

Establishment of Environment Statistics

Report from a short-term mission

March 27th – April 7th 2006

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



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1 EXECUTIVE SUMMARY

The mission was the third on environmental statistics. The mission gave recommendations on the continuation of the process of establishing environmental statistics in Mozambique. The main task of the mission was to assist in the seminar where the first attempt of compiling environmental statistics was introduced and discussed. Both preparations before and assistance in the conducting of the seminar were included in the activities.

The recommendations given included the important part on how to proceed with the draft compendium, which has the objective of producing the first Environmental Statistics Report of Mozambique. The main task in the medium term is to secure the collaboration between the data producers in order to obtain new and already existing data to the environmental statistical system.

2 INTRODUCTION

The Mission was carried out 27 March – 7 April 2006 in Maputo.

The consultant would like to express his thanks to all officials and individuals met for their kind support and valuable information. In particular he would thank his counterparts, Ms. Natércia Macuácuá of INE and Lolita Fondo of MICOA.

A pilot study elaborated by the consultant in July 2000 outlined and proposed a working-plan for environment statistics in Mozambique. Because of lacking resources no activities were performed until 2003. In November 2003, a seminar in the area of environment statistics was organised in order to mark a new starting-point for the process of establishing environmental statistics in Mozambique. The participants of the seminar were identified as representing key stakeholders in the area. The seminar was based on recommendations stated in the initial pilot study. As a result of the seminar a working group consisting of representatives of INE and MICOA was formed. In order to assist the work of producing a report on environmental statistics, a first consultancy was decided to take place in October/November 2004.

During the mission in 2004 visits were made at several institutions producing data. However the main activity was organising a seminar directed to the same participants as the seminar in 2003, with the objective of establishing the most pressing environmental concerns, as well as a discussion of variables that could be used, as a base for compiling statistics.

During the second mission, which was carried out in November 2005, the main task was to continue the work of assisting in establishing environmental statistics. The main result of the mission was a draft content of a report including proposals of tables organised according to the DPSIR-model.

The third mission was manly directed towards organising a seminar with the key stakeholders in order to present an outline of a sub-system of environmental statistics. Furthermore the seminar contained a presentation and discussion of the elaborated draft environmental statistics compendium.

During the mission the consultant was assisted by a trainee, Ms. Maj Eriksson Gothe, who gave valuable contribution to the mission. Some talks also were directed to the area of tourism statistics. A mission in this area is planned for in the future, which will be a follow-up mission of previous consultancies, the last carried out in November 2004.

3 ACTIVITIES DURING THE MISSION

The mission included the following activities.

- *Following-up and modifications of the recommendations from the previous mission.*
The recommendations from the previous missions remain unchanged. Some new proposals were given during this mission. See section 4.1.
- *Assist in the preparation of a statistical compendium, based on the compilation of existing information.*
The second draft of the compendium was presented to the consultant at the beginning of the mission. It had principally the same weakness in terms of quality and structure as the first draft. The compendium was then discussed at the seminar. Comments on the compendium are given in section 4.2.
- *Define variables to collect in the future.*
A proposal of variables to collect, i.e. variables to describe with data, was given in the previous mission. These should be further discussed in the next phase of establishing the environmental statistical system.
- *Define a method of gathering data.*
There is no single data gathering method for environmental statistics, see last year's report. For almost every variable there is a unique way of data collection. A manual of methods for data collecting has to treat each desired variable. If there is a need for support in this area, this could be a task for a long-term consultant.
- *Improve the collecting tools.*
As is mentioned above concerning the methods, also the tools are individual and unique, depending mainly on the source of data storage.
- *Give advice on a database to choose for the environment data.*
During the mission, staff at INE gave an interesting demonstration of the ESDEM database, where also the two long-term consultants at INE participated. The opinion of the long-term consultant on IT is that the ESDEM is a powerful tool of disseminating data and that it is possible to connect the database application to the data warehouse system planned for by INE. Another advantage is that the ESDEM also can function together with PC-AXIS. Therefore the consultant can see no reason why the ESDEM not should be used for disseminating environmental statistics.
- *Assist in a seminar with the participation of potential suppliers of information to the environmental statistics system.*
The main activity of the mission was to assist in the preparation and carrying out of a seminar. At the seminar the consultant gave an outline of a system of environmental statistics. Other contributions were presentations of the national

statistical system, the ESDM database, the data warehouse model at INE and an introduction to the compendium as well as a background.

