INSTITUTO NACIONAL DE ESTATÍSTICA

Translated from the Portuguese original

Revised proposal on a Project for Modernising the Sub-system of Agricultural Statistics

Proposal made by the National Statistical Institute and the Ministry of Agriculture and Food Security with support from Scanstat

25 June 2016

(revision of the 10 May 2016 proposal)

A project proposal for the modernising of the Sub-system of Agricultural Statistics at the Ministry of Agriculture and Food Security (MASA)

Project:	Modernising the Sub-system of Agricultural Statistics
Project funding:	Sweden through the INE Common Fund
Project component:	Extension of the modernising of the National Statistics System
Implementing agencies:	MASA, INE and Scanstat

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Abbreviations

DPCI	Directorate of Planning and International Cooperation at MASA
DPCI/DEST	Department for Statistics at MASA
GSBPM	Generic Statistical Business Process Model
IAI	The annual Integrated Agricultural Survey (Inquérito Agrário Integrado)
INE	Instituto Nacional de Estatística (National Statistical Institute of Mozambique)
INCAF	Inquérito Contínuo aos Agregados Familiares (Continuous Multipurpose Household Survey)
MASA	Ministério da Agricultura e Segurança Alimentar (Ministry of Agriculture and Food Security) (formerly Ministry of Agriculture, MINAG),
PEDSA	Strategic Development Plan for the Agriculture Sector (Plano Estratégico de Desenvolvimento do Sector Agrário)
PDEA	A ten-year Master Plan for the Development of Agricultural Statistics 2012-2022 for Mozambique (Plano Director de Estatísticas Agrárias 2012-2022)
RBM	Results-Based Management
SADC	Southern African Development Community
Scanstat	Consortium consisting of Statistics Denmark, Statistics Norway and Statistics Sweden that has been working with INE Mozambique since 1998.
SEN	Sistema Estatístico Nacional (NSS National Statistical System)
Sida	Swedish International Development Cooperation Agency (Asdi in Portuguese)
SWOT	Strengths, Weaknesses, Opportunities, Threats (FOFA in Portuguese)
TIA	The former Annual Agricultural Survey (Trabalho de Inquérito Agrária)

Summary

This document is a proposal on extending a present project at the National Institute of Statistics (INE) to also cover relevant activities at the Ministry of Agriculture and Food Security (MASA). MASA is an important member of the National Statistical System (SEN) where INE according to the statistics law has a role of securing the quality of Mozambican official statistics. The project proposal is for a period of 3½ years. Beneficiaries of the project are the Ministry of Agriculture and Food Security, the National Statistical System of Mozambique and its coordinating body the National Statistical Institute, as well as the whole range of users of official statistics in Mozambique. The key change agents are the top management of the mentioned institutions, plus the technicians and users who daily work with agricultural statistics.

The components of the project have been drafted and discussed during the preparation phase of the project that started already in 2014. The ideas have been further concretized during and after the Fact Finding and Project Identification Missions in May 2015 and February 2016. This resulting proposal has been revised and appreciated by the Directorate for Coordination at the INE (INE/DICRE) and the Directorate for Planning and International Relations at the MASA (MASA/DPCI).

The overall project objective is that the MASA after the three and half years have improved its institutional capacity to deliver relevant, reliable and timely statistical information within the National Statistical System in Mozambique, and that the MASA at that time is working according to sound statistical methods and practices in line with national and international standards.

Motivation: Agriculture is the main source of employment and family income for the majority of the Mozambican population (80% of the households are involved in the sector) in the rural, semi-urban and urban areas in Mozambique, but the agricultural sector only contributes to 22% of the Gross National Product. The sector is dominated by smallholders complemented by a number of commercial farms. Making the sector more productive and sustainable is probably the most efficient short time way to reduce absolute rural poverty.

In short, MASA is a delegated producer of official statistics within the National Statistical System (SEN) and responsible for surveys on crop production, livestock, irrigation, machinery and input to the sector. In the Master Plan for Development of Agricultural Statistics 2012-2022, adopted by the High Council of Statistics in 2011, the need for further development of agricultural statistics is stressed.

The project: The project is an extension of the present Scanstat Project at INE. The three parts of the project cover most, if not all, of the activities related to the production of official statistics at MASA.

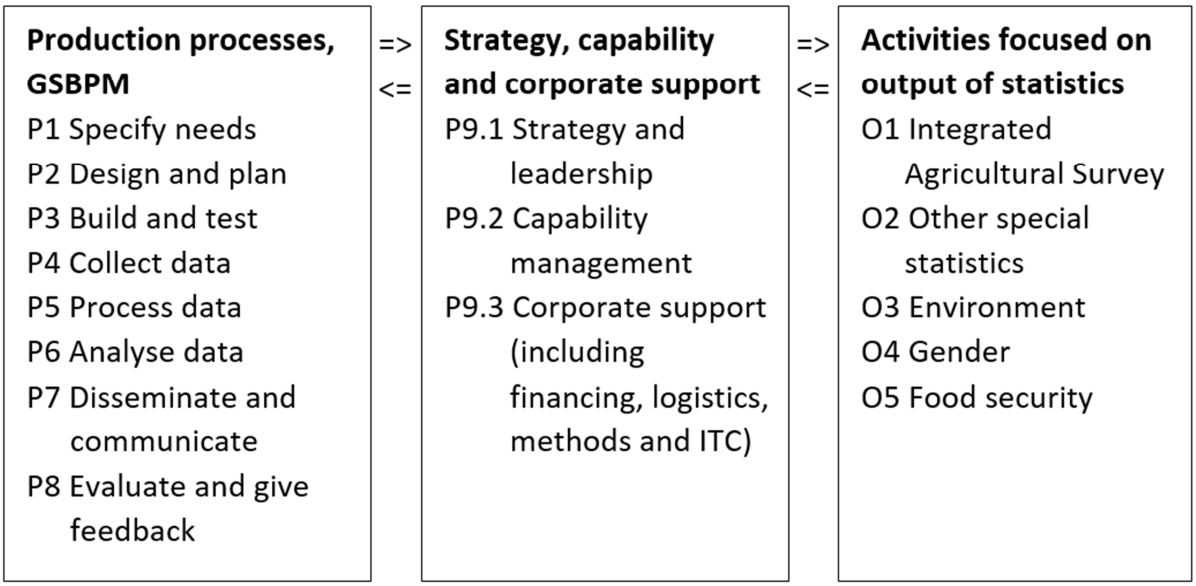

Figure 1. Outline of the project

- The first part, **Production processes,** aims to create a robust system for the production and dissemination of statistics. A base for the work is the Generic Statistical Business Process Model (GSBPM[1]) adopted by the United Nations and recommended by INE to be used within the National Statistical System of Mozambique. The use of a process oriented view will benefit the production of all areas of agricultural statistics as well as the statistical system in general. The development of the processes is to be integrated with the development of the statistical outputs according to the Master Plan for Development of Agricultural Statistics securing that previous experiences are taken into account. This integration also safeguards that the goals for production and dissemination of statistical products are in line with the Master Plan. This first part is covering theoretical and methodological statistical aspects of the production. The principal promoter if this part is the National Institute of Statistics (INE) as being responsible for the National Statistical System.

- The second part, **Strategy, capability and corporate support,** aims to improve the capacity in general and is compatible with the GSBPM extension GAMSO [2]that was launched last year. The aim with this part is to make MASA an efficient contributor to the National Statistical System, having the capability to produce the statistics needed. This part, together with the previous one, constitutes the institutional capacity building component of the project and deals primarily with organisational aspects. Principal promoter for this part is the project itself, in cooperation with the Scanstat consortium.

- The third part, **Output of statistics,** focuses on statistical output in line with user's needs and the MASA Master Plan for Development of Agricultural Statistics. Apart from the Integrated Agricultural Survey (IAI) there are some major areas where input of agricultural statistics is important for good decision-making at different levels in the society. These areas include environmental statistics, gender statistics and food security statistics where the MASA is one of the institutions that contribute with input. It is mainly here the gains from the other parts of the project will be visible and it is here the actual work will be done, dealing

[1] http://www1.unece.org/stat/platform/display/GSBPM/Generic+Statistical+Business+Process+Model
[2] http://www1.unece.org/stat/platform/display/GAMSO/GAMSO+Home

with the practical aspects of implementing the MASA Master Plan for Statistics 2012-2022. Principal promoter is the Ministry of Agriculture and Food Security.

Coordination: The INE plays an important role in the coordination of the implementation of the project as the project is considered as an active part of the National Statistical System modernizing effort of which the INE has the overall responsibility. A special Project Committee is therefore created, consisting of upper management members from both the MASA and the INE. The role of the MASA coordinator, Scanstat and its resident adviser is to assist the MASA and the INE to stay on track towards the project goals and the Master Plan for the Development of Agricultural Statistics, in spite of the day to day problems that are part of the life of Mozambican institutions. The MASA project coordinator will be appointed by the Director of MASA/DPCI and will do fulltime work for the project together with the Scanstat resident advisor and other MASA and INE subject matter specialists.

Costs: The total cost for the project period is estimated to EUR 2.6 million of which EUR 0.9 million are to cover up the missing part of the annual budget for surveys (IAI), including equipment and training. The government contribution is however difficult to forecast for more than one year ahead. An important role of the project will be to find more efficient ways to produce quality statistics using modern technology, advanced methods and by using possible synergies between the existing and future producers of statistics. A more detailed budget is presented in Annex 4.

Resumo

Este documento é uma proposta sobre o alargamento dum projecto já existente no Instituto Nacional de Estatística (INE) para abranger também actividades relevantes no Ministério da Agricultura e Segurança Alimentar (MASA). O MASA é um membro importante do Sistema Estatístico Nacional (SEN) onde, de acordo com a lei, o INE tem um papel de assegurar a qualidade das estatísticas oficiais moçambicanas. A proposta do projecto é para um período de 3 anos e meio. Beneficiários do projecto são o Ministério da Agricultura e Segurança Alimentar (como agencia implementadora), o Sistema Estatístico Nacional de Moçambique e do seu órgão de coordenação - o Instituto Nacional de Estatística, bem como toda a gama de utilizadores de estatísticas oficiais em Moçambique. Os agentes chave de mudança são funcionários da gestão de topo das instituições mencionadas, mais os técnicos e utilizadores que diariamente trabalham com as estatísticas agrárias.

As componentes do projecto foram elaboradas e discutidas durante a fase de preparação do projecto que começou já em 2014. As ideias foram mais concretizadas durante e depois as missões de levantamento e identificação do projecto levadas a cabo em Maio de 2015 e Fevereiro de 2016. Esta proposta resultante foi revista e aceite pela Direcção de Integração e Coordenação do INE (INE / DICRE) e pela Direcção de Planificação e Cooperação internacional do MASA (MASA/DPCI).

O objectivo geral do projecto é de reforçar as estruturas existentes no MASA para que o ministério após os três anos e meio tenha melhorado a sua capacidade institucional para fornecer informação estatística relevante, fiável e atempada no âmbito do Sistema Estatístico Nacional de Moçambique, e que o MASA nesse momento esteja a trabalhar de acordo com métodos estatísticos patronizados usando boas práticas em conformidade com as normas internacionais e nacionais do SEN.

Motivação: A agricultura é a principal fonte de emprego e renda familiar para a maioria da população moçambicana (80% dos agregados familiares estão envolvidos no sector) nas áreas rurais, semi-urbanas e urbanas em Moçambique, mas o sector agrícola só contribui com cerca de 22% do Produto Interno Bruto. O sector é dominado por pequenos produtores, complementados por um número de explorações agrárias comerciais. Tornar o sector mais produtivo e sustentável é provavelmente a maneira mais eficiente de curto tempo para reduzir a pobreza rural absoluta.

O MASA/DPCI é um dos órgãos delegados(ODINE) do INE dentro do Sistema Estatístico Nacional (SEN), responsável pela produção de estatísticas oficiais sobre produção agrícola, pecuária, irrigação, maquinaria e insumos para o sector. No Plano Director para o Desenvolvimento de Estatísticas Agrárias 2012-2022, aprovado pelo Conselho Superior de Estatística em 2011, é sublinhada a necessidade de um maior desenvolvimento das estatísticas agrárias.

O projecto: O projecto será uma extensão do presente projecto Scanstat no INE. As três partes do projecto cobrem a maioria, se não todas, as actividades relacionadas com a produção de estatísticas oficiais no MASA.

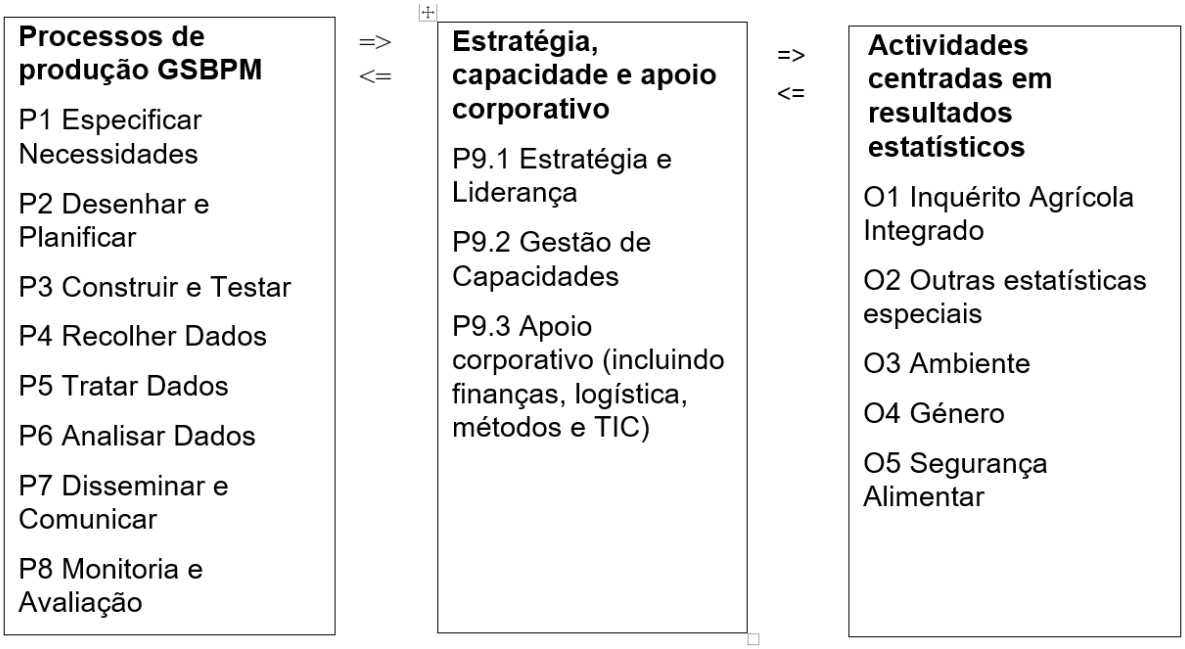

Figura 1. Esboço do projecto

- A primeira parte, **Processos de produção,** visa criar um sistema robusto para a produção e divulgação de estatísticas. A base para o trabalho é o Modelo Genérico de Processos de Produção Estatística (GSBPM[3]), adoptado pelas Nações Unidas e recomendado pelo INE para ser usado no âmbito do Sistema Estatístico Nacional de Moçambique. O uso de uma visão orientada para processos irá beneficiar a produção de todas as áreas de estatísticas agrárias, bem como o sistema estatístico em geral. O desenvolvimento dos processos deve ser integrado com o desenvolvimento dos principais resultados estatísticos de acordo com o Plano Director de Desenvolvimento das Estatísticas Agrárias e garantir que as experiências anteriores sejam tomadas em conta. Esta integração também garante que as metas para a produção e disseminação de produtos estatísticos estejam alinhadas com o Plano Director. Esta primeira parte trata aspectos estatísticos teoréticos e metodológicos da produção. Promotor principal: Instituto Nacional de Estatística como reitor do Sistema Estatístico Nacional.

