



Final report

from a long-term consultancy on economic statistics

From 1st of June 2002 to 15th of July 2003

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Table of Contents

1	INTRODUCTION	4
2	DIVISION FOR ECONOMIC STATISTICS IN INE.....	5
3	THE ECONOMIC STATISTICS PRODUCED BY DESE.....	5
3.1	DATA COLLECTION AND PROCESSING.....	6
3.2	STATISTICS ON EXTERNAL TRADE	6
3.3	THE CONSUMER PRICE INDEX (CPI).....	7
4	THE BUSINESS (REGISTER) CENSUS – CEMPRE 2002.....	7
5	NEW CONSTRUCTION STATISTICS INCLUDING AUTO- CONSTRUCTION.....	9
6	DOCUMENTATION OF STATISTICS.....	10
7	RECOMMENDATIONS.....	11
	APPENDIX 1. Main counterparts in INE and in other institutions.....	14
	APPENDIX 2. Reports, notes and relevant memos	15
	APPENDIX 3: Task description and qualifications, Basic Economic Statistics Advisor.....	16
	APPENDIX 4: List of short-term missions.....	17
	APPENDIX 5: Activity plan for the long-term consultant.....	18
	APPENDIX 6: Presentation at the annual meeting in Pemba 2003.....	22

1 INTRODUCTION

During the period from the 1st of June 2002 until the end of July 2003 I was the long-term advisor within the division for Economic statistics (excl. National accounts) in INE with the Bridging Support Program to strengthen the institutional capacity of the national statistics in Mozambique (The Bridging Program).

According to the ToR my role was to provide overall assistance, guidance, advice and training related to program-supported activities in order for INE to achieve the timely outputs of the program. One major task specified in my ToR was to help INE improve the quality of their Business register. Since the Business register serves as the sampling frame for all surveys undertaken at DESE, it is essential that it be of good quality. Other tasks specified in my ToR were to contribute in the ongoing work to improve utilization of administrative records (in updating the business register and to produce statistics directly), and to improve the quality of various statistical products (i.e. the short-term sector statistics, the CPI and the statistics on external trade). To assist in strengthening the co-operation with owners of relevant administrative registers was also an important task. The complete ToR for my mission can be found in appendix 3.

Looking back the overall major activity during my assignment in INE was the Business Census (CEMPRE 2002/3), which were undertaken mainly to improve the business register. This operation took up nearly all human resources at DESE during the period September 2003 until May/June 2004. As a result, the ongoing economic surveys suffered, and I found that development of both statistical products and staff, instantly at the same time, was difficult to achieve. However, steps were taken in the right direction. Besides from the CEMPRE focus was put on quality awareness in the production process, communication with users of economic statistics and documentation of statistics. For example a working group was established in order to produce a documentation report. This group had regular discussions related to quality and documentation of various subjects. Regular meetings with National Accounts assured better communication across directorates. Trough this processes I feel that the sense of responsibility for subject matter quality was increased.

In this report I sum up the main activities in my field of responsibility during the second half of 2002 and the first half of 2003. I start off by giving a general description of the Economic division in chapter 2. In chapter 3, INEs statistical products are presented, and in chapter 4-6 I describe the main projects that I was involved in during my period of stay. Along the way, I give some reflections and recommendations.

Chapter 7 contains a summery of my recommendations for future work, both short- and long term. These recommendations were also presented and discussed with INE at the time of my departure.

This report contains my views, which do not necessarily correspond to the views of Danida or INE.

2 DIVISION FOR ECONOMIC STATISTICS IN INE

The Division for Economic Statistics in INE is divided in two Directorates: One for Economic Statistics and Business Statistics (DESE) and one for National Accounts and Global Indicators (DCNIG), including Consumer Price Index (CPI).

During my period as long-term advisor (LTA) in INE, the Bridging Program had two LTA within Economic statistics; Timmi Graversen (Dst) placed within DCING focusing on National Accounts, and myself placed in DESE focusing on basic economic statistics, but also responsible for the CPI. My main counterpart was the Director of DESE Mr. Azarias Nhanzimo, but I also had a close link to the Vice President of Economic Statistics Mr. Valeriano de Levene.

DESE is divided into two departments. The Department of Statistics on Goods and Environment (DEBA) and the Department of Service Statistics, Informal sector and Business Register (DESC). Mr. António Júnior, later replaced by Mrs. Natércia Macuáco, while Mr. Cirilo Tembe headed DESC, headed DEBA.

3 THE ECONOMIC STATISTICS PRODUCED BY DESE

The Directorate conducts several surveys. The *Annual Surveys* covers approximately 700 enterprises within manufacturing industry and within commerce and services. Questionnaires are normally distributed in August and have the previous year as the reference year. In connection with the surveys, INE requests larger enterprises to submit a copy of the financial statement for the survey year for use by National Accounts.

