What is the response rate? Does the response rate indicate any potential problems? Are the eligibility rates as expected; do these rates indicate any unexpected problems? Are there any indications of problems with the completeness and accuracy of the sampling frame? Is it difficult to construct code categories for the question or to code responses to open-ended questions? Is the level of variation in responses to each question acceptable? All these questions are important to have in mind during the pilot.

Interviewers will report on practical problems, such as typographical errors, faulty instructions about skipping questions, and inadequate arrangements for recording answers etc. INE will also find out how long the interviews take. To ensure even more adequate evaluation of the questionnaire and the question-and-answers process INE will carry out coding of interviewer and respondent behaviour during the pilot.

#### **Respondent Debriefing**

In general, the goals of respondent debriefing are the same as for intensive individual or cognitive interviews: to identify comprehension and information retrieval problems and to assess close-ended response choices. This technique is similar to the use of special or follow-up probes in intensive individual interviews except that respondent debriefing takes place in conjunction with a field pretest. Depending on the goals of the pretest, respondent debriefing will be part of a declared or undeclared pretest and the debriefing questions can be interspersed throughout the questionnaire or asked at the conclusion of the interview.

#### **Interviewer Debriefing**

Until recently, interviewer debriefing - a group meeting to discuss interviewers' experiences administering the questionnaire and related procedures - was the primary pretesting technique for obtaining feedback on respondent, interviewer, and sampling problems. The agenda includes four topics: overview of the pretest to identify serious problems that occurred, question-by-question problem identification, suggestions for revising questions, and summary comments.

To maximize the usefulness of these meetings we will ask the interviewers to complete a rating form in which they answer the following three questions about each question in the questionnaire:

1. Did you have any difficulty reading the question exactly as worded?

2. Does the question contain words or concepts that respondents do not understand?

3. Do respondents have difficulty retrieving information or providing an answer to the question?

This procedure allows each interviewer to contribute equally to the evaluation and provides a systematic and quantifiable method of identifying problems. The results can be tabulated prior to the group meeting and then, during the meeting, more time can be spent exploring the possible nature of the problems and how they might be fixed. The cost of using rating forms is minimal and the gains are well worth the expenditure.

Another approach to maximize the information from an interviewer debriefing is to report the results of behavior coding (discussed below) to get interviewers' reactions, interpretations, and suggestions for each problem.

#### **Behavior Coding.**

A technique developed by Charles Cannell and his associates at the University of Michigan. It is based on the assumption that any deviation from the ideal model, in which an interviewer reads a question exactly as written and the respondent provides a complete answer, indicates a problem with the question. Behavior coding involves tape recording interviews conducted in an undeclared field pretest and then coding, for each question, the number of times any of the following interviewer or respondent behaviors occurred:

- 1. Interviewer made minor wording change when reading the question
- 2. Interviewer made significant wording change when reading the question
- 3. Respondent interrupted the question reading to give his or her answer
- 4. Respondent asked for clarification
- 5. Respondent qualified his or her answer
- 6. Respondents initial answer was inadequate
- 7. Respondent gave a "don't know" response
- 8. Respondent refused to answer the question

Oksenberg et al. (1991) suggest that when one of these behaviors occurs in 15 per cent or more of the pretest interviews, it is likely that there is a problem with the question.

Behavior coding is a simple, low cost technique for analyzing conventional pretest interviews and to systematically identify problem questions. Reporting the results of behavior coding for each question in the interviewer debriefing session affords an opportunity to get the interviewers' interpretations and suggestions for the problem areas. The major limitation of behavior coding is that it does not identify the source of the problem. However, research cited by Fowler & Cannell(1996) has attempted to link behavior codes with specific types of problems. These authors summarized the preliminary generalizations that emerged from this research as follows:

- Questions that are not read as worded are awkwardly phrased or include words that are difficult to pronounce.
- Questions that are misread and frequently interrupted often offer dangling explanations at their conclusion.
- Questions that lead to requests for clarification often require response tasks that do not fit respondents' experience or frame of reference.
- Questions that require clarification often are vague or contain a poorly defined term or concept.
- Questions that stimulate inadequate answers often ask for a level of detail that is greater than the respondent can provide.