- A segunda parte, **Estratégia, capacidade e apoio corporativo,** visa melhorar a capacidade em geral, e é compatível com o GAMSO[4] - extensão do GSBPM, que foi lançado no ano passado. O objectivo com esta parte é fazer MASA um colaborador eficaz para o Sistema Estatístico Nacional, tendo a capacidade de produzir as estatísticas necessárias. Esta parte, juntamente com o anterior, constitui a componente de reforço da capacidade institucional do projecto e lida principalmente com aspectos organizacionais. Promotor principal: O Comité do Projecto, em colaboração com o consorcio Scanstat.

- A terceira parte, **Saída de estatísticas,** centra-se na produção estatística, de acordo com as necessidades do utilizador e do Plano Director do MASA para o Desenvolvimento de Estatísticas Agrárias. Para além do Inquérito Agrícola Integrado (IAI), existem algumas

[3] http://www1.unece.org/stat/platform/display/GSBPM/Generic+Statistical+Business+Process+Model
[4] http://www1.unece.org/stat/platform/display/GAMSO/GAMSO+Home

grandes áreas onde o contributo das estatísticas agrárias é importante para uma boa tomada de decisões em diferentes níveis da sociedade. Estas áreas incluem as estatísticas ambientais, estatísticas sobre género e estatísticas sobre segurança alimentar onde o MASA é uma das instituições que contribuem. É principalmente aqui que os ganhos com as outras partes do projecto serão visíveis e é aqui o trabalho real será feito, lidando com os aspectos práticos da implementação do MASA Plano Director de Estatística 2012-2022. Promotor principal: O Ministério da Agricultura e Segurança Alimentar.

Coordenação: O INE desempenha um papel importante na coordenação da execução do projecto dado que o projecto é encarado como uma parte ativa do esforço de modernização do Sistema Estatístico Nacional onde o INE tem uma responsabilidade holística. Um Comité do Projecto será por isso estabelecido com membros de ambos o MASA e o INE. O papel do coordenador do MASA e do Scanstat e o seu assessor residente é de ajudar o MASA e o INE a permanecer na pista em direção às metas do projecto e, por conseguinte, do Plano Director de Desenvolvimento das Estatísticas Agrárias, apesar dos problemas do dia-a-dia que fazem parte da vida das instituições moçambicanas. O coordenador do lado de MASA do projecto será nomeado pelo Director da MASA/DPCI e vai trabalhar em tempo inteiro conjunto com o assessor residente do Scanstat e os outros especialistas na matéria do MASA e do INE.

Custos: O custo total para o período de projeto é estimado em 2,6 milhões EUR dos quais 0,9 milhões EUR são para cobrir a parte que falta na contribuição do governo para realizar a pesquisa anual (IAI,) incluindo equipamento e treino. A contribuição do governo é, no entanto, difícil prever por mais de um ano. Um papel importante do projeto será o de encontrar formas mais eficientes de produzir estatísticas de qualidade, utilizando tecnologia moderna, métodos avançados e usando as possíveis sinergias entre os produtores existentes e futuros de estatísticas. Um orçamento mais detalhado é apresentado no Anexo 4.

1 Introduction

1.1 Background

In August 2014, the Ministry of Agriculture and Food Security of Mozambique (MASA), approached the Swedish Embassy in Maputo requesting support to strengthen its capacity in production and use of agricultural statistics. A self-assessment of actual situation was made by MASA/DPCI/DEST in February 2015. In May 2015 Scanstat together with the Swedish Board of Agriculture carried out a ten-day fact finding mission to MASA and the National Institute of Statistics (INE) to evaluate the preconditions for a possible project.

The fact finding mission concluded that the management at MASA and INE are dedicated and committed to move agriculture statistics forward and that there is a strong need for further support to the agricultural statistical system in Mozambique.

The Master Plan for Development of Agricultural Statistics (PDEA 2012-2022) was approved by the High Council of Statistics in 2011. The plan fits well into the *Global Strategy to improve Agricultural and Rural Statistics* **(**GSARS[5]**)**. These two plans are establishing a robust management frame for agricultural statistics, indicating the main statistical operations to be carried out in the country, their planned costs, and the products to be obtained, among other things. The national plan is oriented for integration with the National Statistical System (NSS). Unfortunately, and for various reasons, not all that was planned has been implemented so far, and the need of a stronger focus on the implementation is growing. This is also why MASA contacted the Swedish Embassy in Maputo in search of a solution.

Further discussions between INE, MASA and the Swedish Embassy in Maputo led to the conclusion that the process of compiling a project proposal should be continued by carrying out a project identification and specification mission that had contributed to this report.

The proposal presented here is based on interviews and long term contacts with key staff and technicians at MASA and INE, complemented by meetings with main stakeholders, as the Ministry of Economy and Finance, the FAO and representatives of the Swedish Embassy in Maputo.

1.2 Current situation for development of agricultural statistics

In Mozambique the National Statistical Institute, INE, (by Presidential Decree No. 9/96 of 28 August) is the central executive body of the National Statistical System as defined in Law No. 7/96 of 05 July, and thus responsible for the production and dissemina-tion of official statistical information of general interest to the country.

Currently INE is implementing the fourth strategic plan for the National Statistical System, PESEN 2013-2017. The Scandinavian Statistical Institutes, have since 1996 been involved in the elaboration and implementation of these plans, and knows the system well through the Scanstat project. Scanstat is currently engaged in a modernising campaign within the system and MASA with its agricultural statistics is the first line ministry to be involved in this work, and the others will follow in due time. The planned work at MASA is well in line with the

[5] www.gsars.org

Global Strategy to Improve Agricultural and Rural Statistics in which FAO and others are involved.

Within the National Statistical System INE have delegated the power to produce and disseminate official statistics to other parts of the Mozambican administration (ODINEs – by INE delegated organs).

In its present form the Ministry of Agriculture and Food Security, the actual MASA, is just a bit older than a year, as the Presidential Decree No. 1/2015 of 16 January established the Ministry of Agriculture and Food Security as the central body of the state apparatus which, in accordance with the principles, objectives and tasks set by the Government, directs, organizes and ensures the implementation of legislation and policies in the field of agriculture, livestock, agricultural hydraulic, agro-forestry plantations and food security.

The Directorate for Planning and International Cooperation (former Directorate of Agrarian Economy and Cooperation) at MASA is one of the ODINEs. MASA has among other things the responsibility to *Produce and systematize information on agriculture and livestock within the country*. Regarding food security, MASA has to *Produce, systematize and disseminate information on food security in the country* and also to *Promote an inter sectoral coordination regarding the formulation, monitoring, evaluation and implementation of the policy framework and the strategies made to ensure food and nutritional security of the population*. (See the MASA organisational chart in Annex 5 which also includes the legal context in which MASA is inserted.)

As can be understood from the above, agricultural statistics serves several purposes, one of which is to feed the ministry itself with the information necessary to implement its responsibilities. On the other hand, agricultural statistics has to be able give an independent estimate on the actual situation, needed to monitor the national figures on agricultural production. In Mozambique INE and MASA implement a large agricultural sample survey (CAP) every 10 years, where the fieldwork primarily is made by MASA staff, but with supervision, processing and methodological statistical support from the statistical office, INE. Regarding methodological supervision and publication of national estimates in the annual early warning system and the annual post-harvest crop estimation (together known as IAI, the Integrated Agricultural Survey) MASA is in charge of the whole work. An integration of the IAI and the INE Continuous Multipurpose Household Survey is a possible way to secure the balance between independent estimation and statistics adapted to the needs of the ministry.

Statistics and Vision 2025

Mozambique's long-term development strategy is guided by the Mozambican Vision 2025 which outlines a wide range of milestones that the country will strive to achieve before the year 2025. Specifically, a number of flagship projects have been earmarked to form the backbone of the realisation of this development plan. There is no doubt that reliable and timely statistics are expected to play a pivotal role in the monitoring and evaluation of the activities spelt out in the strategy. As a result of the increasing need for evidence based planning, the National Statistical System is expected to provide the data necessary for informed policy decision making.

1.3 Coordination of donor funded projects within rural statistics

Over the years MASA has received assistance in a number of donor funded short term projects aimed at specific surveys or tasks. MASA has also had a few long-term technical projects, like the SIMA project collecting prices weekly on agricultural markets, supported by the US Michigan State University, MSU. MSU has also given assistance in the processing of the annual agricultural surveys. FAO has since long been active in supporting agricultural statistics and have been of good help together with Italy and Scanstat when the Master Plan for Development of Agricultural Statistics was elaborated. There is a donor working group for agriculture established, where this project proposal when ready will be presented, asking for support, critics and cooperation.

While making the Master Plan in 2011 it was foreseen that more bilateral support would be realized in support of its implementation. This has still not happened.

1.4 Rationale for supporting agricultural statistics in Mozambique

Reliable statistics are vital for the development of any country. Important for governmental decisions and policies. Investments, taxes and welfare programmes must be based on correct information. Statistics on people's real situation are important when making decisions about how the state can act and strive to improve the life of its citizens. Having 80% of its population dependent on agriculture, timely agricultural statistics is of outmost importance for the reduction of absolute poverty and further development of the country.

The recently published UNU-WIDER book *Growth and Poverty in Sub-Saharan Africa*[6]*,* edited by Arndt, McKay and Tarp, further stresses the needs found in case studies from 16 Sub-Saharan countries, among them Mozambique. The Mozambican chapter of the book was written before the results of the 2014/15 Household Budget survey were published, but is interesting anyhow. It also talks about the importance of the annual agricultural survey TIA (initiated already in 1993 with the help of Statistics Sweden) and the recommendations by Ben Kiregyera[7] that now are to be implemented.

Knowing that the old Millennium Development Goals needed a lot of statistical information to be monitored[8], one can see that the new Sustainable Development Goals (SDG), which have much to do with the rural situation (agricultural production, socio-economic situation and food security and more), will necessarily need even more statistical information to monitor its implementation. Defining how to collect and disseminate these indicators will be an important task for the project, properly treated within its first component Architecture[9].

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[6] The book *Growth and Poverty in Sub-Saharan Africa* can be downloaded at https://www.wider.unu.edu/publication/growth-and-poverty-sub-saharan-africa

[7] The Kiregyera report*, MZ:2007:06 A review of the National Agricultural Information System in Mozambique*, can be found at www.dst.dk/mozambique

[8] Especially the indicators to monitor target 2.3: "By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and nonfarm employment."

[9] The presentation *Modernization of Food & Agriculture Statistics in support of SDG2 by Pietro Gennari, FAO, 2015,* gives a lot of good ideas that are in line with the INE modernization efforts.

Timely agricultural statistics of good quality at household, holding and business levels linked to other statistics produced within the National Statistical System[10] are important for the development of the country.

1.5 Methods used for the project extension

This project proposal is a natural continuation of the contacts between MASA and INE where the Scanstat through its resident advisor have taken active part in the elaboration of the actual Master Plan for Development of Agricultural Statistics 2012-2022 and other documents. The project proposal is also a way of expanding the INE modernization process that has been going on for several years. On request from MASA in August 2014, and with the consent of INE and the Swedish Embassy, a Fact Finding mission organised by Scanstat took place in May 2015. The inputs from that mission, further discussed at MASA and INE, was followed up by a second project identification mission in February 2016 laying out a proposal on a project, including its expected outcome.

The project areas identified follow the common GSBPM model that INE has already adopted and is recommending for use within the current modernising efforts all over the National Statistical System. (Regarding principal projected outputs, outcomes and risks see the Results and Monitoring Framework in Annex 6.) The project work in processes P1 to P8 (GSBPM) and P9 (GAMSO) is mainly of institutional capacity building nature. As being of special interest for MASA some especially important transversal areas (further described in section O1-O5 of the project proposal) are pronounced within the project. There are other statistics that also has to be produced by MASA during the project period and they will all benefit from the institutional development made under processes P1 to P9.

1.6 Project objectives, actual situation and base line

The overall project objective is that MASA and other Mozambican producers of agricultural statistics within, and together with, the National Statistical System should have improved their institutional capacity to deliver relevant, reliable and timely statistical information of quality to meet the needs of Mozambican users within public and private sector as well as civil society researchers, media and citizens (women, men, girls and boys) living in urban and rural areas.

It is also an objective to, in accordance with MASA´s responsibilities, respond timely to the demand for data by international organizations like the FAO, ADB and the World Bank, among others.

[10] Page 36 of the UNU-WIDER book *Growth and Poverty in Sub-Saharan Africa* is in fact also a strong motivation for an expanded support to agricultural statistics: "Two other clear policy priorities [… *apart from improving political stability…*] emerge from case studies on a continent-wide basis. ***Agriculture*** is the first. We hope that the rhetoric surrounding agriculture in general and smallholder agriculture in particular is followed by action at scale in a growing number of countries. The second area is information. ***Information*** should be seen as a vital publicly provided input into an informed polity in general, into policy formation, and into investment decisions by both public and private actors. Doing better on information systems is crucial to achieving broad-based development goals, not just looking back and tallying the score card."

Additionally, another objective is that MASA, INE and the National Statistical System should function well together when the project ends, working with sound statistical methods and practices in line with the ongoing modernization efforts based on national and international standards. The means to realise this objective is to secure that the system of agricultural statistics have the basic capabilities to manage the necessary statistical production processes in an economically sound way.

Along with these capabilities MASA clearly also needs the necessary mandates and resources to do the work.

General technical/professional objective: Improved competence level of the staff at MASA to ensure production of reliable statistics on agriculture and food security taking advantage of available technological opportunities.

General organizational objective: An institutionalised overall functioning of the statistics component of MASA, including its management, planning and monitoring systems.

Actual situation, baseline and opportunities

The current situation when it comes to agricultural statistics is the starting point for this project to take advantage of existing opportunities. For a holistic view of the real situation of agricultural statistics from the point of view of the Statistics Department of MASA, a SWOT analysis was carried out in February 2015. The GSBPM model was used as the basis of the SWOT and all processes were scrutinized, process by process.

This analysis was a year later repeated and discussed with all staff of the Statistics Department of MASA (MASA/DPCI/DEST) during a second project identification mission, resulting in the document seen in Annex 1 - Updated SWOT analysis.

In short it can be said that the MASA collects important data from the field using reasonable methods. But there is a problem of disseminating statistics and explain the significance of them to users. There is also a problem with accessibility of necessary resources in a timely manner for achieving timely disseminate at scheduled dates.

