

Final Mission Report
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INSTITUTIONAL CAPACITY BUILDING,
ECONOMIC STATISTICS AND RELATED AREAS**

between

INE and Scanstat

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INSTITUTO NACIONAL DE ESTADÍSTICA

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Summary in English

The following report spans 12 years of Scandinavian support to the National Statistical Institute of Mozambique. It will highlight some of the issues, activities and results that I think have been important during the period. More details regarding specific years can be found in my annual reports at www.dst.dk/mozambique.

The principal goals for the project here at INE have been based on the strategic goals of INE / SEN that once were defined to:

- Raise the level of knowledge and awareness of statistical habits and practices for national development.
- Facilitate the building and maintenance of robust information solutions and systems and communications technologies to collect, share, access and disseminate statistical information; as well as architecture for database and Internet management.
- Assist in the maintenance of a high motivation, personnel management and an efficient training environment.

At INE I have worked with the whole institution, even if the Directorate of Integration, Coordination and External Relations, DICRE, has been the most important counterpart as being the coordination centre for the INE and the SEN, the National Statistical System. Depending on the subject, I have also coordinated and worked with other Directorates of the INE and SEN, especially in connection with the various short-term advisory missions from Scanstat. A list of these missions can be seen in Annex 1 at the end of this document and the reports from the missions can be found at www.dst.dk/mozambique.

Outline

This my final mission report is covering the activities that have characterised my part of the cooperation between INE and Scanstat during the years 2005–2017. The Scandinavian support to INE started however already 1995 with assistance to the creation of a new statistical law. In 1998 the cooperation expanded with the start of a five-year twinning project between INE and Statistics Sweden and Statistics Norway. This was to be replaced 2003 by the “Scandinavian project” where also Denmark became an active partner. In 2008 the INE common fund was established and the Scandinavian NSOs, in the form of the consortium Scanstat, were hired directly by INE, financed by the common fund. More about this can be read in my Annual Report 2016¹.

1995 – 1997	Initial contacts	Preparations: Statistics Sweden and World Bank
1998 – 2002	Strengthening Phase	Twinning project: Statistics Sweden and Norway
2003 – 2007		Programa Escandinavo: Statistics Denmark, Norway and Sweden
2008 – 2012	Consolidation Phase	
2013 – 2017	Phasing Out	

¹ MZ:2017:01 Status Report 2016 LTA in Institutional Capacitation at www.dst.dk/mozambique

Resumo em Português

O relatório a seguir envolve 12 anos de apoio escandinavo ao Instituto Nacional de Estatística de Moçambique. Ele irá destacar algumas das questões, actividades e resultados que eu acho que foram importantes durante o período. Mais detalhes sobre anos específicos podem ser encontrados em meus relatórios anuais em www.dst.dk/mozambique.

Os principais objectivos do projecto aqui no INE basearam-se nos objectivos estratégicos do INE / SEN que foram definidos para:

- Elevar o nível de conhecimento, consciência, hábitos e práticas estatísticas para o desenvolvimento nacional.
- Facilitar a construção e manutenção de soluções robustas de sistemas e tecnologias de informação e comunicação para recolher, compartilhar, aceder e disseminar informação estatística, assente numa arquitectura de gestão de bases de dados e Internet.
- Estimular um ambiente de alta motivação, gestão e treinamento do pessoal.

No INE trabalhei com toda a instituição, mesmo que a Direcção de Integração, Coordenação e Relações Externas, DICRE, tenha sido a contraparte mais importante, como sido o centro de coordenação do INE e do SEN, o Sistema Estatístico Nacional. Dependendo do assunto, também coordenei e trabalhei com outras Direcções do INE e SEN, especialmente em conexão com as várias missões de consultoria de curto prazo do Scanstat. Uma lista dessas missões pode ser vista no Anexo 1 no final deste documento, e os relatórios das missões podem ser encontrados no www.dst.dk/mozambique.

Esboço

Este meu relatório final abrange as actividades que caracterizaram a minha parte da cooperação entre o INE e o Scanstat nos anos 2005-2017. O apoio Escandinavo ao INE começou em 1995, com assistência à criação duma nova lei estatística. Em 1998, a cooperação expandiu-se com o início de um projecto de geminação de cinco anos entre o INE e os INE da Suécia e da Noruega. Isto foi reencaminhado em 2003 pelo "Projecto Escandinavo", onde também a Dinamarca se tornou parte activa. Em 2008, o fundo comum do INE foi estabelecido e os INE Escandinavos, sob a forma do consórcio Scanstat, foram contratados directamente pelo INE, financiadss pelo fundo comum. Mais sobre isso pode-se ver no meu Relatório Anual 2016².

1995 – 1997	Contactos iniciais	Preparações: INE Suécia e Banco Mundial
1998 – 2002	Fase de Fortalecimento	Projecto de Geminação: INE Suécia e Noruega
2003 – 2007		
2008 – 2012	Fase de Consolidação	Programa Escandinavo: INE Dinamarca, Noruega e Suécia
2013 – 2017	Phasing Out	

² MZ:2017:01 Status Report 2016 LTA in Institutional Capacitation at www.dst.dk/mozambique

Strengthening phase 2003-2007

The project document governing the work during the strengthening phase has the following brief description of the Scandinavian programme 2003-2007:

The long-term objective of the programme seeks to strengthen the National Statistics System through the National Statistics Institute (INE) so that it will efficiently generate reliable, relevant and timely statistical information to support the planning, management, monitoring and documentation of Mozambique's economic and social development. This will be achieved through the provision of long and short-term technical assistance, formal and in-house training and general budget support, assisting in the preparation of key statistical series urgently required for social and economic management and planning. The bridging programme for 2002 will give continuity to the institutional cooperation between INE and the Scandinavian countries, finance ongoing statistical programmes, two important surveys and provide the basis for the cooperation 2003 - 2007. Support to INE will be provided by Denmark, Sweden and Norway in the form of a joint Scandinavian institutional support programme in cooperation with the Scandinavian Statistical Bureaux's.

The Scandinavian program

In 2005 the project already was well on its way in strengthening the basic infrastructure for statistical production. My role was to act as team leader³, continuing the work of my predecessor. Specific responsibilities were to co-ordinate the project activities at INE, to assist INE's own project director and to be the liaison with the donors, especially the Danish Embassy as being lead donor. At that time the Scanstat consortium had three long term consultants, spread out all over the central organisation of INE in Maputo. One was a specialist in national accounts from Statistics Sweden, another was specialist in social statistics from Statistics Norway and the third a specialist in information technology, hired through Statistics Denmark. A fourth specialist in economic statistics was still to be recruited.

During this phase, an important role for our Scanstat consultants was to show new ways of producing statistics, to propose new initiatives and suggest new statistics needed to describe the situation in Mozambique. My terms of reference were detailed and project specific, as can be seen in Annex 1. The work at that time was centred around the project document, Prodoc. The enthusiasm was high and the staff of INE was eager to achieve new competence contributing and proving that INE as an institution was becoming an important part of Mozambican administration. The project was rather well integrated into INE's activities and the project activities were to a large extent already a part of INE's ordinary day-to-day activities. The INE Project Director was our most important counterpart being the one responsible for the overall coordination and the one to initiate new project activities.

³ My Inception Report MZ:2005:15 and my annual reports can, like all other Scanstat reports since 2002, be found at www.dst.dk/mozambique

The role as Team-Leader involved annual activity planning of the consortium activities in order to ensure that they were coordinated with INE's own plans. In year 2005 the major part of my work was about planning and administration. The Scanstat advisor in ITC assisted in the implementation of the data warehouse, quality systems and internal organisation of the ITC unit, while our advisor in National Accounts helped to install a new system for handling NA. During 2005 the program had 15 short-term consultants in 11 missions. A monitoring visit by the Scanstat Coordination Office represented by Statistics Denmark was also made and also the respective heads of the international units of Statistics of Sweden and Statistics of Norway made short visits.

Technical assistance and on the job training in the year 2005 were developed in the form of the following core activities:

- A) Planning: Planning, budgeting and implementation of technical and financial assistance projects The regular planning of INE activities Monitoring the execution of activities and their costs Assistance and support to Systematic Quality Work Management activities, based on short-term consultancies and all the other formal and informal working meetings between the INE and the Scandinavian parties
- B) Demographic and Social Area: Quality issues Assistance in the preparation of the Millennium Development Goals report Assistance in processing and analysis of IFTRAB data (the labour force survey) Review of the methodological aspects of the integration of the IAF program (the household surveys)
- C) ITC Policy and Strategy: Start of the practical implementation of the Documentation Standard Initial design of a simple ITC Management Information System Design and initial implementation of a robust DPINE environment (for the provincial delegations of INE) Planning and start of the implementation of a Data Warehouse.
- D) Basic Economic Statistics: Support to activities within this statistical field were still awaiting the extension of the Scanstat - Danida contract making it possible for recruiting a long-term adviser.
- E) National Accounts: Documentation Change of Base Year Processing system Future Development Strategies

Most of the short-term missions were normally accompanied by internal courses/seminars/ lectures at INE. Short-term missions⁴ assisted by the program during 2005 covered the following areas:

⁴ As said before all reports *MZ:Year:Nr* can be found at www.dst.dk/mozambique

□ Promoting Users Dialogue (external seminar) □ STAC Statistics in Action (part 2 of the complete course) □ National Accounts Data Flow □ Data Warehouse □ Gender statistics (external seminar) □ Development of Human Resources (internal workshops) □ Social Statistics - Basic Analysis (in the form of a workshop) □ Environment Statistics (together with MICOA – the Ministry of Environment) □ Poverty Modelling/Analysis (in the form of a workshop) □ Product-based Cost Accounting □ System Security / Migration to Windows 2003

Quality and continuation

The year 2006 continued in a similar way when it came to the work of Scanstat. A Census 2007 Pilot was made and evaluated positive with only some minor changes in the setup to be made. Even if the census preparations took more and more time and resources the Scanstat team continued with its long-term ambitions. The quality of statistics had been in focus since the beginning of the project and concepts like TQM, Total Quality Management, was important. In terms of quality management, a need existed to reinforce the quality group that had been formed some years ago. Quality work ought now to be looked upon as profitable and increasing the status of INE among national and international observers. INE management agreed on this and the quality group's ability to work was reinforced.