Production of annual economic surveys faces serious shortcomings today. Both the response rate and the quality of information received are too low to be of any use (around 25 percent for the 2001 data). There is a need to focus on increasing the response level to the annual surveys, and also to implement the very specific recommendations given by Alex Kornis - UNIDO. During my period as long-term advisor at INE the annual economic surveys were not prioritised by INE or by the Bridging project. No short-term missions were conducted in this area.

INE also conducts monthly surveys within six economic sectors; manufacturing industry, construction, hotels and restaurants, transport, commerce/service and ports/airports. The main use of the monthly data collected is for the quarterly publication, Economic Short term Indicators (A Conjuntura Económica). Today, monthly publications do not exist.

Data collected through the monthly surveys are only disseminated quarterly. There is a need to review the need for monthly short-term statistics, but if INE is to continue monthly collection of data, they should also introduce monthly dissemination. Monthly production routines will first of all help bring the production routines into a steady and daily routine, which will improve both the staff skills in data processing and hence improve the quality of the statistics. The main obstacle to be able to produce monthly short-term statistics is the late deliveries of data from the province offices. Lack of

human recourses might also be a problem depending on the amount of other tasks within the Directory.

Lack of human recourses is a general problem at DESE. Big projects like the CEMPRE take up nearly all recourses in the directorate, and imply less time available to maintain and develop good routines for the production of current economic statistics. It should be of high priority to put "the day-to-day" production of statistics more in focus. The ambition is to strengthen the coordination with users of economic statistics. Internally the National accounts is the main user, and since they now are in the process of making quarterly national accounts, the demand for good quality and timely data will be even higher than it is today.

3.1 DATA COLLECTION AND PROCESSING

INEs 11 provincial offices do the data collection for the annual- and the monthly surveys. INE Central office produces and sends out the questionnaires to the provincial office that collects information from the selected establishments and returns the questionnaires to INE Central by post. DESE is therefore heavily depending on a well-organised transition and handling of data all the way from the enterprises/establishments through the provincial delegations and to the central office. Today this data collection process suffers from delays and missing data.

The long-term goal ought to be to transfer the data processing and parts of the data control work to the province offices. This transaction of tasks from INE-Central to the DPINEs must be done over time. A complete IT-routine, training of staff and IT-equipment are factors that need to be in place before the provinces can take on this task fully.

A short-term solution to the problem with delayed data transfer could be to introduce simple excel-sheets where information on the questionnaires are filled in and then sent INE-Central by e-mail for normal processing, editing and dissemination. Even if this will only solve one problem – late delivery of data – it will mean a world of difference from the situation today, and give a possibility for producing monthly statistics.

3.2 STATISTICS ON EXTERNAL TRADE

DESE is responsible for collecting, processing and disseminating the official Foreign Statistics of goods (FTS) in Mozambique. The main data sources for FTS is the Customs Declaration (Documento Unico, DU), which is required from importers and exporters when clearing commodities inward or outward through the different Customs offices in the country. Monthly copy of declarations is supplied to INE. In addition, information about imports and exports of electricity, petrol and aluminium are collected from major companies each month. The Mozambique Customs has since 1999 developed a computerised customs clearance system based on Oracle databases (The TIM electronic declaration system). From January 2001, INE started to receive copies of Customs declarations on diskettes. In November 2001, the data deliveries have been enlarged to include more data (variables) from the declarations and the data are delivered monthly on a CD-ROM.

The FTS is of limited quality today. During my period of time as LTA in DESE focus was put on trying to develop this statistics further without much success. Due to the Business Census (CEMPRE), very few resources were available to develop this statistical area further. One short-term mission from Statistics Norway was conducted in May 2003 (MOZ:8:2003) as a follow up of a mission on FTS that took place before my time in November 2001 with support from the Twinning Arrangement (MOZINE 2001:10). The mission found that one of the main obstacles for development of a good quality FTS is lack of staff. Progress cannot be expected with only one person working in this area. An absolute minimum will be two persons, -one with main responsibility for the daily routines and for monthly publishing of data and the other with responsibility for trade definitions and international cooperation. Knowledge in English is essential in this area, and plans were made for a 3-month language course in South Africa for Armando Tsanzane who is responsible for producing this statistics today.

3.3 THE CONSUMER PRICE INDEX (CPI)

The CPI is a part of the Directorate for National Accounts and Global Indicators (DCNIG), but was a part of my areas of responsibilities as a LTA. Today INE produces monthly CPI for the cities Maputo, Beira and Nampula, and also the "national CPI" based on these three provincial capitals. The CPI has long been a prioritised statistical area in INE. During the Twinning Arrangement (1997-2001) 3 short-term missions were conducted from Statistics Norway. New methodology was developed and well implemented at the time of my arrival in June 2002. Although still lacking an effective IT-system for production, I consider the CPI to be the statistical area that has come furthest in INE's Economic statistics division, both in terms of methodology used in the production, and in terms of producing timely statistics. One conclusion I draw from this is that for progress to be achieved within a statistical area long-term commitment is essential.

