

Mission Report

FROM A SHORT-TERM MISSION ON THE LABOUR FORCE SURVEY 2004/2005

27/9-9/10 2004

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

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List of abbreviations

IFTRAB	Inquérito Integrado á Força de Trabalho
INE	Instituto Nacional de Estatística, Mozambique
LFS	Labour Force Survey
LTA	Long-term adviser

EXECUTIVE SUMMARY

This mission report is the first volume in a double mission on IFTRAB by Mr Lars Peter Smed Christensen and my self. In short the objective of the shortterm mission was to follow-up the launching of the data collection for IFTRAB. Furthermore, the double mission should also cover work connected to work expected by the Scandinavian LTA in Social and Demographic Statistics, Mr. Dag Roll-Hansen.

(i) Summary of recommendations

- The quick-list variables should be revived to include variables useful for analysis of coverage and non-response.
- Some findings from the first day of data collections should be followed up to ensure no impact on the data quality in the end. Problematic topics are: 1) Administration of the questionnaire, 2) Occupation, 3) Second economic activity, 4) Income.
- A clear IT-Strategy or instruction, Especificação dos Requisitos para o IFTRAB, is defined but need to be revived to integrate the proposed plan: "Quality indicators in the data processing format and editing" for data processing.
- The program specified in the Especificação dos Requisitos para o IFTRAB to tabulate the core labour market variables should be closely evaluated with help of data from the first quarter of fielding.
- In light a demand of quality indicators for the field procedures, I recommend development and implementation of a reinterview program in the second quarter of the LFS.

(ii) Short-term mission activities

The main objective of this short-time mission was to advise INE in finalizing the material for the Mozambican LFS 2004/2005, Inquérito Integrado á Força de Trabalho (IFTRAB), and to ensure quality indicators for the whole data collection system. Specifically the mission was required to address the following areas:

- Sum up experiences from the first weeks of data collection with recommendations on how to solve strategic problems.
- Draft an finalize any changes in key documents
- Advice in changes in survey methods or project plans
- Review the possibilities and prepare to let IFTRAB be a pilot in terms of developing standards for interviewer performance, as well as quality indicators

Terms of Reference also include a major activity on documentation work in cooperation with IMF. This activity has not been launched during this mission.

This Terms of Reference was ambitious in light of timing of the mission. It was not easy for the adviser to check the status of the finalization process due to lack of time between the mission and the launching of the data collection. However, we start focusing on data processing. In order to do this, and indirectly checked the status of the main activities related to the data collection, we discussed some aspect related to the survey design, the development and testing procedures, interviewer deployment and training, and data capture and processing.

During the first week of the mission some time was dedicated to evaluation of the IT-strategy and specifications for tabulations during the data processing step. This topic is treated more carefully later in this report. The work was conducted through closely evaluation of the pilot data and syntaxes developed for tabulation.

As a part of the mission it was important to observe administration, logistics, interviewing and processing of data. Logistics was discussed in front of the launching between Araõ Balate and the consulter. The discussion was topped by a visit to the headquarters for the fielding operations for Maputo province and city the day before the launching the 1st of October. The purpose was to ensure that the interviewer teams and the local administration were ready to start the data collection on time. The visit convinced us. Administration, supervisors and interviewers were ready to start.

The next step, after the data collection had started, was to monitor the data collection. A first approach during the first days of fielding was to catch a glimpse of the interview process by analysis of actual questionnaires returned to INE. After the first two days of data collection, 4th of October, all 30 questionnaires from two numerator areas in Maputo province was controlled by visual inspection. The first impression was good, but some comments were discussed with Araõ Balate after the inspection routine. The problematic

topics observed were due to general administration of the questionnaire and occupation and economic activity.

The next step was to observe the actual fieldwork. Two trips were arranged the last week of the mission. The first trip was carried out short time after the launching of the data collection (day 6 of the data collection). Matola, Maputo province, was visited. The objective was to monitor the implementation of the data collection and to observe the interviewing.