The seminar also included a workshop where the participants discussed the collaboration between the key stakeholders, how to identify the existing data and the contents of the draft statistical compendium.

4 CONCLUSIONS AND RECOMMENDATIONS

4.1 Following-up and modifications of the recommendations from the previous mission

Some new recommendations on the work of establishing environmental statistics were given.

- *An outline of a sub-system of environmental statistics to adopt was presented at the seminar*

A proposal on how to describe a system of environmental statistics, with components concerning demands, objectives, data, statistics, state of the environment report and the decision-makers is found in Annex 3. See also 4.3 below.

- *Organisation of identifying data and data needs and definitions of variables*

The collection of data for the statistical compendium has to day not been successful regarding the poor amount of existing data and the quality of identified data, both reliability and actuality are weak. A more systematic way of identifying existing data would be to form cross-sectorial working groups, one group for each environmental concern composed by participants for the data producers in the area. One representative from INE and MICOA should participate in each group. The groups should apart from the initial detecting phase, identify variables in the DPSIR-model to cover with new or non-existing data and to define the variables; describe the methodology to use for collection and processing, frequency, etc. Each identified variable should be defined in this way.

4.2 Recommendations regarding environmental data and the statistical compendium

The recommendations regarding environmental data which were given in the previous report are still valid. Hopefully the Danish project now operating at MICOA will be useful for the organising and accessibility of data at that institution.

The statistical compendium as it was presented at the seminar was still a very draft piece of work. It provoked discussions both in the working groups and in plenum at the seminar. The structure is not according to the DPSIR-model and as said data presented is weak both in appearance and quality. According to the opinion of the consultant the data should be transformed to the model and a more systematic way of collecting the existing data should be applied. Some comments on the data as well as sources should also be included. The finalising of such a compendium, i.e. a compilation of existing data, is only a first small step of establishing environmental statistics. In order to support in this phase the consultant assisted in formulating terms of reference for this work. At the seminar the participants agreed on cooperating in order to improve the quality of the compendium. A new draft will then be presented in the beginning of May.

The main task in the medium term however is to secure the collaboration between the data producers in order to establish the environmental statistical system.

4.3 The system of environmental statistics

Almost all of the components of the system have to be developed.

The actual concerns have been identified but have to be established officially.

The set of national environment objectives are not yet formulated. These should be regulated legally by the Parliament. Based on the objectives there have to be sub-objectives for each concern, defined and measurable. Follow-ups should be carried out regularly. Data needs for the monitoring of the concerns have to be established, methods for data collection are also necessary to determine. To take care of the data supply for each environmental problem working groups could be formed, between the most involved institutions. A national board taking care of overall problems concerning data supply for the system could also be formed under the cap of SEN.

Data and statistics will supply the system with information. This information has to be reliable and regular. Time series are necessary to perform. The compendium is a first, very draft, compilation of existing data and is in this stage not sufficient in supplying the system with information.

The information shall also feed the data necessities of the State of the Environment Report (SOER), which is planned to be published in the end of 2007.

Based on the SOER the decision-makers have a good ground for taking actions in the environmental field. These actions will hopefully respond to the environmental concerns and objectives.

ANNEX 1 Terms of Reference for the mission

TERMOS DE REFÊNCIA Suporte pelo Programa Escandinavo

Para uma Missão de curta duração de 2 semanas de 27 a 7 de Abril

nas

Estatísticas do Ambiente

Antecedentes

O Instituto Nacional de Estatística e o Ministério de Coordenação e Acção Ambiental tem vindo a desenvolver esforços para o estabelecimento das estatísticas ambientais em Moçambique, com a Assistência Técnica do Programa de Apoio Escandinavo para o Fortalecimento da Capacidade Institucional de Estatísticas Nacionais de Moçambique na pessoa do Consultor Leif Norman.

Varias acções estão a ser desenvolvidas entre as quais a preparação de um Compêndio contendo um leque de informação sistematizada sobre assuntos que directa ou indirectamente estejam relacionados com o meio ambiente e as suas respectivas fontes, capacitação da unidade de estatísticas do MICOA em recursos materiais, financeiros e humanos, avaliação da possibilidade de se utilizar a base de dados do ESDM de modo a disponibilizar a informação ambiental na base do modelo DPSIR, mobilização de Fundos para o financiamento das actividades propostas.