The Bridging Project continued the development work started by the Twinning Project, and one short-term mission was conducted from Statistics Norway during my period as LTA (MOZ:2002:9). The objective of this mission was to review status and to suggest new steps. There was also a need to discuss the transition of data from IAF 2002/3 to actualise the CPI- basket and weights. In order to make the national CPI more representative, one objective was to discuss on how proceed to enlarge the indexes to include more capital provinces.

4 THE BUSINESS (REGISTER) CENSUS – CEMPRE 2002

A Business register should contribute to a relevant and reliable description of the Mozambican economy. In a developed statistical system it is one of the three corner stones, as it provides a basis for all surveys within economic statistics. Hence it is crucial that this register gives reliable information about the structure and development of the economy. Due to the fact that INE in 2002 did not have a good quality business register in place and that available administrative register in Mozambique would not give a complete picture of the business sector, INE decided to conduct a full scale Business Census (CEMPRE 2002) to provide a basis for a new and more complete Business

Register. The Bridging support program supported the CEMPRE, and INE-P provided technical support in planning and conducting the Census.

When I started my assignment at INE in June 2002, INE was about to start the detailed planning of the CEMPRE. The first plan for the CEMPRE was prepared through a mission from INE-P as early as in 2000, but it was first in the beginning of first quarter 2002 that the preparations for the CEMPRE escalated through a second short-term mission from INE-Portugal in July 2002. During a period of two weeks the methodology for the CEMPRE and a detailed timetable were outlined. In a following mission by INE-staff to INE/Portugal in August the planning process was finalized. A limited pilot survey was conducted in September 2002. The data collected through the pilot was not processed and analysed. One reason for this was the limited time available, another that the application for the data processing was not yet available. The pilot was hence first of all a test of the questionnaires and the logistics of collecting the information. Due to difficulties in retaining information about VAT-number it was decided not to collect this number in the CEMPRE. This implied that there would be no unique number to identify the enterprise included on the questionnaires, which made it more problematic to identify an enterprise, and to link establishments to the right enterprise. The VAT-number could also have simplified the up-dating job by utilizing administrative data sources such as the tax register. The exclusion of this unique number on the questionnaire was therefore strongly advised against by myself, and the bridging support program.

The linkage between enterprise and establishment had to be established during the data processing. First we entered all enterprise-forms (which also included a name-and-address list of dependent establishments) and then we entered information collected from dependent establishments by looking up and linking enterprise information available on both forms.

Data collection for the Census started the 1st of October 2002 and after several delays data processing was finalized in July 2003. The population of establishments registered were then around 40000. As a comparison, the samples for the ongoing economic surveys in INE are based on a business register dated back to 1999 containing only 12800 establishments. The largest increase was found to be for small establishments in the service sector.

My role in the process of planning and conducting the CEMPRE was to give both general and specific advice in the process of planning and conducting the census, and to help identify and organize additional short-term assistance along the way. A mission from Statistics Sweden financed by the Bridging Support Program was conducted in October 2002 to help evaluate the initial fieldwork of the Business Census and to suggest improvements in the process of collecting and processing data from the CEMPRE (MZ:2002:7). One main conclusion from this mission was that the planning of the data processing was not sufficiently integrated with the design of the questionnaires. The pilot survey could and should have served as a tool to improve the processing routines if it had included testing the system data entry. This was not possible to do at the time of the pilot because the PALOP software to be used was not in place at the time of the pilot, and INE did not want to postpone the pilot and hence the kick-off for the CEMPRE.

One problem that might have been avoided was that there were no separate registration for the headquarter establishments. Dependent establishments were interviewed with a separate establishment questionnaire, while only enterprise questionnaires were filled in for the headquarter establishments.

In February 2003, the Bridging Support Program supported a two-week mission from INE-P to assist in data quality controls and analysis of data collected (MOZ 2003:4) This mission also focused on issues related to the maintenance of a new business register based on the CEMPRE, and related to this the importance of a unique identification number was pointed out.

When I left INE in July 2002, the final report from the CEMPRE was not yet produced. In fact the CEMPRE project group was in INE-P to finalize it. This implied that we did not get the chance to study the final data. I did however expect there to be more or less problems with coverage and recommended a coverage study to be made prior to drawing new samples for the economic survey. By determining the level and structure of the coverage, it would be possible to improve the Business Register through additional data collection in “weak” areas, and to control for missing units when drawing samples.

The main objective of the Business Census (CEMPRE) was to improve the Business Register. With a new Business Register established from July 2003 it is of crucial importance that systematic maintenance and updating takes place continuously. It should be of the highest priority to implement a system for updating as soon as possible. A business register is a dynamic register, and without updating, the data collected through the Census will soon be out of date.

I would also like to stress that to be able to maintain the business register, it is not sufficient only to have a system for updating in place. It is also necessary to increase the number of persons working within this area. There are no short cuts in this work and it does demand human resources. Updating and maintaining the new Business register should be a full time assignment for at least 5 persons at DESE.