At a steering committee meeting later that year INE presented the economic situation of the project and the preliminary activity plan and budget for the next year. It was the first time INE has presented these plans as early as in November. The donors were satisfied and hopefully this could continue to be a tradition. The last point of the meeting was about possible Scandinavian support to INE also after 2007. Denmark and Norway were interested in continuing the support and also Italy, if an open arrangement could be created. Denmark was to initiate a light evaluation of the project already in February the coming year.

Information Technology and Communication

When the Scanstat long-term advisor in ITC left INE in 2006 he considered the ICT-department as being in a rather healthy state⁵: Its management had good grasp of the fundamentals of IT management and the technicians were reasonably capable, though capabilities and commitment varied a lot within this group. But importantly, those staff members servicing the basic infrastructure were qualified to do so. Still, execution was nowhere near smooth. The main reasons for this could be traced to: • Lack of access to financing for executing of any given task, maintenance included. This was true even when the activity was budgeted. • Lack of access by management of the ICT-department to its own staff. Further, staff was often used by others without asking permission and without giving notification. • Lack of skill and commitment by certain staff, exacerbated by lack of control of the departments own personnel.

⁵ MZ:2006:10

These gaps were dealt with in different ways. A highly experienced consultant from Statistics Denmark was asked to come here to give further advise on IT Management and Strategic IT use. The previous long-term consultant in ITC had together with his counterpart made a draft strategic ITC plan that never was decided.

This might sound strange but at that time the development of ITC happened so quickly that a plan written today would be outdated tomorrow. This was true not only for INE Mozambique but also for many other NSI's worldwide. Regarding the financing of ITC, it had much to do with priorities and it became better with the introduction of the INE Common Fund arrangement. When it comes to management and organization of the ITC staff there have been two international trends. One that the ITC-staff should be decentralised out to the various subject matter units where the statistics actually are produced. This is to secure that the ICT personnel really gets a knowledge and understanding of the statistics. It will facilitate and speed up communication between ICT people and statisticians. On the other hand, INE did not have many ICT officials at that time and if all were spread out evenly among the subject matter units they would work like a set of 1-man teams resulting in a wide variety of solutions. This model also makes it difficult for INE do develop routines covering the whole institution. The other extreme, that all ICT staff is centralised to one ICT unit has the advantage that the management has full control, making it possible to plan and implement features common for the whole institution. And ICT resources can be prioritized and shifted between subject matter areas. The downside is that the gap between ICT staff and statisticians is widening. Following a tradition of caution INE went somewhere in between. Other institutions, like Statistics Sweden, has instead shifted between the two extremes with a periodicity of five to six years. Sometimes the ITC staff is out localised to the subject matter units and sometimes they are centralised in the ITC unit. With better communication models the gap between the extremes ought to lessen. The third point is serious. *“Lack of skill and commitment by certain staff”*. Lack of skill can be remediated by more training and that was also done. However, ITC at that time was in rapid change and skills quickly got outdated, needing an almost continuous refreshment. The institution therefore must create a working environment that stimulates the staff to actively search for new knowledge. This was a challenge for INE and Scanstat, that contributed to the modernising project.

Gender statistics

Gender is one of the most important factors deciding how life will be. The goal has been to make the gender perspective sustainable in improving the whole National Statistical System (SEN). As a part of this work INE has since 2003 published an annual publication addressing gender perspectives in Mozambique, called “Mulheres e homens em Moçambique” (“Women and Men in Mozambique”)⁶. There is however a need to define more indicators reflecting gender inequality in the different sectors of society. Private

⁶ See for exemple MZ:2005:18 and MZ:2006:07

sector indicators should be included to increase information coverage. More of census and survey data can be used to improve information on the gender perspective, as well as to create new indicators. The dissemination of the publication can still be improved and through further collaboration with outer producers and users of related statistics in Mozambique.

INE now wants to improve the publication by raising the number of indicators that reflect a gender perspective and to establish a gender statistics database. But the success of this is not only due to what is produced. It is also necessary that the statistics produced is used. If one looks at agricultural statistics produced in the late 90-ties a gender perspective was well visible. But since then the general reports on agricultural statistics have shown less and less of a gender perspective. This is not because the information has not been collected, but rather due to a low general demand on this type of information. Clearly a continued effort by INE/SEN in raising the statistical literacy is important also in this field.

Training - formal and informal

In 2007 an evaluation was made of the Scandinavian assistance to strengthening institutional capacity of the national statistical institute (INE) during the period 2003-2007. One conclusion was that perhaps the greatest contribution of the project to INE and SEN was in the development of human capital i.e. in the development of skills, expertise and competencies through the comprehensive and needs-based training programme used. This was made both through formal and informal training. When the programme started the shortage of qualified staff was a problem in respect to implementing the daily work, the censuses and surveys, and the training of the staff.

Ten years later the situation was better with qualified trained personnel as a result of participating in various courses. A considerable number of staff had completed degrees and many more were current scholarship beneficiaries expecting future degrees. Informal training: Staff skills and expertise for both headquarters and provincial staff had also been up-graded through on-the-job training by short-term and long-term advisors, workshops and seminars on various subjects (data quality, sampling, national accounts, IT, English, leadership, planning, management, etc), study tours, technical assistance from a distance and group training on specific surveys. Some of the short courses were undertaken outside the country but the majority were held at INE and the recommendation was that these short courses should be continued and intensified.

Now, after almost 20 years with the Scandinavian programme INE has a staff that at management level is experienced and well educated in general. Formal training has been prioritised and already in the year 2005 there were 56 employees studying full time in Mozambique and abroad, mostly financed by the Scandinavian programme. Here an example on the diversity of the levels and subjects:

- Master's degree - 11 employees with the following specialisations: Population and Development (3), Economics (3), Economics and Management (1), Management of Educational Sciences (2), Statistics (1), Management of Statistical Projects (1).
- Bachelor's degree – 49 employees with the following specialisations: Statistics (13), Business Administration (7), Management (3), Economy and Management (3), Economy (1), Management of Human Resources (2), Management and Accounting (1), Management and Finance (1), IT and Management (1) Computer Engineering (1), Legal Sciences (2), Accounting and Audit (2), Geography (2), History and Geography (1).
- Mid-level studies - 5 employees with the following specialisations: Documentation (3), Systems Analysis and Programming (1), Accounting (1).

The majority of these employees are still working at INE and many more have since then been through the same type of degree level studies, at the same time as the educational level of newly recruited personnel have gone up over the years, to almost 100% on academic level. The situation now is that INE have 50% of its staff trained at Masters and Bachelor level. The educational level thus seems to be sufficient when it comes to formal education among the producers of statistics. What is needed as a complement now are some experts on sampling, analysis, dissemination, ICT, and other specialised skills. The number of needed experts in each speciality is not very big but it is important to secure an institutional setup that can offer trained staff the necessary conditions to use and expand their knowledge in a constructive way.

Sector strategic plans

During 2007 INE finalised the definition of its global Strategic Plan (PE SEN 2008-2012) together with the SEN and other stakeholders. In its next step, the Strategic Plan tried to ensure that appropriately defined, harmonized and integrated Strategic Sector Plans were developed at the line ministries taking part in the production of official statistics. Further dialogue was made leading to improved sectoral linkages and generation of better quality statistics. Valuable help in this work was given by a Scanstat consultant from Uganda Bureau of Statistics⁷. Among other things she advised INE to;

- Reinforce the Directorate of Integration, Coordination and External relations with at least 2 officers to handle the upcoming pressure of supporting sector strategy design, implementation and monitoring.
- Identify inconsistencies in existing sector strategic plans. This should be done in a standard format to further facilitate harmonisation and integration of sector strategies into the PE SEN.
- Establish structures (sector working committees, and an inter-agency committee for statistics) to further strengthen coordination and harmonisation of statistical activities, sharing of resources, ensuring data quality and reducing of duplication.

These were important advises and a lot of work was done to follow them. As the first

⁷ MZ:2007:08 and MZ:2008:03

advise dealt with the internal organisation at INE it was rather easy to resolve. But the second and especially the third advise were more complicated as they were dependent on external factors outside direct control that INE could express at that time. A lot of meetings were made with the line ministries and we also arranged for the consultant to return to Mozambique to give more ideas on mainstreaming sector statistics with the new national strategy for the development of statistics. But despite these efforts, INE and SEN still has to do more to secure that the national statistics system functions as well as conditions allows. In many ways this situation is parallel to the current situation in most European countries where the NSI is grasping with coordinating the national statistical system and ensuring that statistics produced by line ministries follows relevant international methodological standards and are produced independent of political considerations.

The INE Common Fund

For the next phase, it was important to continue taking steps to avoid the tendencies that INE was splitting up in various project activities, externally financed with their own independent project organization, financial system, training, acquisition of material, etc. A unified system was thought to avoid sub-optimizing and give INE a better control of the situation. When working as designed, a unified system would allow INE to prioritize interventions and support across statistical sectors and better align the needs of INE and Mozambique with available donors.

A common fund, financially built on external inputs plus the OGE (the governmental contribution), was seen as a step in that direction. As I had previously been actively involved in the construction of the agricultural common fund, PROAGRI, we had good use of those experiences. Common funds at the Ministries of Education and Health were also sources of experience. The INE Common Fund and Common Dialogue Arrangement was to be guided by a Memorandum of Understanding, MOU, elaborated with the objectives to:

- a. Coordinate donor efforts to support the implementation of the SEN Strategic Plan, increase predictability of donor's funds and reduce transaction costs;
- b. Establish a common mechanism, principles and procedures for the allocation and management of funds;
- c. Promote alignment and harmonization of Partners' monitoring and the management of the SEN Strategic Plan;
- d. Build a partnership based on frank and open dialogue on the content and progress of the SEN Strategic Plan.

Initially the directors of INE looked rather coldly upon the common fund idea, as they thought it would reduce their own room for initiative having all plans exposed in the same frame. But with time they accepted the ideas and the INE common fund was introduced.

The new planning system also made it easier to introduce ideas and concepts regarding

results based management, RBM. The annual plan, the PAAO 2008 [*Plano Anual de Atividades Orçamentadas*] was made upon the following four general objectives:

1. To respond to users' statistical needs concerning structure and trends of the population, the economy, society, gender and environment.
2. Gradually build a statistical production capacity at the level of districts and municipalities that responds to the needs of the local governance and development processes.
3. To capitalize on the production and analysis of statistics, using new technologies and methodologies, innovation, interinstitutional coordination and appropriation of administrative records.
4. Improve institutional capacity in face of the new challenges imposed by clients and the imperative of fulfilling the SEN vision and mission.