Principais razões da Missão

Em 2005 houve uma missão que veio dar assistência técnica ao INE e o MICOA para a implementação de metodologias adequadas para o estabelecimento de estatísticas ambientais em Moçambique. No corrente ano existe uma necessidade de dar continuidade a essa missão no sentido de avaliar as actividades já desenvolvidas e estabelecer os passos seguintes aproveitando as sinergias já existentes de modo a que muito rapidamente o MICOA esteja em altura de responder as necessidades de informação das convenções ratificadas a nível Internacional, objectivo 7 dos Objectivos do Milénio e dos indicadores do PARPA II e de criação de bases para a tomada de decisões e definição de políticas tendentes a reduzir impactos negativos ao ambiente.

A missão deverá ocorrer, na última semana Março e primeira de semana de Abril. Ela deverá garantir que o Compendio a ser produzido tenha qualidade e que o plano da criação do subsistema de as estatísticas ambientais sejam uma realidade em Moçambique de modo que os utilizadores de informação no geral, tenham uma informação mais exacta possível de qual é a pressão que se está a exercer, qual é o estado e quais são as respostas dadas, na área do ambiente no país.

Ainda no decorrer desta missão deverão ser desenhados processos para a recolha e o processamento da informação do ambiente e a sua inserção nas rotinas de processamento já existentes.

Beneficiários da Missão

Os principais beneficiários da Missão serão os técnicos do INE do MICOA e outras Instituições a Fins.

Objectivos da Missão

- Dar prosseguimento às recomendações das missões precedentes;
- Ajudar na elaboração do compêndio baseado na compilação de informação já existente
- Definir as variáveis a recolher no futuro
- Definir uma metodologia de recolha dos dados
- Melhorar os instrumentos de recolha
- Acessorar o INE e o MICOA na escolha da base de dados do meio ambiente
- Dar subsídios para um seminário a ser realizado com os potenciais fornecedores de Informação

Resultados esperados

- Elaborado o relatório baseado na compilação de informação já existente
- Definidas as metodologias de recolha de dados;
- Definidas as variáveis a recolher
- Melhorados os instrumentos de recolha

Agenda da Missão

Por definir

Acções a serem realizadas pelo INE e MICOA para facilitar a missão

- Elaborar os termos de referência para a Missão;
- Preparar e providenciar a documentação necessária para o consultor,
- Providenciar boas condições de trabalho para o consultor.

Consultor:

Leif Norman, SCB

Trainee: Maj Eriksson Gothe, SCB

Contrapartes:

Natércia Macuácuca – CDEBA;

Lolita Fondo – Direcção da Planificação do MICOA

Duração da Missão

A Missão conjunta irá decorrer de 27 de Março a 7 de Abril

Relatórios

No fim da Missão a consultor irá preparar um relatório preliminar a ser discutido com o INE e MICOA antes de o consultor sair do País. Eles irão submeter o relatório final, para comentários finais dentro de três semanas após o término da missão.

Estes termos de referência foram preparados por:

Direcção de Estatísticas Sectoriais e de Empresas em coordenação com a Direcção de Planificação do MICOA

Aprovados por

Azarias Marcos Nhanzimo e

Valeriano da Conceição Levene, Vice-presidente do INE para o Pelouro Económico

ANNEX 2 Persons met during the mission

Dr. Azarias Marcos Nhanzimo, INE

Ms. Natércia Macuácuá – CDEBA, INE

Dr. Erasmo Nhachungue, Planning Directorate, MICOA

Ms. Lolita Fondo, Planning Directorate, MICOA

Mr. Camilo, INE

Mr. Cirillo, INE

Ms. Teresa Magalhães Pinto – Planning Directorate, MICOA

Ms. Aurora Henrique Muzima, MICOA

Ms. Anselmina Luis Liphola, MICOA

Ms. Ana Massinga, MICOA

Ms. Graciete Socrates, MICOA

Mr. Lars Carlsson, Long-term Consultant, Coordinator

Mr. Tom, Danish support project at MICOA

ANNEX 3 The sub-system of environmental statistics