The remedy is creating an improved competence of the institution, including its policies, documentation and standardization, as well as creating an improved image regarding the statistics component of MASA. All this as parts of the capacity building process. The proposed project gives an opportunity that undoubtedly will improve the situation. But it has also be recognized that modernization is not an closed activity that have an end after 2019. The environment always changing so it is important to create open institutions to monitor these changes and adapt to continue deliver what is expected by society and users. One of SEN's objectives will be to facilitate this work. Also after year 2019.

2 Project proposal: July 2016 – December 2019

This proposal engages in the following six project components where the first five are concentrating on capacity building and institutional development and where the sixth component is dealing with output centred activities (in parentheses the origin of the component):

- **A.** Architecture, Planning and Monitoring (GSBPM processes 1, 2, 3 and 8)
- **B.** Collecting data (GSBPM process 4)
- **C.** Processing and Analysing (GSBPM process 5 and 6)
- **D.** Dissemination and Communication (GSBPM process 7)
- **E.** Management, strategy, capability and corporate support (GAMSO, INE process 9)
- **F.** Activities focused on output of statistics (MASA Master Plan, PDEA 2012-2022)

Annex 7 presents in depth the content of the various components. The rubrics are: Background and base line; The project (goals and aspirations); Actors (including key change agents) and; Results (see also Annex 6).

The first components (A-D) are about building the overall capacity to be used as building blocks within the National Statistical System. Then we have a component (E) dealing with functions such as strategy and leadership, capacity management and corporate support within MASA statistics. And finally, we have the output-oriented component (F) in accordance with the MASA Master Plan 2012-2022.

As already mentioned, the idea behind this design is that there is a need on the part of MASA to have access to sufficient capacity to be able to deal with each of the processes 1 to 9 of GSBPM in one form or another, whether by the MASA by itself or through another institution, to ensure that statistical information of good quality is produced as a result.

Note that when we stress that all 9 processes should be dealt with in one way or another, this does not necessarily mean that each institution of the National Statistical System of Mozambique should have the ability to do everything in all processes. On the contrary, now it is becoming more and more relevant to look at the national statistical system as a system, just as its name suggests, and seek synergies between institutions coordinated by INE regarding official statistics. In this project the experience made by INE will be used to support the capacity development of MASA, and vice versa to take advantage of this kind of synergies.

3 Implementation, risks, management and monitoring

This project is part of the ongoing Scanstat project that started back in 1998 as a traditional twinning project between INE, Statistics Norway and Statistics Sweden (Statistics Denmark joined 2001). The project has developed during the years and the present agreement between INE and Scanstat continues until end of 2017. If INE and the other stakeholders are interested Statistics Denmark, as lead for the Scanstat consortium, will positively consider a continuation of the agreement or similar modalities to ensure the relevant results.

This project is part of the ongoing modernization project regarding the official statistics within the National Statistical System. Since 1998 Scandinavians have taken part in this work starting with a project of traditional twinning between INE, Statistics Norway and Sweden (Denmark statistics joined in 2001). The Scandinavian project continued over the years and the present agreement between the INE and Scanstat continues until the end of 2017, with possible extension until the end of 2019 if the INE and other stakeholders are expressing an interest.

It is anyhow assumed that the project continues under the INE umbrella and therefore under the monitoring by the INE Common Fund members and cooperating partners.

3.1 Means of implementation

The expected outcome, outputs and some of the activities for the components of the project have been discussed and written down in the Results and Monitoring Framework document created at the RBM workshop held in Maputo in April 2016. From MASA participated upper management (DPCI), the head of Statistics (DPCI/DEST) and most of the staff at DPCI/DEST. From INE participated the Director of the Directorate for Coordination (DICRE), the head of International Relations (DCPRE), a technician from the modernization project and staff from the planning department. The document will be further elaborated during the initial months of the project.

The project will be monitored through the following instruments: (1) The monitoring framework of the INE-MASA project (in Annex 6 there is a preliminary version that will be further developed in the beginning of the project). The framework will be revised and updated ahead of the quarterly Project Committee meetings, where acquired gains and the difficulties faced will be discussed, examined and recommendations agreed upon; (2) In addition to the above, the project will be managed integrated with the normal routines of MASA and INE and thus supervised by their existing monitoring systems including the Partnership Committee of INE Common Fund.

The long-term Scanstat advisor, the MASA project coordinator and the local counterparts at MASA and INE are to facilitate and to follow up on activities and results. Activities are done through short term consultancy missions, workshops/seminars, on-the-job training, study visits or training courses. Whenever appropriate a holistic perspective on the National Statistical System will be used, i.e. when organising training and seminars also INE and other parts of the National Statistical System (SEN) will be invited to participate.

Scanstat will ensure limited backstopping of the project by supporting project management and administration as an extension integrated with the current Scanstat project at INE.

3.2 The Project Committee

Although the intention is to avoid creating parallel structures the fact that both MASA and INE are implementing this project in common calls for an exception. The project will therefore be supervised by a project steering committee, headed by the Director of MASA/DPCI, which manifests large part of the ownership and leadership by MASA and INE. Questions regarding MASA's absorption capacity are part of the discussions that will take place herein. The views of subject matter staff and management is crucial in the work process as to make sure that activities are planned in detail to fit the different in-house capacities at MASA. The steering committee also takes into account other initiatives within agricultural statistics to avoid overcrowding and overlapping. Strategic or otherwise important issues for the National Statistical System (SEN) might be lifted to the High Council of Statistics by INE and/or MASA.

Members: Permanent members of the Project Committee are:

A From MASA:
   1 Director of the Directorate of Planning and International Cooperation (DDPCI)
   2 Head of the Department of Administration and Finance (DAF)
   3 Head of the Department of Statistics (DPCI/DEST)
   4 MASA Project Coordinator
B From INE:
   1 Director of the Directorate of Integration, Coordination and External Relations (DDICRE)
   2 Director of the Directorate of Business and Sectorial Statistics (DDESE)
   3 Director of Administration and Human Resources (DARH)
C From Scanstat:
   1 Resident Scanstat Consultant
   2 Representative of the Scanstat central office (twice a year)
D Others:
   1 Stakeholders who have a permanent interest in the development of agricultural statistics.
   2 Still more occasional participants invited for specific purposes.

Minutes: Two participants, one from INE and one from MASA, are appointed for taking and preparing minutes of the meetings. The minutes will within two weeks be distributed to the other participants and to the lead of the INE Common Fund Cooperating Partners.

Periodicity: Meetings should be held four times a year at dates that are decided well in advance.

Items to discuss: The meetings should concentrate on the activity plan and follow-up of the Results and Monitoring Framework (RMF), and if needed decide on necessary revisions. The risk assessment should be assessed and revised if needed. Once a year the external monitoring report will be discussed.

Meeting standard agenda:

1. Opening
2. Minutes from previous meeting
3. Presentation from one of the sub components.
4. Results and Monitoring Framework follow up
5. Results and Monitoring Framework revision

6. Budget situation and risk assessment revision
7. List of activities for the next six months
8. Closing

Daily monitoring of the project will be done by the MASA project coordinator and the Scanstat resident advisor.

As the project is a part of the general support to the National Statistical System information on progress will also be included in the normal INE reporting to the INE Common Fund Partnership Committee.

An annual meeting between INE, MASA, the Swedish Embassy and the Scanstat will be held if needed.

3.3 Government Commitment

Regarding the TA part of the project (components A-E) the Government of Mozambique has through the INE committed itself to undertake this project as part of its present agreement with Scanstat. The added costs for the project will be covered through the INE Common Fund as agreed between the Government of Sweden and the Government of Mozambique. A budget for the project, as found in Annex 4 to this proposal, or any updated version of it agreed on by INE, MASA, Swedish Embassy and Scanstat, will be the base for the financing. MASA, being part of the National Statistical System (SEN) will dedicate its staff to work for this project as required and also provide adequate office space and equipment to manage the project. MASA will cost share in funding activities according to its annual plans and capacity.

3.4 Management for results and project coordination

The project management structure responds to the main project objectives and also acknowledges the following two important pillars:

- The necessity to ensure sustainability of the project results by delegating the project ownership to the beneficiaries (with reference to the institutional capacity components A-E) and
- A need to focus on the proposed results and to reduce deviation to the minimum (with reference to component F - Activities focused on output of statistics).

As already mentioned, the coordination activities both by the INE and MASA will be strengthened through capacity building. A more stringent planning process will ensure that coordination, communication and cooperation skills are developed within the National Statistical System. The project will avoid to create parallel project specific structures.

3.5 The role of the MASA Project coordinator

It is proposed that a national MASA Project Coordinator is appointed to the project. This is due to the fact that statistics on agriculture, livestock and food security still are produced by various units within and outside MASA and there is a necessity to have an oversight over the whole system to be able to monitor the activities. Having a local project coordinator will also facilitate a sustainable continuation after the project has ended.

The MASA coordinator of the project should be someone who well knows the situation and the possibilities of developing agricultural statistics. It should be an open person, willing to communicate with his colleagues. This is important to facilitate a sustainable continuation of the ideas, also after the end of the project. While the project aim is to strengthen existing structures the appointed project coordinator of MASA preferable is a person that already is working to improve agricultural statistics, at the same time as it is a person that can leave normal job duties for full time support the project. The coordinator's tasks are to facilitate achieving the objectives of the project, working with the resident consultant Scanstat under the Project Committee.

3.6 The role of the resident Scanstat advisor

The idea behind this project is that the INE alone should in future manage this kind of projects in other ODINEs without outside help. But there is still a lack of experience and it will therefore be an advantage to continue cooperation with Scanstat and its resident advisor. The resident consultant and the project coordinator of MASA, together with INE and the management of MASA regularly discuss the project and its policy issues within the National Statistical System. Such discussions may also occur in relation to the INE Common Fund where a number of partners interested in statistics meets.

The overall task of the resident advisor continues as specified in the current agreement between INE and Scanstat. The idea is to assist INE in its efforts to develop an efficient system for the planning, management, monitoring and evaluation of the National Statistical System. All in close cooperation with national and international partners (including MASA and other producers of official statistics) The objectives are 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 defining architecture for database and Internet management.
- Assist in the maintenance of a high motivation, personnel management and an efficient training environment.

The resident advisor will continue to participate in the Advisory Council of INE, when appropriate, and it will be an advantage if the consultant also is invited to participate in similar meetings at the MASA.

3.7 Reporting and follow up

The Results and Monitoring Framework and its list of activities is revised and updated every quarter together with the responsible local partners of the Steering Committee. The performance monitoring framework of the cooperation consists of three interrelated parts: (1) the results and monitoring framework (Annex 6) coupled with; (2) the performance analysis and; (3) its management response.

Four meetings per year by the Steering Committee. The minutes of the Steering Committee meetings will be distributed to all stakeholders. This reporting will be done in line with the Results and Monitoring Framework that is to be finally defined as an initial component of the project to elaborate. The framework will remain slightly adjustable until the time of 1st

Review. The still non-identified baselines will be updated during the initial phase of the project.

An annual report summarising the products and results of the reporting period. It analyses the challenges and reports on the project plan deviations. The report will include the observations from an annual external monitoring mission (preferably made by FAO that also will follow the project on an ongoing basis through its office in Maputo), assessing whether the project is on track according to the result matrix and, if needed, proposing necessary adjustments.

An external review mission at the end of year 2 (mid-term review in 2017, which may possibly be integrated with the second mid-term review of the Strategic Plan SEN 2013-2017-2019) to assess whether the project is on track to according to the results matrix, it is necessary to propose the matrix settings and whether it is appropriate for an extension of the project to cover the entire period of the Master Plan 2012-2022. The terms of reference for this review shall be prepared by INE and MASA and reviewed by the cooperation partners of the INE's Common Fund.

Most reports from the project will be published at the Scanstat web site with the address www.dst.dk/mozambique for a wider audience to be able to share the findings, in the same manner as it is done in the present INE–Scanstat project.

3.8 Financial follow up

Scanstat assists with the financial follow of the TA component of the project, both on an annual basis as well as accumulated for the project cycle. Costs are presented and compared with budgetary lines. Fees, reimbursable costs and assignment costs are invoiced to INE on a quarterly basis, together with other invoices to INE.

Annual external audits are defined in the Framework Agreement / Memory of Understanding between INE and the cooperating partners of the INE Common Fund.

3.9 Risks and mitigation of risk

There are various risks in relation to achieving the objectives and the desired outcomes of this project. The general risks are summarized in the matrix below.

Description	**Category**	**Impact**	**Probability**	**Countermeasure**
Identified risk with potential effect on achievement of objectives		***Potential effect on achievement of objectives*** *(*major, moderate, minor)	***Likelihood that the event will occur*** *(*low, medium, high)	***The project risk mitigation and/or risk reduction***
R1: Failure to implement the Master Plan for Agricultural Statistics (PDEA)	General	Moderate: Some of the components of the plan has to be remade	High: It will occur if no extra resources are inserted.	This project proposal, if accepted The project assisting MASA in discussions with the Government.

		anyhow.		
R2: Risk of loss of credibility of the statistical sector	P1 Specify needs	Major: If MASA statistics not is doing the statistics according to users' needs it will lose its reason to exist	Medium: Some of the ministries are already questioning the work of MASA statistics	This project proposal, if accepted. Following the new context of United Nations regarding statistics in the post-2015 period.
R3: Trained technicians might leave MASA and a heavy reliance on external experts	P2 Design P3 Build P5 Processing	Moderate: The dependence	Medium	Recruitment and training in priority areas. Agreements with external entities who can provide the expertise. Incentives.
R4: Not obtaining necessary financing of the IAI.	P1 – P9	Major: Without IAI is difficult to produce agricultural statistics.	Medium: It depends on government and donor contributions	External risk, difficult to mitigate. If DEST shows good results, it might help.
R5: Not obtaining the planned financing on a timely basis combined with the high costs involved when it comes to work in rural areas.	P4 Collect	Major: The pre-harvest early warning phase of IAI is difficult to prepare and implement early in the year.	High:	External risk and difficult to mitigate, but a good planning system might help. The possibility to show good results will also help.
R6: Weather conditions and military activities restricting the work	P4 Collect	Moderate: It will reduce survey coverage in certain areas	Medium: It happens now and then but normally in limited geographically areas	Advanced statistical methods can reduce the impact of non-response. Better planning might also help.
R7: That the statistics produced not is used in the proper way.	P6 Analyse	Low: Unfortunately	High:	Review the P1 Specification the needs process. Train users both within MASA and outside.
R8: That the statistics produced not is disseminated in the proper way.	P7 Disseminate	High: If not disseminated the production will not be supported	Low:	This will be one of the main targets for the project
R9: A non-learning organisation	P8 Monitoring and evaluation	Major: The idea with the project is to create implemented knowledge	Low:	This will also be one of the main targets for the project

R10: Lack of and high turnover of staff at MASA	P9.2Management	Major: lack of staff would prevent progress in the different subject matter areas.	Medium:	
R11: Lack of short-term consultants within the Scanstat consortium	P9.1Planning	Moderate: MASA delay in project implementation	Low: Scanstat is strengthening its internal resource base in order to provide consultants for the international cooperation.	Risk reduction if needed: Scanstat can if needed hire services from external consultants.
R12: Insufficient budget to implement the Master Plan	P9.1 Political Management	Moderate: MASA less able to engage in project implementation.	Medium:	Promote new methods, technology and other cost saving techniques. Assist in the dialogue with the government and the donor community. Commitment from the Government to support the project.
R13: Political situation in Mozambique	P9.1 Political	Major: Should political instability occur the project will be affected.	Medium: The political tension is growing.	External risk and difficult to mitigate.
R14: Potential overlapping with other projects	P9.1 Planning	Low: Interaction with other projects are sought for.	Low: The project components were discussed prior to assembling the proposal	Risk reduction through continuous contact and networking with other cooperation partners in order to coordinate the different activities. Donor coordination is part of the projects participation in the INE common fund environment.
R15: Corruption	Corruption	Minor	Medium	One experienced long-term advisor will be working at MASA. The INE Common Fund partners.