Each of these general objectives was further subdivided in specific objectives having a set of expected results. The results were to be achieved by performing budgeted activities, both when it came to finances, time and output. Most activities were financed by the common fund but also other sources were possible. In October 2007, I wrote the following text to explain the PAAO:

The PAAO is a specification of the Action Plan 2008-2012 and represents a compromise between the actors within the National Statistical System. The PAAO also serves as a basis for the accounting system of the INE/SEN Common Fund. It is noted that PAAO is not yet a finalized concept and it will undoubtedly improve year by year

The PAAO has not only the same mission and the same general and specific objectives as the strategic plan, but it also has all activities scheduled to be implemented during a given year.

The PAAO activities are specified with sub-activities indicating the person in charge and the executor to the lowest level. The estimated financial value needed to carry out each activity is expressed; And sometimes also the predicted value to carry out the sub-activities.

In addition to the objectives of the activities, the PAAO is structured to show expected results, necessary indicators, hard deadlines and the person in charge of the activities, among other things.

This system for planning is, with minor changes, used also today.

Consolidation phase 2008 - 2012

In many areas of statistical production at INE it was felt that the move from strengthening to consolidation was the proper thing to do at that time. But not in all areas, and during the initial parts of 2008 there were discussions between INE and the Scandinavian donors regarding a possible prolongation of the technical assistance to INE. The result was that INE in July 2008 launched a public tender for the procurement of technical assistance and late August 2008 the resulting contract was awarded to the Scanstat consortium. The contract covered two types of activities:

1. Supply of two resident long term advisers; one working with institutional capacity building and; one working in the field of economic statistics.
2. A frame work agreement for the supply of short-term assistance services. The agreed frame-work could cover up to 300 weeks of consulting.

The contract came into force 1 November 2008. As an initial activity, the Scanstat project coordination at Statistics Denmark and I went around visiting all directors of INE giving them the question: “What should Scanstat do to make sure that the new contract between INE and us will be as good as possible for INE and the statistics in Mozambique?” The visits gave a kind of an x-ray of the whole institution and the conclusions you can read in the Scanstat Inception Report, Dec 2008⁸. The new contract covered a third 5-year period for INE to have support from the Scandinavian INEs and focus became on ensuring the sustainability of what have been achieved so far.

During the previous period there was a heavy focus on training, both informal and formal training. At that time, the staff of INE at central level was one of the best formally trained within the Mozambican administration. It was a good thing and to a big extent a result of the Scandinavian programme. But to function well within INE and to really make use of their competence these persons needed a professionally stable self-esteem. There was a need for “Empowering the staff of INE”. As experience is an important ingredient in building a professional attitude this will of course take time and we believed that the role for Scanstat would be to assist INE in reducing that time by sharing with INE our own experiences and also what we have learnt from projects in other countries.

During 2009 the final results of the Census 2007 was presented on November 18 at the Maputo international conference centre Joaquim Chissano, attended by members of the National Statistic System, the Government and partners. As with the present Census 2017 the Scanstat consortium did not take active part in the activities as they mainly are of a logistic nature that our Mozambican partners know better how to handle. The data entry for the Household Budget Survey was also finished. Preparations of the Agricultural Census continued.

⁸ MZ:2008:06 Scanstat General Inception Report 2008-2012

Planning – PAAO and RBM

As usual INE is refining its planning processes and when a workshop on Results Based Management was offered by Norad it was welcome. INE at that time, 2010, was already using many of the concepts of results based management, but as things always can be made to function better a continuous work to streamline the routines is necessary and useful. The Norad workshop was called by the Norwegian Embassy as a response to an assessment recommendation to make a baseline study at INE as a preparation for future evaluations of the support given through the INE Common Fund. As a baseline study is also part of the practical guide *Ten steps to a results based monitoring and evaluation system* (World Bank 2004) it made a good sense to combine the objectives.

During 2010 a lot of work was done to straighten up the structure of the planning processes of INE/SEN. Experiences gained from discussions within INE and visits to the DPINEs were combined with the results of discussions with various experts on planning coming from donor organisations and Scanstat. In March a consultant from statistics Norway was here on a mission on Quality Management and Planning⁹. He was presented a draft of the INE Planning Manual and in response gave a lot of valuable inputs on how to work further with it. Studies of current recommendations from PARIS21, UNSTATS and others have also contributed to the elaboration of the manual.

Results Based Planning was an upcoming issue at that time, and if one looked at the INE PAAO, the budgeted annual plan, it could be seen that INE at that time already was using a form of it. The driving force of that work had been the Director of DICRE and a first “final” version of the Planning Manual was ready in September 2010. The planning manual was divulged and discussed by a professor from the UEM university and INE staff in two one-week seminars that were held at the new National Statistics School. Participating was staff involved in planning at INE centrally and in the provinces, a total of 60 persons. These seminars were immediately followed by a SEN National Planning Meeting.

SISTAFE

Already in the year 2001 the work on a new system for public financial management, SISTAFE, was initiated. The old Scandinavian project stated in its project document from 2002 that its procurement would observe the procedures agreed with the Ministry of Planning and Finance within the context of SISTAFE. After the 2005 review of the Scandinavian project the donors stated that a particular issue to be looked into regarding the management of the project should be the interface with an upcoming electronic version of SISTAFE, E-SISTAFE and INE’s financial management. In my inception report from 2005¹⁰ I put it as an urgent duty to assist INE in building up this capacity to manage project funds, with the aim of integrating the project with the rest of the INE’s financial system, building on the ideas of SISTAFE. The SISTAFE and E-SISTAFE have since then

⁹ MZ:2010:03

¹⁰ MZ:2005:04

been introduced all over the institution and is now functioning rather well also at provincial level. The INE annual plans are inserted in the system and spending by budget line can be followed. In the annual plan, the major budget lines are however subdivided in activities and it would be fine if this could also be reflected internally in SISTAFE. Another wish is to have the possibility to register assets within the system.

Reviews

A Mid-Term Review of the Strategic Plan for the National Statistics System 2008-2012 was made in 2010. The review took place on 19 – 30 July and the recommendations given reflected much of the actual INE priorities at that time, helping to further concentrate the efforts to the crucial activities for a healthy national statistical system. In the INE/ SEN Planning Manual it is stated that the recommendations from the Mid-Term Review is to be used as an input to the preparation of the next SEN Strategic Plan 2013-2017. The recommendations were translated to Portuguese and presented in a 6-page long matrix showing Findings/Recommendations, Response, Responsible and Time frame. The matrix was further discussed at a Directors meeting before taken to the INE extended consultative meeting, CCAINE.

Reviews are made at different levels and it can be noted that in 2010 UNECA, the UN Economic Commission for Africa, with its African Statistical Index, judged INE Mozambique to be the second best national statistical office in Africa! Maybe that is as good testimonial as any that persistent and consistent work does give good results if guided in the right direction.

The World Bank index on statistical capability¹¹ peaked 2013 with a score of 77,8. Looking at the components of the index, Methodology peaked 2015 and then declined because of lacking Finance Accounting 2016. Regarding the Source Data component it is the Poverty Surveys that have been to infrequent since 2014. This is something that IN-CAF/IOF have the possibility to repair. The Periodicity component is of course also affected by this. Regarding Source Data the Vital Registration System coverage is still missing altogether.

Vital statistics

In 2010 the vital statistics system of Mozambique had been virtually unchanged for more than fifty years, according to the findings of our consultant. Although there existed a comprehensive system for registering births, deaths and other vital events, these data had not been used for statistical purposes. One major reason was that INE had lacked the capacity to do anything about it. Another reason, perhaps more important, was that the coverage and quality of the vital statistics data up till then had been too discouragingly low to merit any attempt to use these data for statistics.

¹¹ <http://datatopics.worldbank.org/statisticalcapacity/SCIdashboard.aspx>

However, with many positive developments occurring around 2010 the recommendation from our Scanstat advisor¹² was for INE to begin receiving data from the National Civil Registry and to analyse, tabulate and disseminate statistics on this. This would give INE both the necessary experience with this kind of data, and an instrument to monitor trends and regional differences in the number of registered births and deaths. INE and the National Civil Registry were recommended to collaborate more on this type of data and on the format for the data transfer between the institutions. Both INE and the National Civil Registry appreciated the recommendations but still there is a lot to do in this field of statistics. This field is gaining in importance as access to reliable CRVS will make it easier for INE to provide the statistical evidence required by the Sustainable Development Goals (SDG).

Local meetings and seminars

An important event in the year 2010 was the PC-Axis Reference group annual meeting that took place in Maputo for three days, 6 to 8 of October. INE, being host this year arranged the meeting together with Statistics Sweden. Over 50 users from 26 different nations participated. The reference group meetings give an opportunity for all PC-Axis users to get information about what is going on and also a chance to exchange experience and establish contacts. Several interesting presentations were held. Among other things FAO told about their extensive Country Stat project in Africa where PC-Axis at that time was used to disseminate the statistics on the web.

Another interesting encounter between INE Mozambique and other INEs were the meeting with Statistics Norway. Every second year the Division for Development Cooperation at Statistics Norway places its annual planning seminar in one of their projects countries. In 2010, it was in Mozambique. Even if the program mainly dealt with internal issues within the division, it also gave time for a one-day extensive seminar with INE. At this meeting INE proudly presented actual status of its work in several different interesting areas of statistics. As many of the participants from Statistics Norway already had worked as long- or short-term experts at INE, both formal and informal communication between the two INEs seemed to be excellent.

STAC – Statistics in Action is a course, workshop and seminar that has been given several times here at INE. The idea is to create a common understanding on the basics of statistics and how is it produced. A two-week STAC course was held in April 2010 by two trainers from Statistics Sweden together with three future trainers from INE¹³. The National Statistics School hosted the course and the participants were mainly newcomers to INE and other institutions producing statistics. Most training material was translated into

¹² MZ:2010:13

¹³ MZ:2010:05

Portuguese and could now constitute a base for development of a national version, ES-TAC - Estatísticas em Acção - of the course.

