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Bjørn K. Wold

Documents

Planned Co-operation with Instituto Nacional de Estatística (INE), Mozambique

Report from Short Term Identification Mission 27th March to 3rd April, 2000
Requested by NORAD/Oslo

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Summary

Mr. Bjørn K. Wold from Statistics Norway visited Instituto Nacional de Estatística, Maputo during the period of 27th March to 3rd April, 2000 jointly with a mission from Statistics Denmark. The objective was to produce a recommendation as to how NORAD best can support the work on INE including: • statistical areas of support, • type of support, and • channel of support.

The mission recommends NORAD to consider the following elements as *one package of financial support and institutional cooperation:*

- the Twinning agreement financed by the World Bank and SIDA,
- possible support from DANIDA, and
- their own support.

It is recommended ensuring 2 set of regular meetings (semi-annual, annual) to plan, review and follow up the work:

- between partner-institutions (INE and Statistics Denmark, Norway and Sweden) and
- between INE and one or more donors.

It is also important to ensure resources for each Scandinavian statistical office to participate in institutional cooperation. This document reviews pro and cons for three different models of institutional support;

- the Twinning agreement,
- an umbrella based institutional cooperation, and
- a consortium based institutional cooperation.

A consortium based approach for institutional cooperation is recommended. In this approach DANIDA and NORAD and possibly SIDA will pool their resources and Statistics Denmark, Statistics Norway and Statistics Sweden will form a consortium to be in charge of institutional cooperation with Instituto Nacional de Estatística.

Jointly it is recommended to provide financial support and technical cooperation including a long term advisor in each of the following areas: • National accounts, • Household surveys, • IT-support, • User/ producer contact, management and administration, • Sector and business statistics (requires further review & discussions of absorption capacity of INE). Statistics Norway may provide support in any of these areas, but has a comparative advantage for National accounts & Household surveys.

It is further recommended to provide financial support and other type of technical cooperation in each of the following areas: • Prices and conjunctures, • Foreign trade statistics, • Social statistics based upon administrative records, • Monitoring of the Government's Absolute Poverty Reduction Action Plan, • Geographical Information Systems, and • Dissemination.

Institutional capacity-building in INE requires a long term commitment, to build not only the capacity of INE, but also to encourage the capacity of other institutions and the civil society to utilize information and formulate their information needs, and finally for INE to respond in a dialogue. It is recommended to support INE for a first phase of 4 years starting from January 2001. Required financial support is in the *magnitude* of up to NOK 24 million per year excluding the support for planning and possibly investment in a new office building. Current SIDA support for the Twinning agreement will pick up around NOK 4 million per year in 2001-2002. Required funding to be considered jointly by NORAD & DANIDA amounts to 2001: up to NOK 20 million, 2002: up to NOK 20 million, 2003: up to NOK 24 million, and 2004: up to NOK 24 million. It is recommended that NORAD consider providing around 50 per cent of this required funding. A precondition for this funding should be that a sustainable financial plan is prepared during the project period. It is envisaged that this plan would include a core set of activities funded by the Government and additional activities to be funded by donors and users of statistics.

It is assumed that an independent appraisal of the planned project will be carried out in the months to come. It is recommended that INE is then offered assistance for the detailed planning of a project proposal by a 3-person joint Statistics Denmark/ Statistics Norway/ Statistics Sweden mission in September 2000.

1. Introduction

As requested by NORAD/ Oslo, Mr. Bjørn K. Wold from Statistics Norway took part in the mission of Statistics Denmark (requested by the Danish Embassy) during the period March 20-31, 2000. Mr. Wold spent some time discussing the issues and work plan ahead of his own visit with the three mission members from Statistics Denmark. He visited Maputo during the period March 27 to April 3 allowing him to work jointly with the Statistics Denmark mission for one week and preliminary wind up the report during the additional days. Upon return to Norway a final report was prepared based upon comments from INE and other partners involved. The consultant will also review and comment upon the mission report prepared by Statistics Denmark.

The objective of the mission as stated in the terms of reference was «to produce a recommendation as to how NORAD best can support the work on INE, taking into account the level of competence and capacity of the institution and needs expressed in government overall plans. This will include which areas within the field of statistics that are most relevant, what type of support to be provided and the optimal way of channeling the support. The study should put specific emphasis on the organizational aspect, i.e. discuss different alternatives for the project structure and financing. Of particular interest will be an assessment of pro and cons with respect to donor constellation and participation, and channeling of funds.»

It is further stated that «The consultant shall produce a brief report recommending possible i) statistical areas of support, ii) type of support, iii) channel of support.»

The consultant worked as requested in close collaboration with the team from Statistics Denmark and in order not to duplicate the work of the Danish team nor to double the work load of INE staff, the Norwegian one person mission utilized the discussions with INE staff and other work by the Danish team. The main input to the work still came from discussions with the President and other staff of INE as well as a review of written documentation of priorities of INE and the Government of Mozambique. This mission also drew upon the information from the World Bank/ SIDA supported Twinning agreement team of long term advisors, information and discussions with the Danish, Norwegian and Swedish Embassies, discussions with a World Bank household survey mission and the resident World Bank mission and the IMF Resident Representative.

This mission report comprises for each of the three tasks, a review of priorities, status of achievements, need for further support and a discussion of possible modalities for potential support. The mission report concludes in an overall recommendation of support and how NORAD best can support the work of INE and how Statistics Norway as a provider of technical support best can contribute to the overall technical support to INE.

During the discussion it soon became clear that «statistical areas of support» should not be limited to the strict technical statistical issues, but be understood in the broad sense, i.e. all areas of work of a national statistical institute comprising a core of statistical areas and an extended list of non-statistical areas needed to service or ensure utilization of the statistical the work of INE such as management and administration. In order to emphasize this definition, the first objective has been rephrased «statistical and related areas of support».

2. Statistical and related areas of support

The President of INE stressed that potential support from any donor including NORAD and DANIDA is very much welcome but should strictly follow the priorities of the Government and INE, i.e. the five year plan for the statistical system in Mozambique 1998-2002 (prepared by INE) and the five-year plan for the work of INE 1998-2002, both to be up dated by policy issues raised by the Government such as for monitoring measures and indicators in the Absolute Poverty Action Plan. The five-year plans present objectives by type of statistics. We have used this as input, but still present the objectives according to the organization of INE, i.e. the directorates and departments under the Vice-President for

Economic statistics, under the Vice-President for Social Statistics and the other directorates and department reporting directly to the President.

2.1 Economic Statistics

The general impression of Economic statistics is a dual one. There are a lot of activities going on with or without financial support and technical support and cooperation. Except for the collection of information on the informal non-agricultural sector the other steps of an economic statistics system are all in place or in the pipeline. However, there are three major problems, two statistical problems; a) lack of standardization of information such as the UN Harmonized Commodity Description and Coding System, b) lack of knowledge of potential bias in data collection by focus on quantity rather than a representative sample. The National Account work is based upon a system developed on site, based on an original core compilation system developed by the United Nation Statistical Division.

- **Standardization.** INE has already decided to implement international standards in all areas. However this is a slow process already within INE and there is a due need to ensure that this is well coordinated with other public institutions according to a well defined time schedule.
- **Coverage.** With support from the Twinning project INE has moved from a probably quite biased[1] sample of well established larger establishment to the current proper statistical sample but new establishment and small establishment are still underrepresented or missing. Hence INE has moved a considerable way from the old focus on size (and a possibly biased sample) to a focus on controlling the bias. It is important that this process continues.
- **National Accounts software.** Five years ago you could argue that standard national account software of sufficient quality and simplicity was not available if a nation opted for input-output tables (which is highly recommended) as in Mozambique. But today there are proper systems (reviewed by Eurostat) developed and maintained by several statistical institutions, including those in Norway, the Netherlands and France.

2.1.1 Department for National Accounts and Economic studies

Over the last years INE has with support from UNDP managed to establish a system for National Account estimates based upon a supply and use table (SUT). When the overall system for collection of production and other economic statistics leading up to the National Account estimation and harmonization, this will allow for a major step forward in economic planning. There seem however to be a need for further capacity building and in the view of the mission the need to switch to a standard national account software package should be reviewed such as by a study trip. The President of INE has expressed an interest that other donors such as NORAD and/or DANIDA continues the support provided by UNDP when they terminate their support by the end of the year. The mission supports this request and will recommend that financial support is provided to strengthen and further build the capacity of INE to compile, estimate and present annual National Account information based upon a supply and use table and over time switch to a standardized National Accounts software such as the SNA-NT package developed by Statistics Norway. The technical cooperation should focus on the following issues:

- National Account work as such;
- collaboration with all stakeholders in Mozambique in order to develop an overall consistent standardized system for economic statistics within INE and other institutions; and
- coordination with other departments of INE to ensure that the data needs for National Accounts are given priority when designing the overall system for collection of pure economic (such as a business census and production surveys) and combined economic and social statistics (such as household budget survey and an informal sector survey).

It is recommended that technical cooperation be established comprising both one long-term technical advisor and short term technical cooperation. The twinning agreement might provide financial support to fund one long-term advisor and some short term experts for a two-year period. Assuming this support is provided, additional financial support and technical cooperation is recommended as follows: For the full project period it is recommended to provide financial support for recurrent costs. For the first two-year period additional short term cooperation is recommended. From the beginning of the third year, it is recommended that technical cooperation should comprise both a long-term advisor and short term

[1] Since the population of establishments is not known the real bias is not known either.

cooperation. If the twinning agreement does not provide a long-term technical advisor within national accounts it is highly recommended that such support and cooperation be provided.