To the extent that data collection is not carried out well, the validity of survey measurement will likely be reduced. Since this is the first time INE carry out a Labour Force Survey is it important to design instruments to measure the survey objects. In our framework we have focused on the process of data collection: how questions were administered and how they were understood. However, none of the prescribed steps to follow up these issues provides a statistical assessment of the amount of error in answers to our survey questions. Therefore some approaches to evaluating the validity of survey measures are required. On approach is to compare answers to survey questions with information derived from other sources, such as records. The yearly QUIBB has collected information on employment in Mozambique from the beginning of 2000/01. The most recent survey (IAF 2002/03) can be used as record in this validation program.

A second approach would be to design a split-ballot experiment for one or two important indicators.

### 11.2 Sample Design

#### **Target Population**

The target population is comprised of all persons between 5 and more living in the districts of Maputo and Gaza. It is feasible to exclude persons living permanently in institutions. The size of the excluded groups will not comprise more than 5% of the target population.

#### Method of Data Collection

The data collection will be done by PAPI techniques during one week in the end of May 2004.

#### Sample size

The sample size required for LFS pilot is not based on expected non-response and any design effect associated with the sample design used.

100 households in 18 enumeration areas (EA) will be interviewed.

### **11.3 Questionnaire**

Mainly the questionnaire is built on the ILFS from Tanzania. Some of the questions to be answered in the pilot is discussed her.

The child work module may be too extensive compared to the relevance in the case of the Mozambican labour market, as indicated by Roll-Hansen (2004) the pilot should give this topic some attention.

Moreover, it seems to be appropriate to do more work on delimiting the age target group for both the child work module and the core questionnaire. Currently, in INE's drafts for the pilot the lower age limit is 5 in case of both the core questionnaire an the child work module, meaning that target group of the 5-17 year olds would have to respond to both the core and child work module. It may be that the lower age limit in the core questionnaire should be higher than in the case of the child work module as the focus of the core questionnaire is delimiting the economic active population in a proper way in terms of participation rates, whereas the child work module also focus on issues related to "illegal" child work. Furthermore, the project groups discussions regarding the upper age limit for delimiting children, as at least in terms of economic active population, it would usually not be recommended to have a higher minimum age limit than 15 to delimit economic active population. However, delimiting children and economic activity may be different issues, thus it is recommended to look into this issue in more detail.

Furthermore, as you have overlapping target groups in terms of economic active population (in the core questionnaire) and children (in the child work module) you need to avoid overlapping questions, like e.g. name and location of the workplace.

Finally, INE also has to look into the matter of direct interview versus proxy interview in the case of small or smaller children. Currently, the child work module is divided into two sub-modules where the first sequence of questions should, ideally, be asked the child as a direct interview, whereas the second sequence of questions of questions is designed as proxy interview to be responded by the parent or guardian. However, even if small or smaller children is completing the interview directly, the parents or guardians are likely to be present at the interview which could lead to potential biases, especially with regard to questions like relationship with their employer or job-satisfaction, if the employer is the family business. One approach is to have proper interviewer instructions regarding when (or for which age groups) it would be appropriate to apply proxy interviews (both for child work module and core questionnaire). Furthermore, to avoid biases it may be appropriate to omit some questions or introducing skip patterns, e.g. in the case of children who are employed in the family business.

As the reference period, both in the Tanzanian and Mozambican case is a reference week (Monday to Sunday) then we find that it would be more appropriate to commence the core questionnaire with questions related to establishing labour status in the reference week. However, the current draft, which is similar to the Tanzanian draft, begins with 5 complex questions where the time reference is either a full 12 months period or a decomposition of these 12 months into individual months. It is our impression that these questions could be omitted if there are no vital reasons for keeping those. If for some reasons these detailed questions are vital, then we recommend that these should at least be simplified and should also be asked as a sequence of questions after establishing labour status in the reference week to avoid potential context effects. In other words, the current question 6 should, ideally, be the first question in the core questionnaire, as other concepts or potential context effects should not influence labour status in the reference week.