At the time the consulter arrived all interviews was nearly completed. One household was not successively contacted due to absent of all household members, and a second household was not completed because of absent of one member of the household. The consulter was shown around inn the area and the quick list procedures were replicated. After the visual observation of the area the consulter and the interviewers was recapitulate some random questionnaires to check for mistakes and errors. During this process some problematic topics was found: 1) Administration of the questionnaire, 2) Occupation, 3) Second economic activity, 4) Income. This four item needs to be followed up to ensure no impact on the data quality in the end.

The second visit in the field was prepared to observe the interaction between the interviewer and the respondents. During the first trip with the interviewer team in Maputo province preparations for the monitoring was carried out. Unfortunately, it was not possible to do this monitoring exercise due to local holiday in Maputo province the 6^{th} of October. The observations session was therefore carried out two days later with the interviewer team in Maputo city. Also this observation stresses the importance of focusing questionnaire administration and interpretation of some key concepts in a survey on economic activities.

The field visits also enlighten our attention on the listing procedures. The consulter discussed this issue with Mr Hans Erik Altvall and Araõ Balate on three different occasions. We were looking for a possibility to include more variables in the listing process to ensure more information about non-respondents. This efforts will be helpful both in light of documentation of coverage errors and non-response errors. It was unfortunately not enough time to work out variables during this mission.

1 Summary of recommendations

The quick list variables should be revived to include variables useful for analysis of coverage and non-response.

Some findings from the first day of data collections should be followed up to ensure no impact on the data quality in the end. This is due to

To start the work on developing standards for interviewer performance it will be useful to conduct a re-interviewing program during some part of the data collection. A clear IT-Strategy, Especificação dos Requisitos para o IFTRAB, is defined but need to be revived to integrate the proposed plan for data processing "Quality indicators in the data processing - format and editing", in the work with implementing of the data processing of IFTRAB.

The program specified in the Especificação dos Requisitos para o IFTRAB to tabulate the core labour market variables should be closely evaluated with help of data from the first quarter of fielding.

In light a demand of quality indicators for the field procedures, I recommend development and implementation of a reinterview program in the second quarter of the LFS.

2 Introduction

As Stated in Mission report and The Labour Force Survey in Mozambique 2004/2005 (LFS) is a complex data collection project to measure employment and occupation issues.

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.

Standardization using best practices in surveys is necessary to achieve the full potential of this LFS. One major recommendations for the conduction of LFS is not said to often:

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 step. The achievement of this standardization using best practices requires more than the specification of the practices to be followed. Careful monitoring is also required.

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. One major step in direction of monitoring factors which may influence the data quality is to break down quality into components or characteristics that focus around several key concepts, as accuracy, relevance, timeliness and accessibility.

This report will enlighten accuracy in the Mozambican LFS and the steps discussed during the short mission to ensure high accuracy and the ability to report this during and after the survey.

Federal statistical offices have a stated policy of "openness" concerning the reporting of data quality to users. For example, Statistics Canada (1992) has articulated a policy on informing users about data quality and methodology:

"Statistics Canada, as a professional agency in charge of producing official statistics, has the responsibility to inform users of concepts and methodology used in collection and processing its data, the quality of the data it produces, and other features of the data that may affect their use and interpretation."

3 Reporting sources of errors

One of the first activities during my mission was to ensure that INE had adapted goals of best practice of data collection. Reporting sources of errors is important. While there is a general agreement that this information should be reported, there is no clear answer to how much information to provide, format and complexity. Evaluation criteria for the sources of error can be presented in levels as described in table 3-1.

Error type	Level	Criteria		
Coverage error	1	Coverage error is mentioned as sourc of nonsampling error		
	2	Overall coverage rate is provided		
		Univers is defined		
		Frame is identified and described		
	3	Coverage rates for subpopulations are given		
Nonresponse error	1	Unit nonresponse is specifically mentioned		
		Item nonresponse is specifically mentioned		
		Overal response rate is given		
	2	Item response rates are given		
	-	Numerator and denomirator for unit and item response rate are defined		
	3	Subgroup response rates are given		
		Effect of nonresponse adjustment procedures is mentioned		
		Effect of item nonresponse is mentioned		
		Results of special nonresponse studies are described		
Processing error	1	Processing errror are specifically mentioned		
r tocessing entit	2			
	2	Data keying error rates are given Coding error rates are given		
		Edit failure rates are summarized		
		References are given to processing error studies and documentation		
	3	Coder variance studies or other processing error studies are given		
	5			
Measurement error	1	Measurement error is mentioned as a souce of nonsampling error		
	2	Specific sources of measuremnet errors are described and defined		
	3	Reinterview, record check, or split sample measurement error studies are mentioned		
Sampling error	1	Sampling error is mentioned as a source of error		
		Definiton and interpretation of sampling error is included		
		Significance level of statement is given		
	2	Sampling error are presented		
		Confidence intervals are defined and method for calculating intervals is described		
		Sampling errors and calculations for different types of estimates (e.g., levels, percent, ratios, means, and medians) are given		