Turnover, such as brain drain and retirement, are serious matters in any organisation and could be alleviated with good working conditions. Nevertheless, under normal circumstances, people will leave and the only way to meet this threat is to always have a cadre of well-trained people and a pool of know-how in the organisation so as not to become dependent on one or a few persons. The use of standardized metadata and process descriptions as facilitated by the use of GSBPM framework generally reduces the consequences of staff turnover.

4 Beneficiaries and factors ensuring sustainability

4.1 Beneficiaries

The beneficiaries will be the Mozambican Ministry of Agriculture and Food Security (MASA) and the National Statistical System of Mozambique (SEN). An indirect beneficiary partly involved in the project implementation will be other agencies responsible for agricultural statistics. The project will take care that stakeholders are involved in activities when appropriate, e.g., ministries and other agencies that produce agricultural statistics, and not only MASA. The focus should be to develop the agricultural part of the entire National Statistical Systems in the country by developing the statistical office of MASA.

4.2 Sustainability, exit and non-exit

Sustainability: The Scandinavian approach with an institutional capacity building project founded on cooperation between NSIs has a character of a long-term collaboration and partnership. The present Scanstat cooperation with the National Statistical Institute has shown that it takes time to build up a well-functioning apparatus for producing statistics in Mozambique. But it has also shown that it is possible, and that the receiving institution can reach a level of professionalism that makes it possible for it to continue by itself and even spread the methodological efforts to other parts of the system.

It is important that the role of MASA is clearly visible in the cooperation and that it is decisive in implementation of the project. MASA, besides being beneficiary, plays a key role in the implementation. Special training of its technical staff oriented towards strategic management of the project should be developed as an assurance of success

Exit: For any form of cooperation, an exit strategy has to be part of the planning and implementation. MASA will be assisted in preparing an exit strategy for this cooperation. For the reasons mentioned above, an additional project phase after this project phase should already now be considered.

Non-exit: The exit of Scanstat does not signify the end of the project as INE will continue as lead within the National Statistical System, nor does it signify the exit of the ideas behind this project. If the project will be evaluated as a success INE will then replicate it also at the other producers of official statistics in Mozambique. This can be done with or without external support depending on actual situation.

4.3 The Scanstat strategy for work in Mozambique

The strategy follows the demands and needs expressed by INE and the National Statistical System. Statistics Denmark is the lead within the Scanstat consortium and Statistics Denmark is positively considering to continue its role as lead for the consortium, also after 2017 when the current agreement between INE and Scanstat ends.

Statistics aim to bring forward more information to allow measuring the progress of Mozambique's society and to facilitate effective management and informed political decision

making. Local ownership, sustainable results and clear strategies on how to reach various objectives are guiding points of the national project. Creating parallel structures for the project is avoided as much as possible. If this project is considered successful by the stakeholders Scanstat/DST is also interested in advancing to other line ministries producing official statistics, offering the same type of services starting with the “Autodiagnóstico” and then followed by a small especially tailored modernisation programme supervised by INE.

5 Financial considerations

Regarding management, budgeting and reimbursement of long-term consultants
Project costs for the components A to E have been budgeted in accordance with the current long-term agreement 2013-2017 between INE and Scanstat. Prolongation of the agreement for another period, at least including 2019, is foreseen.

The Scanstat resident advisor will together with the MASA project coordinator assist the implementation of the project and together with INE secure that it fits well within the National Statistical System.

5.1 Calculated costs and budget

The proposal covers a period of three and a half years. The total cost for the project period is estimated to EUR 2,6 million of which EUR 0,9 million are to cover up a missing part of the annual survey, IAI and equipment. Historic and planned costs for producing agricultural statistics at MASA/DPCI/DEST can be seen in Annex 3. It must however be noted that it is difficult to estimate the missing part of the IAI financing. The Mozambican economy is currently at pressure and the annual deficit can be bigger or lesser depending on how important the government see agricultural statistics in relation to other urgent needs. The first phase of the IAI 2016 was not made due to lack of needed financing within the proper time (January / February).

The TA and project part of the sum (EUR 1,7 million) covers the costs of training, 48 short-term mission weeks, one long-term advisor and 26 staff weeks of study tours to Scandinavia, the region or other project countries where the members of the Scanstat consortium have projects. A big part of the training activities can be made together with other institutions of the National Statistical System. A more detailed budget for the project is found in Annex 4.

5.2 Cash Flow

The management of funds for this project will be made via e-Sistafe under the control of NSAs and in *Annex 4, Proposed budget for the project from 2015 to 2019*, it can be seen that the project is divided into 3 parts:

- The first part deals with consultancies and study visits and will be arranged through the Scanstat as it presently is handled at INE. This means that Scanstat initially pays the expenses and then sends quarterly invoices to INE.

- The second part works in the same way, except when it comes to long and short term training in which the INE/DARH/DAF handles the transactions.

- The third part is mainly financed by the Government of Mozambique on the MASA budget. It includes the current field work (first and second IAI phase, TIA/Early Warning) that still is

paid by the State Budget. The third part also includes purchase of vehicles for the 52 brigades formed for data collection in the field (see more in Annex 3 and 3b paragraph 1.8 transportation). Purchases of goods and services financed by the project will be made by INE using their existing structures. The purpose of these acquisitions is to be used in statistical activities SEN. A Memorandum of Understanding between the users will be done.

5.3 Financial support to regular activities

The proposed project is primarily designed as a Technical Assistance (TA) project. However, the project, and MASA, needs financial support also for the actual statistical output component F - Activities focused on output of statistics. Statistics is needed by government and other users but current national budget restrictions are felt also in this field. The most pressing need is to finance the IAI, the annual Integrated Agricultural Survey, equipment and training which for 2016 had a budget on EUR 2,3 million. Previous years the government of Mozambique has financed most of the costs as agriculture have been considered a priority for the development of Mozambique. For the year 2016 EUR 1,2 million has been allocated and therefore EUR 1,1 million is still missing (46%), see Annex 3. Ways of reducing the costs for the IAI have to be searched for, but external support is probably also needed. Of particular concern is the high cost for transportation activities in the field. The MASA/DEST currently does not have vehicles enough for its 52 teams working with the collection of IAI data. More about this can be read in Annex 3b, notes to the MASA/DEST budget.

Combining the Continuous Household Survey (INCAF) with the annual Integrated Agricultural Survey (IAI) might alleviate the situation somewhat. But not for this year (2016), as it will take time to work out the details. And next year the general population census will consume most of INE resources, both human and financial.

MASA is generally understaffed when it comes to statistics, analysis and also when it comes to ITC. Recruitment, transfer of knowledge and training will be important activities, needing allocations both from MASA and from the Ministry of Labour.

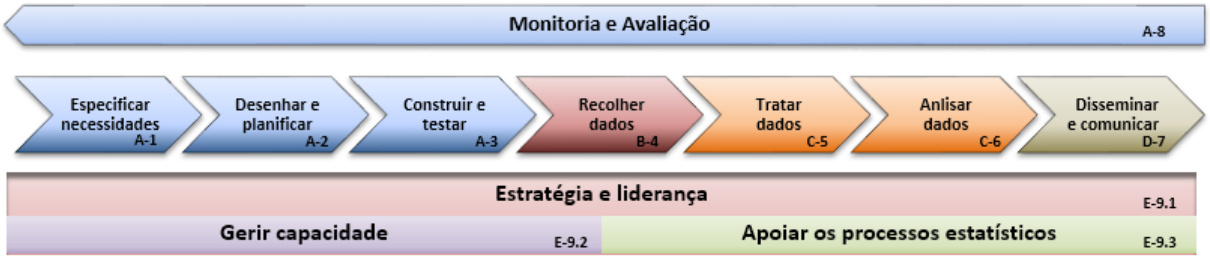
5.4 Cost-effectiveness

This proposed project, working with the MASA through INE within the National Statistical System, is to be looked upon as an expansion of the ongoing modernizing at INE. It is considered to be an efficient way to reuse results achieved so far, and if successful it could be expanded to other parts of the NSS.

- - - END OF PROPOSAL - - -

Annex 1 Baseline and possibilities, the extended SWOT analysis - Autodiagnóstico

As INE already has adopted the GSBPM model it was interesting to organize a brief internal diagnostics using this model to help with the planning of an external support to strengthen the statistic part of the MASA. Not only when it comes to production, but also when it comes to the use of the statistics produced. The main processes of the GSBPM (Generic Statistical Business Process Model) are the following:

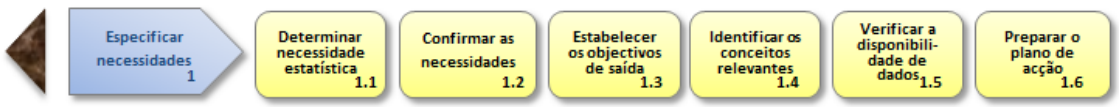


The underlying idea of this project is that there is need for the proper capacity to handle each of processes 1 to 9 in one or another way, by the MASA or other institution, to ensure that statistical information of good quality will be produced as the result. But note that when it is said that all 9 processes should be treated in a way or another, this does not necessarily mean that each institution of the National Statistical System (NSS) has to have the ability to do everything in all processes. It is now getting more and more relevant to look upon the National Statistics System as the system the name suggests.

So - What are the skills that the MASA presently has, and which ones are needed to be more developed? Perhaps we can combine the perspective of GSBPM with a traditional SWOT for each process. In this way we use a known model applied on a new model to ensure that we are covering most of the aspects related to the production of agricultural statistics.

The first round of this self-diagnostics that was made in February 2015 has now a year later been updated with the help of all the staff at MASA/DPCI/DEST.

P1 Specify needs



What kind of statistics are needed to solve the problem at hand? This process P1 is normally triggered when new statistics or information is initiated and the needs have to identified and organised, but it can also be activated for current statistics indicating the need for a review. It determines whether there is an unmet demand, external and/or internal, for the identified statistics and if the MASA and the system of agricultural statistics can produce what is sought for. Some needs are of a repetitive nature, while others come less frequently and are specified

in the strategic plans, like the Agricultural census and other large surveys as IAI etc. There are also surveys and ad hoc work, made to satisfy suddenly born unforeseen needs.

Strengths - the basis of the work:

- More than 20 years' experience of dialogue with users.
- The existence of the strategic plan 2012 - 2022, the Master Plan of Agricultural Statistics - PDEA.
- Good relations with international organizations like FAO, PARIS21, ADB, etc.
- As an ODINE (delegated part of the NSS) being an active part of SEN (National Statistics System).

Weaknesses - to be addressed:

- There is still a weak general statistical literacy resulting in reduced use of data and statistical information;
- There is also a limited capacity to diagnose and meet the needs; strategic thinking to diagnose and address the needs is undeveloped;

Opportunities - to be explored:

- The growing international demand for statistics on agriculture and food security;
- Cooperation with UEM (the largest and oldest university of Mozambique) will require more statistical data.
- The creation of the new Ministry for Land, Environment and Rural Development will require availability of statistics on land and rural development;
- The new context of United Nations in the post-2015 period, where the Food and Agriculture area is one of three elements of the Resource Triad, will need a lot of updated statistical information for its monitoring.
- The new government of Mozambique focuses on Agriculture and Food Security and the new governance cycle needs statistical quality information on Agriculture;

Threats/challenges – to be faced:

- Failure to implement the Master Plan for Agricultural Statistics (PDEA)
- Risk of loss of credibility of the statistical sector.
- The entry of private competitors in the area of statistical production.

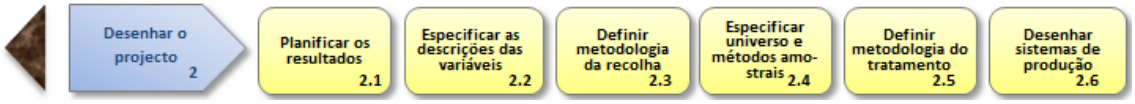
Intervention of a possible project:

The key for success regarding agricultural statistics is for the Ministry to have access to expert statisticians who can act as a link between users, agronomists and other subject matter staff helping them to document their needs for statistics and setting this in relation to available resources. This initial planning is done in the process 1 and it is important because if you do not do this well one can end up spending efforts to produce statistics that nobody really want.

This process 1 Specify needs is about communication and communication always need actors. Therefore, it is not enough to only train the statisticians, MASA also need to train its specialists, agronomists, husbandry experts and even external politicians at different levels in the country.

In short – there is a necessity for long and short term training, workshops, awareness material, study visits etc.

P2 Design and plan



This phase starts with results based planning, of type RBM. In the proposed draft FAO project there is for example an Activity called *Training course on sampling design* which is part of this complex. But there is much more. The process *2 Design* will be executed by agronomists and statisticians.

Strengths - the basis of the work

- The Master Plan (PDEA) is important also here.
- The existence of National Statistics System and the possibility of working with the National Statistics Institute (INE).

Weaknesses - to be addressed:

- The MINAG statisticians still need more experience in project design.
- There are few MASA employees who can support this process.

Opportunities - to be explored:

- Surveys/studies are already proposed in the Master Plan (PDEA).
- The introduction of new methodologies proposed by UNSTAT, PARIS21, FAO etc.
- Collaboration with international experts.

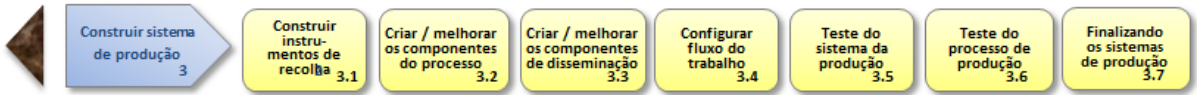
Threats/challenges – to be faced:

- The heavy reliance on external experts.
- Lack of means to finance new projects.

Intervention of a possible project:

- There are new work and modelling techniques facilitating the design of new projects. Although the statistical products of MASA are not many there is a constant development of new products to meet new and changing user requirements.
- There is a need for strengthening the overall capacity in this area (perhaps along with the INE National School of Statistics and other international schools selected within Africa and elsewhere) and in parallel open a specific strengthening in agricultural issues (along with international organizations like FAO, ADB and others).
- Assist in the recruitment, training and possibilities to retain national staff;

P3 Build and test



Personnel who can turn the designed projects into reality by building or assembling the needed instruments are necessary to have to carry out the activities processes 3. The process will be run by statisticians technical and ICT technicians.

