



MZ:2006:3

# **Final Report**

# April 20th 2006

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

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Ref. no. 104.Moz.98 April 2006

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## List of abbreviations

CO Scanstat Coordination Office in Statistics Denmark
Danida Danish International Development Assistance

DKK Danish Kroner
DSt Statistics Denmark
EUR European Euro

INE Instituto Nacional de Estatística, Mozambique INE-P Instituto Nacional de Estatística, Portugal

MZM Mozambique Meticais NOK Norwegian Kroner

Scanstat Consortium between Statistics Denmark, Statistics Norway

and Statistics Sweden

SCB Statistics Sweden
SEK Swedish Kronor
SSB Statistics Norway

USD US Dollars

ZAR South African Rand

# 1 SUMÁRIO EXECUTIVO

O ponto central neste fase do Programo Escandinavo será a expansão gradual da consolidação, melhorando da eficiência e da qualidade e a finalização da dependência da assistência técnica externa.

O contracto com o consultor de longa duração na área social vai terminar no dia 31 de Marco 2006. Os dois anos ele estava com Instituto Nacional de Estatística em Moçambique ele trabalhava principalmente com às seguintes tarefas:

- Inquérito Integrado á Força de Trabalho (IFTRAB) 2004/5:O PRODOC aponta o IFTRAB como um inquérito essencial a ser conduzido como parte integrante do projecto. A maior parte das questões do QUIBB estão igualmente incorporadas no IFTRAB.
- Estatísticas Sociais e a Monitorização da Pobreza: O PRODOC aponta as estatísticas sociais como importantes para a monitorização deste processo sobre dados de pobreza, sendo uma das quatro linhas a serem definidas e dadas como prioritárias no projecto.
- Treinamento no Trabalho: O PRODOC enfatiza que o treinamento no local de trabalho é também uma das linhas de tarefas a serem suportadas pelo projecto, com vista a consolidação do processo de produção de estatísticas, através da capacitação dos técnicos do INE.

O consultor tambèm trabalhava com as prepara Á es para o Censo 2007.

Recomendações e sugestões estão escrito a partir capitulo 5 neste relatório.

#### 2 EXECUTIVE SUMMARY

The Scandinavian Program is in the consolidation phase, meaning that INE should gradually take full responsibility for all aspects of the survey production, finding solutions that does not involve gap filling of consultants. The focus has gradually shifted from expansion to consolidation, improving efficiency and quality and gradually phasing out the dependency on external technical support.

The contract of the long term consultant in social statistics will end on the 31<sup>st</sup> of March 2006. During the two years he has been here, he has focused on assisting in the following tasks:

- The Labour Force Survey / InquÈrito Integrado · ForÁa de Trabalho (IFTRAB) 2004/5: The PRODOC points to IFTRAB as a key survey to be conducted as a part of the project. Several of the questions from QUIBB are also incorporated in IFTRAB.
- *Social Statistics and Poverty monitoring*: The PRODOC points to social statistics with special emphasis on poverty data, as one of four issues to be focused and prioritised in the project.
- *In house and on the job training:* The PRODOC emphasizes that in house training is a central task of the project, to ensure sufficient knowledge at INE to consolidate the statistical production process.

The consultant has also taken part in the preparations for the Census in 2007.

Recommendations and suggestions are given from chapter 5 of this report.

## **3 INTRODUCTION**

During the period from May 2004 trough March 2006, the consultant has been acting as a long term adviser in social statistics at Instituto Nacional de Estatística, Mozambique.

The consultant has taken take part in the efforts of Instituto Nacional de Estatística to supply Mozambique and the international society with social statistics of high quality. This has involved participation in several tasks within the Department of Social Statistics within INE.

The PRODOC points to social statistics with special emphasis on poverty data, as one of four issues to be focused and prioritized in the project. It also points to IFTRAB as a key survey to be conducted as a part of the project. Several of the questions from QUIBB are also incorporated in IFTRAB. Further the PRODOC emphasizes that in house training is a central task of the project, to ensure sufficient knowledge at INE to consolidate the statistical production process.

The focus had gradually been shifting from expansion to consolidation, improving efficiency and quality and gradually phasing out the dependency on external technical support.

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

The consultant would like use this opportunity to thank INE for a good cooperation.

## 4 ACTIVITIES

The long term adviser has assisted in the following issues during the last two years:

Inquérito Integrado á Força de Trabalho - IFTRAB 2004/5

- Quality control of the data gathering process. This includes construction and evaluation of data files and other quality issues relevant to the IFTRAB.
- Analyzing the preliminary and final results, with special emphasis on calculating the central figures from the IFTRAB, like the size of the labour force, unemployment rates, durable goods, income etc. As the preliminary data files became available, these were used to prepare the tabulation programs necessary to produce tables and do other analysis necessary to illuminate the field.
- Disseminating the results. A report is being prepared on the basis the IFTRAB data files. The process is believed to of be accelerated by the fact that the writing process started after we got the preliminary files from the first half-year of data collection.