Table 3-1: Evaluetion criteria for the sources of error

	Method used for calculating sampling error is mentioned with reference to a more detailed description
	Generalized model(s) and assumption are described

In this report I will discus these evaluation criteria in the light of observations during the mission for the first four error types in the list above. A self-assessment checklist for IFTRAB, who was prepared during the first days of the mission to give quick input on the status of the survey preparations (appendix x), will also be used during this discussion.

3.1 Coverage error

The target population is comprised of all persons over 6 years who is permanent residents in Mozambique at the time of data collection. These require a good listing procedure in order to avoid counting individuals more than once or missing any. The quick list procedure was replicated in field for the consulter and seems to be very efficiency to ensure good coverage in the numerator area at the time of listing. Problems are likely to occur in cases were individuals having more than one resident or move to a new enumerator area during the data collection.

Steps should be taken to try to measure coverage error. The quick list approach gives a possibility to give some estimates on differences between the new and the "old" frame. An approach to measuring coverage errors is based on case-by-case matching. If an alternative list of units exists, units in the population can be classified as either present or not present in the survey or in the alternative list. Consequently, all units can be cross-classified

		Alternative frame		
		In	Out	Total
	In	N (11)	N (12)	N (1*)
	Out	N (21)	N (22)	N (2*)
Frame	Total	N (*1)	N (*2)	N (**)

Under condition of independence, we can estimate

$$N(1^*)/N(*^*) = N(11)/N(*1)$$

Which is the coverage ratio of our frame, using the alternative list as a control. The alternative list in this case should be the numeration list.

It is not straightforward to say anything about the effect of coverage errors on the survey results, but we can emphasize that under-coverage have some effect on labour market statistic as unemployment and hours worked.

3.2 Non-response error

Non-response error is an error of non-observation like coverage error. However non-response error differs from coverage error in that non-response reflects unsuccessful attempt to obtain the desired information from an eligible unit, whereas coverage error reflect the failure to have the sample unit uniquely included in the frame.

Non-response rate, or the opposite response rate, is often used as an overall indicator of the quality of the data. But the non-response rate is only an indicator of the potential bias in survey estimates due to non-response errors in the survey. The actual degree of non-response bias is a function of not only the non-response rate but also how much the respondents and nonrespondents differ on the survey variable of interest. Thus, the effects of nonresponse errors are very rarely directly observed due to difficulty in obtaining information from and about the non-respondent. We have little information about the non-response rate after the first days in field, but we have to consider some efforts to ensure information about the non-response i.e.

In this case it makes sense to divide the non-respondents in two groups; unit non-response and item non-response. This is not an adequate way to use this concepts, but it make sense if we use the label unit for the whole household and item for each person, 6 years or older, in the household. A second approach would than be to collect data about some characteristics with the respondents and households to ensure data for non-response analyses. Two different procedures are to collect some data about labour characteristics during the listing procedures or by partly proxy reporting during the interview of the household. The first procedure will ensure data about unit non-response, whereas the second procedure will capture information about "item non-response"

Furthermore, the procedures used for IFTRAB, especially time spend in each numerator area, seems to minimize the occurrence of non-response.

3.3 Measurement error

Measurement error is related to the observation of the variables being measured in our survey and occurs as a part of the data collection, as opposed to sampling, non-response, coverage, or data processing.