Sources for updating the Business Registers are; Administrative sources, Surveys (regular surveys and special survey for updating purposes) and regular field updating done by the province delegations. An operative plan for this work needs to be developed, but I suggest it is based on the system described in the UNIDO-report by Alex Corns, July 2001.

5 NEW CONSTRUCTION STATISTICS INCLUDING AUTO-CONSTRUCTION

Today INE conducts a monthly survey within the construction sector. An initial sample of about 150 of totally 450 enterprises that have their main activity within the construction sector, are drawn from INE's business register. In addition to construction work done by authorized construction firms, construction can be done as self-construction (auto-construction). Within the building- and housing sector, auto-construction is widespread. Today, no statistics or national register exists that can give information about this part of the construction sector.

During my period as long-term advisor I looked at possibilities to further develop statistics on construction in INE. Together with António Júnior (Head of Department) and Matilde Chiulele at DESE I prepared a draft plan outlining steps to be taken in order to improve statistics within this area. The report also gives ideas to possible administrative data sources. The goal is to strengthen the capacity of INE/DESE to produce timely and reliable Construction statistics. Focus in the short run is to find methods to cover the building- and housing part of the construction sector, but the long term goal for INE must be to establish a statistical system that covers both Building- and Civil Engineering activity, and that also gives indicators on investment.

In the planning-report for a new construction statistics we also listed the main activities for INE to take in the process of establishing a new construction statistics. For each of the activities mentioned, it is necessary to make a detailed work plan including specific tasks to be done, and persons responsible. Time schedule for further improvements depends on resources available, and how this project is prioritised compared to other tasks within INE/DESE.

6 DOCUMENTATION OF STATISTICS

A user-oriented documentation report containing standardised documentation of all subject areas within economic statistics was finalized in July 2003. This documentation is based on the user-oriented documentation standard used in Statistics Norway, and it facilitates the users' accessibility to the statistics. Such documentation is also very helpful for INE when in the process of revising the surveys. For documentation to be 100 % useful however it must be continuously updated whenever changes are made in the production routines.

The user-oriented documentation paper is only a first step in the ongoing work to implement a complete documentation system for statistics. According to the documentation standard under development by DISI, metadata are divided into user-oriented metadata and producer-oriented metadata. The next step for DESE in the documentation work should be to make complete and standardized producer-oriented metadata. This work should start now to serve as a basis when developing a new system for economic statistics.

All persons responsible for one or more statistical areas participated in this work. A working group was established and met frequently to assure progress and commitment to the work. This group also had discussions with key persons from the national accounts division. As the main user of basic economic statistics it was important to have their views on the different statistics, in order for us to better satisfy their needs for input data to produce NA. Hence this work also contributed to better internal co-ordination between the two economic directorates.

7 RECOMMENDATIONS

The following recommendations were presented and discussed with the Vice president on Economic statistics at the time of my departure:

- **Priority number ONE at DESE should be to continuously update the Business Register – At least 5 persons should work full time with the BR**

The main objective of the Business Census (CEMPRE) is to improve the Business Register. With a new Business Register established from July 2003 it is of crucial importance that systematic maintenance and updating takes place continuously. It should be of the highest priority to implement a system for updating as soon as possible. A business register is a dynamic register and without updating the data collected through the Census it will soon be out of date.

I would like to stress that to be able to maintain the business register it is not sufficient to have a system for updating in place. It is also necessary to increase the number of persons working within this area. There are no short cuts in this work and it does demand human resources. Updating and maintaining the new Business register should be a full time assignment for at least 5 persons at DESE.

Sources for updating the Business Registers are; Administrative sources, Surveys (regular surveys and special survey for updating purposes) and field updating done by the province delegations. An operative plan for this work needs to be developed, but I suggest it is based on the system described in the UNIDO-report by Alex Corns, July 2001.

- **Consider monthly production of economic short-term statistics**

Today the surveys are monthly but the statistics are quarterly. Monthly production routines will first of all help bring the production routines into a steady and daily routine, which will improve both the staff skills in data processing and hence improve the quality of the statistics. The main obstacle to be able to produce monthly short-term statistics is the late deliveries of data from the province offices. Lack of human resources might also be a problem depending on the amount of other tasks within the Directorate.

- **Prioritise the “day-to-day” production of high quality statistics**

Lack of human resources is a general problem at DESE. Big projects like the CEMPRE take up nearly all resources at the directorate, and imply less time available to maintain and develop good routines for the production of current economic statistics. It should be of high priority to put “the day-to-day” production of statistics more in focus. With detailed documentation and work plans for each of the current statistics the actual time and resources needed to produce quality statistics will be visualized, and should be taken into account when planning for big projects like the CEMPRE.