2.1.2 Department for Prices and Short Term Indicators

This department has with long term and short-term technical cooperation through the Twinning Agreement developed a capacity to compile and disseminate consumer price statistics. They are also in charge of the quarterly compilation and dissemination of other economic short-term indicators. According to the five-year plan their work should also include a broad set of short-term indicators. Given the current achievements, this mission assumes this can be accomplished by a series of short-term consultancies. Hence it is recommended to provide financial support and technical short-term cooperation.

2.1.3 Directorate for Sector and Business Statistics

This directorate comprises two departments, jointly covering economic production statistics including a business register and environmental statistics. The five-year plan also gives priority to environmental statistics. The 2000 Annual Plan states that an identification study must be carried out during this year. However due to lack of resources it is not likely that this activity can be carried out this year. It would definitely be useful for the planning of future NORAD support if Twinning Agreement resources or other resources could be reallocated for this purpose during the third quarter of 2000. That would allow recommendations to be considered within the context of possible NORAD support. If not, it is recommended that the NORAD project includes funding for this identification work and an opening to reconsider support for environmental statistics at a later stage.

Concerning economic production statistics, the main picture is that INE has now started the process of moving from an old system with old standards, lack of coordination with other institutions in Mozambique, regular statistical production but with a low coverage and a biased sample of establishment to a future system with up to data international standards adapted to Mozambique, quite some work to ensure coordination and still regular statistical production, may be not a larger sample but definitely a less biased one. As stated there are a number of efforts for improving the system of economic production statistics. One main positive feature is the ability of INE to collect monthly information from a sample of establishments and enterprises and a pretty fast dissemination of information on the production of a few selected commodities. However, as stated there are also two less positive features of the current system, standardization and bias in selection of production units due to low or biased coverage and hence biased production estimates.

The issue is how to establish a Harmonized Commodity Description and Coding System (HS) as recommended by UN to ensure a consistent system. INE approved already in 1999 some important classifications namely:

- Economic Activity Classification Rev-1 (equivalent to ISIC, Rev 3); and
- Goods and Services Classification Rev-1 (equivalent to CPC).

It is supposed to start this year the implementation of these two classifications. However there are some practical issues related to the proper implementation, equivalence, dissemination and maintenance.

In the field of foreign trade there is the Harmonized Description and Coding System (HS) that is used by the customs and by INE in the statistical production.

In collaboration with Ministry of Industry, Commerce and Tourism INE has now embarked on a plan to combine the current two (biased) data collection exercises with an annual joint data collection providing the information requested from both institutions. The sample will be an ordinary statistical random sample based upon probability sampling methods utilizing an up-dated business register. This work is supported by technical cooperation within the Twinning Agreement, technical cooperation with UNIDO experts, and financial support from NORAD[2]. There is still quite some work ahead, and it is

[2] NORAD has agreed to support this work in INE and the Ministry with UNIDO as the implementing orgaization in 2000 and 2001.

important to ensure that the work to upgrade the quality of this work is included in future technical cooperation within the Twinning Agreement, with UNIDO and if need be also within a future larger NORAD supported INE project.
This mission was very satisfied to learn that the standardization work has developed this far within INE and that considerable work had been done to ensure that institutions outside INE fully implemented these new standard. For the years to come it is import to provide support to ensure all elements including the following ones:

- harmonization within the overall statistical system comprising not only INE but also other institutions,
- foreign trade statistics,
- a comprehensive business register covering all formal secondary and tertiary sector activities utilizing all available register information and up dating routines,
- based upon the full set of available register information considering a full scale formal sector business census
- a proper sample approach for production statistics
- informal sector information on a regular basis, such as every fifth year.

This approach would require continued financial and technical support. It is recommended to provide financial support to establish the system and build the technical capacity to continue collecting, compiling and disseminating the information. It is assumed that short-term technical support will be provided through the Twinning agreement and by UNIDO experts. It is recommended closely to follow the provision of financial support and technical support and cooperation. If need be it is recommended to provide additional technical cooperation in this area. If no long-term advisor is provided by the twinning agreement, it is also recommended to provide such support and cooperation.

2.1.4 Agricultural Statistics

Agricultural statistics is essential in a country like Mozambique where the large majority of the population earn their main living from agricultural production and where roughly 1/3 of the gross national product comprises agricultural products. The current arrangement is that the Ministry of Agriculture collects annual information on agricultural production and that a planned Agricultural Census for the 2000/ 2001 season will be conducted jointly by INE and the Ministry of Agriculture, i.e. the Ministry staff to collect information under the supervision of INE. The Agricultural Census is receiving substantial financial support and technical support including one long term FAO consultant.

The Census approach has faced some difficulties ensuring the cooperation but that seems to be settled and the big advantage of the approach is that it allows agricultural sector information to be linked to the statistical system. This might obviously be more difficult to ensure for the annual information to be collected in the years to follow the Census. It is highly recommended that the work to ensure a consistent and comprehensive system for economic statistics include agricultural and fishing sector information. It is also highly recommended to ensure a proper cooperation between INE and the Ministry of Agriculture when designing social sector data collection. Finally it is recommended to reconsider the modalities of cooperation when developing the next five-year plan for statistical work.

2.2 Social statistics

Social statistics comprises three large type of data collection; census based information, survey-based information and administrative records.

One of INEs major achievements during the last year is the fast turn around and high quality of statistical reports and output from the 1997 Census results. The Census work has received considerable financial and technical support and this is soon to be phased out and the Census work will come to an end.

It is also very encouraging to learn that work to establish an overall system for household survey data collection already has advanced pretty far and is just currently at the stage to settle for a comprehensive system based upon a core set of information combined with annual sector modules.

Even the collection of data based upon administrative records has advanced pretty far both through utilization of information collected by sector ministries and by co-operating with other ministries to start collecting administrative information directly from the sector institutions and/ or provincial offices. INE has established a close collaboration with Ministry of Education allowing them to utilize administrative information from that sector. INE has also established a close collaboration with the Ministry of Justice and designed a system for collection of information directly from institutions and provincial offices

2.2.1 Directorate of Demographic, Vital and Social Statistics

In developing a system of social, demographic and vital statistics, it is necessary to focus on the analysis and presentation of data as well as collecting data from administrative records, to obtain a most efficient data collection for the whole area of social statistics. Continued work in needed to develop detailed plans and then for implementation.

Up to last year, the Department for Demographic Analysis has been fully occupied with the presentation of the Census results. However, this Department is now actively responsible for data analysis based on other sources, not the least based on the data collected via the Household Survey Program. A booklet on Women and men in Mozambique has been prepared, and the continued work on gender analysis and gender statistics is a high priority at INE

The other department of this directorate is responsible for collecting and tabulating data based on data from administrative records. So far new forms for collecting data on culture have been introduced, forms for collecting statistics on crime and justice based on a close collaboration with the relevant institutions have just been launched, and a short term consultancy to look into the possibility of collecting data both from administrative records and via the household survey program has just been completed.

Also, INE considers the possibility to start collecting data on social security, and developing methods to collect data on Sports and the Press. In the coming years INE also plans to work with the Ministries of Education and Health to establish a system of official statistics in these fields, seen in close connec-tion with what is provided via the household survey program.

INE will need continued technical assistance both in the analysis and presentation of social statistics as well as to in the further development of social and vital statistics based on administrative records. Also, training, both in analytical work and in data collection, not the least in the provinces is needed.

2.2.2 Directorate of Census and Surveys

This directorate is in charge of both census and survey data collection including the cartographic work. While they have managed to establish a permanent cartographic capacity, they naturally had to let go the data collection capacity from the Census. This points to a critical decision, whether to continue at an ad hoc basis for survey data collection or to establish a permanent system. There should be no doubt of professional and economic advantages of a permanent household survey system. Such a system is however dependent on the overall needs for survey data, the financial capacity for a permanent system of data collection, technical co-operation to establish the system and the ability to enforce the system, i.e. to integrate additional donor driven survey into the overall approach by ensuring a flexible system, a transparent system towards donors and the strength to pressure donor to accept that they all need to fit into a given system.

A permanent household survey system

INE agrees that it is important that a Household Survey program is established, and also, as far as possible all demands for survey data from donors and ministries should be incorporated in such a system, with INE in the lead to set up such a program. INE has made a policy decision to use the CWIQ survey as the core information gathering instrument in the planned household survey program.

The pilot survey has been carried out successfully, and the results presented in a workshop for the donor community and ministries. The main response was very positive, and INE will accordingly work towards carrying out the first CWIQ starting *late August this year*. However, they are dependent on

proper funding and availability of cars for data collection, the latter also being dependent on the plans for the Agricultural Census. As to the funding, INE has already received initial funding from DANIDA and will approach donors for funding for the main data collection.
INE has prepared a preliminary plan for the whole survey system up till 2006. However, due to the constraints mentioned earlier, and also the need to evaluate at least the first ordinary round of the CWIQ, it is too early for INE to commit itself to the timing and the contents of future surveys. Hence, it seems premature at this point to decide on data collection methods and during what time-periods data collection should be carried out. However, methods for data collection and data-processing for the Household Survey System to secure the best possible quality of the results, are a high priority and are presently being discussed at INE, based on the experience from the CWIQ Pilot survey and other surveys previously carried out by INE.

Also, the organizational and managerial issues related to the establishing of the survey system are being considered. A report on lessons learnt and how to proceed in the future is under preparation by INE and will be available to NORAD as soon as finalized.

Absolute Poverty Action Plan - monitoring measures and indicators
The mission was impressed by the dedication of INE to support the provision of information for the Government's «Absolute Poverty Action Plan». This plan is an integrated part of the Government's commitment for the Poverty Reduction Strategy Paper. A draft of this strategy plan is to be agreed upon with IMF and World Bank in early April this year and a final version is expected to be ready by March 2001. While INE has participated in the identification of measures and indicators it was planned that the specific ministries should be in charge of the provision of data.