3.3.1 Measurement error defined and described

Measurement error comes from four primary sources. These are:

- 1. Questionnaire; specification problems, question wording, length of questions, length of the questionnaire, order of questions, response categories, open and closed formats, questionnaire format
- 2. Data collection method
- 3. Interviewer; interviewer characteristics
- 4. Respondent; encoding of information, comprehension of the survey question, retrieval of information from memory, judgment of appropriate answer, communication of the response

During the observation of the interviews these first days of fielding, we tried to investigate the question and answer process briefly. Especially is this important during the first weeks of the data collection. Furthermore, it is important to ensure that observations by the supervisors are effective to identify if respondents understand the words, terms, and concepts being used. This step of the quality insurance should tell us more about question as: Do the respondent 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? During the discussion with the interviewer team in Maputo province it become clear that the interviewers was aware of this questions. Likevel is it not easy to avoke that some of the questions in the questionnaire was misinterpreted by some of the respondents

The complexity of the interviewer tasks seams also important to focus on. Do interviewers have difficulty pronouncing words or reading particular sentences? This is especially important because of low level of literacy among the respondents and many different languish of mother tough across the country. 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 the interviewer teams has of course taken care of some of these challenges. But it is also important that these moments have some attention in 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. Some evidence of difficulties due to skip patterns was observed during observation and visual checks of questionnaires from Maputo city and Maputo province. In all cases the supervisor or the interviewer corrected this errors in field before return.

3.3.2 Special studies identified

We have three methods to control interviewer errors; training, supervision or monitoring and workload manipulation. Supervision and performance monitoring are essential ingredients of quality control system.

Observation is the most obvious method, but my suggestion is to carry out a re-interview program to get objective information about sources for measurement errors. More about this in chapter 4: Quality indicators.

4 Quality indicators

Terms of Reference emphasise the need of quality indicators. In chapter 3 we have discussed sources of errors and some possible solutions. In this chapter I will try to take this down to recommitted actions.

4.1 Observation

During the observation of the data collection it become clear that specific quality indicators for the data collection is not easy to neither develop nor implement during at the moment. Development should be done in the planning process and implemented during the training of the supervisors, and later, the interviewers. Nevertheless, we discussed the possibility to include some indicators on the data processing step. Objectives and solutions are heavily discussed by Lars Peter Smed Christensen and Bengt Oscar Lagerstrøm (2004) during the preparation for the survey. In the next chapter you will find a validation plan that is closely related to the procedure described in the IT-strategy for IFTRAB. This is not a new procedure, but an extension to a already specified procedure.

4.2 Procedure for the validation of your first step data file

Verification of the data file should be done in two steps. This procedure should be included in the revised version of the Especificação dos Requisitos para o IFTRAB under the heading "Quality indicators in the data processing format and editing".

4.2.1 First step verification of the data file

Verification of the format of the file (consistency with the data dictionary) should be carried out with:

- Use SPSS to make sure that everything is ok, no strange characters, all the needed variables are there and are valid.
- Stop bite. For an easy check of record length, make sure that the last value of each record is a '5'.
- Duplicate check
- Flow edits; make sure that the path is clean.
- Cross verification between the three questionnaires; Questionário do agregado familiar, Questionário principal and Questionário para pessasos de 7 17 anos de idade. Make sure that the flow between the three questionnaires is correct.

4.2.2 Second step verification of the data file

The second step is validation of the data.

- Look at the distribution of most variables to see if they make sense
- Cross tabulation of variables

4.3 A Reinterview program

Quality indicators for the fieldwork are not straightforward. Nevertheless will a replicated measurement of the same unit in a survey, a reinterview, provide information on measurement errors resulting from interviewer effects.

Reinterviewer programs is conducted for one or more of the following four purposes:

- To identify interviewers who are falsifying data;
- To identify interviewers who misunderstand procedures and require remedial training;
- To estimate simple response variance; and
- To estimate response bias

The first two purposes provide information on measurement errors resulting from interviewer behaviour. The observation of the data collection during this mission gave insight in how well the interviewer teams was monitored and supervised in field. My concern is not falsifying of data or misunderstood procedures in between members of each team, but differences in interviewer behaviour between different interviewer teams all over the country.

I recommend development and implementation of a reinterview program in the second quarter of the LFS.