### Social Statistics and Poverty monitoring

• The Millennium Development Goals (MDG) and the Poverty Reduction Strategy Plan (PARPA) are central to monitoring the development of wellbeing and poverty in Mozambique. The LTA has participated in the preparation of a paper on the development in Mozambique on the issues focused in the MDGs. This focused on issues like poverty, education, gender differences, child mortality, maternal health and combating deceases.

#### In house training

- On the job training in working with SPSS.
- Conveyed experiences form Norway regarding building systems for Total Quality Management (TQM). This included focusing on the importance of finding the sources of errors in order to prevent errors from happening.
- Taken part in planning and coordination of short-term missions. E.g. the consultant has coordinated and participated in missions on poverty analysis, gender statistics and analysis and presentation techniques.
- Contributed to general improvements of the survey system trough on the job training.

#### International workshop on poverty monitoring

• The consultant participated in conducting an International Workshop on using light surveys/Quibb-surveys as a poverty-monitoring tool. The World Bank, Instituto Nacional de Estatística and Statistics Norway were jointly responsible for the workshop.

The consultant has also taken part in the preparations for the Census 2007.

The aim of the Scandinavian Program is to gradually shift the focus from expansion to consolidation, improving efficiency and quality and gradually phasing out the dependency on external technical support.

## 5 RECOMMENDATION I: Building analytical capacity

The reputation of a statistical agency is not only dependent on its capacity to collect data. More important is probably its ability to analyse and disseminate data. In building analytical capacity the following elements should be considered:

- 1. Education
- 2. Cooperation
- 3. Practice

Having sufficient knowledge on how to conduct different kinds of statistical analysis is an important basis for any statistical agency. Everyone does not have to know everything, but a sufficient number of people should know the most important analytical approaches. One definition of "sufficient" is when the staff can train a new employee in the methods after another has left his job. This is an important element of institutional learning.

Cooperation on doing analysis between individuals at INE spreads the competence in analytical work. Cooperation between different institutions is also important to learn new analytical approaches and ways to enhance quality in statistics.

Knowledge about analytical approaches does not lead to analytical capacity if it is not used. The staff working with analysis need confidence that they are applying the methods in a right way. This confidence is more easily established when working as a team, than when doing individual analytic work.

#### Suggestions:

- 1. The courses in basic analysis conducted by Mr Jan Erik Kristiansen should be continued. The approach he uses to analysis of data ought to be introduced also to other parts of INE that are analysing data or making publications.
- 2. The focus on poverty analysis ought to be continued. The work should be extended to cooperation with the Ministry of Planning and Development (MPD). We no doubt will learn from this cooperation. Further, a joint publication made by the two institutions will have more credibility than one made by either of the institutions alone.
- 3. Teamwork and project work ought to be encouraged.

## 6 RECOMMENDATION II: Quality control

Advanced statistical agencies build systems to avoid, to find, and to correct errors. Unfortunately we still see too many errors in publications from INE.

The easiest and most cost effective is to build procedures that *avoid errors*. To do this we must take a closer look at the entire statistical process. We should ask ourselves if our questionnaires are working, what is happening in the field, how the data file is made, how the data, tables and publications are processed. Questionnaire design and testing of questionnaires has typically proven to be cost-effective when working to avoid errors.

Finding errors is typically done by a dedicated and competent group of people, reviewing publications before they are printed or put on the Internet. One limitation to this approach is that it only reveals the errors that are possible to see, i.e. results that are unlikely or not possible.

To *correct errors* we must take a second look at the process leading up to a published result, either in a report or on the Internet. We should look at what is happening throughout the process, and try to identify the sources of errors. They can be found in the questionnaire, the field work, the data file, the data processing, tabulation programs, or in analysis and report writing. An important question is always what we do to correct the errors we detect.

## Suggestions:

- 1. INE ought to give increased attention to survey design, especially design and testing of questionnaires.
- 2. As an immediate measure, a group of competent and dedicated individuals should be given the task to read trough every INE publication while there is still time to make corrections.
- 3. Further it should be discussed what other measures INE can take to improve the quality of our products.

## 7 RECOMMENDATION III: Organizational issues

INE is a hierarchical organization with many levels. Many decisions are to be taken on a high level of the organization. This generally gives the top management a high workload and may give a lower sense of responsibility at lower levels, as people tend to think that other people are doing the corrections. Further it may delay a decision to be taken and the work to be executed.

If decisions were to be taken on a lower level in the organization, it would be necessary to give the authority to staff with sufficient competence. Competence consists of education and experience.

One should not underestimate the learning effect in giving employees the possibility to evaluate a situation and suggest which decision to be made. Generally, this also is considered to motivate the work force and improve job satisfaction.