- **Introduce a simplified routine so that data can be transferred electronically from the provinces: Excel sheets by e-mail**

DESE produces economic statistics based on both monthly and annual surveys. INEs provincial offices do the data collection, and DESE is therefore heavily depending on a well-organised transition and handling of data all the way from the enterprises/establishments through the provincial delegations and to the central office. Today this data collection process suffers from delays and missing data.

The long-term goal should be to transfer the data processing and parts of the data control work to the province offices. This transaction of tasks from INE-Central to the DPINEs must be done over time. A complete IT-routine, training of staff and IT-equipment are factors that need to be in place before the provinces can take on this task fully.

A short-term solution to the problem with delayed data transfer could be to introduce simple excel-sheets where information on the questionnaires are filled in and then sent INE-Central by e-mail for normal processing, editing and dissemination. Even if this will only solve one problem – late delivery of data – it will mean a world of difference from the situation today, and give a possibility for producing monthly statistics.

- **Annual workshops on each subject area to strengthen the capacity at DPINEs**

Workshops for DPINE and INE Central on each subject area should be organized by INE-Central annually to strengthen the capacity at DPINE to collect and revise data collected. The workshop should be for technicians responsible for each subject area. This will also strengthen the contact between responsible person at INE Central and responsible person at DPINE on subject level.

- **Surveys based on both old and new samples the first 3 months to study variation in the growth rates of the short-term indicators**

Monthly surveys based on new samples are planned to start from January 2004. INE should consider doing the surveys based on both the old and new samples at least the first 3 months. This would give INE the possibility to study variation in the growth rates in the short-term indicators based on old and new samples, and what can explain these variations. This is important knowledge, for example when doing longitudinal analyses on data based on both new and old samples. INE should consider getting short-term assistance to help analyse and compare data based on the new and old samples.

- **Introduce a Statistical Release Calendar for economic statistics**

This will improve the users accessibility to the statistics, and are also helpful in organizing the production process at DESE. When INE starts quarterly National Accounts, even higher demands will be put on timeliness for the economic statistics, and a release calendar will be a helpful tool in keeping the timeliness.

- **Strengthen the co-ordination with users of economic statistics - Especially with National Accounts**

INE should work to strengthen the coordination with users of economic statistics. Internally the National Accounts is the main user, and since they now are in the process of making quarterly national accounts, the demand for good quality and timely data will be even higher than it is today. For DESE to

be able to provide NA with data, it is necessary for NA to put well-formulated demands on the subject matter statistics. A joint effort should be put on formulating these demands in statistical tables. It is essential that DESE have a detailed description of NA needs *before* the new system of economic statistics is to be implemented

- **Complete and continually update the standardised documentation for economic statistics**

DESE are in the process of finalizing a complete documentation report for all subject areas within economic statistics. This user-oriented documentation facilitates the users' accessibility to the statistics, and is also very helpful for INE when in the process of revising the surveys.

The user oriented documentation paper is only one part of documentation needed for the statistics. According to the documentation standard under development by DISI, metadata are divided into user-oriented metadata and producer-oriented metadata. The next step for DESE in the documentation work should be to make complete and standardized producer-oriented metadata. This work should start now to serve as a basis when developing a new system for economic statistics.

- **No major revision of contents of questionnaires should be implemented from 2004.**

Feedback from users (National Accounts) shows that the questionnaires content and form for most areas are satisfactory. There is no immediate need to introduce completely new questionnaires for the economic statistics. Only some minor alterations are recommended. Focus should in any case be on simplifications of existing questionnaires. In terms of comparability over time this is an advantage.

- **Pre-print identification variables on questionnaires**

Identification variables such as Number, Name and Address should be pre-printed on the questionnaires. This will prevent unwanted substitutions and save resources. The respondents should only report on changes in the identification variables.

- **Introduce a "control sheet" to help collect systematic and standardized information on non-response and changes in identification variables**

A "control sheet" should be filled out for each unit in a sample. The province delegate responsible for collecting the data should fill out the control sheet. This information can also be transferred to INE-Central electronically as a excel file.

- **Prioritise higher and more timely response to the annual surveys**

The annual surveys have serious shortcomings today. Both the response rate and the quality of information received alarmingly low. The consequence is reduced usability and less relevance. There is a need to focus on increasing the response level to the annual surveys, and also to implement the very specific recommendations given by Alex Korns - UNIDO.