While nobody really expect the ministries themselves to collect statistical information, it is even hardly acceptable that each line ministry should themselves take the sole responsibility for collection of information to confirm whether they have achieved their development goals or not. Hence the mission was very satisfied that INE decided to give high priority to ensure that this information is collected and disseminated by INE. It is envisaged that this type of information would as far as possible be included in the CWIQ from the outset in August 2000 and forward. The mission is also recommending that INE includes the information listed in the 21 development goals from the UN Summits in the last decade and the corresponding indicators developed by OECD/DAC jointly with UNDP and World Bank and presented for the UN Statistical Commission in February this year (refer to annex).

Need for financial support and technical cooperation
The Twinning agreement already provides technical cooperation based upon a long-term advisor and the World Bank provides support to the household survey program and the CWIQ. With the pressure from several donors for a special solution for their priority survey it is important both to establish the planned comprehensive approach as soon a possible and to strengthen the capacity of INE to accommodate different needs within the permanent framework. This will require continued support including both a long-term resident advisor giving main attention and priority to households survey work and short term technical cooperation visits for technical issues such as development of the methodological approach and analysis of findings.

It is also recommended to continue developing the capacity of production of social statistics based upon administrative records. It is however believed that in this area short term technical cooperation with some follow up assistance from a long-term advisor will do.

Hence the mission recommends that further long term technical cooperation for household surveys is provided by a resident advisor, either one to follow the current advisor within the Twinning agreement or one to be financed by support from NORAD or DANIDA. In either case short term technical assistance is also required. INE had prepared a draft estimate for just the CWIQ of slightly above US$ 0.65 million for the first year and for consecutive year of slightly below $ 0.6 million. The World Bank had however at an earlier stage prepared a draft annual budget indicating only half the costs excluding initial costs to establish the organization. Hence a rough estimate for survey costs including both the CWIQ and annual modules might be in the magnitude of US$ 1.1 million for the first complete year and US$ 0.9 million for consecutive years.

This mission also recommends that NORAD provides the financial support and technical short term cooperation to assist INE in building a monitoring system and capacity for the statistical work under the Absolute Poverty Action Plan.

2.3 Information Technology, GIS, and Support and Administrative Services

2.3.1 Information Technology

With information technology we usually include hardware, software and programming, and the Web. There are a number of achievements in IT development and application as well as an IT plan, but INE still has quite some work to do implementing the IT strategy. INE has established a LANetwork, but for some reason it does not cover all of the three floors INE occupies. INE has developed quite a system for standard database applications and that fits well the needs for economic statistics. They do not utilize standard software for social statistics, such as Census type of software or survey type of software, but the Microsoft Office package. Even in other specialized areas as different as National Accounts and ordinary accounting INE is not utilizing standard software packages[3], but develop their own custom made applications.

The use of simple office software and tailor-made approaches might all serve the purpose in the short term. But in the middle and long term this might be a risky policy for three reasons. First, what might serve the purpose at the initial stage will soon require updating work outside the ability of new staff. Second, while the simple software might serve the initial needs in an easy manner, soon the need for other functions like weighing, filters, confidence intervals etc will develop and turn out to be quite cumbersome and when the needs outgrow the capacity the threshold to start using a new package might look too large. But third and most important, this approach will continue to alienate subject matter statisticians from embarking on an active use of statistical software. This is obviously a problem in the short run because it increases the workload of the IT-staff, makes the communication between subject matter specialists and IT specialists difficult, and for the few subject matter specialists who actually do some tabulation the threshold to play around with data and hence ensure quality is remaining too large. It is also a problem in the long term because only subject matter specialists understanding the IT issues can ensure that the IT-staff are adequately staffed and get enough resources in the future.

In the view of this mission INE should *consider* several additional steps in order to build the IT capacity of INE, such as a) consider to ask for the support from an IT-experienced non-IT consultant to advise on how to internalize IT development; b) consider how to upgrade the status of the IT-units to directorate level; c) consider to introduce standard software packages for survey data capture, compilation, tabulation, analysis and presentation; for national accounts; and for accounting; and d) consider how to train subject matter specialists for the user-end of IT-work.

It is important to consider these ideas and proposals not to replace the current work to build standard IT capacity of INE but as additional needs showing how to continue from short term to medium and long term needs.

There is a need for continued support to build an institutional IT capacity of INE. As stated there is already an IT-plan but this is really a technical plan and further work is needed to agree on an implementation plan for how to develop the capacity of the staff. It is the experience from all statistical offices that this requires the support of a team comprising at least one IT-staff knowledgeable in subject matter needs and one subject matter specialist knowledgeable in IT-issues. The head on DISI, one high level subject matter specialist such as one of the vice-president of INE supported by the Twinning adviser Mr. Yttergren and the short term consultant Mr. Sæbø (deputy director general and in charge of IT development strategy in Statistics Norway) might serve as an ideal team.

[3] For accounting, the Twinning Agreement has recommended a software package used by other governmental institutions and being available in a Portuguese version.

It is assumed that such an implementation plan is in place before support from NORAD and DANIDA is implemented. If not, it is highly recommended to ensure this at the initial stage. It is envisaged that such a strategy will include continued technical support either of a long term IT adviser or equally probably a subject matter specialist with IT knowledge complemented by a series of short term IT advisors. Currently INE had asked the Twinning agreement to provide one long-term advisor combining the functions of a Team Leader at IT experience. If this materializes, it is recommended to provide only financial support and short term technical cooperation.

2.3.2 Geographical Information Systems

Thematic statistical maps has been produced in INE for several years and the Census has taken this capacity further by producing thematic maps at an even more detailed level.

With this capacity it is natural to reflect on the possibilities. If INE had geocoded (from maps) all enumeration areas from the Census they could on short notice combined vectored digital maps from the flooded areas to identify the population seriously and less seriously affected by the flood. Such information would also be useful for more «normal» type of evaluation and monitoring, including issues such as a data bank on areas cleared for mines to social planning. Combining geocodes for enumeration areas with geocodes for schools and census information would allow for an overall description of school access. Add annual information from the school census and you could monitor the situation to guide optimal investments in new schools.

While there are many interesting options with GIS technology, it is believed that a decision to build further capacity in GIS related statistical work requires more thorough discussions such as when planning for the next five-year plan. Hence it is recommended to provide financial support to GIS work, some short-term technical cooperation and then to consider extended support within the next 5-year plan.

2.3.3 Dissemination

Currently the printing of reports is highly delayed due to lack of funds for external printing. INE manages however to print a number of the publication internally. The printing quality might suffer somewhat, but the publications are released and users get the information without additional delays. This situation reflects the general impression of the dissemination. There are a number of well designed publications such as the new population density map from the Census and even innovative ones as the CD-ROM from the Census, but on the other hand there seem to be no overall implemen-tation of proper graphs. Many publications present a proper base (zero-value) line and proper two dimensional bars, while others have baselines that vary and three-dimensional bars which are extremely hard to read by the experienced reader and deemed to go wrong for the lay man. Some publications are properly fitted with footnotes while others are very short. While some statistical areas issue reports presenting a proper descriptive, methodological and analytical description, other areas concentrate solely on figures.

The overall impression is the need to systematize the dissemination policy and strategy. It is believed that by adding some more resources at this almost final stage, the users of statistics will gain multifold.

Hence it is recommended that quite some financial and technical support should be given to this area, including covering the steps from identifying usergroups and needs, deciding on publishing means and the production of the disseminating products being paperbased or electronic means. Support from NORAD and/or DANIDA in this area should include either a long-term consultant or a series of short-term consultancies.

2.3.4 User/ producer contact

INE has established a system of user-producer contact that allows them to discuss priorities for a special data collection exercise such as a census or a large survey. They have however only partially taken the next step, being to organize regular contact to identify how statistical information could serve policy decisions of the main users. This is not a one-time operation but requires the production and dissemination of statistical information demonstrating how this could serve policy decisions. Such demonstrations are necessary to form the base for further mutual cooperation.

It is the experience that joint study tours, high-level workshops, followed by high level technical cooperation could trigger such cooperation. The Absolute Poverty Reduction Action Plan is a unique opening to jumpstart this process. It is highly recommended that the NORAD and/ or DANIDA support should include financial support and short term technical cooperation within this area.

2.3.5 Management and administration

INE is still in the vicious circle of being dependent on project-based donor funding and extremely short government funding outside salaries. A package to break this vicious circle might comprise the following elements:

- a transparent annual planning lead by INE and supported by all donors;
- a transparent system of economic planning, management, accounting and auditing;
- a transparent system of internal activity planning, activity management and follow up

While the President naturally will lead the annual planning and supervise economic management and internal activity planning, it is important to strengthen the economic management capacity of Department of administration and finances and to strengthen the activity planning capacity of all heads of departments and directorates.

There are different ways to organize this work, but in order to ensure a proper activity management which can accommodate the necessary donor support and requests without jeopardizing the standard work program a system for activity planning, management and follow up is needed.

The Twinning agreement is currently providing support to build the capacity for computerized accounting, but substantial further support is needed. Hence it is strongly recommended that long term technical support from NORAD and/or DANIDA be provided, ideally by a long-term resident advisor. In addition support is also needed for study tours to review different approaches in other statistical offices and to select proper software and especially to build the capacity to utilize such a system.

3. Infrastructure - planning for a new office building

INE is currently located in the Ministry of Planning and Finance at three separate floors. As already stated this has led to an incomplete implementation of the LANetwork which also makes it difficult to implement the human training and experience for further IT-use. You can hardly expect subject matter statisticians without access to a local network to be in the frontline of developing the statistical quality control and statistical analysis capacity and experience . Equally important is the lack of proper premises for large meetings. The Ministry is in charge of the larger room and insist on their primary right to these rooms.