CCAINE and CCRINE are acronyms for the INE extended and restricted advisory boards. The CCAINE has been a 3-day meeting held in March each year where the participants have been INE management, presidency and directors, some of the department chiefs, members of the High Council of Statistics and others representing institutions producing statistics within the national statistical system. The Scanstat resident advisors also participated. To highlight the importance of a nationwide participation the meetings took place in different provinces each year. Important on the agenda was to discuss achievements during the previous year and how to implement the plans for the current year. The other advisory board, CCRINE, was held monthly at the INE central office. Members were INE management, presidency and directors, and Scanstat resident advisors. On the agenda was to discuss the actual situation and the coming activities when it came to results and resources, both financial and human.

Strategic Planning at the National and Regional levels

Planning continued to be an important issue also in 2011. It is however important to remember that INE is an institution within the Mozambican central administration and thus has to align its routines with the ones recommended (and often imposed) by the Ministry of Public Affairs regarding general issues like SIGEDAP (the performance management system in public administration), the Ministry of Planning and Development regarding the “Scenario fiscal de médio prazo” (a 3 year rolling financial and activity planning system), the Ministry of Finance through the SISTAFE (the government's public financial management system for annual financial planning and execution at central and provincial level) and the Ministry of Labour regarding employments and promotions. On top of this INE also have to align with the planning and monitoring required by the INE Common fund as specified in the Memorandum of Understanding between the Ministry of Finance, INE, and the development partners. Maybe it is the complex stakeholder participation that make planning such an interesting area at INE.

If we look at statistics outside of Mozambique INE have been actively taking part in the regional and international context. For example, SADC was during 2011-2012 actualizing its 1998 Statistical Strategy “*Promoting regional integration by making available relevant, timely and accurate statistics that is used beneficially for policy formulating, decision making, and general use*”. A task force composed by the SADC Secretariat and the SADC Member States of DR Congo, Lesotho, Mozambique, Mauritius, South Africa and Tanzania was set up for this work, with INE Mozambique as chair¹⁴. Strategic issues

¹⁴ <http://www.sadc.int/issues/statistics/> It can be noted that the actual SADC Statistics Strategy 2013-2018 has both Cirilo Tembe, Director of INE/DICRE, and myself as co-authors. The full document is found at [http://www.sadc.int/files/1513/6800/4894/SADC_RSDS_2013-18 - Final Version -23 July 2012 - 1.pdf](http://www.sadc.int/files/1513/6800/4894/SADC_RSDS_2013-18_-_Final_Version_-23_July_2012_-_1.pdf)

were discussed in a constructive way that also influenced the way INE elaborated the next national statistics strategic plan 2013-2017.

The elaboration of the previous Strategic Plan 2008-2012 involved big changes at that time. The Scandinavian and Italian projects were to be replaced by a fully integrated national program funded mainly by the Government of Mozambique and the newly established INE Common Fund. The next Strategic Plan 2013-2017 was not to include that kind of wide-ranging changes. Rather, the experience of the previous period was to be consolidated and the good things in the plan to be retained and further developed. At the same time, every effort was made to anchor the plan firmly among producers and consumers of official statistics in Mozambique. To make the stakeholders responsible for their part of the plan, and thus to make them fight for the true implementation of it, we had to make them feel that they were contributing to the plan, recognizing their own wordings in it. Stakeholder participation must be given time and if speeded up the whole idea might be spoiled. At INE a central group for the elaboration of the strategic plan was set up. Members were staff from the planning department at DICRE, the management of DICRE, the Human Resources directorate DARH and the Scanstat consultants.

Quality, NQAF and GSBPM

Quality is an important concept for INE/SEN and quality has also been prioritized by the Scandinavian support since its very beginning. But quality still is, also for many of the INE and ODINE staff, something rather abstract and less tangible. The UN Statistics Division has adopted a model describing the components of quality in statistics. It is built on the Quality Assurance Framework, QAF, that is accepted by most National Statistical Offices worldwide. A new slightly adopted framework called the National QAF has also been made and it covers most aspects of the work at a modern NSO. But even if the NQAF describes the components of quality in a good way there is also a need for some more practical hints on how to make the components fit together. Here the GSBPM, the Generic Statistical Business Process Model, approved by the UNECE/ METIS Steering Group in April 2009 is a way forward¹⁵. These ideas, adapted for INE, are presented in a quality manual called *Quality – how to achieve it?*¹⁶ that I have written and where the introduction states that *for the National Statistical Institute, and for the National Statistical System, there is nothing more important than having the right quality in the products*. The document explains why this is important and also how the staff of INE/SEN must work to achieve the appropriate quality in the products. Hopefully this document can be of use for the National School of Statistics. Quality has its basis in the life of an institution, in its leadership and the environment where it exists. There have been several attempts to describe how statistics are related to development, where one of the most comprehensive is the African Charter on Statistics.

¹⁵ MZ:2010:03

¹⁶ In portuguese *Qualidade – como alcançar?* - INE 2010-2017

The Statistical Yearbook

The Statistical Yearbook is one of the channels used for letting the world know Mozambican statistics and the INE. When Professor Sten Johansson made his speech on the day of the 10th anniversary of INE he started by comparing the Statistical Yearbook 1995 with the one of 2005. The number of pages for population and social statistics had more than doubled reflecting the increase in data available. The chapter on production of goods and services had increased even more. The small section on macro-economic statistics of only 7 pages in 1995 tripled to 21 pages in 2005. The Statistical Yearbook is an important way of letting the world know INE and Mozambican statistics and therefore we in 2011- 2013 made it available also as an app for iPad at the Apple App Store¹⁷. Although the yearbook now can be found at the INE web page, its layout and content has been rather fixed and a revision of the publication and its publishing strategy would be fine¹⁸. What should be published? How? And with what frequency? Especially considering the new channels that internet and social media offer. Publishing Statistical Yearbooks is gradually being stopped by most European NSI's and publishing statistical information is increasingly being shifted to database tables only.

Analysis

It has since long been a request from INE staff to learn more about analysis. Different NSI's around the world put different emphasis on in house analyses of statistical data. Basic statistical analysis is no problem but when it comes to deeper analysis to discover the more complicated relations between cause and effects there is a fear that the requirement of impartiality might be squeezed. This makes that some NSI's remain as producers of raw statistic information for others to analyse. Other NSI's may enter in partnership with external institutions for the analysis while a third group of NSI's puts a lot of emphasis in doing their own internal deeper analysis of the data collected. Within the members of Scanstat one can see signs of different strategies, even if not at the extreme. When INE Mozambique was a newly created institution it made its primary task do deliver basic statistic information for others to analyse. The Ministry of Planning became one of the important users doing advanced analysis using INE data. As INE became more established it wanted to have a more active participation in the analysis and agreements on analysis were made with universities and other institutions. Being a new set of activities, INE initially lacked staff with experience and skills to do the more complicated analysis. And where staff existed, at the directorates of National Accounts, Demographics and Economic Statistics, the personnel already was heavily occupied with current day to day work.

Scanstat tried in various ways to help the situation. An example is the Course on basic analysis and user-friendly presentation of statistics, held by two consultants from Statis-

¹⁷ MZ:2013:01

¹⁸ MZ:2010:09 and MZ:2010:10

tics Norway. Their material on the Scanstat internet page is still worth a visit¹⁹. This material has been further worked on and turned into a guide on how to create a dissemination strategy, giving dissemination guidelines for developing and transition countries: *The user-friendly presentation of statistics*²⁰. Another example of direct Scanstat participation is the workshop on food security using data from the household budget. Previously FAO had assisted INE in producing food security reports. Such information is important to describe the overall level and nature of hunger in Mozambique and for the design of effective policies for reducing hunger and poverty. It was now felt important for the INE staff to be well familiarized with the analytic steps needed to produce this type of reports. FAO agreed to provide the SPSS programmes needed and to give technical backstopping from their headquarters in Rome, at no extra cost to the project. Scanstat contributed with two experts acting as teachers and moderators during the workshop. The immediate results can be seen in the mission report²¹, but the long-term results are yet to be seen. With the current restructuring of INE, analysis has been given more space to develop and the staff is giving more opportunities to collaborate across subject matter barriers. Another interesting part of analysis is for INE to explore the new fantastic tools that have become available recently. Tools to explore and make sense out of less structured administrative data. Concepts as clustering, decision trees and big data in combination with these new tools are quite exiting. But it is complicated, and I do hope some of the INE analysts will have the time and dedication to explore this field further.

The Millennium Development Goals - MDG

In 2010 the Norwegian Norad hired Statistics Norway to assist a number of countries to keep track on their national MDG figures, as it had been noted that international and national values sometimes differed a lot. For INE this initiative fitted well within the work of disseminating the national MDG data to a wider public. INE thus gave access to already collected data and assisted in contacting other national data providers, whenever necessary. Statistics Norway took part in documenting and presentation of the data, both at national and global level. A lot of that work was actually done in Norway by staff from Statistics Norway. Two of them were here for two weeks in November 2010 to discuss with the INE focal points, who were to continue the work later. The resulting database was presented jointly by Statistic Norway and INE on seminars, one of them in Oslo early 2011²².

¹⁹ MZ:2007:12

²⁰ <http://www.paris21.org/node/455>

²¹ MZ:2011:07

²² MZ-2010-16, MZ:2011:04 and the MDG Fact sheet 2012

Modernizing the production processes

CIDA, the Canadian International Development Agency, had asked INE to express in what way it could help to develop statistics and INE had answered that CIDA might finance a project raising the level of ITC at INE. CIDA accepted and invited firms on an international open tender for a project of providing this to INE. More specifically the project was to assess how statistical information was stored in different formats, and how it could be harmonized. It should also to look at the appropriateness of the current ITC organizational structure, staffing and training needs to determine if INE was optimally organized to meet the maturing business objectives of the National Statistics System.

Scanstat regarded the requested services as important for INE and the whole National Statistical System and we could of course without any problems do all the work specified in the assignment. The competence and experience existed within Scanstat, gained both at our home offices and from similar assignments in countries facing the same situation as Mozambique. But we told INE that we would be most happy to assist any winner of the bidding process, facilitating the fulfilment of the objectives. Our idea was that it always is good to have a second opinion on the strategically important issues that were covered in the tender invitation. A second opinion would help to secure as good and robust solution for the data and information handling processes as possible.