Strengths - the basis of the work

- Long experience of the annual agricultural surveys (TIA and IAI) and the agricultural censuses (CAP).
- The existence of technical documentation of the processes;

Weaknesses - to be addressed:

- The design phase does not have enough staff, leaving the build with weak designs.
- High dependence on the few people that master the area within the MASA.
- Lack of methodologies for building special surveys and studies, including for statistics at lower levels (district).
- Possible administrative sources are not yet validated.
- The reference periods for the IAI phase I (Early Warning) and phase II are still not harmonized.

Opportunities - to be explored:

- The arrival of new methods and technologies.
- The increasing accessibility of data from administrative sources.

Threats/challenges – to be faced:

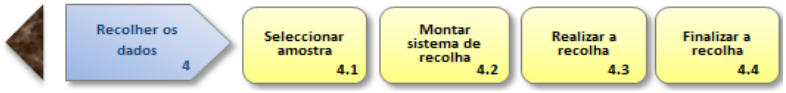
- Greater reliance on external staff.
- Slow increase in the number of national staff with developed skills.

Intervention of a possible project:

Even if the competence exists at the INE, experience shows that the MASA also needs to have at least the basic skills needed to perform its duties. There is a need for staff dominating issues like sampling and statistical methodologies, mapping and GIS as well as the ICT to collect, process and disseminate statistics. The staff should be stimulated and encouraged to continuously perform quality work.

As in all of the GSBPM processes education in the form of on the job / short / medium and long term training to the staff is important regarding data analysis, sampling, GIS, processing, procurement, dissemination

P4 Collect



When it comes to process 4 MASA already has experience of using various modern methods. Here one probably also can make a win-win by increased cooperation with INE and other institutions working in rural areas. New administrative sources will gradually be more important in data collection for statistical purposes. But we should not forget that a large part of the holdings in agriculture still are unregistered, small and household based, where most of their owners and managers do not know how to read and write.

Strengths - the basis of the work

- The masa has staff in all 133 districts of the country.
- There is already experience of using laptops, tablets and GPS in data collection.
- There is considerable experience of field work management
- The existence of SIMA to collect prices at agricultural markets is also a strength.
- The resent decentralization of logistics and financial routines.

Weaknesses - to be addressed:

- There are no specialists in sampling and cartography.
- Communication is difficult in rural areas.
- The permanent problem of very limited availability of transports.
- A weak sample when it comes to livestock (the 2017 population census can temporarily improve this if the INE accepts to include some simple questions about livestock).
- The data collected in IAI is not representative at the level of districts.
- The details regarding the sample for IAI 1st and 2nd phases are unclear.
- Weaknesses in the financial management.

Opportunities - to be explored:

- One possibility to be investigated is a fortified collaboration with INE regarding rural household surveys.
- Another is to make a study with SETSAN (the Technical Secretariat for Food Security) on the possibility of shared data collection on food security. Type of information and periodicity.
- A study of the needs of the new Ministry responsible for land use, regarding a joint collection of data on land, mainly through surveys and censuses.

- When it comes to large agricultural companies one might find opportunities to exchange information with the new INE-based system of FUE (the integrated Business Register) and data resulting from the improved INE External Trade System.
- The improvement of administrative information will with time give new opportunities.
- Here there is also a direct connection to INE Territorial Statistics that already is working with administrative data at the level of districts and certainly the MASA will be welcome to join that work.

Threats/challenges – to be faced:

- The high costs involved when it comes to work in rural areas.
- The difficulty of obtaining the planned financing on a timely basis.
- Sometimes weather conditions and military activities are restricting the work.
- A lack of good methodologies to measure the production of vegetables and fruits in periurban areas.
- Lack of availability of funds to carry out IAI phase I and phase II.
- Hesitancy in making decisions because the large sums involved.

Intervention of a possible project:

- Ensure the ability to create samples, calculate weights and estimate the quality of the data produced.
- Train staff in methods of monitoring and documentation of the data collection process.
- Refine the sample for livestock and other special areas (like cashew, rice and coconut).
- Study on how to make IAI data representative at the district level (prioritizing the data type and the geographical level, including the use of special surveys and the use of administrative sources).
- Facilitate the creation of the factors for conversion of actual weights for crops in different forms to the standard units of measure and states of the cultures.
- Introduce the use of tablets for data collection.

P5 Process

Here one needs to strengthen competence in computer areas and ensure organization of data that ensures sustainability, rigor and documentation.

Strengths - the basis of the work

- The existence of a technical staff with extensive experience of existing systems.
- There is a training plan defined for this area this area.

Weaknesses - to be addressed:

- Lack of own personnel in this area. This creates great dependence.
- Poor knowledge of modern methodologies.
- Lack of a consolidated data base set up.
- That the training plan not is implemented.
- Workplace with poor conditions

Opportunities - to be explored:

- The new technologies, methodologies and applications that are coming.

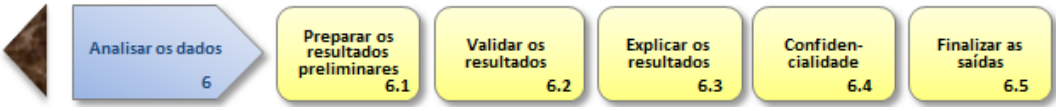
Threats/challenges – to be faced:

- Trained technicians can leave.
- Lack of incentives to the technical staff
- Lack of specialists among the staff

Intervention of a possible project:
There is a need to recruit and train more experts in IT in order to ensure the completion of various tasks related to the collection, processing facilitating the process of analysis and dissemination of data. And one should not forget the importance of documenting and archiving data in the various stages.

Improving local working conditions is important after identifying the necessary resources and requirements in hardware and software as well as in recruitment and training. Secure access to necessary software licenses (Stata, Stata Transfer, SPSS, GIS, ArcGIS). Assist in the implementation of the training plan and give further training in the development of applications for data entry.

P6 Analyse



Basic analysis can be done by the MASA technicians while more advanced analysis could be carried out jointly with expert analysts on agronomy, husbandry, veterinary and others at the Ministry of Agriculture, the universities and the private sector when it comes to matters of agriculture. Analysis will also be made together with the Ministry of Economy and Finance and the Ministry of Land, Environment and Rural Development when it comes to issues of poverty and rural development. However, regardless of where it is made, the analysis needs the input of good competence and of quality data. Also the users' needs to be trained.

Strengths - the basis of the work

- The long presence of the Michigan State University project giving technical assistance.
- Cooperation with experts outside the MASA (like UEM, INE and FAO).

Weaknesses - to be addressed:

- Limited internal competence, both at the statistical department at the Economic Directorate and in other Directorates of the MASA.
- The limited competence of cooperating with individual experts outside the MASA.

Opportunities - to be explored:

- A growing demand for data on agriculture and food security.
- The creation of the Centre for Agriculture Policy Studies at Faculty of Agronomy, UEM University;
- The advanced use of statistical data by the Ministry of Economy and Finance as well as by international institutions.

Threats/challenges – to be faced:

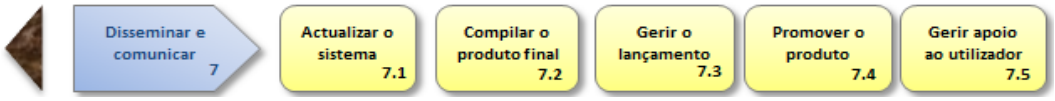
- The user institutions still need to be trained and informed about the data that is available.

Intervention of a possible project:

The analysis made could be better planned, identifying existing senior, intermediate and junior analysts and, for example, involve them in;

1. Analysis activities on already existing data. It could be in the form of local consultancies on various themes, using mixed teams involving experts from the MASA, the Ministry of Economy and Finance, the INE and the universities and the;
2. Conducting producer/users seminars facilitated by Scanstat, PARIS21, BAD and/or FAO, in order to increase the relevance and quality of produced and available data;
3. Actions like "on the job" training guided by senior analysts (from universities and other institutions, as well as planners and other users within the government).
4. Train users of agricultural statistics, both within and outside the MASA.
5. Conduct training on how to elaborate reports and use statistical data.
6. Conduct training in data analysis.

P7 Disseminate and communicate



Nowadays there are many channels for dissemination: Reports, Brochures, Folding and Press releases, Internet, Tablets, SMS, YouTube, Seminars, Library, Schools, Radio and Television. A study of the Statistics Norway document *User-friendly presentation of statistics* may be helpful. A publication plan should be done and published (stressing the importance of fulfilling the commitments on timely availability of results). The capacity to organize the work can be increased.

Strengths - the basis of the work

- There are tables of IAI (the annual integrated agricultural survey) regularly produced on CD.

- There is the CountryStat.org site organized by FAO and produced by the Mozambican team at the INE and the MASA.
- The existence of the SIMA (a system for weekly information from agricultural markets) which helps to regularly disseminate statistics of prices.

Weaknesses - to be addressed:

- The lack of a communication and publication policy.
- Poor connection with the media.
- Lack of elaborated channel/media for dissemination.
- The weak functioning of the Agrarian Documentation Centres

Opportunities - to be explored:

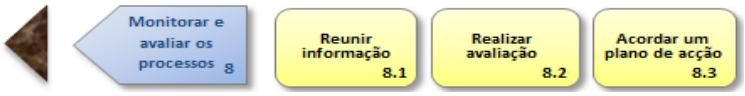
- The use of new technologies and new dissemination channels.
- The ability to create stronger ties with the planning and management systems at the MASA, the Ministry of Economy and Finance and the Ministry of Land, Environment and Rural Development.
- The ability to use experience of the new Information and Documentation Centres system that INE is developing in Maputo and other provinces.

Threats/challenges – to be faced:

- Weak statistical literacy at various levels of the society.

Intervention of a possible project:
As the dissemination seems to be one of the weakest processes in the system of agricultural statistics, there is plenty to do here. It is necessary to make the collected information available to the public. Information that should be available to the public through the press and media, in addition to traditional tables, deeper analysis and micro-data to scientists. There is also a need to create robust routines for regularly providing information to international institutions like FAO. The MASA needs help create a page on agricultural statistics on the web. Assist in improving the documentation centres at central and provincial levels.

P8 Evaluate and give feedback



This activity is traditionally not very well treated, but now that it is made an overarching process within the GSBPM it stresses that it is an extremely important component contributing to ensure the production of quality statistics. Within this process one is dealing with methods like Lean, RBM, etc. The ability to look upon all processes in a holistic way is important.

Strengths - the basis of the work

- There are still not many.

Weaknesses - to be addressed:

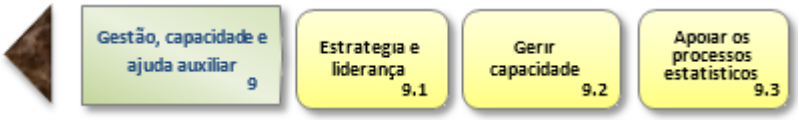
- Poor experience.
- Lack of policies, regulations and routines.

Opportunities - to be explored:
- Large space for improvement.
- The introduction of RBM (results based management) and work based on the philosophy of the GSBPM processes.

Threats/challenges – to be faced:
- The idea that this process is not a necessary process.

Intervention of a possible project:
This is a competence field where Scanstat has a very strong experience that can be shared with the staff of the MASA.

P9 Management, capacity and other support



Good competence in this process is also important. Sometimes projects initiated by statisticians or agronomic experts forget the importance of these supporting activities.

Strengths - the basis of the work
- Experience gained by performing agricultural surveys and censuses like the TIA, the IAI and the CAP.
- The government e-SISTAFE system that facilitates operations in the provinces.
- The presence of MASA infrastructure and technical staff in all districts
- The masa MASA/DPCI/DEST staff of 14 technicians is a strength but also a weakness because more of them is needed. Of the 14 technicians the educational levels are 9 on superior, 2 on medium and 3 on basic level.
- Equipment: Among other things 54 laptops (some of them damaged), 12 desktops, 18 vehicles, 270 GPSs and 80 tents. .....
  .....

Weaknesses - to be addressed:
- Limited resources; financial, human and material. Transport.

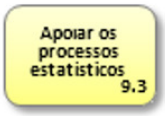
Opportunities - to be explored:
- The implementation of the Global Strategy Action Plan for improving agricultural and rural statistics in Africa.
- Full use of existing resources.
- Training of existing staff in logistics and finance (procurement).

Threats/challenges – to be faced:

- The capability to meet the new requirements
- Lack of offices space to allocate 9 of the technicians
- Late Availability of Funds
- Insufficient human resources in the procurement area
- Insufficient financial resources for the acquisition of means of transportation and field and office equipment

Intervention of a possible project:
Although this process is important for the entire Ministry of Agriculture and Food Security the current project will focus on the sub-processes that are directly linked to statistical production. The project should however advocate for increased provision of adequate resources for statistical production, as recommended in the Master Plan.

P9.3.4 Manage IT



1. *Manage business and performance*
2. *Manage finance*
3. *Manage human resources*
4. *Manage IT*
5. *Manage statistical methodology*
6. *Manage information and knowledge*
7. *Manage consumers (users)*
8. *Manage data suppliers (households, business entities)*
9. *Manage buildings and physical space*
10. *Manage quality*

Process *9 Management, capacity and other support* is a complex one, and so is sub-process *9.3 Corporate support* that is further divided in the 10 areas shown here. As P9.3.4 Manage IT is an area both important and possible to influence we made it a target for a separate SWOT analysis conducted with the head of the IT Department and one systems technician from the DPIC/DEST. The number of employees, according to educational background, the list of hardware and software as well as the organizational structure of the IT Department can be found in Appendix 8.

Strengths - the basis of the work
- Existence of IT staff members with knowledge in the development of applications for data collection and processing.
- Existence of a system for videoconferencing with all provinces.
- Existence of an organizational structure for the IT department.
- Existence of computer equipment (desktop, laptop, printers, tablets, etc.).

Weaknesses - to be addressed:
- Although there is a computer department in the Directorate of Planning and International Cooperation, it has only one staff member who at the same time is the head of the department.
- Each directorate has its own ISP, therefore it is not easy to control costs as well as to adopt standards, etc.
- Each directorate acquires and manages its hardware own and software.
- Software and applications are not interconnected.
- There is a proliferation of planning and management systems.
- There is a lack of licenses for commercial software.
- There is an under-usage of IT resources.

- The IT Department is inoperable due to the lack of staff (there is only one staff member).
- Some positions (e.g. database administrator, programmer, systems analyst, network administrator, etc.) are missing.
- There is no computer network for the entire ministry.
- The Website of the ministry is uninformative and outdated.
- Provincial directorates are not linked to any Internet service provider. Internet connection is via modem.
- Lack of a strategic ICT vision.

Opportunities - to be explored:

- The IT department could be repositioned in the new organic structure of the Ministry.
- A data centre could be setup for better management of the following services:
    - Backup and disaster recovery.
    - Institutional e-mail, Implementation of an Intranet.
    - Management of databases of the entire ministry.
- Alignment with the National Institute of Statistics in terms of hardware, software, IT policies, etc.
- Use of information and communication technologies for disseminating data (e.g. information on agricultural markets via SMS).
- Acquire of software licenses via the National Institute of Information and Communication Technologies (INTIC) as well as the inclusion of the MASA in Electronic Government Network (GovNet).
- Recruitment of IT staff for missing IT positions.
- Centralization of IT resources (IT staff and equipment) into the IT department.