Besides the practical problems, this consultant will like to stress that such a joint location makes it difficult to build the necessary (and correct) image of INE as a professionally autonomous national statistical institute. To build and establish a sound profile of high quality independent statistical production is essential in building the future democracy of Mozambique.

In another country like Eritrea, NORAD contributes substantially to the investment funding for a new office building for the national statistical institute. This mission would like to stress the importance of proper premises and recommends that NORAD consider to provide financial funding for the planning of a new office building and then to develop a plan for joint investment funding with the Government and other donors.

4. Type and organization of support

4.1 Absorption capacity and time horizon

Mozambique is still in a recovery period after the civil war and a number of institutions, including INE, are facing the tough balance between the need for a rapid development and the absorption capacity of the staff. INE is still a young organization and will need a long term commitment and support in order

to establish an organization for collection, compilation and dissemination of relevant and timely quantitative information of high quality within the Mozambican society at large. In fact INE will even then need further time to ensure the necessary support from other institutions to be able to secure a proper basic funding through the ordinary governmental budget and additional funding from other users. It is envisaged that 8-10 years are required to establish the necessary quality organization and a similar time period is required to ensure the support needed for a proper funding from the Government. Hence it is recommended that NORAD consider their support based upon the need for a long-term commitment.

However, it is also necessary to consider the short and medium term needs as expressed in the 5-year plans and current demands by the Governments and others. Hence it is recommended to develop a plan for financial and technical support and cooperation for a shorter time span such as a 4-5 year time period.

This balance between short term needs and long term time horizon should also be reflected in the design of institutional cooperation. While the short term needs might indicate that several long term resident advisors are needed there should also be a plan for a step-wise reduction in this type of institutional cooperation.

4.2 Regional cooperation

INE is already involved in a number of regional initiatives and the SADC and between Portuguese speaking countries. Statistics Norway has assisted INE/ Angola in developing a plan for financial support and institutional cooperation which is still under consideration for funding by NORAD. If NORADs decides to provide financial support to both institutions including institutional cooperation with Statistics Norway, it is strongly believed that an extended tri-partite institutional cooperation will by of mutual benefit and should be planned for.

4.3 Type and organization of support

It is recommended that the national financial support and technical cooperation will comprise the following elements:

- An agreed set of priority issues for statistical capacity building based upon INEs Guidelines and Masterplan adjusted by policy requirements as the Poverty Action Plan and other policy priorities developed since the approval of the 5-year plans (INE plan and Statistical system plan).
- An agreement to support the further development of the next 5-year plans.
- An initial work plan for the current 5-year plan period addressing the needs comprising the staff requirements, field costs, other local recurrent costs and investments and technical cooperation.
- An initial financial plan indicating Government funding, donor support and other income sources.
- It is envisaged that the technical cooperation (apart from the coordination) will comprise a set of modalities balanced between earmarked funds for each department and non-earmarked funds to be allocated to departments actively presenting their needs and follow up plans, as follows:
    - Long term resident advisors, tentatively comprising four or five advisors in subject matter areas and/or management and support areas in what seem to be the priority areas:
        - national accounts,
        - household surveys (incl. Poverty Reduction Action Plan monitoring)
        - statistical producer/ user cooperation (INE/ line ministries etc.), activity planning and financial planning/ management
        - IT development and training,
        - economic production statistics,
        - dissemination,
        - social statistics based upon administrative records,
    - Series of senior advisors providing short term consultancies with long term commitments over a 4-5 year period (within the above mentioned areas) not covered by long term resident advisors, if need be followed by ad hoc short term support.

- Ad hoc short-term advisors earmarked for each subject matter area, including such as administrative management and activity planning, GIS work and statistical methods.
- A number of study visits, workshops and training courses earmarked for each subject matter area.
- An allocation for planning and follow up work from the headquarters for each Scandinavian statistical office.
- An allocation for joint (INE staff and Scandinavian staff) production of analytical and methodological papers, not earmarked.
- Short term support resources for crosscutting priority areas such as department level management and activity planning, process quality work and dissemination.
- A training plan for an internal training program.
- A plan for regional activities, including a possible tripartite arrangement with INE/ Angola is NORAD decides to provide funding for projects with both national statistical offices.
- An allocation for INE participation in international conferences and other collaboration.

A similar but somewhat limited set of modalities for cooperation should be developed for the provincial offices. Currently there us only limited support to the provincial offices. The German volunteer service is currently providing a long term consultant in each of three provinces. This mission recognizes the need for provincial support but was not able to appraise the magnitude or type of support needed nor the future German commitment. Hence this task remains to be done during the detailed planning process.

4.4 Technical cooperation with Statistics Norway

If requested by INE, Statistics Norway might take part in a program of institutional cooperation with INE. In addition to one long-term advisor and short-term technical advisors provided within the Twinning agreement, Statistics Norway might provide another long-term resident advisor and other modalities of cooperation as outlined above. Statistics Norway has a comparative advantage within household survey programs and national accounts based upon input - output models[4] as already being implemented here in Mozambique, but is ready to discuss provision of technical cooperation based upon long or short term consultancies in any of the priority areas listed above.

4.5 Communication - project language

It has been the experience by the current Twinning agreement that the language barrier might be larger than expected. Hence it is important to include modalities that reduces the language barrier as much as possible by considering financial support as follows:

- Portuguese training a) to long term resident advisors not only before leaving Scandinavia but also after arrival and b) to short term consultants with long term commitments.
- English training for INE staff.
- Translation of written material.
- Simultaneous translation for conferences and larger meetings.

5. Channel of support and funding arrangements

In 2000 some of the financial support is coming to an end including the UNDP support for National Account, the DANIDA support for the pilot CWIQ, the UNFPA and USAID support for the Census, and the Italian IT support focusing on Local Area Network and hardware. Leaving the agricultural census, which is fully financed, aside, there is only the Twinning agreement that continues. The Twinning agreement funds allow for the planned support of two long term advisors in 2001 and 2002, some short term consultancies and follow up work from Sweden, but no funding for recurrent costs nor for data collection field work. Statistics Norway agreed in 1997 to provide around half the long term and short term advisors for the 5-year Twinning agreement. Hence Statistics Norway is providing 2 of 4 long-term consultants up to early 2001 and 1 of 2 long-term consultants for another 2 years. SIDA has so far given no commitment for extending the support to recurrent costs, to data collection fieldwork,

[4] Based upon the SNA-NT software, refer to appendix 4.

nor to extending the twinning agreement beyond early 2003. They have however expressed an interest to be informed and participate in further discussion of Scandinavian support.

DANIDA has started their support to INE by allocating around US$ 400 000 this year and given a clear commitment for further support to the activities of INE. DANIDA has expressed a long-term commitment and indicated they might start regular support from beginning of next year providing technical support from Statistics Denmark and support to recurrent costs and data collection fieldwork. The technical cooperation proposed by Statistics Denmark will amount to roughly speaking Danish kroner 3 million per year and it has been envisaged that support for recurrent costs and data collection field work might amount up to a similar amount. DANIDA and Statistics Denmark are however stressing that no decision has been taken as to the total financial support.

This mission has not been in the position to calculate any budget estimates for neither recurrent costs, for data collection field costs or for costs of recommended technical cooperation. There are however some rough indications of the *magnitude* of overall costs. Given the needs for technical cooperation, the plan for the Twinning agreement and the proposal from Statistics Denmark there is an additional need for one long term technical advisor and several long term commitments for a series of short term assistance. The costs of this support will be around NOK 4 million per year.

The data collection/ field work costs for the Core Welfare Indicator Questionnaire are estimated by INE to around US$ 0.7 million for the first year and US$ 0.6 million for consecutive years for a very large sample size. The original budget for a similar survey was estimated by the World Bank to be US$ 0.3 million apart from the establishment costs, but then for a somewhat smaller sample. Hence by looking at potential savings this mission assumes it is possible to reduce the costs to US$ 0.6 million for the initial year and US$ 0.45 for consecutive years. INE is however utilizing an annual CWIQ as the core in a permanent household survey capability annexing other priority survey such as on victimization, a household budget survey, a combined labor force/ informal sector survey and a combined health and demographic survey. While it is envisaged that USAID and UNICEF will contribute to the latter, the other surveys miss funding. Hence the annual survey costs almost double such as to US$ 1.1 million in the initial year and US$ 0.9 in consecutive years. Hence in a five year time perspective there is a gap in field costs of roughly US$ 0.95 million a year.

In addition funding is required for recurrent costs and data collection for economic statistics. Assuming these costs are only half of the survey costs, the financial requirements to be considered for data collection field work and other local costs (excluding recurrent costs) by DANIDA and NORAD are in the magnitude of close to US$ 1.4 million or NOK 12 million a year.

No estimate is available for the financial requirements to plan for a new office-building at the current stage, but this amount should be added when writing the final project proposal later this year.

The overall requirement for technical cooperation is of a similar magnitude or NOK 12 million a year. Hence if SIDA through the Twinning agreement provides a support of around NOK 4 million, there is still a gap for technical support of 8 million NOK a year and a total gap of NOK 20 million a year. Obviously both NORAD and DANIDA support will be needed in order to provide this funding.

Institutional capacity-building in INE requires a long term commitment, to build not only the capacity of INE, but also to encourage the capacity of other institutions and the civil society to utilize information and formulate their information needs, and finally for INE to respond in a dialogue to these needs. A proper balance between a necessary time horizon for planning and the need for accountability and necessary adjustment might be to start the support to INE with a first phase over 4 years starting from January 2001. The required financial support is in the magnitude of up to NOK 24 million per year. SIDA support for the Twinning agreement will pick up around NOK 4 million per year in 2001-2002. Hence required funding to be considered by NORAD and DANIDA amounts to 2001: up to NOK 20 million, 2002: up to NOK 20 million, 2003: up to NOK 24 million, and 2004: up to NOK 24 million. It is recommended that NORAD consider to provide around 50 per cent of this required funding. A precondition for this funding should be that a sustainable financial plan is prepared during the project

period. It is envisaged that this plan would include a core set of activities funded by the Government and additional activities to be funded by donors and users of statistics.