APPENDIX 1. Main counterparts in INE and the Bridging Project

INE

Mr. João Dias Loreiro, President

Mr. Valeriano de Levene, Vice-President Economic statistic division

Mr. Azarias Nhanzimo, Director of Directorate for Economic Statistics and Business Statistics

Mrs. Natércia Macuácuá, Head of the Department for Goods and Environment

Mr. Cirilo Tembe

Mr. António Ferreira Júnior, Head of the Department for Goods and Environment (until May 2003)

Mr. Adriano Matsimbe, National coordinator of the Business Census

Mr. João Nhabete, Business register

Mr. Armando Tsanzane, Foreign Trade

Mr. Firmino Guiliche, Chef of the Price and Conjuncture Department

BRIDGING PROJECT

Mr. Hans-Erik Altvall, Team leader and advisor on planning and administration

Mr. Timmy Graversen, Long-term advisor on National Accounts

Mr. Mogens Nielsen, Long-term advisor on IT

Mr. Jon Teigland, Long-term advisor on Social Statistics

APPENDIX 2. Reports, notes and relevant memos

<i>Evaluation of the initial phases of the Business Census</i>	MOZ 2002:7
<i>Consumer Price Index</i>	MOZ 2002:9
<i>Synthesis from a meeting with all the LTA:s</i>	MOZ
<i>2002:10</i>	
<i>Progress Report 3rd Quarter 2002</i>	MOZ 2002:11
<i>Progress Report 4th Quarter 2002</i>	MOZ 2003:3
<i>Business Census – Quality aspects</i>	MOZ 2003:4
<i>Foreign Trade Statistics</i>	MOZ 2003:8
<i>Progress Report 1st quarter 2003</i>	MOZ 2003:12
<i>Development of a new system for Economic Statistics</i>	MOZ 2003:15
<i>Development of a new system for Economic Statistics</i>	MOZ 2003:19

Preparação do recenseamento empresarial. CEMPRE 2001. Report from a planning mission from INE Portugal by Julia Cravo, July 2002

Relatório da realização do piloto. INE, Adriano Matsimbe, 17. September 2002

Análise dos dados do censo de empresas 2002. Relatório do estágio e visita de trabalho realizado no ine – portugal. August 2003

Documentação de estatísticas Econômicas. Instituto Nacional de Estatística (INE), Julho 2003

Plan for a new construction statistics. INE, DESE. Julho 2003

PRODOC for the Bridging Support Program 2002-03, November 2001

Contract Agreement; TA for the Bridging Support Program, May 2002

APPENDIX 3: Task description and qualifications, Basic Economic Statistics Advisor

General responsibilities and tasks

The Advisor will be responsible for the assistance to capacity building within the Vice Presidency of Economic Statistics.

He/she shall collaborate with and assist the Vice President, the heads of directorates and other staff of the INE, providing overall assistance, guidance, advice and training related to program-supported activities in order for INE to achieve the timely outputs of the Program.

He/she will report to the Team Leader.

Specific tasks

The specific tasks shall include, but not necessarily be limited to:

- Contributing to the improved utilisation of administrative records, especially in the area of business statistics.
- Assist in strengthening the co-operation with national authorities responsible for relevant administrative records.
- Assist in the work, which aims to improve the quality of the business register.
- Assist in increasing response rates and improve sampling and estimation techniques within the monthly surveys for industry and services. An improvement of the quality of the business register is an important task in this respect.
- Assist in the elaboration of plans and guidelines for the continued enhancement of basic economic statistics, primarily but not exclusively, those produced and/or disseminated by INE.
- Assist in the elaboration of plans and guidelines for the continued improvement of the quarterly Consumer Price Indices.
- Assist in improving the quality of the external trade statistics, through better co-ordination with the customs, and eventually provide support for the processing of information collected.

Qualifications

- A Master's degree in Economics or Statistics.
- Minimum 10 years working experience in economic statistics.
- A good working knowledge in SNA 93.
- Previous experience from assignments in developing countries is an advantage.
- Experience from advisory positions and/or training.
- Adaptability, social sensitivity and respect for a variety of cultures.
- Familiar with Scandinavian development assistance in general.
- Fluency in written and spoken English and an adequate working knowledge in Portuguese.

APPENDIX 4: List of short-term missions

The table below lists all short-term missions in DESE (including CPI) during my period of stay in INE

Date	Subject	W	Consultant	Bridging	Report
July 02	Business Census – Planning	2	INE-Portugal Júlia Cravo	No	
Oct 02	Business Census - Installation of PALOP software	1	INE-Portugal Fernando Carvalho	No	
Oct 02	Business Census - Evaluation of the initial phase	3	SCB - Kenny Pettersson	Yes	MZ:2002:7
Oct 02	Consumer Price Index	2	SSB - Randi Johannessen	Yes	MZ:2002:9
Nov 02	Business Census - Evaluation	2	Cap Verde - Rodriguez	No	
Feb 03	Business Census - Quality aspects	2	INE-Portugal Júlia Cravo	Yes	MZ:2003:4
May 03	Foreign Trade - Further development	2	SSB - Hans Kristian Østereng	Yes	MZ:2003:8

APPENDIX 5: Activity plan for the long-term consultant

Introduction

To be able to provide a better service to INE the long-term SCANSTAT consultants in co-operation with their counterparts has prepared an individual Activity Plan for the Bridging Support period; November 2002 - May 2003. My hope is that this plan will make my work here at INE more visible for my counterpart and my other colleagues at DESE and also help me organize and prioritise my work tasks better.