5 APPENDIX 1. Persons met

ORGANISATION

Araõ Balate, Director Censos e Inquéritos Manual da Costa Gaspar, Vice President, Social & Demographic, INE Cristóvão Muahio, Chefe do DMA Hans Erik Altvall, Team leader, Scandinavian Program, INE Bruno Couto Eugénio Matavel

INE Maputo city INE Maputo province:

6 APPENDIX 2. List of Literature

- Especificação dos Requisitos para o IFTRAB. INE, 2004
- "Mission Report from a Short-time Mission on Preparing a Project Plan for the Labour Force Survey 2004/2005. 19/4-30/4 2004", Lars Peter Smed Christensen and Bengt Oscar Lagerstrøm (2004).
- "From a Short-time Mission on Assisting INE in Preparing a Definiton of Employment, Unemployment and Underemployment Based on Tanzania Definiton for the Labour Force Survey 2004/2005, 7-18 June 2004", Gideon Kisai Ngoi (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 9th 13th February 2004", Gløersen, Rune (2004)

7 APPENDIX 3. Programme for the Mission

<An overview over meetings etc.>

8 APPENDIX 4. Terms of Reference

TERMS OF REFERENCE

for 2 short-term missions

on Labour Force Survey 2004/05

27 September – 8 October and 18 October – 29 October 2004

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

Consultants: Bengt Lagerström (first mission) and L P Cristensen (second mission)

Counterparts: Fatima Zacarias and Arao Balate

Background

Instituto Nacional de Estatística (INE) is ready to embark on the arrangement of a large Labour Force Survey 2004-2005, the Inquérito Integrado à Força de Trabalho (IFTRAB). Data collection will start October 1. Before that, the training etc of interviewers and INE staff will be done.

The present long-term adviser in Social and Demographic Statistics to INE, Mr Dag Roll-Hansen, will be absent from his position 23/8 - 31/10 (ca) due to private reasons. In his absence the 2 interrelated short-term missions according to these ToR will take place.

The 2 short-term consultants carried out a common mission on a project plan for the IFTRAB i April 2004 – MOZ 2004:10. Another important advisory support from the Scandinavian Program was the short-term mission in June 2004 by Mr Ngoi on assisting INE in definition of various key concepts in the survey – MOZ 2004:13.

A Pilot Survey was carried out in July with a report and a final dataset in SPSS amongst the results.

Other material with relevance for the mission– though they still need more elaborations - are

• A manual with a documentation standard (" Manual de padrões de documentação")

- A manual for developing of applications with a specific orientation towards the IT activities in relation to IFTRAB (" Especificação do Desenho da Aplicaçºao IFTRAB")
- Subject Matter Areas requirements on the IT activities (" Especificação dos Requisitos para o IFTRAB")

There are plans to carry out a second short-term mission on reviewing the Integrated Household Survey Program at INE about the same time as the 2 LFS-missions. A first review mission took place in the end of 2003 – MOZ 2004:5. The review mission aims to ensure that the Household Survey program will fill the data needs for monitoring poverty in 2006 according e.g. to what is mentioned in the Aide-Memoire from the Joint Review inm April 2004.

Objectives of the 2 missions

То

- assist INE in the activities leading up to the IFTRAB, and the immediate first weeks of the data collection
- give advice on the data collection based on experience from the first weeks
- give advice on the output from the IFTRAB tabulation- and dissemination plan
- give advice on the IT work for the IFTRAB
- give advice on the documentation of the IFTRAB
- strengthen the Scandinavian project with personal resources in Social and Demographic statistic in the absence of the LTA

Benefactors of the mission

- All parties in INE engaged in the IFTRAB preparations and data collection
- INEs Social and Demographic statistics Directorate
- All parties interested in the economy and working conditions of the people of Mozambique: The Mozambican government, the donors, researchers and INE.

Expected results

Mission no 1

- Sum up experiences from the first weeks of datacollection with recommendations on how to solve strategic problems (in particular problems that might generate systematic errors)
- Draft and finalize any changes in key documents (questionnaires, manuals, enumerator materials etc)
- Advice on changes in survey method or project plans
- Review the possibilities and prepare to let IFTRAB be a pilot in terms of developing standards for interviewer performance, as well as quality indicators
- Assist with the documentation work in close cooperation with the IMF consultant
- Assist with the design of the IT activities for the IFTRAB (a project description) in close cooperation with the new LTA on IT in the Scandinavian Program

Mission no 2

- Assist INE in analysing interview data from the first weeks of fieldwork, with the purpose to identify potential weaknesses and review the need for intervening the process.
- Assist INE in Preparing a preliminary dissemination plan for the results of the IFTRAB with specific focus on priorities
- Assist with the documentation work in close cooperation with the IMF consultant
- Assist with developing the requirements on the IT work for the IFTRAB

Consultants and Counterparts

Consultant at mission no 1, from 27 September to 8 October: Mr Bengt Lagerström, Statistics Norway.