5.1 Funding and coordination modalities

INE has expressed their remarks concerning funding and coordination modalities as follows:

- *"We think the management of the NORAD funds should be in the form of projects, with annual activity plans and budgets for the identified areas.*
- *We think one single project should be established, which includes all areas that will benefit from the support. The Director of DICRE would work together with the Team-Leader for the co-ordination of the project, with the help of the administrative assistant, paid by the project.*
- *There is no need for a national co-ordinator paid by the project, since the co-ordinator will be an INE senior official paid by the Government.*
- *It is important to create a co-ordination committee, consisting of the Director Generals, that will meet regularly (for example twice a year) to evaluate and monitor the project, in the cities proposed by the mission.*
- *We think the current Twinning Arrangement should serve as the umbrella for the coming projects."*

Statistics Norway is very encouraged by the policy of the President of INE to ensure a transparent planning process. The tradition of five-year plans is already established. The President is now committed to an annual planning discussion with all donors involved. He has also expressed his interest in ensuring that a new project includes support to an annual activity planning of INE.

Statistics Norway would like to stress that funding and coordination responsibility should aim at following up this transparency policy by ensuring the following objectives:

- to allow and encourage INE to take financial and professional responsibility for the program financially supported by NORAD, DANIDA and possibly SIDA;
- to ensure full financial and professional accountability;
- to ensure a proper institutional cooperation where the Scandinavian statistical offices cooperating with INE all are fully committed to ensure a professional high quality and the necessary resources and modalities are provided to achieve this standard.

The institutions cooperating could be organized in different manners and in any case their is a need to ensure the following two elements:

- First, the project should include resources for each of the Scandinavian statistical offices to participate in the coordination, planning and follow up of the technical cooperation.
- Second, there should be regular meetings to plan, review and follow up the work both between the partnerinstitutions (INE and Statistics Denmark, Norway and Sweden) and between INE and one or more of the donors.

5.2 Three possible models for organizing institutional cooperation

Three models for institutional cooperation has been raised; to continue the twinning arrangement, to establish a consortium of the Scandinavian statistical offices and organize the financial support as a joint DANIDA/NORAD/SIDA project (including or excluding the Twinning agreement), or to organize three projects and an umbrella arrangement to ensure coordination and cooperation. There are a number of features being equal for any models and some unique features. Here the order of presen-tation is turned around, starts with the umbrella approach which then includes a number of the common features as well.

5.2.1 Tripartite Scandinavian institutional cooperation with Instituto Nacional de Estatística, an umbrella approach.

It is envisaged that the modalities for coordination should serve to ensure both the donor coordination and the joint four-partite coordination, as follows:

- An INE project coordinator (on INE payroll or paid by the project);
- One or more part-time Team Leaders from each of these three Scandinavian statistical offices spending jointly up to a 50% staff year.

- On a rotating basis one of the Scandinavian statistical offices will be in charge of planning, co-ordination and follow up work from the headquarters (such as 12 staff weeks a year), while even the two other offices will be actively involved in the coordination (such as 6 staff weeks a year).
- The Scandinavian statistical office in charge of Scandinavian coordination will also be in charge of regular telephone conferences such as monthly in the project coordination group comprising a core group i.e. the INE project coordinator, the Team Leader and the Head Quarter Coordinator and an observer group comprising the other long term resident advisors and the Head Quarter staff.
- It is envisaged that the same core group will meet regularly, such as every month with the President of INE.
- A plan for initially semi-annual and later annual meetings: a) INE with these three Scandinavian statistical offices and b) INE with donors, where these three Scandinavian statistical offices would be observers and/or assisting INE.
- Each (semi-)annual meeting should present a status report, up-dated work plans and proposals for reallocations. It is envisaged that the paper work for these meetings will initially be prepared by the technical experts from the Scandinavian statistical offices but the INE project coordinator should as soon as possible be fully in charge, tentatively at the third meeting.
- It is envisaged that the initial work plans are continuously revised and that potential changes are presented at the semi-annual meetings for approval.

It is envisaged that the semi-annual meetings might alternate between Mozambique and the Scandinavian capitals comprising such as three meetings in Maputo and one each in Copenhagen, Oslo and Stockholm. It is envisaged that the delegations to these meetings will be led by the President of INE and the Director-General of the Scandinavian Statistical Office currently in charge and that the meetings are attended by the extended project group.

Pro and cons

The main problem with the umbrella approach is as expressed by INE, that INE needs to build and maintain a working relationship with three pretty equal, but still different statistical national institutions. Given the current lack of absorbtion capacity it is difficult to justify an umbrella approach streching the management capacity unnecessary. *Hence Statistics Norway does not recommend this option.*

5.2.2 Consortium based Scandinavian institutional cooperation with Instituto Nacional de Estatística

The alternative to arrange the Scandinavian support as an umbrella approach is to form a consortium between these three Scandinavian national statistical offices and for the consortium to follow the approach agreed upon between the donors and the Government of Mozambique/ INE.

Statistics Norway would prefer the umbrella approach in order to ensure full commitment from each of the statistical offices and a balanced coordination, but is ready to accept a request for a consortium. Also in this case Statistics Norway has the two requirements already stated above comprising a) resources for each of the Scandinavian statistical offices to participate in the coordination, planning and follow and b) the need for regular meetings to plan, review and follow up the work between the partner institutions and donors.

Please refer to the previous paragraph for a description of how the modalities in such an institutional cooperation could be organized.

Pro and cons

The consortium based institutional cooperation ensures that INE has one main partner and give the extra coordination burden to the Scandinavian national statistical offices. It sounds reasonable to put the burden of extra coordination on these offices. The drawback is that this might hide different opinions and make the institutional cooperation with INE less flexible. *But based upon an overall review Statistics Norway will still recommend this approach.*

5.2.3 Extending the Twinning agreement

The current Twinning agreement is a World Bank project with funding partially from the World Bank Group and partially by Swedish funding through the World Bank project. There is one amount earmarked for the contract with Statistics Sweden (where Statistics Norway is a sub-contractor) and another amount for other expenses. The other expenses are allocated following standard World Bank procurement routines. In principle the technical support is outlined in the projectplan but INE might agree with Statistics Sweden to reallocate resources within the overall amount. Even other financial support is outlined in the project document and again INE might reallocate within these specifications. The current Twinning agreement has certain limitations on allocation of funds, but these might of course be different for an extended contract.

Pro and cons

The main problem with the Twinning agreement is the lack of ownership and accountability of the project-activities undertaken by INE and their technical partners. In the opinion of this mission, the only way to build institutional capacity is to ensure a system where the recipient institution is responsible for the design of the project plan, the implementation and the regular monitoring and review at annual (or semi-annual) meetings. During the initial years, the technical partners might assist heavily in this process, but over a few years the institution will not only take charge but need less and less assistance. INE has now expressed that they are ready for a transparent coordination to ensure regular monitoring of the process. That is a very important decision, but the Twinning arrangement does not include any feature to ensure such an accountability. There is no arrangement to ensure that the technical partner in such an institutional cooperation, i.e. one or more Scandinavian statistical office is made accountable towards INE, nor to ensure that INE is made accountable towards the donors. The World Bank approach ensures that the funds are allocated according to the plan and that proper procurement routines are followed, but there are no modalities to ensure an active monitoring and a rolling planning process. Hence there is no security for an active ownership from INE and more important no security for an impact accountability. *Hence Statistics Norway can not recommend extending the Twinning agreement.*

5.2.4 Recommended model for organizing institutional cooperation

There is no "one best solution" for organizing institutional cooperation. *Based upon the reviews outlined above it is however clear that the consortium based model for institutional cooperation is to be recommended.* It should be added that this approach could also easily accommodate the 2 remaining years of the Twinning agreement within the consortium framework or as an appendix. In either case Statistics Norway is willing to take an active part in a consortium including the coordination role if agreed upon.

6. Next steps

It is envisaged that NORAD and the other donors will need some time to discuss modalities and possibly to arrange for separate or joint independent appraisal of the project plan. If it is decided to go ahead with the planning Statistics Norway will suggest that a team of 3 persons from Statistics Denmark, Statistics Norway and Statistics Sweden visit INE to assist in preparing a detailed project work plan such as in September 2000. Statistics Norway is ready to head such a planning mission if requested. With such assistance to prepare a detailed work plan, INE will be able to submit a detailed plan to the donors such as in October 2000.