#### Other surveys

The LFS questionnaire has been evaluated in terms of to which extent the "Tanzanian model" would fit the requirements in light of both the standard LFS framework and the local Mozambican case. This approach was due to the fact that INE's first questionnaire draft was to a high extent based on these experiences, meaning that the link to previously conducted surveys by INE have had lower priority, even though they already have experience with selected employment related questions from QUIBB, IAF and IDS. Thus, we have not been able to look into the matter of consistency between INE's current draft for the LFS and their previous experiences with asking employment related questions. Roll-Hansen (2004) has mentioned this issue. However, consistency of time-series is of importance but we find it equally important to make sure that the Mozambican LFS would follow the common LFS guidelines of course adjusted to the Mozambican labour market. One way to look further on this issue in the pilot is to prepare two questionnaires for the pilot, one based on QUIBB and one based on the ILFS from Tanzania.

### 11.4 Data collection

No single activity is enough to control or minimize non-response in the pilot. Both procedures that can reduce the level of non-response and procedures that can reduce the level of missing data in otherwise complete questionnaires would be stressed.

Some strategies for minimizing non-response in LFS are listed under.

#### Interviewer Recruitment and Training

In the interviewer training INE would identify and utilize those interviewers and field supervisors who are uniform in their performances. INE would also use bilingual interviewers when the sample includes a substantial portion of non-Portuguese speakers.

#### **Questionnaire Design**

Make the flow of questions in an interviewer-administered questionnaire clear by following the natural inclination of people (e. g., to read from left to right) and by using consistent graphical devices to emphasize the intended path.

### **11.5 Data processing**

Monitoring of processing is important. INE will conduct continuously processing steps for both monitoring issues in connection with the data collection and the data processing. The goal of the system is to improve the data collection and processing to the point where inter-rate agreement approaches 100 percents.

### **11.6 Weighting**

Not appropriate for the pilot.

### **12 Dissemination**

The purpose of the dissemination is to ensure that all LFS products are disseminated in ways that help to promote the widespread use of the data, and to increase the awareness of the LFS data among potential users.

All LFS products must be disseminated according to a plan that identifies intended and potential users. To ensure that the contents of a product reflect the needs of intended users, authors should consider user needs early in the publication development process. In some degree this is extant through meetings with some users in advance of the survey. The Ministry of Labour is for obvious reason an important and vital collaborator and user of the LFS. And, as pointed out in the chapter of the user side, the Ministry of Labour will be represented in the work group creating the questionnaire.

In designing a publication or product, it is also important to consider the Web presentation of the final product. INE have presentations of all their surveys

on www.ine.gov.mz, but should use the LFS to establish some standards for presentation of findings and documentation of the project and quality issues in co-operation with the project working on Systematic Quality Work.

Once the Chief Statistician has approved LFS for release INE and the Ministry of Labour will arrange a meeting or work-shop with potential users to review proposed dissemination strategies including press releases, targeted mailings, Web release, the use of print on demand, and the use of both print and electronic announcements.

Innovative ways to disseminate LFS data should be explored. Presentations at annual meetings, seminars on specific publications, and training on the use of data from the LFS are some preliminary thoughts.