A Canadian firm, C2D - Catalyst to Development, got the contract with CIDA and soon sent a team to Maputo to work with INE and us. The C2D team consisted of experts on how to organize institutions and they already had some experience of working in Mozambique. However, we all soon realised that the terms of reference ought to be expanded if the work should have an important impact on the quality of statistics. From the original focus on IT we together with C2D used the GSBPM as a model to add aspects on production processes, organisation of the institution, human resources and management. The project grew substantially and the modernising project was born²³. At Statistics Sweden a similar development, called the Lotta project, had occurred some years before. That project gave us something to follow and helped us to avoid the biggest pitfalls. Modernisation and process orientation also became important challenges at the European NSI's. Here in Mozambique the modernisation project now became a main part of the Scanstat intervention at the end of the consolidation phase and also the entry point for the following phase. As a way of securing the implementation of the modernizing project the contract between INE and Scanstat was extended for another five-year period, 2013-2017.

Phasing out 2013 – 2017

²³ MZ:2014:06

Diagnostics and evaluations

Evaluations are important and serve many purposes. The members of the Scanstat consortium make regular surveys of how satisfied their own national customers are with the services offered. They do it because they are learning organizations and because it is imperative to keep up to date with the needs of the customers. INE have also been doing user satisfaction studies here in Mozambique although the users here are less in numbers and tend to be more difficult to reach.

Another important type of evaluations is the annual staff satisfaction survey that helps management to guide INE in the desired direction regarding human resources. External reviews are also important. During the years INE and Scanstat have been evaluated several times by external teams. INE Mozambique have participated in Peer Reviews of other INEs in the region and INE itself was Peer Reviewed in 2009. These reviews are often very fruitful as they act as transmission channels of best practises between countries facing similar realities. Another type of reviews are the reviews done by external experts on one or another part of statistics. Since 2005 the following reviews of this type have been made:

- 2005 Midterm review Scandinavian project 2003-2007
- 2007 Final review Scandinavian project 2003-2007
- 2010 Midterm review SEN strategic plan 2008-2012
- 2013 Final review SEN strategic plan 2008-2012
- 2015 Midterm review SEN strategic plan 2013-2017

What is missing now is targeted reviews of specific subject matter areas and also specific reviews on the different production processes.

It can be noted that the work of Scanstat from 2008 and onwards has been totally integrated with the INE activities, with no administration of its own. Scanstat has therefore since then naturally been included in the common SEN strategic plan reviews. More technical and in-depth reviews have also been done. For example, the abovementioned diagnostic review made 2012 together with the Canadian firm C2D.

A Commission for Reform and Modernization of Statistical Production Processes

The ITC processes are intimately related to the activities of Human Resources and the Organization and Management of the institution. Modernizing ITC thus means more than just buying new machines or systems, as it involves all the personnel, the organization, and the management. Changing the latter takes time and involves hard work. Changes that take time and involves hard work are apt to meet resistance and must be well motivated. Quick fixes like buying new machines or systems are easier to introduce. Therefore, we decided to use the ICT as an entry point for modernizing the whole institution.

The next question was where to place the modernizing project. ICT has historically been situated at the Directorate of Integration and External Relations, DICRE, but as the modernization process spans over a much wider part of the organisation it was finally decided that it should be led by a special commission, the Commission for the Reform and Modernization of the Statistical Production Processes at INE, reporting directly to the President of INE. Working together with me in the commission were three experienced INE officials and three associated external members, one from the INE Statistics School (and previous head of DICRE), one retired specialist from Sweden and the head of C2D from Canada.

The reasons behind setting up a separate modernization commission were many and varied. The final goal was to have the institution to continuously and by itself adapt to the fast-changing environment. Among other, the following opportunities and challenges were to be met:

- An increased global use of harmonized methodologies in the production of statistics.
- The African Charter on Statistics that gave a stronger focus on the user.
- A current review of the laws regarding the Mozambican National Statistical System.
- The new head office building of the NSI that has given new interesting possibilities.
- An inevitable Census of Population and Housing that was to take place 2017.
- And of course, the continuous advances regarding ITC – hardware, software and methods.

The Continuous Multipurpose Household Survey - INCAF

Another area of with potential for modernizing was the household based sample surveys. Previously these were typically done with intervals of 3 to 6 years. While doing research for the strategic plan 2013-2017 we learnt that users demand more frequently updated data. A new concept, the Continuous Multipurpose Household Survey, was introduced²⁴. It meant that a kind of a “survey machine” was created, that on a quarterly basis could offer users information on the actual state of important development indicators. The survey was named INCAF, *Inquerito Contínuo aos Agregados Familiares*, and was built around a core set of questions to which specialised modules were to be added. For 2014 the principal module to add was a Household Budget Survey module. The new survey system would initially be costly, but being of a repetitive nature the INCAF over time would give INE a good possibility to gradually refine the processes of the survey and thus reduce costs, gaining at the same time on quality and timeliness.

An external evaluation of the INCAF methodology and results was done by two consultants, financed by the Italian Embassy, during two weeks in September 2013. Maybe it was a bit premature to evaluate the results already at that time as the full implementation of INCAF was not yet achieved. Anyway, the evaluation team did see the need of a sur-

²⁴ MZ:2012:05

vey like INCAF and gave recommendations on how to continue its development. In a mission report from 2013 one of our Scanstat consultants gave a complementary view on the evaluation²⁵. However, the World Bank continued to show doubts regarding the INCAF setup and its ability to produce data comparable to previous household based surveys in Mozambique. Thus, INE never made any explicit decision on what to do with INCAF.

PARIS 21 and the Data revolution

A two-day regional workshop titled *Better dialogue on statistics for better development results*, organized by the SADC Statistical Secretariat, PARIS21 and INE was held 2013 here in Maputo and had as its objective to increase the awareness of a foreseen *data revolution* regarding demand, production and use of statistical data. The workshop was interesting for the participants and also useful for the PARIS21 secretariat, helping them to collect opinions from this part of the world. On the last day a question was however raised if the word *revolution* is the correct one to use? A greater involvement of users and a wider use of statistical data has in fact been on the agenda for a long time now (see for example the African Charter of Statistics, the SADC Regional Strategy for Development of Statistics, as well as various initiatives from UNSTATS and even PARIS21 itself). The ideas and concepts presented were nevertheless useful for the modernising commission at INE. As an extra plus, the head of PARIS21 spent a third day here in Maputo to give an appreciated seminar on gender statistics for the students of the National Statistical School.

The coordination group for the Reform and Modernisation

During the years 2014 and 2015 the Commission for Reform and Modernization of Statistical Production Processes continued to take a big part of my time. The permanent members of the group had a short internal daily meeting (SCRUM type) to discuss and coordinate activities. Weekly informative messages were sent to the associated members in Canada, Mozambique and Sweden and every second week the group was presenting its work at a meeting with the president of INE. The director and deputy director of DICRE were met with whenever necessary.

The C2D report was been re-read and discussed by the group and the opinion remained that it was a good report. In a concise way, it summoned up what INE had to do to become a fully modern organisation. To further secure that our work covered all areas of interest within INE the group started a series of visits to all departments of INE. A brief presentation of the report was made after which a discussion of the implications for the department followed. We were aware of the immense volume of information contained in

²⁵ MZ:2013:06, pp7.

the report and therefore the departments were given time for a second meeting where they had the possibility to give their opinion on the project.

In Africa, the rate of change was accelerating tremendously at that time and what was good practise yesterday seemed totally outdated next day. As the IMF Chief Christine Lagarde spoke at the Africa Rising conference in Maputo, Mozambique, May 29-30, 2014 *“Sub-Saharan Africa is clearly taking off - growing strongly and steadily for nearly two decades and showing a remarkable resilience in the face of the global financial crisis. - But with poverty still at unacceptable levels, high inequality, and some countries facing recurring internal conflict, a priority for the continent is to build people.”* And the INE modernizing project has been one of the attempts to do that.

The external members associated to the INE modernisation commission visited INE now and assisting in the further specifications of the plans²⁶. The work was actually going on at two levels in parallel. At the process level the aim was to identify, describe and improve specific areas in ways that could be replicated elsewhere within INE. As a first business case giving experience of a statistical product, the INCAF/IOF 2014/15 was chosen, being the Household Budget and Consumption Survey module of the Continuous Multipurpose Survey. At institutional level, there were several areas targeted where improved support functions would benefit the entire INE. As a first case, representing the provincial delegations of INE, the Maputo Province was chosen and was visited several times. We also thought of selecting a delegated institution producing official statistics as a second business case to study, but due to the workload already foreseen this was postponed until later. The Ministry of Agriculture was however seen as an interesting case to study, as the annual agricultural survey had a lot in common with INCAF.

A Study-visit to Scandinavia

Early 2014 a study-visit to Scandinavia, Statistics Sweden SCB and Statistics Norway SSB was made. The background was the implementation of the 4th National Statistical Strategic Plan where a “troika” had been established at INE to deal with running issues regarding the management of the strategic plan. This troika was composed of the directors of DICRE and DARH together with the Head of the Cabinet for International Relations and Cooperation (GRIC). A member of the Commission for the Reform and Modernization of the Statistical Production Processes and I also joined the team.

The overall objective of the tour was to visit the two Scandinavian Bureaus of Statistics in Norway and Sweden to:

- Present the new SEN Strategic Plan 2013-2017 of the Mozambican National Statistical System
- Present the new memorandum of understanding between INE and Common Fund partners

²⁶ MZ:2014:06

- Exchange of ideas on the actual revision of the statistical legislation of Mozambique
- Exchange ideas about the future prospects for cooperation between INE and the Scandinavian counterparts
- Reinforce the mechanisms for interaction
- Motivate new partners in Scandinavia, such as Finland and Iceland, to enter the INE Common Fund.

Of special interest for INE were also to obtain information regarding:

- Processes: Modernizing a NSO through a business architecture that manages rules, processes, systems and ITC. Best practices?
- Quality: Quality and metadata in relation to GSBPM and relevant software.
- Certification: Level of ambition.
- Planning, monitoring and evaluation: The relations between 20-year visions, 5-year strategic plans, annual plans and actual work plans and their monitoring.
- Communication: Internally within the NSO and externally with users, mass media and producers.
- International relations: What is done? And how?
- Production: Acquiring and using Administrative data for Statistical purposes.
- Dissemination: Routines for quality assurance. Case 1 Yearbook. Case 2 Web Databases. Case 3 Managing User Access to Micro data.
- Human Resources: Case 1- Managing Competence; Case 2 - Administrative systems; Case 3 - Time reporting system.
- Finance: Cost accounting.
- Security: How to maintain security in a complex environment?