Appendix A - Absolute Poverty Indicators & Development Goal Indicators[5]

Annual Indicators

Sector	Annual Indicators
Demographic Area	Population growth rate Life expectancy Global fertility rate Dependency rate
Macro-economic Area	Economic Growth rate (GDP) GDP per capita Inflation rate Proportion of public expenditure for social sectors
Food Security	Food balance (cereals availability and requirements) Total production of basic crops Environmental situation (drought, floods, pest outbreaks and disasters)
Education	Gross enrollment rate Gross admission rate Number of schools Percentage of girls Number of graduates (Grade 5) Pupil/ teacher ratio
Agriculture and Rural Development	Prices of basic food crops Production of basic food crops Productivity per hectare of the main crops Animal production and derivatives (eggs and milk) Artisan fishing Family sector agricultural marketing Fish products marketed (artisan) Situation of agricultural markets
Infrastructure	Km of primary and secondary roads rehabilitated KM of tertiary roads rehabilitated and built Percentage of good, bad, reasonable and impassable roads (national level) Number of wells and boreholes re-opened Per cent of people supplied with piped water (rural and urban)
Health	AIDS and HIV prevalence Number of antenatal consultations Number of institutions deliveries Immunization coverage (tuberculosis, polio, measles and tetanus) Low birth weight rate Stunting rate
Employment	Unemployment rate Number of jobs created (rural and urban areas) Social security system beneficiaries (work reintegration)
Social Security	Number of children assisted (engaged in occupational activities, assisted in special centers, provided with food subsidies) Number of disabled assisted Number of elderly assisted Number of drug addicts rehabilitated
Institutional Capacity Building in Poverty Issues	Inclusion of a poverty perspective in sector and province development plans Number of technicians trained in poverty analysis Number of annual seminars and courses in poverty Research results

Main Five-Year Indicators considered:

Maternal mortality rate
Infant mortality rate
Neonatal mortality rate
Number of inhabitants per Health Unit
Poverty gap index
Poverty depth index
Squared poverty depth index
Adult illiteracy rate
Human development index

[5] Ministry of Planning and Finance: "Absolute Poverty Reduction Action Plan (2000-2004)", Maputo, February 2000

Appendix B - Measuring Development Progress: A Working Set of Core Indicators[6]

GOALS	INDICATORS
Economic well-being	
Reducing extreme poverty	
The proportion of people living in extreme poverty in developing countries should be reduced by at least one-half by 2015. *(Copenhagen)*	1. Incidence of Extreme Poverty: Population Below $1 Per Day 2.Poverty Gap Ratio: Incidence times Depth of Poverty 3. Inequality: Poorest Fifth's Share of National Consumption 4. Child Malnutrition: Prevalence of Underweight Under 5s
Social development	
Universal primary education	
There should be universal primary education in all countries by 2015. *(Jomtien. Beijing. Copenhagen)*	5. Net Enrolment in Primary Education 6. Completion of 4th Grade of Primary Education 7. Literac Rate of 15 to 24 Year-Olds
Gender equality	
Progress towards gender equality and the empowerment of women should be demonstrated by eliminating gender disparity in primary and secondary education by 2005. *Cairo. Beijing. Copenhagen)*	8. Ratio of Girls to Boys in Primary & Secondary Education 9. Ratio of Literate Females to Males (15 to 24 Year-Olds)
Infant & child mortality	
The death rates for infants and children under the age of five years should be reduced in each developing country b two-thirds the 1990 level b 2015. *(Cairo)*	10. Infant Mortality Rate . 11. Under 5 Mortality Rate
Maternal mortality	
The rate of maternal mortality should be reduced by three-fourths between 1990 and 2015. *(Cairo. Beijing)*	12. Maternal Mortality Ratio 13. Births Attended b Skilled Health Personnel
Reproductive health	
Access should be available through the primary health-care system to reproductive health services for all individuals of appropriate ages, no later than the year 2015.	14. Contraceptive Prevalence Rate 15. HIV Prevalence in 15 to 24 Year-Old Pregnant Women *(Cairo)*
	Environmental sustainability & regeneration
Environment	
There should be a current national strategy for sustainable development, in the process of implementation, in every country by 2005, so as to ensure that current trends in the Icsc of cr;:-ircrmental resources are effectively reversed at both global and national levels by 2015. *(Rio)*	16. Countries with National Sustainable Development Strategies 17. Population with Access to Safe Water 18. Intensity of Freshwater Use 19. Biodiversity: Land Area Protected 20. Energy Efficiency: GDP per Unit of Energy Use 21. Carbon Dioxide Emissions
General Indicators	
Other selected indicators of development	
For reference: Population Gross *National Product*	GNP per Capita Adult Literacy Rate Total Fertility Rate Life Expectancy at Birth
	Aid as % of GNP External Debt as % of GNP Investment as % of GDP Trade as % of GDP

This list is neither exclusive nor comprehensive and some elements (e.g. environment) remain under discussion. It reflects progress to date in identifying core indicators that are relevant to the development goals selected from the series of UN Conferences held in the 1990s, and which now form a wide consensus on development priorities. The goals were selected because they were important in their own right and as meaningful proxies for broader development goals. The selection does not imply any diminished commitment to other goals accepted by the international community, at international conferences or elsewhere. The list reinforces other indicator initiatives, such as the Minimum National Social Data Set of the United Nations Statistics Division, and the General Data Dissemination System of the IMF.

[6] OECD/ DAC: "Measuring Development Progress, A Working Set of Core Indicators" as discussed in Paris 16-17 February 1998. Refer to http://www.oecd.org/dac/indicators

Appendix C - A technical note contributing to the discussion on how to organize a permanent household survey system.

This mission overlapped with a World Bank household survey mission and hence had the chance to participate in the discussion of a permanent household survey capacity system. The final approach seems to be well balanced between the need for a permanent system and still allowing for a necessary flexibility and also between the need to ensure both a fast production of statistical outputs and traditional quality. The current approach is one where information for the CWIQ is collected every year, usually by collection information in two or three month rounds with a one month stop in between to allow for training and to catch up delays. The CWIQ is based upon scanning of standardized question response and allows for a very fast publishing of tabulation reports. This core also allows smaller or larger modules to be attached to the core, either very small modules where the same scanning approach is applied or large traditional modules such as a Household budget survey. While such as comprehensive approach has a number of advantages it also highlights the need for INE to prioritize within a 5-year and partly a 10-year time horizon. And it follows from this approach that donors should accept that INE should rather combine the overall needs for information and use the donor support to provide information in the framework of INEs household survey program rather than that of individual donors. This approach also requires that INE really take the lead to settle and combine the data needs for different purposes. While the priorities by INE is not finally set, it seems that Victimization, Household Budget Survey and Labor Force Surveys (possibly combined with an Informal Sector Survey) already are on the priority list for the five years to come, while an Education and Health survey and a Time Use survey has also been considered within a longer time horizon. In addition other surveys are also being discussed including an Intercensusal demographic survey, a Demographic and Health Survey and a UNICEF supported Youth and Reproductive Health Survey.

A permanent approach based upon a core set of questions utilizing a scanning approach would be able to include the three most common major types of extra modules being household budget survey, labor force/ informal sector and a demographic/ health survey within each 5-year period. That allows for one census year and three other specialized modules during a ten-year period. Such a systematic approach also allows to develop a system for seasonal adjustments based upon a minimum of 2 years of year around data collection, a rotating panel, special general samples such as women and special adds-on samples such as for monitoring project impact in certain areas.

Time period - example	**Core information**		**Special module**	**Funding**
Aug-Sep, Nov-Dec 2000	CWIQ 2000	CWIQ 2001	None	No
Feb-Mar, May-Jun 2001	CWIQ 2001/I		Victimization	No
Aug-Sep, Nov-Dec 2001	CWIQ 2001/II	CWIQ 2002	Household Budget Survey	No
Feb-Mar, May-Jun 2002	CWIQ 2002/I			
Aug-Sep, Nov-Dec 2002	CWIQ 2002/II	CWIQ 2003	Intercensus/ Demographic & Health, Youth & Reproductive Health	Yes
Feb-Mar, May-Jun 2003	CWIQ 2003/I			
Aug-Sep, Nov-Dec 2003	CWIQ 2003/II	CWIQ 2004	Labor Force/ Informal Sector	No
Feb-Mar, May-Jun 2004	CWIQ 2004/I			
Aug-Sep, Nov-Dec 2004	CWIQ 2004/II	CWIQ 2005	Option: Time Use	No
Feb-Mar, May-Jun 2005	CWIQ 2005/I			

Appendix D - The SNA-NT software

The history of computerized National Accounts with SUT in Norway.

Input-output tables have been included as an integral part of the national accounts compilation in Statistics Norway already from 1952. The commodity flows of the input-output tables in current and constant prices, constituted the core of the Norwegian National Accounts from that time. Already from the end of the 1950's, computers were used for compiling the national accounts and balancing the supply and use of commodities.

Norway has always been a strong follower of international recommendations in the area of national accounts. When SNA 1968 was implemented in 1973, the full SNA matrix was established as the framework for the Norwegian National Accounts. New computerized routines were established for compiling Supply and Use Tables (SUT) in current and constant prices.

Based on the experience from compiling SUT in Norway, a simplified software for compiling SUT for developing countries (SNACZ) was developed in the 1980's for Jamaica and later for Zimbabwe. The SNACZ software is running under DOS on portable PCs.

The Data Processing Architecture for the Norwegian National Accounts System

The new, integrated Norwegian National Accounts System has been developed as a Client-Server-System, where the clients are Windows PCs and the server is a relational database, specifically Oracle version 7.3 or 8.

The software has been used for compiling the Norwegian National Accounts with both Supply and Use Tables, Integrated economic accounts for institutional sectors and Tourism Satellite Accounts for the years from 1978 and with 1996 as the last final version.

The software has been developed in several stages from 1993 to 1999. In 1998 the software for compiling Supply and Use Tables (SUT) and »Tourism Satellite Accounts» were transferred from a SUN UNIX computer, to a PC with Windows NT 4.0. A graphical user interface (GUI) was added to make it more user-friendly, and the software package was given the name SNA-NT. SNA-NT has been developed using Microsoft Visual C++.

The user interface consists of a number of dialog boxes for starting and running the SNA-NT application. The SNA-NT software will establish and update Supply and Use Tables (SUT) in current prices. The software also converts the SUT in current prices of the particular year to the prices of the previous year. A procedure, to convert the Supply and Use Tables into »Industry format» Input Output Tables (I-O) in current and constant prices is also part of the package. The SNA-NT software also contains a module to produce Tourism Satellite Accounts.

A user interface has recently been developed for the Integrated economic accounts, so the package now covers the complete national accounts system.