So far I find my role within INE to have been very much general and “ad-hoc”. My main area especially in the first months has been the Business Census. I have given both general and specific advise especially in the planning process of the Business Census. I have worked with plans for short-term missions, for INE (5-year plan) and the Scandinavian project (PRODOC), and I have contributed in writing the quarterly report for DESE. I now think it is important to focus more on some areas. It is also important for me to feel more a part of DESE, and that DESE-staff knows my role and working areas better. Trough an activity plan that is discussed, agreed upon and not least known to all staff at DESE I think this will be easier to accomplish.

There are many issues/areas within DESE that I could contribute to. I have listed some specific areas that immediately come to mind;

- The Business Census
- System for updating the Business Register
- New sampling plans for the surveys
- A system for Documentation and storing of data
- Further development of current economic statistics within one or more of the following;
 - Manufacturing production
 - Construction
 - Domestic trade and services
 - Transports
 - Airports and harbours
 - Hotel and restaurants
 - “Border movements” or ”Estatístico de saídas e entradas”
 - External Trade
 - CPI
- Development of new statistics such as;
 - Environmental statistics
 - Construction statistics – Auto construction

These are all important and major areas within DESE. I could give assistance in a very general way on several areas, or I could concentrate on a few areas and then be more involved in all parts of the process from start to finish (keeping in mind my role as advisor, and not gap-filler). Further I could contribute on one or several levels or stages in the process (ex. planning, monitoring, production, documenting, evaluating).

Selection of areas

Within the Directorate the field work and processing of the Business Census has been, and will continue to be, the major task that takes up most of the resources. When I choose not to include assistance to the Business Census

directly in my activity plan the following 6 months it is due to the fact that INE has had extensive assistance (during the planning- and initial period of the data collecting- and processing) both from INE-Portugal, INE-Cap Verde and from the Scandinavian project. It is now up to INE to do complete the data collection and processing according to plans. Now further assistance from me should be necessary. Also it is INE-Portugal that is the main technical consultants in the CEMPRE.

In the light of prioritised areas in the Scandinavian project, within DESE and based on my own observations I suggest that I concentrate on the following areas in the months to come:

Main activities:

- Plan for development of Construction statistics
- Assist in documenting current economic statistics
- Elaborate a plan for the future system of Economic statistics based on the new business register (FUE)
- Give recommendations on the frequency of Economic short-term statistics. Quarterly or monthly?
- New survey plan based on the new business register

Other activities:

- Intranet page for the Scandinavian project
- Work report based on “own observations”

Current activities:

- Assist in the elaboration of plans and reports within my areas
- Give comments and recommendations (oral and in writing)
- Participate in relevant seminars
- Suggest and assist in the planning of short-term missions
- Participate in “Tuesday-meetings” with the SCANSTAT-group
- Participate in “DESE-meetings” two times per month.
- Participate in other relevant meetings
- Update the SCANSTAT-intranet page

Conditions

There are especially three conditions that need to be fulfilled in order for me to work according to the activity plan, and for DESE to achieve the desired results;

- Working colleagues that are available to work on these areas
- Frequent information about activities within DESE that affects the areas in this activity plan
- Co-operation with other directorates/departments at INE (especially DISI and DCNIG)

Plano de actividades
 Consultora Irene Tuveng
 Período nov 2002 – abril 2003
 nov 2002

25.

Actividades principais		Até
1	Fazer um plano para melhorar a estatística de Des Construção	
2	Assistir em documentar os estatísticas correntes incluindo as sistemas técnicos	Jan
3	Elaborar um proposta da estrutura de sistema de inquéritos e estatísticas económicas baseada de novo FUE	Abr
4	Dar recomendações em relação de frequência da estatística conjuntura. Mensal ou trimestral?	Jan
5	Fazer um plano sobre como tirar novo amostras para as inquéritos	Mar
Outras actividades		
6	Fazer uma página no intranet sobre o projecto escandinávico	Jan
Actividades correntes (incluindo reuniões)		
8	Assistir em escrever planos e relatórios no meu área	
9	Consultoria geral (comentários orais e escrito)	
10	Participar em seminários relevantes	
11	Sugestir e assistir em planear missões de curto prazo	
13	"Terça-feira reuniões" semanal com o grupo escandinávico (2 horas)	
14	"DESE reuniões" dois vezes por mês (só um sugestão)	
15	Participar em outros reuniões relevantes	
16	Actualizar o página do Intranet sobre o projecto escandinavico	

Plano detalhado de actividades
 Consultora Irene Tuveng
 Período nov 2002 – abril 2003
 nov 2002

25.