Expected Results were to get:

- Ideas and suggestions for improving the SEN Strategic Plan 2013-2017
- New prospects for cooperation and statistical production
- New contacts and existing ones revitalized.

The study tour worked out fine and its report can be found at www.dst.dk/mozambique²⁷.

Foreign Trade Systems and INCAF

Two Scanstat consultants have been here on several missions to support the INE Foreign Trade Systems²⁸. They have also given a detailed course in SPSS and how it has been applied in the system. They have also elaborated detailed work plans for the running and maintenance of the system. The aim has been to give the INE FTS staff the knowledge and fundamentals to maintain the system by themselves.

²⁷ MZ:2014:03

²⁸ MZ:2014:07

Another Scanstat consultant has been assisting in the planning and implementation of the INCAF Household Budget Survey module that was upcoming. A pilot had been done and the future of INCAF was discussed with INE and donors. The consultant spent most of this time at a centre outside Maputo, where the INCAF/IOF interviewers were trained. Two information events for the donor community regarding INCAF/IOF were also held and valuable contributions were given to the modernizing project regarding this multi-purpose household survey system²⁹.

Critics against the African statistical society

A book with the title "*Poor Numbers: How we are Misled by African Development Statistics and what to do about it*" was presented 2013 by Professor Morten Jerven. The book raised a lot of critics against the African statistical society and created interesting discussions in the media. However, many statisticians in the region felt offended by the book and a project aiming to document an African statistical renaissance was initiated by researchers and practitioners within African statistics. The joining force of this project was Professor Ben Kiregyera (he has been working with us here in Mozambique several times³⁰). Kiregyera is showing that a lot of work has indeed been made to improve the quality of statistics in Africa. And that much more is coming. The debate has been very interesting as it shows the complexity of the statistics building processes here.

Modernization - Adaptation to a changing environment

In early 2015 the Modernization commission at INE held a series of workshops for INE Presidency, the Directorate Directors and Heads of Departments. The idea was to continue discuss the concept of GSBPM and to have the participants reflect further around the processes. The first workshop was held during two full days and covered the whole GSBPM, as a repeated introduction, combined with work in groups and presentations. It was later followed up by half day workshops covering one process each. Initially the modernizing commission made a big part of the presentations, but later the presentations were transferred to the directorates that were most involved in each of the processes. A process 8, Monitoring and evaluation, was added to the traditional seven statistics producing processes of the GSBPM. We also added a 9th process, Infrastructure and auxiliary support, that in GAMS0³¹ terms is subdivided in three groups of supporting activities; 9.1 Strategy & Leadership; 9.2 Capability Management (a somewhat new concept) and; 9.3 Corporate Support (our enumeration). These three groups of activities are truly complex, but absolutely necessary and I am glad that they were added to the GSBPM model.

²⁹ MZ:2014:09

³⁰ MZ:2007:06

³¹ GAMS0 = the Generic Activity Model for Statistical Organisations, an UNECE extension to the GSBPM.

INCAF – The Continuous Multipurpose Household Survey

The Household Budget Survey module (IOF) of the INCAF had an involuntary interruption which made it impossible to carry out the 3rd quarter 2015 round of the survey. Some users became worried that the missing quarter could drastically lower the quality of the IOF-module, and thus making it difficult to evaluate the results of the efforts that have been made to reduce poverty since 2008/09. When our Scanstat specialist compared the periods of the actual and previous IOF he found that the measurements between the third and the other quarters of IOF 2008/09 did not differ much for most types of important expenditures, and that the results of INCAF/IOF 2014/15 ought to be as reliable as the previous one. If not even better due to the more efficient distribution in time of the interviews (4 quarterly visits spread over 4 different weeks of the month).

It is true that the Introduction of INCAF has not been without problems. Some problems have been related to late disbursements of financial resources, but other problems have been more related with the fact that the INCAF needs new ways of organizing the workflow to be fully efficient. Experienced survey specialists at INE must change their way of seeing household surveys like INCAF as big onetime, or seldom done, projects. The introduction of GSBPM and standardized tools is of great help in this aspect. Another problem that have to be solved is that INCAF is costly as it requires a nationwide survey repeated several times a year. But on the other hand, it can the question can be asked if Mozambique can afford not to implement a survey like INCAF? In the five-year plan 2013-2017 the INCAF was projected to cost around 4 million Euro per year. To reduce the costs, one could try to share them with other household based surveys. INCAF consists of a fixed core module on which are added more specialised modules. In 2015 the module added was the IOF module.

In my opinion, many of the household based surveys ought to be integrated with INCAF. One early candidate could be the Mozambican Integrated Agricultural Survey, IAI, by the Ministry of Agriculture. But not the Early Warning system part of it, which is calculating the probable outcome of the agricultural year while the crops still are on the fields. It is the other part of IAI that is interesting as it is a traditional annual agricultural survey (previously since 1993 called TIA in Mozambique). Even if this survey also deals with bigger agricultural holdings but primarily it is the household based small holdings that are targeted. It is the latter that easily can be inserted as an integrated module of the INCAF, running during one quarter each year. Apart from being an alternative using available resources as good as possible it will also make the statistics produced more valuable and useful as more types of variables can be directly related to each other. Household surveys made at the Ministry of Health and other line ministries could also be included in INCAF on a rolling scheme.

Later the same year Scanstat and INE signed an agreement on a further three separate consulting rounds for the INCAF/ IOF 2014 and 2015. Now elaborating especially on the

new IOF module of the INCAF. This version of IOF would cover both seasonal and monthly variations in household income and expenditures over a period of 12 months. Thus, a Scanstat expert was here March–April 2015 assisting INE in quality control and weighting of data from the two quarters that had been captured at that time. The same consultant also returned in November to cover the whole year³².

Our Norwegian consultant assisted INCAF/IOF when it came to informatics, CSPro input and the processing of the IOF module³³. She added a training course in CSPro using the actual modules as working material. Programmers from the Ministry of Agriculture also participated as being the next producer of official statistics to be added to the modernizing project.

The Swedish household survey expert visited INE in April assisting in further analysis of the INCAF/IOF module data. As usual the consultant participated in information events together with the Ministry of Economy and Finance and the donor community, giving valuable contributions regarding multipurpose household survey systems. A second visit was made later the same year³⁴.

National Accounts, Agricultural Statistics and Statistics in Action

Our Scanstat expert on National Accounts continued to work with the National Accounts directorate. Not all his missions have been made through Scanstat as some have been financed by the World Bank and some by IMF AFRITAC South. These missions, like the RBM missions, were however strongly interwoven with our other activities. It can also be noted that the long series of Scanstat missions³⁵ with the NA consultant now is coming to an end, but that a continuation might be possible through the support by the World Bank project starting in august 2017. It is important for INE to continue good relations with the IMF and I think a new IMF ROSC, Report on the Observance of Standards and Codes, would be valuable now.

Two consultants from Statistics Sweden and the Swedish Board of Agriculture were in Maputo to do a fact-finding mission at the Ministry of Agriculture and Food Security regarding possible Swedish support to agricultural statistics. The mission was financed within the INE PAAO, the INE annual budget, under the budget line promotion of inter institutional coordination, and it is one of the early efforts to advance the INE modernization project to other parts of the National Statistical System.

³² MZ:2015:04 and MZ:2015:08

³³ MZ:2015:07

³⁴ MZ:2015:03 and MZ:2015:09

³⁵ MZ:2017:03

In its first issue, June 2015, the Statistics Sweden newsletter *Statistics in Action*³⁶ the INE president was interviewed and the interview ends with the following reassuring words: – *“After all these years the direct influence from Statistics Sweden is being gradually phased out, and we now feel confident that we can advance, relying more and more on our own internal resources. But of course, we will continue to meet Statistics Sweden as colleagues and friends, sharing the vision of a global use of statistics for the good of all.”* And I suppose the same is true also towards the Norwegian and Danish members of Scanstat.

Internal organisation of a national statistical institute

When INE was created 1996 it was, like most other NSI's at that time, organised according to subject matter fields. The big division was between economic statistics and social statistics, where the first was split into a unit for national accounts and another for business statistics. Social statistics was split in a unit for demographic, vital and social statistics and another for census and surveys. A unit for administration and human resources and another for integration, coordination and external relations were also created as support to the four units producing statistics. This setup has functioned rather well, which can be understood from the fact that it remained unchanged for more than 20 years. The administrative, political and economic environment in which INE works is however changing constantly and for many years a project with the aim of adapting the INE setup to these changes has been going on. Not only external factors are changing, also internal things like the educational level of the staff, the methods to use and the way of cooperation within the national statistical system is changing. The basic idea is to have an organisation that can produce the statistical information needed by the users at the lowest costs possible without losing any of the characteristics of high quality statistics. Defining the best organization of an institution is a complex operation. The UN Handbook of Statistical Organisation³⁷ is giving a lot of considerations and advices. The difference between a subject matter oriented and functional organisation is described in the Handbook. The traditional subject matter approach where the institution is organised according to the type of statistics produced can be said to be output focused. The functional approach is different as it puts focus on the input of information to the system. It aims to reduce the costs of production and secure a reasonable quality and coverage of statistics. Internal and external cooperation becomes important.

Combining this and my experience from INE, I made a proposal called INE 2020 where a possible setup of INE was presented. It was based on the functional approach to stimulate the development of specialists within the various statistics producing statistics along the processes in the GSBPM. One advantage of this approach was that specialists on the processes would work more closely together and thus build up a common knowledge about

³⁶ <https://www.scb.se/Grupp/OmSCB/Bilder/ICO/Statistics%20in%20action/Statistics-in-action-juni-2015.PDF>

³⁷ Handbook of Statistical Organisation SeriesF_88E.pdf Chapter V. PRINCIPLES OF ORGANIZATION AND REORGANIZATION, pages 71 ff.

most suitable tools and methods to use for the tasks all over the organisation. Another advantage was that the responsibilities within the production chain would be more transparent as it would be clear who is responsible for what and how the responsibilities are transferred between production entities. This would also facilitate a detailed RBM planning on process level, not only at INE but also within the rest of SEN.