The experience from developing the SNACZ software for Jamaica and Zimbabwe was taken advantage of when defining the SNA-NT software as a flexible system for use also in other countries.

The SNA-NT software is portable and can without alterations be adapted for use in both large and small, developed and developing countries.

Input data are loaded into the database from ASCII (text) files. The formats of the different input files are described in a separate handbook. Macros are provided for transferring input data from Excel files to ASCII files.

Several versions of National Accounts SUT are stored in the same Oracle database, each identified by different Oracle "ID's". For instance, the National Accounts for year 1997 in current prices will be stored as

"SNA97", the year 1998 as "SNA98". When connected to the database, only the current set of the National Accounts SUT is visible.

The database is kept consistent at all times, i.e. when any element changes, the associated "Changes in inventories" and other residuals are changed at the same time.

Environment Required

The SNA-NT software is supplied on a CD-ROM with the set of SNA-NT Handbooks (Written in Word 97). This CD-ROM does not include the ORACLE Server software. This must be obtained and installed separately.

The PC should also run Excel, to prepare input data and publish reports and Word as the SNA-NT handbooks and other documentation are in Word format.

SNA-NT can be used as a Single User system or a Multi User system.

The Single User System has both the database and the SNA-NT application on the same PC. The Multi User System has the database on a separate server.

A Single User System for a small National Accounts Office:
One Windows-NT Pentium PC with 300+ MHz processor, 64+ Mb RAM, 2+ Gb Harddisk and a CD-ROM drive.

A Multi User System (network):
Consists of a server and multiple clients connected to it. The server can be a Windows-NT PC equipped with Oracle Server). For running the SNA-NT software application, release 7.3 or newer of the Oracle software is required. It is advised that the server is the strongest PC in the network with a large harddisk (8+ Gb).

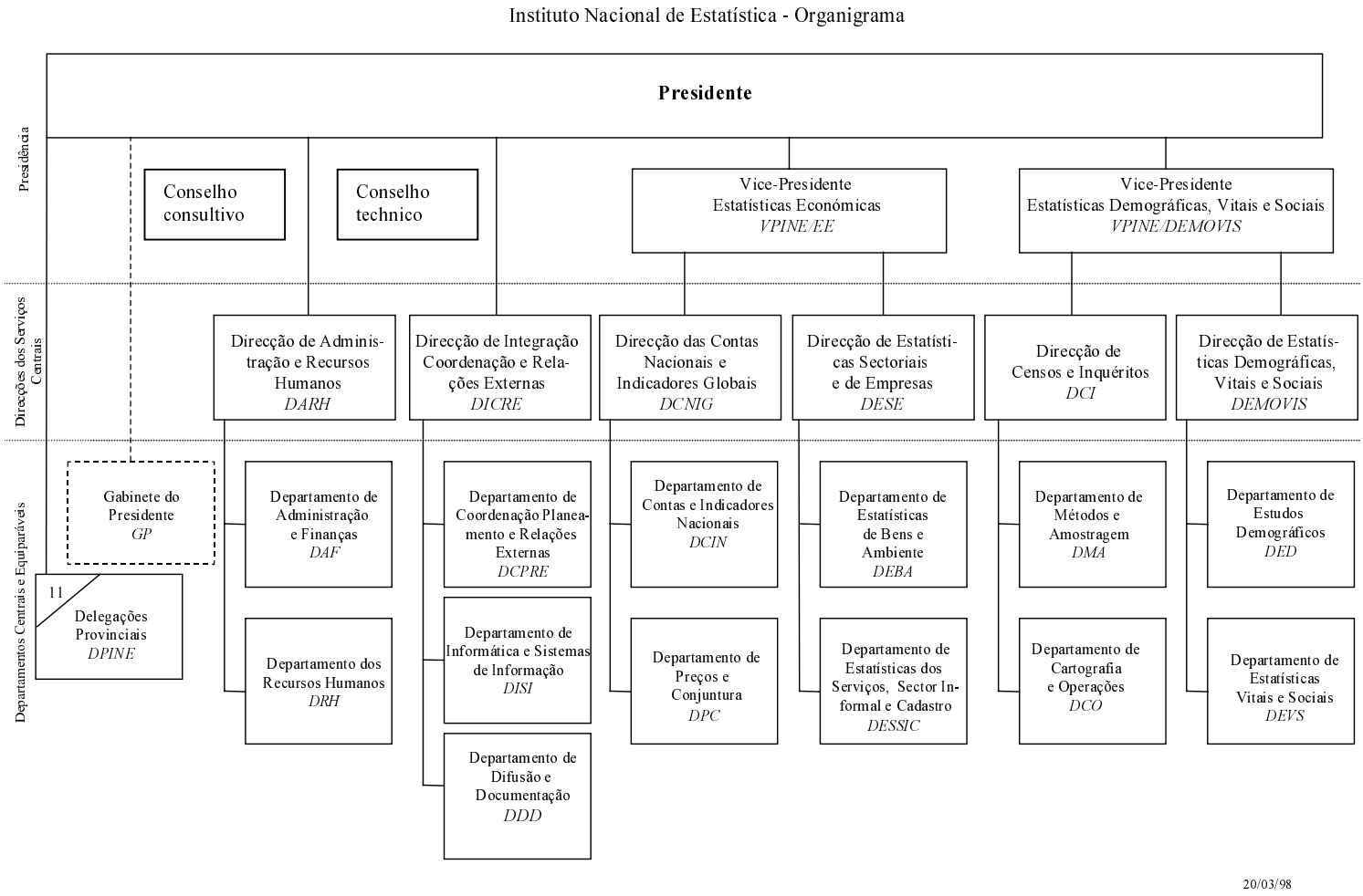
Each user of the network is connected via a (client) PC. The minimum client PC is a Windows-NT Pentium PC with 200+ MHz processor, 64+ Mb RAM and 2+ Gb Harddisk. The client PCs must be connected to the server over a TCP/IP network.

Technical Assistance and Training

The SNA-NT software is only provided in combination with training, according to a contract with Statistics Norway. Economists should give the training with experience from National Accounts compilation, using the SNA-NT software in the National Accounts Division in Statistics Norway.

- Follow up support should also be provided according to a contract with Statistics Norway. The contract should cover an E-mail service and later follow up visits to and from users, as required and agreed upon.

Appendix E - Organigram



Appendix F - Long term assistance to INE[7]

1. Twinning Agreement between INE and Statistics Sweden

This agreement was originally a 5 year programme 1998-2002 to be financed by the World Bank, but the Bank pulled out after 2 years. The rest of the project is to be financed by SIDA who has deposited 2 million US$ in a World Bank trust fund to pay the rest. The funds can only be used for technical assistance and study tours.

4 long term advisers are in place, two from Statistics Sweden and two from Statistics Norway who is subcontracted in the Twinning arrangement. This Twinning arrangement covers a large part of the statistical production, Social, Business and Economic Statistics as well as IT. The plan is that the long term advisers during the second half of 2000 gradually will be replaced by two new long term advisers, tentatively one team leader who will also advise on Social Statistics and another person on Economic Statistics.

1998-2000: 4 resident advisers and short term consultancies
2001-2002: 2 resident advisers and short term consultancies
Total project budget (All amounts are rough estimates given by the Twinning arrangement):
1998: 900,000 USD; 1999: 800,000 USD; 2000: 900,000 USD; 2001: 500,000 USD
2002: 500,000 USD

The possibilities to extend the funds to cover further consultancies during 2001-2002 have also been discussed with SIDA. IT has been mentioned as an important topic for another possible long term adviser.

2. Other long term advisers to INE

FAO, Agriculture Census
Resident adviser since 1998
Italian Government, IT/Network
Two resident advisers
USAID, Population Census
Resident advisers, to be terminated March/April 2000
German Government (GTZ), Support to Provincial Offices
Long term advisers for the support of regional statistics (a continuation of a support initiated by the Portuguese Government)

- Maputo city (since one year)
- Beira (since one year)
- Nampula (since 6 months)

UNFPA, Demographic and Health Survey
(terminated)
USAID, IT
(terminated)
UNDP, National Accounts
UNDP is financing a long term adviser in national accounts. This is an important area where the expertise is limited in INE. The assignment for the long term adviser has gradually been prolonged. It is however not expected to continue during 2001.

[7] Copy from the Statistics Denmark report

Appendix G - Persons met[8]

Persons met by Statistics Norway mission
INE (info@ine.gov.mz)
Management
Mr João Dias Loureiro, President (loureiro@ine.gov.mz)
Mr Manuel da Costa Gaspar, Vice President, Person Statistics (gaspar@ine.gov.mz)

Directorate Integration, Coordination and External Relations
Ms Assa Guambe, Director

Directorate Censuses and Surveys
Mr Paulo Alberto Mabote, Director (mabote@ine.gov.mz)

Directorate Demography, Vital and Social Statistics
Ms. Destina Eduardo Sidónio Winge, Director (destina@ine.gov.mz)

International Monetary Fund, Mozambique
Mr Arnim Schwidrowski, Resident Representative (aschwidrowski@imf.org)

Royal Danish Embassy, Maputo
Ms Esther Lønstrup, Councellor (estlon@mpmmz.um.dk)

Royal Norwegian Embassy, Maputo
Mr Jan Arne Munkeby, Minister Councellor
Mr Jan Eriksen

Royal Swedish Embassy, Maputo
Ms Maude Svensson, First Secretary (maude.svensson@sida.se)

Statistics Sweden
Mr Kenny Pettersson, Senior Statistician (kenny.pettersson@scb.se)

The World Bank, Mozambique Resident Mission
Ms Sherri Archondo, Financial Specialist (sarchondo@worldbank.org)