### 13 APPENDIX 1. Persons met

Arão Balate, Director, Census and Survey, INE Manual da Costa Gaspar, Vice president, Social & Demographic, INE Cristóvão Muahio, Chefe de departamento, Census and Survey, INE Elisio Mazive, Census and Survey, INE David J. Megill, Chief, International Project staff, US Bureau of Census Abilio Mussane, Director of Planing, Ministry of Labour Eugenio Matavele, Data Processing, INE Cassiano Soda, Data Analysis, INE Fátima Zacarias, Director of Demographic and Vitals Statistics, INE Mónica Magaua, National Accounts, INE Carlos Creva Singano, Sampling, INE João G. Loforte, Secretário Permanente, Ministry of Labour Dr. Fátima Tayob, Director do Emprego, INEFP, Ministry of Labour Félix Filipe Manhique, Director geral, INEFP, Ministry of Labour Hans Erik Altvall, Team Leader, Scandinavian Program, INE Fernando Casimiro, Team Leader, Italian Program, INE Elisabeth Gulløy, International Consulting, Statistics Norway Bengt Oscar Lagerstrøm, Project Manager, Division for Sample Surveys, **Statistics Norway** Lars Peter Smed Christensen, Senior Adviser, Labour Market, Statistics Denmark

### 14 APPENDIX 2. List of Literature

- "Surveys of economically active population, employment, unemployment and underemployment. An ILO manual on concepts and methods", International Labour Office (1990).
- "Key findings. Integrated Labour Force Survey 2001/2002", National Bureau of Statistics Tanzania/Ministry of Labour, youth development and sports (November 2002).
- *Working paper for INE*: "Sampling Considerations for Mozambique labor Force Survey", Megill, David J., U.S. Bureau of Census (April 19, 2004).
- "Mission Report on Strategic Advice on the Labour Force Survey 2004/05 and tentative work plan for a Long Term Consultant in Social Statistics. 23 February to 5 March 2004", Roll-Hansen, Dag (2004).
- "Mission Report From a short-term mission preparing an Evaluation of the Integrated Household Program. 3 to 15 December 2003", Opdahl, Stein (2003).
- "Short-term mission on Standards and System Design. Report 9<sup>th</sup> 13<sup>th</sup> February 2004", Gløersen, Rune (2004)

### 15 APPENDIX 3. Terms of Reference

DRAFT TERMS OF REFERENCE

For a short-term mission On

Preparing a PROJECT PLAN for the Labour Force Survey 2004/05 - **30 April 2004** 

within the Scandinavian Assistance to Strengthen the Institutional Capacity of INE/Mozambique 2003-2007

Consultants: Messrs Christensen INE/Denmark and Lagerstrom INE/Norway Main Counterpart: Arão Balate, Director for Censuses and Surveys IT Counterpart: Eugenio Matável Department of Informatics

#### Background

The yearly QUIBB has collected information on employment in Mozambique from the beginning of 2000/01. The most recent survey (IAF 2002/03) shows that the lack of employment is one of the two most important social problems in Mozambique according to the inhabitant's own judgment. This is especially a problem for the households where the head has only short-term employment with pay on a daily/hourly basis. But employment is also a main concern among students 15 years and older. Work among children 6-14 years old was not common. Most parents reported that their children were not available for work, when asked about work during the last 7 days.

The employment rate is high, but less than 5 % of the adult inhabitants was employed in the public sector and only 0,9% in public administration. Total employment in private companies and cooperation's is also low. Nearly 90% of the work force is therefore either self-employed or work for their families. The large majority (85-95%) of those who were self-employed or worked for their families, did work in the agriculture, forest or fishing sectors.

Only 10,9% of all employed adults in Mozambique did get a payment for their work the last 7 days in the form of salary or other kind, including payment per hour and day more by chance. Nearly 30% work for their family without a compensation.

IAF 2002/03 does not measure if the persons who had work would like to work more if they had the possibility, and especially if they could get paid work. *Under-employment* is therefore most probably an important problem that needs to be measure in future surveys. One way can be to measure *how much time the adults are using for different work related activities. The need for more paid work is also important to investigate* in addition to information on the level of salaries, if the salaries are paid as agreed upon and other issues related to work conditions.

INEs Plan 2004 states that a survey focusing on labour force issues is the main task in social statistics. The survey will be heavily supported by the

Scandinavian Program, which is likely to fund the entire survey, including necessary consultants.