But how to take care of the users and subject matter experts? At Statistics Sweden, we have a special unit for communication of the statistics produced. It is called the Directorate of Communication to emphasise the importance of two-way communication with the users. This unit has quickly been growing and getting more important as the principal output interface of the institution towards the users. In my proposal, I have therefore inserted a Directorate for Dissemination and Communication as the output part of the production processes. The other three directorates for statistical planning and production were; Architecture and Monitoring; Construction and Collection; and Treatment and Analysis. The idea was that the subject matter specialists should be placed in the analysis part of Treatment and Analysis having an oversight over the whole series production processes within their field of specialization. In this way the functional approach is combined with user and subject matter needs.

The proposal also included three supportive directorates for management, capacity and auxiliary help. The first, Administration and Finance, is necessary. The second, ICT Administration, is a break out from the previous directorate of coordination and motivated by the enormous importance ICT has for the collection, production and dissemination of statistics today. The third, Human Capability Development, is a break out from the previous directorate of Administration and Human resources. The administrative management of human resources remains within the directorate for administration and finance, while the competence part of HR is moved to a new unit, that eventually could be combined with the statistical school. The responsibility for this new unit would be to develop the capability³⁸ of the INE/SEN staff. This means that the unit needs to know how the production processes actually are done within INE and what the best practises used within the SEN and globally are. Then the unit must figure out what changes are needed to implement this within INE/SEN. The work will involve a lot of training and that is why the school is important for the development of capability. Big changes need to be well rooted within the institution and that often takes time. The proposal therefore was named INE 2020 when it was presented.

The National Statistical School – ENE

In December 2008, the ideas of creating a national statistics school finally resulted in its official opening. Initially the activities consisted of defining what to do and how to do it. Some short-term courses were given by external and internal experts. However, the idea

³⁸ The Open Group Architecture Framework defines a capability as "An ability that an organisation, person, or system possesses. Capabilities are typically expressed in general and high-level terms and typically require a combination of organisation, people, processes, and technology to achieve."

of a mid-level 3-year course grew stronger and late 2010 INE got the curricula accepted by the Ministry of Education and August the following year the first group of 30 students entered the 3-year course. New cohorts entered also 2013 and 2014.

In 2013 a team at the Eduardo Mondlane University, UEM, were contracted through Scanstat to assist INE/ENE adapting the curricula to comply with the Integrated Program for the Reform of Vocational Education (PIREP) that was under way in Mozambique. That reform had as its main objective the transformation of the current system of vocational technical education, driven by the supply, to a demand-driven system capable of meeting the needs of the Mozambican economy, at that time in a phase of rapid growth.

Meanwhile a shorter mid-level 18 months course had been developed and it got its first students in February 2015. The curricula of the lighter course were: 1st Semester (18 weeks); Computing; English; Scientific Methodology, Economic Geography, Deontology and Professional, Ethics, Statistics, and Introduction to Demography. 2nd Semester (18 weeks), Computing, Statistics, Vital and Social Statistics, Introduction to Economics and National Accounts, Agrarian Statistics and Cartographic Sciences. 3rd Semester (18 weeks + 4 months internship); Scientific Research Methodology; Publishing Techniques; Cartographic Sciences; Vital and Social Statistics and Internship.

The modernization commission at INE started to review the draft results of the UEM/PIREP project and found that the courses defined up till now were to a large extent based on thematic subject matter knowledge and user oriented. Probably INE needed more of a producer perspective. So, what if the school looked upon the production of statistics using a process centred view like GSBPM? A general proposal for a 3-year curriculum build on the UEM/PIREP project was made, now giving GSBPM a major role in organizing ENE curricula:

- 1st Year or Semester: The work would begin with an introduction of GSBPM processes using the INE quality manual, *Qualidade – Como alcançar?*. Later, this would be further specified by entering deeper into the various processes, mainly using the units already presented together with new ones like; *The quality concept and the implications of this in the other parts of the course*; *Understanding the central role of Information and Communication Technologies in the processes of producing statistics*; *Understanding the components of the GSBPM methodology as the main tools to organize statistical work (and the rest of this course)*; *Knowing the statistical workflow through the ESTAC seminar*; *Understanding the central role of ICT in statistical production through study visits*. Space for this could be created through a certain reduction of the units covering pure mathematics. The process 7 *Dissemination and communication* must also be given an important role. The document *Friendly Presentation of Statistics* could be used for this purpose.

- 2nd Year or Semester: This school year/semester must also deal with all processes, but in more depth. In other words, the first year/semester will be at a more introductory level, the second more in detail, introducing the concept of user and the use of statistics as important parts of the National Statistical System.
- 3rd Year or Semester: The third year/semester is principally used for a practical use of the new knowledge together with a real work (survey or research) at INE or some ODINE, more or less as already indicated in the vocational certificates presented.

The work to rewrite the ENE courses to fit within the PIREP templates was arduous and the project time was prolonged several times. So, when it finally was ready in early 2016 INE had already decided to continue the shorter 1 ½ year mid-level course which made it necessary to review the work of the UEM/PIREP once again. The units of English and Logistics etc. could be treated within process 9 *Infrastructure and auxiliary help*. The process 8 *Monitoring and evaluation* is important and probably needs a unit of its own. The number of credits used for analysis is reduced in favour of a more even distribution of credits between the statistics producing processes 1-7. For each process, a link is given to the best fitting PIREP units and new units are proposed where necessary. The work of defining the role and content of the national statistical school is still going on and hopefully some of the proposals made will fit into that work. A question raised is if there is sufficient demand from statistics producing institutions to motivate a mid-level course like this. Maybe it would be more appropriate to concentrate on specialised GSBPM inspired courses in partnership with existing institutes and universities to create the experts that are needed within the National Statistical System.

A healthy national statistical system needs to have users with sufficient knowledge and interest to use existing statistics in a constructive way, and to demand new quality statistics wherever there are gaps. The number of potential users by far outgrows the number of producers and the National Statistical School ought to investigate how it might help users and how it could contribute in raising statistical literacy among the users and citizens in general. A big component of distance training will probably be necessary as this would increase accessibility and at the same time reduce costs.

Afterword

The national statistical system of Mozambique is now very different from what it was 1998 when the initial Scandinavian project started. During the preceding colonial time statistics had mainly been an exercise of administrative bookkeeping. The period after independence continued in the same tradition, although it was felt that the administrative sources gradually were getting less reliable, with less coverage. Counteracting this degra-

dition would have been costly and difficult. As a remedy, the use of sample surveys was introduced. One of these was the agricultural annual survey that had its first pilot already 1993, just after the general ceasefire in 1992. Other sample based surveys followed. Like the national household budget surveys labour surveys and health surveys. Sample based surveys are still an important way to get an estimate on the situation of a population. But they are expensive. The growing use of ITC at the line ministries and within business nowadays is however pointing at a reappearance of administrative data as a primary data source for the production of statistical information. It will thus be important to put even more emphasis on cooperation between the producers. Common methods and share of resources within the NSS will help to achieve a sustainable system. To strive for this will be an important task for the future. And don't forget regional and international cooperation!

Maputo 2017-08-23

Lars Carlsson

Appendix 1 – Terms of Reference 2005 - 2007

From PRODOC 2001, Annex 6B: Task description and qualifications -Team Leader / Management and Administration Advisor

Background

The modality of the Scandinavian Project composes a long-term consultant to coordinate project activities at INE, to assist INE's own Project Director and to be the liaison with the Donors, especially the Royal Danish Embassy as lead donor. This work will take at least half of his or her working-time and the remaining part will be devoted to advise INE on management, planning and administrative issues.

Tasks in the role as the Team Leader

The project will be integrated in INE's activities and implemented by INE. Project activities will be a part of INE's day-to-day activities of various plans; annual as well as long term plans. Within INE a specific Project Director will be responsible for the overall coordinating control and initiative of project activities.

The Team-Leader is responsible for the annual activity planning of the Consortium activities. The task will at a minimum comprise a review of last year's activities and achievements and a draft work plan for the year to come. The activity plans must be well coordinated with INE's own plans.

Tasks in the role of advisor on management and planning

The prime objective with various activities within management, planning and administration is to support the management in handling and directing the various activities, separately and for the institution as a whole, according to set plans and set targets. Some key concepts in result-based management are distinctly defined and measurable objectives, transparency and staff-encouragement/satisfaction.

As the Team-Leader will advise on issues on management and planning, the tasks of the Team-Leader will be to assist INE to proceed along the lines that have been drawn up with assistance from the Twinning Arrangement and the Bridging Support Project, which means to further

- Develop and establish various planning procedures/components
- Develop and establish a modality for management performance key indicators based on information for each product on for instance cost, quality and users satisfaction
- Develop a result-oriented staff development plan as a base for individual competence development activities
- Develop, establish and maintain a continuous tailor-made in-house training scheme

He/she will work closely together with above all the Directors of DICRE and DARH.

The Team-Leader will further in relation to INE

- Participate in INE's monthly "management meetings" (CCRINE)
- Be a member of the Coordinating group (with INE's Project Director as the chairperson).

- In collaboration with INE's Project Director closely follow the staffing situation at INE
- Jointly with INE be responsible for the Project activity plan and the Project budget and budget follow up, and jointly with the project director sign proposed budgets to the donors.
- Assist INE's Directors and Heads of Departments in their respective fields for the day-to-day functioning of the project.
- Lend strategic support to the development of INE, he/she is expected to play an active role in the discussions and contacts with users.

Task in relation to donors

- Assist INE in co-ordination with the donors and in adjustment of the strategic plan for support
- Assist INE with the Steering Committee meetings and in drafting minutes from the meetings
- Be a member of the Steering Committee
- Assist INE with various reports from the Project
- Assist INE's Project Director in his/her management of project activities and inputs.

Tasks in relation to the Consortium and the consultants

- Work as the representative of the Consortium Co-ordination Office (CCO) and keep the Home Coordinators informed about the progress of the Project.
- Coordinate the distribution of the Terms of Reference to the CCO and the Home Co-ordination Offices in such a way that all Parties will have an equal chance to propose candidates.
- Inform the long- and short-term consultants on the progress of the Project
- Professionally and practically back up the long- and short-term consultants in the Project and have regular meetings with the long-term consultants

Qualifications

- University degree at Master level
- Substantial experience from work with management and planning, especially in the statistical area
- Substantial knowledge/experience about statistical systems and production
- Substantial experience from work in developing countries
- Experience in teaching or from work as a trainer
- Adaptability, social sensitivity and respect for a variety of cultures
- Acquaintance with Scandinavian development assistance in general
- Willingness to receive necessary training in Portuguese

Working language: English and Portuguese

Duty Station: Instituto Nacional de Estatística (INE) Maputo with possible travel up-country to Provincial offices

Appendix 2 – Terms of Reference 2008 – 20012 and 2013 – 2017

From the Agreement 2008-2012 between INE and Scanstat: ANNEX A – TERMS OF REFERENCE AND SCOPE OF THE SERVICES. The agreement was further prolonged for another 5-year period, to 31 December 2017, on the same terms as in the contract ending 31 December 2012.