Consultant at mission no 2, 18-29 October: Mr Lars Peter Christensen, Statistics Denmark.

Main counterparts at INE: Fàtima Zacarias and Arão Balate.

The advisors will cooperate closely with the Scandinavian Team Leader, Mr Hans Erik Altvall during their missions.

Report

Since the 2 missions are closely interrelated, the consultants will prepare one common report. The first consultant will prepare a draft report from his mission to be discussed with INE before leaving Maputo. The second consultant will be responsible to complete this report by including his contributions to be discussed with INE before leaving Maputo. The two consultants will submit a final draft to INE for final comments within one week of the end of the mission, i.e. before 5 November. 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 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

Day / /

9 Appendix 5: Self assessment checklist for IFTRAB 04/05

Some aspect related to the survey design

1. How long is the time gap between the reference period to the last update of the sampling frame?

_____ days/weeks/months

2. Would the problem of under- overcoverage be less if the time gap between the reference period to the last update of the frame was shorter?

Yes No

3. Did you make sure that the frame is as close to the target population as possible by assessing the coverage via....

... matching the frame with comparable alternative sources for the target population?

... analyzing survey returns for duplicates, deaths, out of scope units and changes in characteristics?

... using specific questions on the questionnaire to aid in monitoring coverage?

... verifying with local authorities?

... verifying the frame of subsets of it in the field?

... comparing the frame with sample units from a corresponding area frame?

... updating the frame to determine the changes which occur during a certain time period?

... checking the consistency of counts with other sources or with data from specially designed replicates?

... using evaluative information obtained from other surveys with the same frame?

... contact with the people in charge of the administrative data when coverage changes are outside your control?

... map checks for area frames to ensure clear and non-overlapping delination of the geographic areas used in the sampling design?

... no monitoring?

... others?

Please specify:

4. Is substitution allowed in the case of missing units?

Yes No

Development and testing of the questionnaire

Well developed measurement instruments minimize measurement errors and optimize the relation to the respondent. The following questions focus on the main aspect concerning the quality of the questionnaire or interview.

5. Which of the following measures was in place for the questionnaire design?

Questionnaire or question batteries that have been used before but have not been previously tested

Harmonized questions or question batteries that have been previously tested

Standardized drafts for the layout

An internal specialized questionnaire appointee in INE who gives advice and checks the questionnaire

6. How do you appraise the response burden considering the length for responding or completion per respondent?

It is easily done within 10 minutes per respondent It is easily done within 20 minutes per respondent It can be done within 30 minutes per respondent It takes longer than 30 minutes per respondent

7. How do you appraise the response burden considering the length for responding or completion per household?

It is easily done within one hour per household It is easily done within two hours per household It can be done within three hours per household It takes longer than three hours per household

8. How do you appraise the response burden of the questionnaire or interview concerning the compilation of information needed?

Low response burden, the information can be provided easily Moderate response burden, some information needs to be retrieved Demanding response burden, the information required needs complicated retrieval

9. How do you appraise the response burden of the questionnaire or interview considering sensitive questions?

Low response burden, the information can be provided easily Moderate response burden, some information needs to be retrieved Demanding response burden, the information required needs complicated retrieval

10. Who has tested the questionnaire?

Testing was undertaken internally Testing was undertaken by the responsible committee in INE In a internal survey laboratory The questionnaire was tested by external experts Other testing procedures, specify:

11. Which methods for questionnaire testing have been used to assess the questionnaires response burden in terms of length, requirements and its (graphical) design?

Pre-testing of the questionnaire with a small sample Debriefing sessions with interviewers following the pre-test Focus groups In-depht interviews Think-aloud interviews Paraphrasing Behavior coding Split sample testing Other methods, specify:

Interviewer deployment and training

The way an interview is conducted influence the relation to the respondents to a large extent. To optimize this relation and to minimize the measurement error, care should be taken how to deploy and train the interviewers.