With support from the Scandinavian Program there have been several consultants for the integrated household survey program. One recent a short-term mission took place in December 2003 to contribute to evaluate the Integrated Household Survey Program and to give recommendations on methodological improvements – MOZ 2004:5.

The report concludes that INE is very competent and skilled in "survey logistics but weak in survey methods. It has to strengthen the competence and capacity in processing data, reporting and disseminating results. It also stated that in IAF 2002/03 particularly high standard errors and design effects are observed for the three northern provinces and that this should be closer investigated.

Another main task for INE in 2004 is to plan and carry out an informal sector survey through funds from a recently started Italian project. One component of this is planned to be a survey to households that may be incorporated in the Labour Force Survey at least with a few basic questions. The other component is a survey to enterprises.

#### Main reasons for the mission

INE has a lot of experience from carrying out surveys to households. It lacks however experience from a labor force survey and requires assistance in order to do this. INE has been for a study visit to Tanzania on their experiences from LFS and will continue to make use of the Tanzanian experience. The plan is to invite Takwimu (INE/Tanzania) to carry out a short-term mission to INE in May in connection with a workshop with the users.

#### Benefactors of the mission

The mission will benefit INE and also users of statistics on labor force and employment issues.

#### Objectives of the mission

The overall objective of the mission is to assist INE in making a plan for the Labor Force Survey 2004. This will be the base for preparing a budget for the whole survey ant its different steps – from planning to, data processing, reports and dissemination activities. The mission will propose on support from the Scandinavian Program also in terms of more consultancies and it will design draft ToR for the most urgent missions

#### Expected results

A draft project plan for the Labor Force Survey 2004/05 as the basis for a budget for the entire survey.

Agenda for the mission Will be specified on the first day of the meeting.

Tasks to be done by INE to facilitate the mission Elaborate ToR and a tentative agenda for the mission The agenda must include a workshop or seminar towards the end of the mission when the consultants present draft results of the mission

The agenda and other important prerequisites for the mission will be discussed on the very first day of the mission (19.4 at 09.00) in a meeting with VPINED and the counterparts.

Supply the consultants with information on the national contributions to the survey in terms of funds and human resources (with available competence that is relevant for the survey)

Prepare and supply the consultant with relevant documents and information, such as

Documentations on how the Tanzanian LFS was carried out, with questionnaires, definitions, instructions etc.

Documentations on how the Tanzania LFS was planned, such as the project plan for the survey, users dialogues etc

Documentations on the use of the Tanzanian LFS – how it is used, for what it is used etc.

The report from INEs visit to Tanzania

Supply good working conditions for the consultant

Consultant and Counterpart

Consultants: Mr.Lars Peter Smed Christensen INE/Danmark och Mr Bengt Oscar Lagerstrom INE/Norway

Main counterparts at INE:

Mr Arao Balate Director for Censuses and Surveys

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Eugenio Matável Department of Informatics

The Project Assistant from the Scandinavian Programme will assist with translations etc. whenever this is required.

Timing of the mission

19 April – 30 April.

Mr David Megill US Bureau of the Census will start a mission on the same day on the sampling design for LFS.

Mr Manlio Calzaroni, Italian Project will start a mission on the same day on the Informal Sector Survey

The two Scandinavian consultants should work close together with these two and of course also with the counterparts.

### Report

The consultants will prepare a draft project plan for the LFS to be agreed with INE as the basis for the survey budget. The survey budget should be prepared for the Steering Committee at a meeting on 29 April. They will submit a final draft report to INE for final comments within one week of the end of the mission. Statistics Denmark as Lead Party will print the final version within 3 weeks of the end of the mission. The structure of the report should be according to Danida-format. The main content should be the project plan.