Long-Term Consultancy in Institutional Capacitation - Terms of Reference

To achieve the objectives of SEN (the National Statistics System) a long-term consultancy Institutional Capacitation services are designed to be provided for a period of 36 months. The 36 months must correspond to no more than 36 consultants x months.

Objectives

The aim is to achieve the following strategic goals of INE / SEN, but not limited to:

- Raise the level of knowledge, awareness, statistical habits and practices for national development.
- Facilitate the building and maintenance of robust information solutions and systems and communications technologies to collect, share, access and disseminate statistical information; as well as architecture for database and Internet management.
- Assist in the maintenance of a high motivation, personnel management and training environment.

Assist INE in its efforts to ensure the development an efficient SEN management, planning, monitoring and evaluation of system, and close cooperation with national and international partners.

Organizational framework

Under general supervision of the President of INE, the consultant will advise members of the Presidency of the INE, regarding matters relating to institutional capacitation, and will

- Develop, its routine activities based at the Directorate of Administration and Human Resources (DARH), reporting to its Director, to whom the consultant shall be accountable.
- Also develop routine at the Directorate of Integration and Statistical Coordination (DI-CRE), reporting to the director, to whom the consultant shall be accountable, according to the subject in question.

Depending on the subject, the consultant will coordinate with the Central Directorates of the INE and SEN.

Responsibilities:

Assist the **INE** in the development of efficient human resources, financial and property planning, monitoring and general management system; quality management and training of personnel and the establishment of the National School of Statistics.

Design and produce plans, manuals and work and training methods, as well as organising seminars and training programmes.

Assist in the establishment of an integrated database management systems and management information system.

Assist in the definition and management of specific programmes to be undertaken by short-term

consultants that may be defined in the various areas.
Undertake other activities that may be defined by INE.

Expected results

Solid planning, monitoring and management systems in operation, with guaranteed sustainability.

Regular documentation of the results of work done, including activity reports, plans, manuals and methodologies.

A framework of short-term consultancy services, covering the time horizon of the SEN / INE Strategic Plan, established and implemented.

Qualifications and Requirements

The consultant must have a master's degree in management or related areas, 10 years of experience in similar areas. Fluency in spoken and written Portuguese language and an adequate knowledge of English. Experience of work in African countries.

Working Language

Portuguese

Workplace

The Central Offices of INE, with trips to the provinces.

Start of work

1st of September, 2008.

Appendix x – Scanstat Long- and Short-Term Advisers to INE 2005-2017.

Full reports are accessible on the Internet at www.dst.dk/mozambique and on the [INE Intranet](#).

.	Name	Inst.	Last Visit	Area of Work	All Years with Visits
1	Carlsson, Lars	Scanstat SCB	2017	LTA - Institutional Development	(1988-1990); (1992-1996); 1998; 1999; (1999-2003); 2005; 2005-2017.
2	Cravo, Julia	Scanstat INEp	2017	LTA - Economic Statistics	2003; 2004; 2004; 2007-2017.
3	Redeby, Jan	SCB	2017	LTA - National Accounts	2003; 2004-2006; 2007; 2009; 2010; 2010; 2011; 2011; 2011; 2012; 2013; 2014; 2016; 2017.
4	Gomez, Eliecen	SCB	2016	Coordination Agriculture	2016.
5	Karlsson, Ann Marie	SE	2016	Coordination Agriculture	2015; 2016.
6	Schmidt, Martin	SE	2016	Operational planning - RBM	2014; 2015; 2015; 2016; 2016.
7	Abelseth, Anne	SSB	2015	HBS - INCAF - CSPro	2014; 2015; 2015.
8	Lundgren, Lars	SCB	2015	HBS - INCAF - Content	2012; 2013; 2014; 2014; 2015; 2015.
9	Megill, David	US	2015	HBS - INCAF - Sampling	2005; 2007; 2009; 2009; 2014; 2014; 2015; 2015.
10	Norman, Leif	SCB	2015	LTA - Environment Statistics	1996; 1998-2002; 2004; 2005; 2006; 2015.
11	Sæbø, Hans Viggo	SSB	2015	Quality Management	2000; 2000; 2001; 2002; 2003; 2004; 2005; 2006; 2010; 2015.
12	Dadour, Philippe	CA	2014	Institutional Development	2012; 2013; 2014; 2014.
13	Jeneva, Cras-simira	BG	2014	Foreign Trade Statistics	2010; 2011; 2014.
14	Olsson, Lars	SCB	2014	Institutional Development	2014.
15	Østereng, Hans K.	SSB	2014	Foreign Trade Statistics	2001; 2003; 2004; 2006; 2007; 2009; 2010; 2010; 2011; 2014.
16	Guldager, Bo	DST	2013	IT - System	2004; 2005; 2007; 2011; 2013
17	Pappila, Mårten	SCB	2013	Statistics in Action - STAC	2013.
18	Netterstrøm, Søren	DST	2012	National Accounts - NADABAS	2001; 2004; 2005; 2005; 2006; 2007; 2008; 2010; 2010; 2011; 2012.
19	Ortúzar, Julio	CI	2012	HBS - IOF - CSPro	2005; 2012.
20	Pedersen, Siv Irene	SSB	2011	MDG Presentation	2010; 2011.
21	Vikan, Stein Terje	SSB	2011	HBS - IOF - Food Security	2011.
22	Øvensen, Geir	SSB	2011	HBS - IOF - Food Security	2005; 2006; 2011.

				rity	
23	Andersson, Pernilla	SCB	2010	Statistics in Action - STAC	2010.
24	Brunborg, Helge	SSB	2010	Vital Statistics	2010.
25	Davidsson, Gunilla	SCB	2010	Statistics in Action - STAC	2003; 2010.
26	Kristiansen, Jan Erik	SSB	2010	Presentation of Statistics	2005; 2005; 2006; 2007; 2010.
27	Opdahl, Stein	SSB	2010	HBS - MDG - Evaluation	2003; 2010.
28	Otto, James	DE	2010	HBS - IAF - Quality	2003; 2003; 2010.
29	Poulin, Niels	DST	2010	IT - Hardware	2007; 2010.
30	Roll Hansen, Dag	SSB	2010	LTA - Social Statistics	2004; 2004-2006; 2007; 2010.
31	Tavares, Laurent	CV	2010	Economic Statistics	2008; 2009; 2010.
32	Triebkorn, Erwin	DE	2010	HBS - IAF/IOF - Processing	2003; 2003; 2004; 2009; 2010.
33	Alberts, Ritva	FI	2009	HR - Institutional Development	2009.
34	Ellemose Jensen, Jesper	DST	2009	Scanstat Home Office - Quality	2003; 2004; 2006; 2007; 2007; 2008; 2009.
35	Kjøsterud, Ellen Cathrine	SSB	2009	HBS - IOF - Analysis	2009.
36	Mathiassen, Astrid	SSB	2009	HBS - IOF - Analysis	2005; 2006; 2009.
37	Madaya, Nora	UG	2008	Institutional Development	2007; 2008.
38	Eriksson Gothe, Maj	SCB	2007	Tourism Statistics	2006; 2007.
39	Kiregyera, Ben	UG	2007	Project Evaluation	2005; 2007; 2007.
40	Svensson, Rolf	SCB	2007	Tourism Statistics	2003; 2004; 2007.
41	Altvall, Helena	SE	2006	Gender Statistics	2006.
42	Borman, Karsten	DST	2006	LTA - IT	2004-2006.
43	Gewalli, Lars Erik	DST	2006	Scanstat Home Office	2002; 2003; 2003; 2004; 2006.
44	Johansson, Sten	SCB	2006	Strategic Planning	1996; 1996; 2006.
45	Jorner, Ulf	SCB	2006	Strategic Planning	2006.
46	Jäverlind, Robert	SCB	2006	Cost Accounting	2003; 2006.
47	Nilsson, Sofia	SCB	2006	Gender Statistics	2006.
48	Thygesen, Lars	DST	2006	Strategic IT Development	2003; 2003; 2006.
49	Wismer, Kirsten	DST	2006	Strategic Planning	2006.
50	Altvall, Hans Erik	SCB	2005	LTA - Institutional Development	2000; 2001-2005.

51	Andersen, Camilla	DST	2005	Statistics in Action - STAC	2005; 2005.
52	Andersen, Otto	DST	2005	Dissemination - User Dialogue	2005.
53	Ekman, Veronika	SCB	2005	Statistics in Action - STAC	2005.
54	Henningsson, Birgit	SCB	2005	Statistics in Action - STAC	2003; 2003; 2005.
55	Lazo, Antonio H.	PE	2005	National Accounts	2003; 2005.
56	Maniskkaviita, Ari	SCB	2005	Statistics in Action - STAC	2005; 2005.
57	Persson, Jessica	SCB	2005	Statistics in Action - STAC	2005.
58	Petersson, Kenny	SCB	2005	Data Processing	(1994,1996); 1999; 1999; 2000; 2000; 2001; 2001; 2002; 2003; 2003; 2005.
59	Rasmusson, Inga-Maj	SCB	2005	Construction Statistics	2003; 2005.
60	Vorwerk, Peter	SCB	2005	Statistics in Action - STAC	2005; 2005.

60 advisors in 205 visits during the 12 years 2005 – 2017.

LTA = Long Term Adviser, HBS = Household Budget Survey, SCB = Statistics Sweden, INEp = INE Portugal, SE = Sweden, SSB = Statistics Norway, US = United States of America, CA = Canada, BG = Bulgaria, DST= Statistics Denmark, CI = Chile, DE = Germany, CV = Cape Verde, FI = Finland, UG = Uganda, PE = Peru, TZ = Tanzania

All mission reports since 2002 can be found at www.dst.dk/mozambique