Threats/challenges – to be faced:

- Turnover of qualified personnel.
- Budget constraints (e.g. re-allocation of funds to mitigate national disasters).

Participants in the extended SWOT analysis, February 2016

From MASA/DPA/DEST

Architecture.P1 Specify needs, P2 Design and plan, P3 Build and test and P8 Evaluate and give feedback:
Arlindo Mazivila, Técnico, Metodologia e formação
Arlindo Miguel, Técnico, Metodologia e formação
Domingos Diogo, Assessor, Coordenador dos Inquéritos

Collecting data. **P4:**
Felisberto Fumo, Técnico, Operações de campo

Processing and analysing. P5 Process data and P6 Analyse data:
Rafael Actticala, Técnico, Informática e Processamento de Dados
Salvador Cardoso, Técnico, Informática e Processamento de Dados
Venâncio Salustiano, Técnico, Informática e Processamento de Dados

Strategy and leadership, capability management and corporate support. P9:
Aurélio Mate, Chefe do Departamento
Fernando Camisa, Técnico, Logística e Finanças
Luís Lopes, Técnico, Informática e Processamento de Dados

From INE/SCANSTAT

Tomas Bernardo, Instituto Nacional de Estatística
Lars Carlsson, Scanstat
Eliecen Gomez, Statistics Sweden
Ann-Marie Karlsson, Swedish Board of Agriculture

National Statistical Institute - INE

The INE has the perception that a support project for the strengthening of agricultural statistics at the MASA, which is a delegate body (ODINE) of INE, is a natural extension of the current project with Scanstat. At the INE, the ideas on what statistics to produce and how to produce it has been increasing within the national statistical system, and an as a consequence influenced the way we work. The cooperation between the INE and Scanstat has been developing for a long time and we are sure that its impact can be seen throughout the organization. We are pleased if the Scanstat consortium and other partners still are interested in supporting the further strengthening of the production and dissemination of statistics. We also believe that the present phase of controlled low intensity "exit/withdrawal" can continue, ensuring the availability of Scanstat to assist the statistical system whenever necessary.

The project to support agricultural statistics, as presented, are within our expectations. This is natural as the INE participated in the elaboration of the project. We also know that while the main user of official statistics in Mozambique is the government, there are other important users, and it will be necessary to make a balance between different demands.

The INE has cooperation with international organizations such as UNSTATS, UNECA, OECD PARIS21, FAO, World Bank, ADB, IMF and SADC, bilaterally and/or multilaterally, permanently or occasionally, resulting in orientations om mechanisms and important methodologies. This have greatly contributed to the strengthening of national statistical institutes, as is our case where it has helped us to face the challenges posed in an organized manner. Another powerful component in the field of agricultural statistics is the initiative called the Global Strategy to Improve Agricultural and Rural Statistics (GSARS). The INE Mozambique and members of Scanstat, are aware of the fact that many of these organizations mentioned have gathered a lot of experience and knowledge in the field of Statistics. But we are also aware of the need to have an oversight over the whole situation at national level.

Hence, we reiterate our hope that the Scanstat, as one of the partners of the National Statistical System, will continue to contribute with its assistance also after 2017.

The modernisation of the National Statistical System is relevant and is on our agenda. Thus, we suggest that this might be the right time for the responsibility for the project to be handed over to national authorities. If the partners of INE Common Fund agree to this, we propose to make an assessment/discussion on this issue. However, the common idea is that the project continues under the guidance of INE, involving all stakeholders and cooperation partners of the INE Common Fund.

Statistics Norway - SSB

Statistics Norway has reviewed the proposal and finds this a very interesting approach extending support to the national statistical system from INE to a sector ministry. As the proposal states, a successful support in this sector may show the way for support to other sectors such as education and health later on.

We find the proposal a solid base for a SCANSTAT project and think the project may be further improved by also addressing the following issues[11]:

1. How to approach the sensitivity of agricultural statistics.

Agricultural statistics is a sensitive area of statistics all over Africa. Another example is inflation. The central bank is mandated to control the inflation, hence they should not be responsible for the CPI statistics, but of course they often follow the price developments in order to ensure a proper monetary policy. In the same manner, the ministry of agriculture is mandated to promote and develop the agricultural sector. Hence they should not be responsible for estimation of national figures on agricultural production, but at the same time they need to do proper crop forecast statistics etc. In both cases it is essential that INE runs the overall statistics providing national figures. Within that frame, the sector ministry and central bank should run the statistics providing the more detailed information.

For agricultural statistics this necessary independence is usually ensured in the following manners:

• The statistical office implements a large agricultural sample survey every 10 years, usually with support from extensions officers, but with supervision and methodological statistical experts from the statistical office

• Methodological supervision and publication of national estimates in the annual post-harvest crop estimation. The ministry will then be in charge of the disaggregated information within this framework.

A paragraph on how to ensure this balance between independent estimation and statistics adapted to the needs of the ministry should be added in the project plan.

2. Technological opportunities.

The proposal addresses the opportunities offered by GIS information. We think the proposal could gain from discussing other technological opportunities such as how GPS measurement combined with a rolling panel can reduce the variance of sampling and hence improve accuracy. We also think the proposal could gain from a discussion on how to combine satellite images of total areas under crop by on the ground measurement of mixed cropping etc. Here the Global Strategy to Improve Agricultural and Rural Statistics has now produced a number of interesting recommendations and guidelines both at Africa region level and at the global level.

3. Baseline and capacity-building[12].

[11] After having received these advices the report have been slightly adjusted as a response to them. /LC

As stated by the proposal (such P3.2), both INE and the ministry already have quite some capacity in statistical issues and we could add: in subject matter issues. Hence we think that the proposal could gain from adding a kind of baseline assessment such as by peer review and then better address the need for additional support. May be it is a good idea to include some capacity building in policy analysis rather than more technical expertise in the project. The proposal may also gain from addressing how to use the INE expertise to assist the capacity building of the ministry and vice versa.

From Statistics Norway we would be happy to participate in the further development of the project.

Statistics Denmark

From Statistics Denmark we would be happy to participate in the further development of the project. The present modality of "controlled low intensity exit/withdrawal" have in many ways have worked well for INE. The modality has had a number of inherent challenges but has helped ensure local ownership and prioritizations in a unique way. If possible we see no reasons that this modality should not be extended or even expanded to include MASA and other relevant producers of official statistics.

The project proposal in some ways presents a radical and innovative approach to project design as it incorporates the GSBPM model and its particular "take" on the statistical production process in the project design.

INE has over the last years strived to implement the GSBPM in its own production processes. We find it most beneficial for the quality of official statistics in Mozambique if this can be further developed and strengthened through extending the use of GSBPM in the SEN.

The general trend inside the European Statistical System (ESS) and in many OECD countries is for the National Statistical Institution and its director to take on a coordinating role inside the National Statistical System. The coordination role ensures that official statistics are produced using recommended international methodologies and results in comparable, independent, trust worthy statistics and that all statistics are produced and benchmarked using the same international approved quality criteria. We see the increased cooperation between INE and MASA as defined in this project as aligned with this international trend. As capacity evolves at INE and MASA it will be logical to extend the project to other sectors of the SEN.

Like SSB we see growing focus on analysis among NSI's. If and when analysis is done in a transparent and apolitical way it greatly strengthens the role of the NSI and the value the NSI and official statistics brings to the political process and the democracy.

[12] When this comment was done SSB had not yet seen Annex 2, where a type of baseline can be found. /LC

Swedish Board of Agriculture

Agriculture is an important sector in Mozambique and the proposal addresses how to improve key statistics in the agricultural area. The Swedish Board of Agriculture has participated in two missions developing the project proposal. The Board would like to highlight two areas in the project that we consider to be success-factors for developing agricultural statistics in Mozambique.

1. *Work according to the GSBPM-model*

One conclusion from the missions was that in previous work with agricultural statistics there had been a strong focus on specific steps in the process of producing statistics, for example methods for collecting statistics. Other steps, especially plans for and ways of analyses and dissemination of the produced statistics has been less developed. Subsequently some statistics from the last agricultural census was not published. Another conclusion was that user needs were not discussed to such a length that the users would understand what statistics they could expect to receive. In some cases, the users seemed to have unrealistic demands and in some cases more basic needs for the national accounts and for estimations of food-supply were not met.

In this proposal it is suggested that the project should focus on developing all steps of the GSBPM-model of statistics production. The Board assesses that this approach will help assure that all steps in the process will get the attention they deserve. This includes both discussions with users and plans and methods for dissemination.

Another advantage with using the GSBPM-model is that this project can be used as a pilot-project and that the knowledge gained could be used also in other areas of statistics.

2. *Co-operation between INE and MASA*

Within the National Statistical System INE have delegated the power to produce and disseminate official statistics to among other institutions MASA. Agricultural statistics is therefore produced in co-operation between INE and MASA. In the last agricultural census for example staff from INE and MASA worked together. In the project-proposal the co-operation is seen as a success factor and the project plan to take advantage of the different strengths of MASA and INE. It is important that possibilities and forms for co-operation is developed in the project in such a way that it benefits the development of agricultural statistics as well as forms a basis for how INE as an NSI can co-operate with other institutions within the framework of the statistical system.

The Ministry of Agriculture and Food Security – MASA

Workshop Opening Statement on a monitoring framework for the INE-MASA project by the Director of the DPCI (Directorate of Planning and International Cooperation) of MASA

Mr Director of DICRE (Directorate of Integration, Coordination and External Relations) of the INE;
Mr Director of INE DESE (Directorate of sectoral statistics and Business)
Mr Information Director of SETSAN,
Consultants of Scandinavian Statistics (SCANSTAT) and Sweden

Ladies and Gentlemen
Dear colleagues,

It is with great pleasure that I address you with words of warmth and welcome to this seminar on Programme Monitoring Framework (PMF) conducted by INE and MASA.

This seminar is a joint activity between the National Institute of Statistics and the Ministry of Agriculture and Food Security rooted in the INE delegation of responsibilities to the Ministry of Agriculture and more specifically the Directorate of Planning and International Cooperation, for the production official Agricultural and Food Security statistics within the National Statistical System.

In strengthening the use of evidence based facts in the management of agriculture the strengthening of institutional capacity, leading to a better and more timely production of reliable statistical information, is one of our priorities.

This workshop will explain the proposed project for strengthening and modernization of agricultural statistics in Mozambique that, in all the preparatory activities for its design and implementation includes this seminar aiming to socialize and get to know the key players of the National Statistical System, that deal with the Statistical System of the Agricultural Sector and the main approaches of statistical modernization, to ensure an adequate management of the statistical activities oriented to results and thereby improving efficiency and effectiveness in alignment with our Master Plan for Agricultural Statistics.

The project, that now is in a final stage of preparation, has the overall objective of strengthening the MASA so that after a period of four and a half years the MASA has improved its institutional capacity to provide relevant, reliable and timely statistics on agriculture and food security within the National Statistical System of Mozambique, and that the MASA at that time is working in line with robust international standards, statistical methods and best practices.

It is also an objective, within the responsibilities of MASA, to respond timely on the demand for data by national users (government, academic institutions, researchers, media, etc.) as well as by international organizations, like the FAO, ADB and the World Bank, among others.

Another goal is also that the MASA, the INE and the National Statistical System should work well together after the end of the project, using sound statistical methods

in line with the ongoing modernization efforts. One way to achieve this objective to guarantee that the staff and institutions of the agricultural statistics system have the basic skills needed to manage the necessary processes of statistical production.

The project is particularly oriented towards the modernization of statistical activities at the MASA, as being the INE Delegated Authority regarding the production of official quality statistics on Agriculture and Food Security and in line with the Master Plan of Agricultural Statistics.

The project is designed and runs with GSBPM as a base, aligning the processes and stages of production in an integrated and targeted way leading to the final results, including:

A. *Architecture, Planning and Monitoring (GSBPM processes 1, 2, 3 and 8)*
B. *Collecting data (GSBPM process 4)*
C. *Processing and Analysing (GSBPM process 5 and 6)*
D. *Dissemination and Communication (GSBPM process 7)*
E. *Management, strategy, capability and corporate support (GAMSO, INE process 9)*
F. *Activities focused on output of statistics (MASA Master Plan, PDEA 2012-2022)*

The implementation of the project is expected give results on long, medium and short term.

Among the main results expected are:

• Long-term:

A greater awareness by users about the worth of an increased use of statistics;

Statistics produced in accordance with international standards;

Greater adherence to quality standards.

• In the medium term:

Greater efficiency in statistical production, e.g. shorter times between the reference period and publication;

Improved response rates;

Downloads of surveys via the Internet, etc.

A certain number of technicians trained in methodologies.

• In short term:

Further disaggregation of data (to national, provincial and possibly district levels);

Established time series;

Regular presentation of sampling errors or so-called statistical efficiency indicators;

Less delays in the production and dissemination of statistical data;

Improved capacity for data input and statistical processing.

• Immediate consequences:

Publications and statistical products published more regularly;

Better publication, dissemination and use of statistical publications and products;

Statistical guidelines and metadata is also published;

Computer facilities installed.

Dear colleagues,

As you can see our expectations are massive. We hope that this seminar, with support and guidance of Consultant Martin and with your effective participation, are achieving the desired results.

Bom trabalho!