The Counterpart has to ensure that the final printed report has at least a summary in Portuguese if the main report is in English – or vice versa

These Terms of Reference were prepared by

Day	/

/

Approved by/in the name of the President of INE

/	/	
	/	' /

**16 APPENDIX 4. Comments on the core questionnaire** 

Question	stion Difficulties			Comments
	Comprehen-	Information	Reporting	
	sion	processing		
	work activity Long question with list of items Question/answer mismatch		List of activities not complete	
Q2	High response task			Alternative wording:
		No objection		Did you work at a job or business at any time in the last 12 months; that is, from <month and="" year=""> to <month and="" year=""> (regardless of the number of hours per week)? PLEASE INCLUDE AS WORK TIME OFF FOR VACATION, ILLNESS, MATERNITY/PATERNITY LEAVE, STRIKES AND LOCKOUTS. Yes/No</month></month>
Q3a		Retrieval task Long period of recall Much information needed to answer question Difficult task (complex calculation)		During the last 12 months; that is, from <month and="" year=""> to &lt; month and year &gt; did you work in every month (at least 8 hours in each month)? REMEMBER TO INCLUDE AS WORK TIME OFF FOR VACATION, ILLNESS, MATERNITY/PATERNITY LEAVE, STRIKES AND LOCKOUTS. Yes/No In which months did you work (at least 8 hours in each month)? REMEMBER TO INCLUDE AS WORK TIME OFF FOR VACATION, ILLNESS, MATERNITY/PATERNITY LEAVE, STRIKES AND LOCKOUTS. Note: the months used will correspond to the 12 months prior to the interview. Month1 Month2 Month3 Month4 Month5 Month6 Month7 Month8 Month9 Month10 Month11 Month12 <math>0^{1}F</math> <math>0^{2}F</math> <math>0^{3}F</math> <math>0^{4}F</math> <math>0^{5}F</math> <math>0^{6}F</math> <math>0^{7}F</math> <math>0^{8}F</math> <math>0^{9}F</math> <math>1^{0}F</math> <math>1^{1}F</math> <math>1^{2}F</math> In which months did you work the whole month, that is, at least 8 hours every week and in which months did you work part of the month? Month1 Month2 Month3 Month4 Month5 Month6 Month7 Month8 Month9 Month10 Month11 Month12 <math>a_{1}F</math> <math>a_{2}F</math> <math>a_{3}F</math> <math>a_{4}F</math> <math>a_{5}F</math> <math>a_{6}F</math> <math>a_{7}F</math> <math>a_{8}F</math> <math>a_{9}F</math> <math>a_{9}F</math> <math>a_{1}F</math> <math>a</math></month>

			b. <sup>01</sup> F <sup>02</sup> F <sup>03</sup> F <sup>04</sup> F <sup>05</sup> F <sup>06</sup> F <sup>07</sup> F <sup>08</sup> F <sup>09</sup> F <sup>10</sup> F <sup>11</sup> F <sup>12</sup> F PART
Q3b	Question answer mismatch	Retrieval task Long period of recall Much information needed to answer question Difficult task (complex calculation)	Remember that the question is last 12 months. Not January-December.
Q3c	Question answer mismatch	Retrieval task Long period of recall Much information needed to answer question Difficult task (complex calculation)	Se Q3a and 3b
Q4a	Difficult wording switch from work activities (Q1-Q3) to economic activity		Define work activity and economic activity. Is the meaning of the terms the same?
Q4b	No objections		
Q5	Question/answer mismatch		What was/is your status at this job or business? Were/are you         (Read Categories)?         1       F       Working on own or family farm or shamba         2       F       An employee without supervisory responsibilities         3       F       An employee with supervisory or management responsibilities for up to 5 persons         4       F       An employee with supervisory or management responsibilities for more than 5 persons         5       F       Self-employed without employees         6       F       Self employee with employees         7       F       Unpaid family worker
Q6	No objections		Did you do any work of any type for pay, profit, barter or home use during the last 7 days?