## Suggestion:

To lower the workload on the top management, increase decisional capacity at INE and – hopefully – increase job satisfaction, it should be considered which kind of decisions that could be made at a lower level than is the case today. At first these decisions should be made in cooperation with the senior management. Later, the responsibility could be gradually transferred to employees lower in the hierarchy, as they gain experience.

## 8 RECOMMENDATION IV: Selling services

Most European statistical agencies are gradually directing more of their work towards selling services. The part of the activity financed by the ordinary government budgets tends to be decreasing.

#### Suggestion:

INE ought to consider to actively market the possibility of doing special surveys and analysis to other government bodies, NGOs, and donors. There seems to be a demand for special surveys related to evaluation of projects in the donor community.

#### 9 APPENDIX 1. Persons met

Joao Loureiro, President of INE

Manual da Costa Gaspar, Vice president, Social & Demographic, INE Ar., o Balate, Director, Census and Survey, INE

F. tima Zacarias, Director of Demographic and Vitals Statistics, INE Lars Carlsson, Team Leader, Scandinavian Program, INE

Hans Erik Altvall, Former Team Leader, Scandinavian Program, INE

CristÛv,,o Muahio, Chefe de departamento, Census and Survey, INE

AntÛnio Adriano, Leader of the Division for Cartography

Cassiano Soda, Data Analysis, INE

Zuraida Khan Leader of the Department of Social and Vital Statistics Destina Uinge Director of Directorate of Integration,

Coordination and External Relation

Alda Rocha Head of the External Relations unit

Elisio Mazive, Census and Survey, INE

Bruno Rodolfo, Programmer of Survey, INE

Basilio Cubula, Sampling, INE

Eugenio Matavele, Data Processing, INE

Salom,, o Felix, Mambo IT-consultant

Francisco Macaringue Social statistics consultant

Samuel Tauene, Social statistics consultant

Isabel Noela, Scanstat project assistant

Gon Alves Chachuaio Secretary of the Vice President of Dem. Stat.

Abilio Mussane, Director of Planing, Ministry of Labour

Karsten Bormann, Scanstat resident advisor

Jan Redeby, Scanstat resident advisor

Jon Teigland, former Scanstat resident advisor

Mogens Nielsen former Scanstat resident advisor

Gideon Kisai Ngoi, National Bureau of Statistics, Tanzania

David J. Megill, Chief, International Project staff, US Bureau of Census

Selma L. Sawaya, International Technical Advisor, US Bureau of Census

Jan Erik Kristiansen, Statistics Norway

Geir ÿ vensen, Statistics Norway

Astrid Matiassen, Statistics Norway

Helena Altvall, Sweedish gender consultant

Jan Isaksen, Chr. Michalsens Institute, Norway

Julio Ortuzar, SERPRO, Chile

Stein Waale, Norconsult

Lars Ekman Norwegian embassy

Inge Tvedten Norwegian embassy

Lis Rosenholm Rasmussen, Danish Embassy

And others.

## 10 APPENDIX 2. Terms of Reference

# Annex 6D from PRODOC: Task description and profile-Social Statistics and Demographic Statistics Advisor

## 1. General responsibilities and tasks

The Advisor shall be responsible for assistance in consolidating the integrated household survey program. This will include assistance and advice in design of survey instruments, pilot-tests, planning and implementation of field work, data entry and processing, preparing tabulation reports, and dissemination. The survey work will include standard paper based questionnaires with keypunching data-entry, paper based surveys for scanning and optical reading and diary based surveys.

He/she shall collaborate with and assist the Vice President and 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.

Key issues for the advisor are to advise and carry out in-house training on for instance how to

- increase relevance and reliability of existing and new statistics, including conceptualising and design data collection in new statistical fields
- carry out quality control of data, the data processing itself and in publications
- apply methods for data analysis.

He/she will report to the Team Leader but work closely with the Vice-President on professional matters.

The Advisor will split his/her time between general co-operation and support in demographic and social statistics and other professional tasks.

The advisor will support INE on the further use of administrative records within the area of social and demographic statistics.

#### 2. Specific tasks

The specific tasks shall include but not necessarily be limited to assist in the:

- analysis of HBS 2002-03, with emphasis especially on poverty and the use of CWIQ as poverty monitoring instrument
- preparation and implementation of the labour force survey, the time use survey and the demographic and health survey, respectively

#### 3. Qualifications

- A Master's degree in economics or statistics.
- Minimum 10 years relevant working experience including experience from a statistical office.
- Substantial experience in planning and managing household surveys
- Knowledge and experience in various methodological and sampling techniques
- Substantial knowledge about production of social and demographic statistics

- Substantial knowledge about register development and register utilization
- Knowledge and up-to-date experience in IT hardware, office software and statistical software.
- Previous experience from assignments in developing countries is an advantage.
- 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.

### 4. Working language

Portuguese and English

### 5. Duty Station

Instituto National de Estatística (INE) Maputo with possible travel up-country to Provincial offices.