Annex 3 MASA/DPCI/DEST budget and executed 2014-2020

Anexo 3, Orçamento e executado 2014-2020 MASA/DPCI/DEST — **Annex 3, The MASA/DPCI/DEST budget and executed 2014-2020**

MZM	2014	2015	2016	2017	2018	2019	2020	Total (MZM)	
Orcamento Planificado	105 750 000,00	87 183 111,00	128 072 268,00	134 561 608,00	127 516 938,00	125 523 818,00	109 623 818,00	818 231 561,00	Planned budget
Executado/Aprovado	89 626 560,00	84 405 652,39							Approved/Executed
1.Produção Estatística									**1. Statistical production**
1.1 Actividades de Previsão Early Warning	14 736 894,36	19 016 826,00	33 620 512,00	33 620 512,00	33 620 512,00	33 620 512,00	33 620 512,00	**201 856 280,36**	1.1 Activities Early Warning Forecast
1.2 Trabalho de Inquérito Agrícola Integra	57 473 086,70	57 291 817,26	54 646 426,00	54 646 426,00	54 646 426,00	54 653 306,00	54 653 306,00	**388 010 793,96**	1.2 The Integrated Agricultural Surve
Sub-total	**72 209 981,06**	**76 308 643,26**	**88 266 938,00**	**88 266 938,00**	**88 266 938,00**	**88 273 818,00**	**88 273 818,00**	**589 867 074,32**	**Sub-total**
1.3 Equipamento e Material									**1.3 Equipment and Material**
1.4 Material informático para o trabalho c	3 482 136,82	790 607,73	655 330,00	7 344 670,00	1 000 000,00	1 000 000,00	1 500 000,00	**15 772 744,55**	1.4 Computer equipment for field w
1.5 Material de Escritório	528 395,40	1 094 471,23	1 000 000,00	600 000,00	500 000,00	500 000,00	1 500 000,00	**5 722 866,63**	1.5 Office supplies
1.6 Material para trabalho de campo	5 848 040,72	3 497 315,81	1 000 000,00	1 200 000,00	600 000,00	600 000,00	1 200 000,00	**13 945 356,53**	1.6 Material for field work
1.7 Material para os cursos	2 287 443,00	2 414 614,36	800 000,00	800 000,00	800 000,00	800 000,00	800 000,00	**8 702 057,36**	1.7 Material for the courses
1.8 Meios de Transporte	4 970 563,00	0,00	20 000 000,00	20 000 000,00	20 000 000,00	18 000 000,00	0,00	**82 970 563,00**	1.8 Transport facilities
1.9 Contratação de Recursos Humanos	0,00	0,00	675 000,00	675 000,00	675 000,00	675 000,00	675 000,00	**3 375 000,00**	1.9 Contracting of Human Resources
Sub-total	**17 116 578,94**	**7 797 009,13**	**24 130 330,00**	**30 619 670,00**	**23 575 000,00**	**21 575 000,00**	**5 675 000,00**	**130 488 588,07**	
Training									
1.10 Formação de Curta e Longa Duração	300 000,00	300 000,00	15 675 000,00	15 675 000,00	15 675 000,00	15 675 000,00	15 675 000,00	**78 975 000,00**	1.10 Short and Long Term Training
Sub-total	**300 000,00**	**300 000,00**	**15 675 000,00**	**15 675 000,00**	**15 675 000,00**	**15 675 000,00**	**15 675 000,00**	**78 975 000,00**	**Sub-total**
Orcamento Planificado	105 750 000,00	87 183 111,00	128 072 268,00	134 561 608,00	127 516 938,00	125 523 818,00	109 623 818,00	818 231 561,00	Planned budget
Executado/Aprovado	89 626 560,00	84 405 652,39	68 555 870,00						Approved/Executed
em % do planeado	85%	97%	54%						in % of planned

Notes to MASA/DPCI/DEST Budget 2014-2020

1.4 Material informático para o trabalho de campo: Nos anos 2014 e 2015 foram feitas as duas fases do IAI. Actualmente o DEST tem 54 laptops que são usados durante a recolha de dados no campo. Nesta abordagem as entrevistas são feitas com auxílio do questionário impresso no papel onde são registas as respostas das respectivas perguntas. Com esta abordagem tem-se registado problemas de incumprimento dos prazos de entrega dos questionários impressos por parte das empresas seleccionadas mediante um concurso público para o fornecimento dos serviços de impressão o que atrasa o início da recolha de dados. O que se pretende na nova abordagem de modernização e fortificação das Estatísticas Agrárias é que a partir de 2017 o MASA passe a usar Tablets na recolha de dados, sendo necessário 5 Tablets em cada uma das 52 brigadas (= 260 tablets de ser comprados 2017).	**1.4 Computer equipment for field work:** The two phases of IAI were done both 2014 and 2015. Currently the DEST has 54 laptops that are used for data collection in the field. In this approach the interviews are done with the help of the printed questionnaire on paper which the answers of the questions are registered. With this approach there has been problems with the delivery times of the printed questionnaires by the companies selected through public tender for the supply of printing services. Resulting in delays of the start of data collection. The aim of the new approach to modernization and strengthening of Agricultural Statistics is that from 2017 the MASA will pass to use Tablets in the collection of data, requiring 5 Tablets in each of the 52 brigades (= 260 tablets to be bought 2017).
1.5 Material para escritório: Todo material usado para o funcionamento do Escritório incluindo os custos de imprimir as publicações produzidas. O material e adquirido anualmente. Em 2015 os Anuários 2002-2011 e 2012-2014 foram publicados em dois volumes.	**1.5 Office Material:** All material used for the operation of the Office, including the costs of printing the publications produced. This type of material is purchased annually. In 2015 the Yearbooks 2002-2011 and 2012-2014 were published in two volumes.
1.6 Material para o trabalho de campo: Todo o material usado na recolha de dados; GPS, tendas, botas, capa de chuva, catanas, cordas, balanças. O valor alocado servira para fazer a reposição necessária do material já existente.	**1.6 Material for field work:** All material used in data collection; GPS, tents, boots, raincoats, machetes, ropes, scales. The amount allocated will serve to make necessary replacement of existing equipment.
1.7 Material para o curso: Usado na capacitação de Supervisores, Assistentes, técnicos do Serviços Distritais de Actividades Económicas dos Governos Distritais e no treinamento de inquiridores. Este material consiste em lápis borrachas, blocos de apontamento, esferográficas, afiadores, flip charts, marcadores, apagadores, giz etc.	**1.7 Material for the course:** Used in training supervisors, assistants, technicians at the District Services of Economic Activities of the District Governments and for training of enumerators. This material consists of pencils, erasers, note pads, pens, sharpeners, flip charts, markers, erasers, chalk etc.
1.8 Meios de transporte: A recolha de dados no campo, incluindo a supervisão e controlo de qualidade, no âmbito do IAI é realizada em duas fases sendo que a primeira fase vai de	**1.8 Transportation:** The data collection in the field in connection with IAI, including supervision and quality control, is performed in two stages wherein the first stage is

Dezembro a Maio e a segunda fase de Julho a Dezembro. Neste momento o MASA/DEST possui 13 viaturas das quais 11 são de marca Toyota Land Cruiser e duas de marca Toyota Hilux, todos de 2012. Estes carros são usados na recolha e também pelos técnicos centrais para o trabalho de supervisão e controlo de qualidade dos dados recolhidos. Quando termina o trabalho de recolha de dados estes veículos são enviados aos agentes ou oficinas para se fazer a manutenção. Nota-se que 13 viaturas é insuficiente para transportar as 52 brigadas, de 5 pessoas cada, formadas para a recolha. Para suprir o défice o MASA tem solicitado apoio aos Governos Provinciais que dentro das suas possibilidades têm alocado alguns meios de transporte para o IAI. Em cada província existe um supervisor que é responsável pela gestão do IAI e as viaturas. Mas as viaturas, entretanto, apresentam avarias constantes para além de serem em número insuficiente e serem alocadas fora do tempo em que são necessários, o que resulta em paragens constantes da actividade de recolha de dados no campo acarretando deste modo, custos operacionais e incumprimento do prazo para a disponibilização dos resultados, para além de poder afectar a qualidade dos dados. Os custos actuais de manutenção são altos porque grande parte das viaturas está em estado avançado de degradação, é pioram nos períodos entre os períodos de recolha. Há uma política de abate de veículos velhos. É também previsto fazer um trabalho específico de melhorar a recolha de dados nas grandes explorações, trabalho que necessita reforço em meios de transporte.	from December to May and the second phase from July to December. At the moment the MASA/DEST has 13 vehicles of which 11 Toyota Land Cruiser and two Toyota Hilux, all from 2012. These vehicles are used for data collection and by central technicians for the work of supervision and quality control of the data collected. When the data collection work is finished these vehicles are collected to the central level in Maputo where maintenance is done. Note that 13 vehicles are insufficient to cover the 52 brigades, 5 persons each, formed for data collection in the field. To meet the deficit MASA has requested support from provincial governments that within their possibilities have allocated transport for the IAI. In each province there is a supervisor who is responsible for managing the IAI and the vehicles. But these vehicles, however, present constant breakdowns in addition to being insufficient in number which results in constant interruptions of the data collection activities in the field, thus resulting in higher operating costs and duration of the infringement for the release of the results, as well as affecting the quality of data. Current maintenance costs are high because most of the vehicles are in an advanced state of degradation and getting worse during periods between the collection periods. There is a culling policy for old vehicles. It is also expected to realize a specific work to improve the data collection from large farms, this is a work that needs strengthening in transport capacity.
Por causa destas razões pretendia-se acrescentar a frota com 39 viaturas para aliviar a situação (10 por ano a partir de 2016 num custo de ca de 2 000 000 Mt por cada viatura). Ligado ao projecto a ideia era de deixar o INE comprar os veículos através o Fundo Comum do INE. O INE continua proprietário das viaturas que têm um fim de ser usadas nas actividades estatísticas	Thus the original plan intended to add a fleet of 39 vehicles to alleviate the situation (10 per year from 2016 at a cost of ca 2 000 000 Mt per vehicle). Regarding the project, the idea is to let INE buy the vehicles through the INE Common Fund. INE remains the owner of the vehicles that are to be used in statistical activities within the SEN. An

dentro do SEN. Um acordo será feito entre INE e MASA que explica as condições do uso e os limites temporais do uso. As viaturas serão usadas para fins estatísticos no âmbito do SEN e o MASA é membro do SEN. Mas se o projecto não financia todos os veículos continua-se a trabalhar nas maneiras existentes, a dizer usando viaturas dos Governos Provinciais. Isto funcionou antes, mas não tão bem como seria desejável para produzir as estatísticas em tempo oportuno. Outras soluções procuram-se por isso. **1.9 e 1.10 Formação de Curta e Longa Duração e Contratação de Recursos Humanos**: O DEST tem neste momento falta de técnicos e os poucos existentes precisam também de capacitação em diversas áreas. A modernização e fortificação de estatísticas requerem uma equipa dotada de conhecimentos técnico-científicos e equipada com meios necessários para a realização da actividade de Produção estatística. The original MASA/DEST budget for long and short term studies abroad is substantially reduced. Nota-se que a necessidade de ter especialistas bem formados em estatística continua. Seria bom ter 2 bolsas por ano para nível de pós-graduação num país africano, como Uganda e a sua Universidade de Makerere, ou para Índia que também tem boas escolas de estatística.	agreement would be made between INE and MASA explaining the conditions of use and the time limits of use. The vehicles will be used for statistical purposes within the SEN, and MASA is member of SEN. But if the project does not fund all the vehicles the existing ways that work will continue, using vehicles from the Provincial Governments. This has worked, even if not as well as desirable to produce the statistics in a timely manner. Other solutions are to be sought for. **1.9 and 1.10 Training Short and Long Term Hiring and Human Resources:** The DEST is currently lacking technicians and also the few existing ones need training in several areas. The modernization and fortification of statistics require a team with technical know-how and equipped with necessary means for conducting the activity of statistical production. O orçamento original do MASA/DEST para estudos de longo e curto prazo no exterior é reduzida substancialmente. Note that the need for specialists well-trained in statistics continues. It would be good to have 2 graduate level scholarships per year in an African country, such as Uganda and its Makerere University, or in India which also has good schools of statistics.

TOTAL do Projecto, em EUR — Project TOTAL, in EUR

Descrição	2015	2016	2017	2018	2019	Total	Description
Custos totais MASA/DEST Estatística	**36 903,79**	**1 623 639,91**	**2 299 119,06**	**2 187 678,95**	**2 171 159,24**	**8 318 500,95**	**Total costs MASA/DEST Statistics**
Financiamento OE (MASA)	**0,00**	**1 246 470,36**	**1 500 000,00**	**1 500 000,00**	**1 500 000,00**	**5 746 470,36**	**Financing OE (MASA)**
Financiamento CF (Suécia)	**36 903,79**	**377 169,55**	**799 119,06**	**687 678,95**	**671 159,24**	**2 572 030,58**	**Financing CF (Sweden)**
Excedente / Déficit	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**0,00**	**Surplus / Deficit**

O orcamento é, como o próprio projecto, descrito em 3 partes com focos diferentes:

- A primeira parte é sobre os componentes de capacitação geral (A-D) usados como blocos de construção no âmbito do Sistema Estatístico Nacional.
- Em seguida, a segunda parte (componente E) que trata as áreas de estratégia e liderança, gestão de capacidade e apoio corporativo no âmbito das estatísticas do MASA.
- E, finalmente, enfrentamos o componente (F) orientada às saídas, conforme descrito no Plano mestre 2012-2022 do MASA.

The proposed budget is, like the project itself, described in 3 parts with diferent focus:

- The first part is about the specific GSBPM building components (A-D) used as building blocks within the National Statistical System of Mozambique.
- Then the second part (component E) is dealing with strategy and leadership, capability and general corporate support within MASA statistics.
- And finally we deal with the output oriented component (F), as already described in the MASA Master plan 2012-2022 (PDEA 2012).

Componentes específicos de capacitação (A-D) — Specific capacity building components (A-D)

Descrição	2015	2016	2017	2018	2019	Total	Description
COMPONENTE A Arquitetura, Planificação e Monitoramento (processos 1, 2, 3 e 8 do GSBPM)							**Architecture, Planning and Monitoring (GSBPM processes 1, 2, 3 and 8) COMPONENT A**
Consultores de curta duração		Planificação / Planning	Acompanhamento / Follow up	Acompanhamento / Follow up	Acompanhamento / Follow up		Short Term Advisors
		1m,1p,2w	1m,1p,2w	1m,1p,1w	1m,1p,1w	**4m,4p,6w**	
Visitas de estudo		1sst,3p,3w				**1sst,3p,3w**	Study tours
COMPONENTE B Recolha de dados (processo 4 do GSBPM)							**COMPONENT B Collecting data (GSBPM process 4)**
Consultores de curta duração			Planificação / Planning	Acompanhamento / Follow up	Acompanhamento / Follow up		Short Term Advisors
			1m,1p,1w	2m,2p,4w	1m,1p,1w	**4m,4p,6w**	
Visitas de estudo			1rst,7p,5w			**1rst,7p,5w**	Study tours
COMPONENTE C Tratamento e Análise (processos 5 e 6 do GSBPM)							**COMPONENT C Processing and Analysing (GSBPM processes 5 and 6)**
Consultores de curta duração		Planificação / Planning	Acompanhamento / Follow up	Acompanhamento / Follow up	Acompanhamento / Follow up		Short Term Advisors
		1m,1p,2w	1m,1p,2w	1m,1p,1w	1m,1p,1w	**4m,4p,6w**	
Visitas de estudo				1sst,3p,3w		**1sst,3p,3w**	Study tours
COMPONENTE D Disseminação e comunicação (processo 7 GSBPM)							**COMPONENT D Dissemination and Communication (GSBPM process 7)**
Consultores de curta duração		Planificação / Planning	Acompanhamento / Follow up	Acompanhamento / Follow up	Acompanhamento / Follow up		Short Term Advisors
		1m,1p,2w	1m,1p,2w	1m,1p,1w	1m,1p,1w	**4m,4p,6w**	
Visitas de estudo					1rst,7p,5w	**1rst,5p,7w**	Study tours

Descrição	2015	2016	2017	2018	2019	Total	Description
Sumário Componentes específicos de capacitação (A-D)							**Summary Specific capacity building components (A-D)**
Consultores de curta duração		3m,3p,6w	4m,4p,7w	5m,4p,7w	4m,4p,4w	**16m,16p,24w**	Short Term Advisors
Custos Consultores EUR		54 978,26	65 241,48	67 441,83	41 052,87	**228 714,44**	STA Costs
Visitas de estudo		1sst,3p,3w	1rst,7p,7w	1sst,3p,3w	1rst,7p,7w	**2sst,2rst,20p,20w**	Study tours
Custos Visitas de estudo EUR		16 644,80	15 770,09	16 644,80	15 770,09	**64 829,77**	Study tour Costs
TOTAL PARTE 1 (EUR)		**71 623,06**	**81 011,57**	**84 086,63**	**56 822,96**	**293 544,21**	**TOTAL PART 1 (EUR)**