Q7a	No objections			
Q7b	No objections			
Q8	No objections			
Q9	No objections			
Q10	Question/answer mismatch			Where you available for full-time work or part-time work last 7 days? Full-time/Part-time/Both full- and part-time
Q11	Unclear wording: any steps			
Q12	Unclear wording: <i>look</i> for	G	Missing categories	Which steps have you taken in the past 4 weeks to get a job? You have to find valid alternatives for Mozambique
Q13	Unclear wording: look for	C	Missing categories	Why didn't you take any steps to find a job last 4 months? You have to find valid alternatives for Mozambigue
Q14	Double question			Two questions What kind of business, industry or service was your last job? (Give full description, e.g. fish canning plant, automobile manufacturing plant, municipal government.) What kind of work were you doing at this job? (Give full description or occupational title, e.g. office clerk, machine operator, computer programmer.)
Q15	Question answer mismatch	r		Perhaps this should be an open question.
Q16		Retrieval task Long period of recall		No need for adjustments
Q17	Double question			See Q14

Q18a	question/answer mismatch		What was/is your status at this job or business? Were/are you (Read Categories)?
			<ul> <li><sup>1</sup> F Working on own or family farm or shamba</li> <li><sup>2</sup> F An employee without supervisory responsibilities</li> </ul>
			<sup>3</sup> F An employee with supervisory or management responsibilities for up to 5 persons
			<sup>4</sup> F An employee with supervisory or management responsibilities for more than 5 persons
			<sup>5</sup> F Self-employed without employees
			<sup>6</sup> F Self employed with employees
			<pre>/ F Unpaid family worker</pre>
			Perhaps you need to clarify some of the alternatives out of consideration for agriculture
			You should also control the skip instruction. Something seems to be wrong
Q18b	question/answer mismatch		What are your main activities on the farm or shamba?
Q18c			Cut the question
Q19		Judgement task	The question seems not appropriate. Cut the question or move it to section H
Q20			Alternative wording:
			For whom did/do you work? (NAME OF BUSINESS, GOVERNMENT DEPARTMENT, OR PERSON) Note: The information gathered in questions D25-28 will be used to code occupation to 4 digit ISCO and industry to 2 digit ISIC.
Q21			What kind of business, industry or service is this? (Give full description, e.g. fish canning plant, automobile manufacturing plant, municipal government.)
			INT: Give a description of the main economic activities at our business, industry or service
Q22	No objections	I	
Q23			About how many persons are employed at the location where you work? Would it be less than 6, 6 to 10 or more than 10?
			<sup>1</sup> F Less than 6
			<sup>2</sup> F 6 to 10
			<sup>3</sup> F 10 or more
Q24	Difficult or uncle wording	earJudgement task: Is the respondent fully	
	wording	informed about the	
	Response task: T		
	question wou	uld ve Social desirability	
L	probably be selisitiv	ve oocial desirability	

Q25	High response task	Judgement task: Is the respondent fully informed about the issue? Social desirability	
Q26-Q33	No objections		You have to control alternatives and make it reasonable for Mozambique. Q33 is a sensitive question
Q34	No objections		
Q35	Double question		Two questions (see also Q14)
			What kind of business, industry or service was your last job? (Give full description, e.g. fish canning plant, automobile manufacturing plant, municipal government.) What kind of work were you doing at this job? (Give full description or occupational title, e.g. office clerk, machine operator, computer programmer.)
Q36a	Question/answer mismatch		What was/is your status at this job or business? Were/are you (Read Categories)?
			<sup>1</sup> F Working on own or family farm or shamba <sup>2</sup> F An employee without supervisory responsibilities
			<sup>3</sup> F An employee with supervisory or management responsibilities for up to 5 persons
			<sup>4</sup> F An employee with supervisory or management responsibilities for more than 5 persons
			<sup>5</sup> F Self-employed without employees
			<sup>6</sup> F Self employed with employees
			<sup>7</sup> F Unpaid family worker
			Perhaps you need to clarify some of the alternatives out of consideration for agriculture
Q36b	question/answer mismatch		What are your main activities on the farm or shamba?
Q36c			Cut the question
Q37		Judgement task	The question seems not appropriate. Cut the question or move it to section H
Q38			
			For whom did/do you work? (NAME OF BUSINESS, GOVERNMENT DEPARTMENT, OR PERSON) Note: The information gathered in questions D25-28 will be used to code occupation to 4 digit ISCO and industry to 2 digit ISIC.
Q39			What kind of business, industry or service is this? (Give full description, e.g. fish canning plant, automobile manufacturing plant, municipal government.)
			INT: Give a description of the main economic activities at our business, industry or service