12. Is there a special recruiting procedure for interviewers?

Yes, the interviewers are specially selected for IFTRAB Yes, there is a list of personal requirements the interviewer should have Yes, there is a list of minimum qualifications the interviewer should have No, there are no binding minimum qualification Other methods, specify:

13. How is the interviewer deployment organized?

Central Not central Other organization, please specify:

14. Is there any support for interviewers?

Yes, every group of interviewer has a specially trained support and contact person

Yes, there are regular meetings

Yes, support is provided on demand of the interviewer

No, there is no support for the interviewer

15. Is there any means of control for the interviewer?

Yes, the interviewer get special feed-back periodical

Yes, the interviewer are systematically checked during the first couple of interviews

Yes, there are special controls in case of suspicious facts

Yes, there are accomplishment controls concerning the failures, the compliance of the deadlines and the exhaustion

Yes, there are routine accomplishment control % of the interviews

Yes, there are basic controls of the compliance of the sample instructions, the sample household and/or the prescribed way of completing the questionnaire

No, there are no means of control for the interviewer

Other control mechanism, please specify:

16. How many interviews are (planed) conducted by one interviewer on average?

17. What is the maximum number of interview (planed) conducted by one interviewer?

18. Are there any analyses about the possible influence of the interviewers demographic attributes and the response pattern of the target groups?

No

Yes, please specify the method:

19. What kind of time information do you have in the questionnaire?

The month The week-day The calendar day The rough time, like forenoon, afternoon, evening The rough time, like how many minutes used for the whole household The exact start time of interviewing The exact end time of interviewing Visit number

20. Have you any consistency check implemented in the questionnaire?

Yes No

21. Are the respondents re-contacted in the case that an answer is not plausible?

Yes No

22. Does the collection period cover any holidays or unpredictable events (e.g. a strike) which might influence the survey results?

No Yes, please specify events: 23. What is the ratio of people in supervisory position to the people accomplishing the fieldwork?



24. What kind of arrangements do you have organized for potential problems that might arise during progress of the survey?

There are supervisors that can be contacted immediately Continuous monitoring by supervisor

There are feedback reports containing information about frequencies and causes of errors

There are sample control procedures for all data collection operations which track the status of sampled units from the beginning through the completion of data collection

Others, please specify method:

Data capture and data processing

Converting the original data into a computer-readable format and coding them are processes susceptible to errors. Therefore different methods need to be regarded to minimize them.

25. How are data captured?

Manually Electronically

26. How are the data coded?

Manually Automatically by specially designed software Others, please specify method:

27. If the data are manually coded, are there any means of control or consistency checks of the codes?

Yes, dependent verification Yes, independent verification No

28. Is the chosen editing method automated, manual or a combination of both?

Automated Manual Combination

29. Does the chosen editing method rely...

... solely on data available for the non-respondent and/or other auxiliary data?

... solely on the observed data of other responding units for the IFTRAB?

... on a mixture of data available for the non-respondent?

... other methods?

Please specify:

30. Do you pretest your editing procedures?

Yes No

31. Which of the following editing procedures are applied to the raw data?

A value range check for every variable Logical editing (based on logical relationship) Statistical tests of procedures, e.g. outlier analysis techniques Comparisons with data from previous collections of the same statistics or from other sources

Empirical procedures Others, pleas specify

32. Are the persons in charge of manual editing provided with written, clear and detailed instructions?

Yes, they have accurate and continuously up-to date instruction Yes, however the instructions are only partly concise No

33. Is there a distinction between the concept of missing values, zero values and impossible information?

Yes No

34. Are there any measures taken in order to avoid over-editing and introduction of new errors into the data?

Yes, there is an error recognizing mechanism assessing the influence of the corrections on the final result thus allowing determining an "optimum of editing"

Yes, edits were reapplied to units to which corrections are made No

35. Are there error statistics available from previous surveys that can built upon to improve your editing procedures?

Yes No

36. Do you calculate any error statistics as a quality measure of IFTRAB and to suggest improvements for future surveys?

Yes No