Twinning Arrangement between INE and Statistics Sweden
Mr Leif Norman, Team Leader (leifnor@teledata.mz)
Ms Gunvor Iversen, Consultant, Demographic and Social Statistics (gunvor@virconn.com)
Mr Leif Korbøl, Consultant, Economic Statistics (korbol@virconn.com)
Mr Bo Yttergren, IT Consultant

Agricultural Census
Mr. Chris Hill, FAO Technical Advisor

Additional persons met by Statistics Denmark mission
INE (info@ine.gov.mz)
Management
Mr Valeriano da Conceição Levene, Vice President, Economic Statistics
(vlevene@virconn.com)

Directorate Administration and Human Resources
Ms Manuela Xavier, Director (manuela@ine.gov.mz)
Mr Domingos Mateus Maringue, Head, Administration and Finance

[8] Based upon the Statistics Denmark report

Mr Artiel Arnaldo, Head, Human Resources
Mr Zenóbio Luciano Aramuge, Téc. Est. 'A', Administration and Finance

Directorate Integration, Coordination and External Relations
Mr Tomás Bernardo, Head, Information Systems Department
Mr Luis Mungamba, Systems Analyst, Dissemination Department
Ms Alda Rocha, Head of Department, Planning and External Relations

Directorate Business Statistics
Mr Azarias Marcos Nhanzimo, Director (nhanzimo@ine.gov.mz)

Banco de Moçambique
Mr Armindo Monjane, Director, International Relations
Mr Carlos Melo Jó António, Team Leader Bilateral Co-operation
Mr Lino Kanji Junior, Technical Assistant
Mr Felistero Dinis Navalha, Economic and Statistics Department (fdnavalha@yahoo.com)
Mr Antonio Luçiano Jossefa (ajossefa@yahoo.com)

Central Police
Mr ...

Legal Sector Project
Ms Nina Berg, Danida Adviser

Ministry of Education
Mr Mads Meinert Jensen, Danida Adviser

Ministry of Planning and Finance
Ms Vitoria Ginja, Director Planning
Mr Pedro Couto, Department for Economic Studies
Mr Piaraly, Head of Department for Macro-Economic Anaysis

Ministry of Women and Social Affairs
Mr Augusto Laurenço, Head of Statistics, Department of Planning and Co- operation
Ms Vicente

Ministry of Labour
Mr Abilio Mussane, Director of Statistics

National Directorate of Prison
Mr ...

Provincial Delegation of INE, Maputo City
Ms Lusia, Director
Mr Tripkorn, GTZ Adviser

Royal Danish Embassy, Maputo
Mr Thomas Schjerbeck, Ambassador
Ms Trine Næraa-Nicolajsen, Local Assistant (trnman@virconn.com)

State Attorney
Mr ....

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[9] Based upon the Statistics Denmark report

Appendix I - Terms of Reference

TERMS OF REFERENCE

SUPPORT TO INSTITUTO NACIONAL DE ESTATÍSTICA (INE), MOZAMBIQUE

INDENTIFICATION MISSION

BACKGROUND

The Mozambican society has seen profound changes in the latter years. Economic and social restructuring programmes, emphasising economic growth and improving living conditions, has made it increasingly important that the official statistical system can provide reliable and timely statistics. The private sector needs reliable information for decision making, e.g. in relation to future investments in the country, and measurements of performance and achievement of goals of public services in for instance health and education can only be made on the basis of objective and independent statistics. Also the implementation of sector programmes resulting in more donor funds being channelled through the state system will require more efficient tools, especially in the areas of financial management and statistics, as well as better reporting on outcome and impact on the Mozambican society as a result of the development effort.

In response to this a National Statistical System (SEN) and a National Statistical Institute (INE) were created in 1996. INE is an autonomous institution with direct reference to the Council of ministers and INE is thus the official national board overall responsible for conducting surveys and processing and storing data. By resolution No. 1/99 a general frame for the national statistical production for the period 1998-2002 was approved by the Superior Council of Statistics, in which priorities were established for the co-ordination, production, quality control and dissemination of statistics. A national statistical five-year plan 1988-2002 was prepared on the basis of this general frame. The central bank, Banco de Moçambique, remains responsible for the preparation of monetary and balance of payment statistics, now within the framework of the SEN.

In order to ensure co-ordination among data collectors, as well as to ensure that the procedures defined for the collection, processing and dissemination of data are adhered to, a co-ordination board, the National Council of Statistics, has been established. Representatives from all ministries and other governmental institutions are members of the board. All institutions collecting statistical data – both governmental and non-governmental – must seek permission from and follow the procedures set by INE and approved by the National Council of Statistics before they conduct surveys and report results on completion to the INE.

INE's five-year plan 1998-2002 emphasises the importance of developing a thorough database within the areas of economic, social, socio-demographic, and gender statistics. In order to develop a system of social statistics, INE currently receives technical assistance through a twinning arrangement with Statistics Sweden and Statistics Norway. The Department of Demographic, Vital and Social Statistics within INE is currently planning the introduction of two systems:

i) collection, processing, analysis and dissemination of socio-demographic data and social indicators, and
ii) improvement of gender statistics for Mozambique.

Regarding a socio-demographic statistics and social indicator system in Mozambique, INE has opted for the Core Welfare Indicators Questionnaire (CWIQ 2) developed by the World Bank and used in several countries. It is planned that the CWIQ will be conducted annually, starting in 2000. Further, it is being considered to undertake an extensive and in-depth household budget and income survey every five years. One was conducted in 1996/97, and the next is planned for publishing in the beginning of year 2000.

At the moment several countries, including Norway, are in the process of preparing a comprehensive, common proposal for a programme of institutional capacity building and public and financial management. The proposal recommends a certain support to the area of statistics, as a basis for drafting of and follow up of economic and social development policies.

In addition to the twinning arrangement mentioned above, some other projects are already on going to support INE, amongst them:
UNDP supports a project on National Accounts and DANIDA supports the pilot testing of the CWIQ-survey. Norway has been approached about financing of the two first survey rounds. Initial discussions have taken place between the Nordic countries – Denmark, Norway and Sweden – and with INE to seek a common and comprehensive approach in order to avoid a fragmented support in which individual donors finance one or more elements.

OBJECTIVE OF THE STUDY

The objective of the study is to produce a recommendation as to how NORAD best can support the statistical area and the work of INE, taking into account the level of competence and capacity of the institution and needs expressed in government overall plans. This will include which areas within the field of statistics that are most relevant, means to make the statistics relevant to the users, what type of support to be provided and the optimal way of channelling the support.

The study should put specific emphasis on the organisational aspect, i.e. discuss different alternatives for the project structure and financing. Of particular interest will be an assessment of pro and cons with respect to donor constellation and participation, and the channelling of funds.

OUTPUT OF THE STUDY

The consultant shall produce a brief report recommending possible

i) strategic statistical areas in need of support
ii) type of support needed
iii) channels of support
iv) linkages to other ongoing and planned initiatives in support of statistics in Mozambique

SCOPE OF WORK

The consultant shall acquaint himself with the framework in which possible assistance to the statistical area is to be provided, such as the human resource situation, the public sector reform and proposed support to capacity building in financial management, other donor support, and ongoing activities within INE.

General Aspects

- General assessment of the Five Year Plan 1998-2002 for development of statistics in Mozambique seen in the light of the overall development context of the country and the requirements
- General assessment of the needs in terms of institutional and human resource capacity of INE required for providing the results stated in the Five Year Plan compared to existing capacity
- Overall assessment of the budget allocations from the state (OGE) for the statistical area
- Brief description and assessment of assistance already being provided by other donors and institutions to INE
- Brief description of the outcomes of the PRSP mission to Mozambique in January this year

Statistical area and activities to be supported

- Based on the previous assessment and requests for support expressed in meetings with INE, a recommendation should be made on statistical areas and activities that could be supported by NORAD.
- The proposal should be in line with the donor proposal for institutional capacity building in public and financial management as well as NORAD's country strategy for Mozambique.

Type of support

There are mainly two alternatives here;

1. Technical assistance and institution building, for instance through Statistics Norway, Statistics Sweden or Statistics Denmark
2. General financial support to INE, not related to specific technical assistance, but preferably in conjunction with other donors

Different modalities of cooperation should be discussed.

Channelling of support

There are several alternatives that need to be explored;

- Support through an already existing program, the SIDA/WB project will be particularly relevant.
- Support in co-operation with DANIDA.
- Support through a Sector Wide Approach (SWAP), for instance as part of the drafted "Institutional capacity building programme in public and financial management".
- Direct support to INE in a bilateral project.

Although all 4 alternatives for channelling of support should be considered, a project in conjunction with other donors is preferable, given that a sound and rational organisation structure can be agreed on. Whatever the type of project or channel of resources, the consultant should primarily be looking for a project structure where NORADs administrative burden is limited. Whilst a project entailing a limited administrative burden for NORAD is preferable, it is a prerequisite that the recommended structure satisfies NORADs customary demands as to reporting and financial management.

METHOD OF WORK

The consultant will be working with a Danish team doing a similar study for DANIDA (TOR attached). This implies conferring more or less the same background information, taking part in the same meetings, discussing alternatives for Scandinavian co-operation and in general organising the mission to

mutual benefit. The two teams should jointly meet with the Danish, Swedish and Norwegian Embassies to discuss progress and preliminary ideas for future cooperation.

REPORTING

The report should be finished within 4 weeks of the termination of the mission. The main body of the report should be no more than 15 pages excluding annexes.

DURATION AND TIME FRAME

The mission is scheduled from March 26 to 31. The Danish team is starting the fieldwork one week earlier. It is recommended that the consultant stay in touch with the Danish consultants during their first week in order to be updated on their findings. The time used in Norway to write the report should not exceed 1 week.

Oslo, 23 March, 2000

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