1	Fazer um plano para melhorar a estatística de Construção	Oct-	Dec-
1.1	Estabelecer um grupo de trabalho que consiste em representantes de DESE	out	
1.2	Investigações para saber mais como o sector funciona e os fontes de informação existindo	out	nov
1.3	Definir a cobertura dum novo estatística nesta área. Em termos de população coberta e em termos de áreas de construção para incluir	nov	
1.4	Definir os indicadores	nov	
1.5	Definir o metodologia da inquerito	nov	dez
1.5	Finalizar o relatorio que descreva o plano para melhorar o estatística de Construção	dez	
2	Assistir em documentar os estatísticas correntes	Nov-	Jan-

ndo as sistemas técnicos			
2.1	Elaborar um draft numa forma de documentação unificada junto com o consultor de DISI	nov	nov
2.2	Presentar e discutir o drafte com representantes do DESE	dez	dez
2.3	Finalizar a forma de documentação unificada incluindo os comentários de DESE	dez	dez
2.4	Introduzir a forma de documentação para os técnicos próprios no DESE	jan	
2.5	Assistir em preencher a forma de documentação em todas as estatísticas correntes	jan	
2.6	Assistir em juntar o documentação sobre todas as estatísticas económicas num relatório, incluindo um plano para melhorar o processo de documentação	jan	
3	Elaborar um proposta da estrutura de sistema de inquéritos e estatísticas económicas baseada de novo FUE	Nov-	Abr-
3.1	Estabelecer um grupo de trabalho que consiste em representantes de DESE (3), DCNIG (1) e DISI (2)	nov	
3.2	Estudar as propostas já escrito sobre a estrutura estatística e outra literatura disponível neste área	nov	dez
3.3	Elaborar junto com o grupo de trabalho um proposta dum sistema de estatísticas económicas	jan	mar
3.4	Preparar um apresentação sobre o novo sistema de estatísticas económicas	abr	abr
4	Dar recomendações em relação de frequência da stica conjuntura. Mensal ou trimestral?	Jan-	Jan-
5	Escrever um plano sobre como tirar novo amostras is inquéritos	Mar-	Mar-
5.1	Estudar e avaliar o plano de amostras que é usado hoje	mar	mar
5.2	Propor um novo plano de amostras	mar	mar

APPENDIX 6: Presentation at the annual meeting in Pemba 2003

The following presentation is about the relationship between the new Business register (FUE) and surveys based on samples from this register

FUE e produção de estatística
Relação entre FUE e Inquéritos

Irene Tuveng
Consultor da DESE

Pontos

- ✦ Relação entre FUE e Inquéritos
- ✦ FUE como base de amostragem
- ✦ Inquéritos correntes como fonte de actualização do FUE

A relação entre FUE e Inquéritos

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graph TD; FUE((FUE)) -- Amostras --> Inq((Inquéritos)); Inq -- Actualização --> FUE;
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Objectivo da amostragem

- ✎ Objectivo principal da amostragem;
 - Fazer conclusões sobre características numa população
- ✎ Porque não fazer um inquérito exaustivo?
- ✎ Vantagens das amostras:
 - Necessita de menos dinheiro
 - Necessita de menos tempo
 - Focaliza mais em casos individuais
 - Mais fácil controlar erros não amostrais

Amostragem e representatividade

A amostra deve ser representativa para a população



Sem actualizar o FUE não vamos ter amostras representativa

Conclusão

- ✎ Para usar o FUE como base de amostras é essencial que represente o universo real e actual de empresas e estabelecimentos no país
- ✎ Para ter um FUE representativo do universo é essencial actualizar-lo constantemente

Inqueritos como fontes de actualização do FUE

- ✦ Os inqueritos anuais e mensais
 - Cobrem todas províncias
 - Incluem todas as variáveis que existe no FUE
 - As delegações conhecem a realidade da provincia
- ✦ Lançamento dum inquérito de actualização
 - Para cobrir mais unidades

Folha de controle

- ✦ Vai dar informações sobre alterações em variáveis importante (nome, endereço, numero de trabalhadores, actividade principal, etc)
- ✦ Vai mostrar os estabelecimentos que não receberam o questionário
- ✦ Vai mostrar razões da não recepção (paralisada, extinta, desconhecida, fora da provincia/do sector actual, repetida, incapaz entregar)

Inquéritos não são suficiente para actualização do FUE

Tipo de inquerito	Amostra
Indústria	312
Construção	135
Comércio e serviços	744
Alojamento e restauração	566
Portos e Aeroportos	22
Transportes	101
Comércio e serviços (Anual)	321
Indústria (Anual)	391
TOTAL	2592

Significa só
10 % de
Universo

Inquérito de Actualização

- ✦ Objectivo é actualizar as variáveis do cadastro
- ✦ Usa uma grande amostra, mas poucas variáveis
- ✦ Inclui as maiores empresas
- ✦ Melhora a qualidade de ficheiro antes se tirar novas amostras

Conclusões

- ✦ Inquéritos devem ser usado para actualizar o FUE
- ✦ Inquéritos correntes não são suficiente, deve-se introduzir também um inquérito só para actualizar o FUE
- ✦ O sucesso desta forma de actualização depende dum contacto forte e frequente entre as delegações e o INE Central
- ✦ É necessário formalizar o processo de recolha e transferência de informação actualizada

**MUITO
OBRIGADO**