Q40	No objections			
Q41				About how many persons are employed at the location where you work? Would it be less than 6, 6 to 10 or more than 10? <sup>1</sup> F Less than 6 <sup>2</sup> F 6 to 10 <sup>3</sup> F 10 or more
Q42	Difficult or unclea wording Response task: Th question woul probably be sensitive	d	due to skip	This is an important question for determinations of the target group for section I: Informal section. You have to discuss how to ensure that people whom work in informal sector get to section I. One option is to skip "Don't know" to Q51
Q43	High response task	Judgement task: Is the respondent fully informed about the issue? Social desirability	,	
Q44-Q51	No objections			You have to control alternatives and make it reasonable for Mozambique. Q51 have high response task in terms of sensitivity
Q52		Retrieval task: It is difficult to report exact amount of hours		How many hours per week did you work in the last 7 days? Include both main and other economic activities. (Hours)
Q53a	No objections			
Q53b			Missing categories: Is the list appropriate for Mozambique?	
Q53		Judgement task:		Were you available for work more hours last 7 days? YES/NO
Q54	No objections	1		
Q55	Question/answer mismatch	Judgement task		Were you available for work in the agriculture or somewhere else? Agriculture/somewhere else/no especial sector In what business, industry or service was you available for? Open question
Q56		Judgement task		Are the benefits/earnings from your work appropriate in terms of hours worked under normal circumstances?
Q57	No objectives			
Q58a	No objectives			
Q58b			Missing categories?	
Q59	No objections	1		

G60b-61e       Retrieval task       What is the casiest way for you to tell us your usual wage or salary for your job? Would it be hourly, weekly, annually or on some other basis?         Cng period of recall?       Difficult       task (complex         Difficult       task (complex       Per day         calculation/estimation       Per day       Weekly         P       Bi-weekly       Per year         P       Per year       Per year         P       Per piece       Per piece         P       Other, specify       What was/is your (interviewer fill text as indicated in Q62b, e.g. hourly, weekly, etc.) wage or salary before taxes and all other deductions at this job? Including lips and commissions and before taxes and deductions?         Image: Per piece       Image: Per year       Image: Per year         Per piece       Per piece       Per piece       Per piece         P       Per piece       Image: Per piece       Per piece         P       Per piece       Per piece	Q60a		
Q62a No objections	Q60b-61e	Long period of recall' Difficult tas (complex calculation/estimation )	basis?         Prime       Per hour         Prime       Per day         Prime       Bi-weekly         Prime       Bi-weekly         Prime       Per month         Prime       Per month         Prime       Per year         Prime       Per p
Q62a No objections	Q62a	No objections	

Q62b	Retrieval task Long period of recal? Difficult task (complex calculation/estimation )	What is the easiest way for you to tell us your usual wage or salary for your agricultural work? Would it be hourly, weekly, annually or on some other basis?         11       F       Per hour         12       F       Per day         13       F       Weekly         14       F       Bi-weekly         15       F       Per day         16       F       Per month         17       F       Per year         18       F       Per month         17       F       Per pointh         17       F       Per pointh         17       F       Per month         17       F       Per month         18       F       Per month         19       F       Other, specify         What was/is your (interviewer fill text as indicated in Q62b, e.g. hourly, weekly, etc.) wage or salary before taxes and all other         10       10       10         10       10       10         10       10       10         10       10       10         10       10       10         10       10       10         10       10       10         10       10       10