Estratégia, capacidade e apoio corporativo (E) — Strategy, capability and corporate support (E)

Descrição	2015	2016	2017	2018	2019	Total	Description
COMPONENTE E Gestão, estratégia, capacidade e apoio corporativo (GAMSO, INE processo 9)							COMPONENT E Management, strategy, capability and corporate support (GAMSO, INE process 9)
Trabalho do Projeto	Identif. do project/ Proj. identification	Form. do projecto/ Proj. formulation	Acompanhamento / Follow up RBM	Acompanhamento / Follow up RBM	Acompanhamento / Follow up RBM		Project Work
Trabalho do Projeto	1m,2p,4w	1m,4p,8w	2m,2p,4w	2m,2p,4w	2m,2p,4w	**8m,12p,24w**	Project Work
Custos Trabalho do Projeto EUR	36 903,79	73 304,35	36 652,18	36 652,18	36 652,18	**220 164,67**	Project Work costs EUR
Visitas de estudo		1sst,3p,3w		1sst,3p,3w		**2sst,6p,6w**	Study tours
Custos Visitas de estudo EUR		16 644,80		16 644,80		**33 289,59**	Study tours costs EUR
Scanstat Assessor residente Meses		8	10,5	10,5	10,5	**39,5**	Scanstat resident advisor Months
Taxa para Scanstat Assessor EUR		193 223,00	253 605,18	253 605,18	253 605,18	**954 038,55**	Fee for Scanstat advisor EUR
Formação,longa e curta duração		6 666,67	13 988,43	10 913,37	38 177,04	**69 745,52**	Long and Short Term training
Coordenador do MASA Meses		4	11	11	11	**37**	Local MASA coordenator Months
Coordenador do MASA EUR		15 707,67	43 196,10	43 196,10	43 196,10	**145 295,97**	Local MASA coordenator EUR
TOTAL PARTE 2 (EUR)	**36 903,79**	**305 546,49**	**347 441,89**	**361 011,63**	**371 630,50**	**1 422 534,30**	**TOTAL PART 2 (EUR)**

O componente orientada a saída (F) — The output oriented component (F)

COMPONENTE F Actividades voltadas para a produção de estatísticas (PDEA 2012-2022)							COMPONENT F Activities focused on output of statistics (PDEA 2012-2022)
Inquérito Agrícola Integrado		1 025 918,91	1 604 853,42	1 604 853,42	1 604 978,51	5 840 604,26	Integrated Agricultural Survey
Equipamento e Material		220 551,45	265 812,18	137 727,27	137 727,27	761 818,18	Equipment
- Contribuição do MASA		-1 246 470,36	-1 500 000,00	-1 500 000,00	-1 500 000,00	-5 746 470,36	- MASA OE contribution
Défice	0,00	0,00	370 665,60	242 580,69	242 705,78	855 952,07	Deficit
TOTAL PARTE 3 (in EUR)	**0,00**	**0,00**	**370 665,60**	**242 580,69**	**242 705,78**	**855 952,07**	**TOTAL PART 3 (EUR)**

TOTAIS do projecto por nível de intervenção — Project TOTALS by intervention level

TOTAL PARTES 1, 2 & 3	2015	2016	2017	2018	2019	Total	TOTAL PARTS 1, 2 & 3
MZM	2 012 732,71	20 570 827,18	43 583 953,42	37 506 009,72	36 605 024,93	140 278 547,96	MZM
USD	40 958,70	418 612,15	886 924,59	763 239,67	744 904,82	2 854 639,94	USD
EUR	**36 903,79**	**377 169,55**	**799 119,06**	**687 678,95**	**671 159,24**	**2 572 030,58**	**EUR**

TOTAL PARTES 1 & 2	2015	2016	2017	2018	2019	Total	TOTAL PARTES 1 & 2
MZM	2 012 732,71	20 570 827,13	23 367 851,59	24 275 658,84	23 367 851,59	93 594 921,87	MZM
USD	40 958,70	418 612,15	475 531,03	494 004,72	475 531,03	1 904 637,63	USD
EUR	**36 903,79**	**377 169,55**	**428 453,46**	**445 098,26**	**428 453,46**	**1 716 078,51**	**EUR**

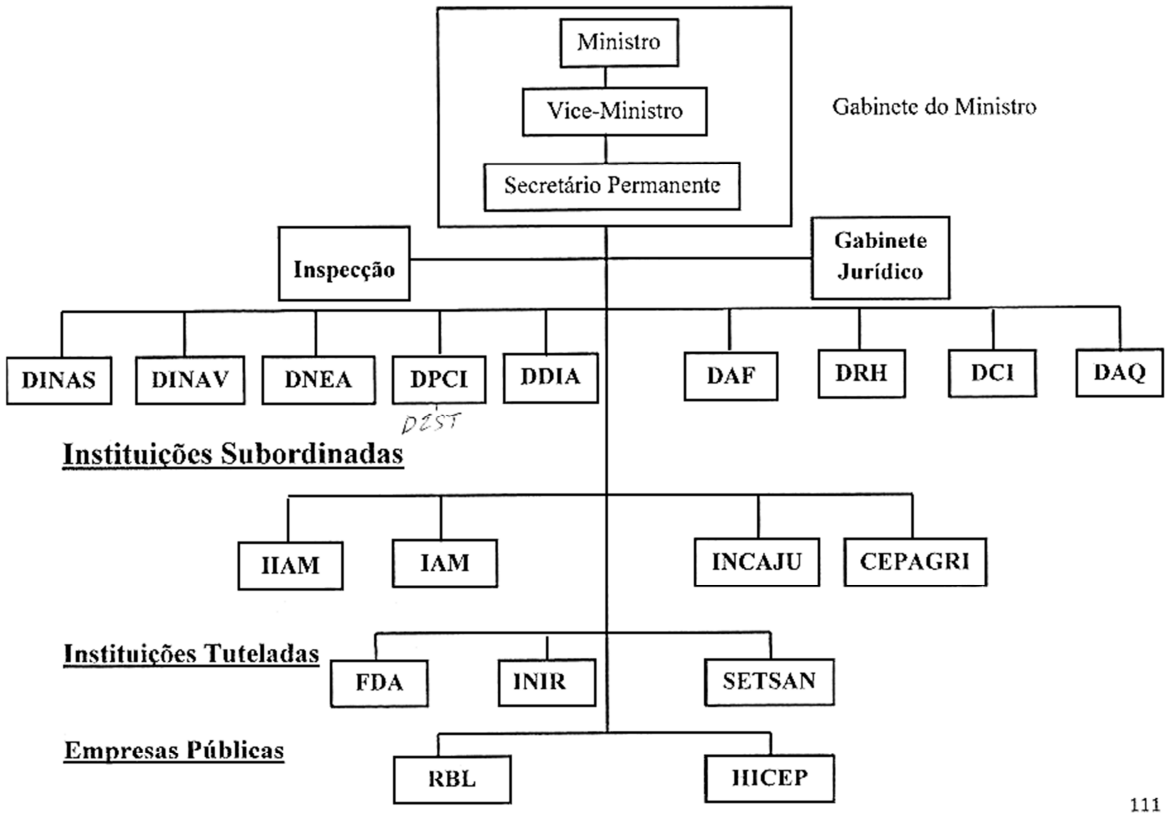
TOTAL PARTES 1	2015	2016	2017	2018	2019	Total	TOTAL PARTES 1
MZM		3 906 321,80	4 418 370,97	4 586 084,53	3 099 124,01	16 009 901,31	MZM
USD		79 492,85	89 912,95	93 325,89	63 066,54	325 798,24	USD
EUR		**71 623,06**	**81 011,57**	**84 086,63**	**56 822,96**	**293 544,21**	**EUR**

Notes to Annex A4 Proposed budget for the project 2015-2019

O orçamento é, como o próprio projecto, descrito em 3 partes com foco em diferentes facetas: - A primeira parte é sobre os componentes de capacitação especifica (A-D) usados como blocos de construção no âmbito do Sistema Estatístico Nacional. - Em seguida, a segunda parte (componente E) trata de estratégia e liderança, capacidade e apoio corporativo no âmbito dum projecto externo nas estatísticas do MASA. - E, finalmente, enfrentamos o componente (F) orientada às saídas, conforme descrito no Plano Director 2012-2022 do MASA. **Parte 1 Componentes específicas de capacitação (A-D)**: Esta parte trata a introdução teorético e metodológico de ideias modernas de produzir estatística no Sistema Nacional de Estatística de Moçambique. Os custos orçamentados são para cobrir consultores de curta duração e visitas de estudo. Muito do trabalho desta parte também pode ser feito pelo INE e MASA com pouco custos adicionais. A notação `1m, 1p, 2w` significa; uma missão por uma pessoa e 2 semanas; os custos (em EUR) são calculados usando os valores estipulados no contrato actual entre INE e Scanstat. `sst` significa visita de estudo para Escandinávia e `rst` visita de estudo na região. **Parte 2 Estratégia e liderança, gestão da capacidade e apoio corporativo (E):** Aqui está incluído os custos do projecto, a dizer, visitas de apoio pelo Scanstat central, visitas de estudo sobre coordenação, consultor residente, coordenador local, formação de curta e longa duração mais a contratação de recursos humanos temporários para os inquéritos. A linha Formação de Curta e Longa Duração e reduzido em relação a sua base no Plano	**The budget is, as the project described in 3 parts focusing on different facets:** - The first part is about the specific training components (A-D) used as building blocks within the National Statistical System. - Then, the second part (component E) deals with to strategy and leadership, capacity and corporate support in the context of an external project at the MASA statistics. - And finally, we face the component (F) focused on the outputs, as described in the Master Plan 2012-2022 MASA. **Part 1 The specific training components (A-D):** This part deals with the theoretical and methodological introduction of the modern ideas on how to produce statistics within the National System of Statistics in Mozambique. The budgeted costs are to cover short-term consultants and study visits. Much of the work of this part can also be done by INE and MASA with few additional cost. The notation `1m, 1p, 2w` means; one mission by one person and two weeks; the costs (in EUR) are calculated using the values stipulated in the current contract between INE and Scanstat. `sst` means study visit to Scandinavia and `rst` study visit in the region. **Part 2 Strategy and leadership, capacity management and corporate support (E):** Here it is included project costs, supporting visits from central Scanstat, study visits on coordination, a long-term advisor, a local project coordinator, short and long-term training and the hiring of temporary human resources for the surveys. The line Short and Long Term Training is reduced in relation to its base in the Master Plan 2012-2022. Complementing solutions are

Director de 2012-2022. Soluções complementares procuram-se. Algumas das formações de curta duração vão ser feitas na parte 1. **Parte 3: A componente orientada às saídas (F):** Aqui inclui-se as restantes actividades do MASA/DPCI/DEST, como orçamentadas no Anexo 3. Nos anos 2014 e 2015 a contribuição do governo às actividades era quase 100%. Esta parte também inclui 10 dos 39 veículos que se precisam para reforçar as 52 brigadas de trabalho do campo. Soluções complementares procuram-se. É difícil saber o tamanho da contribuição do governo no futuro. Isto depende da situação financeira geral do país, a demanda de estatísticas agrárias e também da qualidade das estatísticas produzidas. O valor usado, 1,5 milhões de EUR e um pouco menos do que a media dos últimos 3 anos (1,7 milhões de EUR).	searched for. Some of the short training will be made in part 1. **Part 3: The component oriented to the outputs (F):** Here are included the rest of the activities for the MASA/DPCI/DEST, as budgeted in Annex 3. During the years 2014 and 2015 the government's contribution to the activities was almost 100%. This part also includes 10 of the 39 cars needed to reinforce the 52 fieldwork brigades. Complementing solutions are searched for. When it comes to the year 2016 the MASA/DPCI/DEST will receive much less than planned. It is difficult to know the size of the government's contribution in the future. This depends on the overall financial situation of the country, the demand for agricultural statistics and also the quality of the statistics produced. The value used, 1.5 million EUR is a little less than the average of the last 3 years (1.7 million EUR).

Annex 5, MASA Organisational Chart



Estrutura

O Ministério da Agricultura e Segurança Alimentar tem a seguinte estrutura:

a. Inspecção da Agricultura e Segurança Alimentar;
b. DINAS - Direcção Nacional de Agricultura e Silvicultura;
c. DINAV - Direcção Nacional de Veterinária;
d. DNEA - Direcção Nacional de Extensão Agrária;
e. DPCI - Direcção de Planificação e Cooperação Internacional;
(DPCI/DEST - Departamento de Estatística)
f. DDIA - Direcção de Documentação e Informação Agrária.
g. Gabinete do Ministro; h. Gabinete Jurídico;
i. DAF - Departamento de Administração e Finanças;
j. DRH - Departamento de Recursos Humanos;
k. DCI - Departamento de Comunicação e Imagem;
l. DAQ - Departamento de Aquisições.

Instituições Subordinadas

São instituições subordinadas do Ministério da Agricultura e Segurança Alimentar:

a. IIAM - Instituto de Investigação Agrária de Moçambique;
b. IAM - Instituto de Algodão de Moçambique;
c. INCAJU - Instituto de Fomento de Caju;
d. CEPAGRI - Centro de Promoção da Agricultura;
e. Outras instituições como tal definidas nos termos da legislação aplicável.

Instituições Tuteladas

São instituições tuteladas pelo Ministro da Agricultura e Segurança Alimentar:

a. FDA - Fundo de Desenvolvimento Agrário;
b. INIR - Instituto Nacional de Irrigação;

c. SETSAN - Secretariado Técnico de Segurança Alimentar e Nutricional;
d. Outras instituições como tal definidas nos termos da legislação aplicável.

O MASA: Contexto Legal
O Decreto Presidencial nº 1/2015, de 16 de Janeiro, criou o Ministério da Agricultura e Segurança Alimentar.

O Ministério da Agricultura e Segurança Alimentar é o órgão central do aparelho do Estado que, de acordo com os princípios, objectivos e tarefas definidos pelo Governo, dirige, planifica e assegura a execução da legislação e políticas no domínio da agricultura, pecuária, hidráulica agrícola, plantações agro-florestais e segurança alimentar.

Atribuições
O Ministério da Agricultura e Segurança Alimentar tem as seguintes atribuições:

a. Fomento da produção, agro-industrialização e competitividade dos produtos agrários;
b. Promoção do desenvolvimento sustentável através da administração, maneio, protecção, conservação e uso racional de recursos essenciais à agricultura e segurança alimentar;
c. Promoção do uso e desenvolvimento sustentável dos recursos agro-florestais;
d. Promoção da Investigação, extensão e assistência técnica agrária e de segurança alimentar;
e. Promoção, monitoria e avaliação de programas, projectos e planos agrários e de segurança alimentar;
f. Licenciamento das actividades agrárias.

Competências
Para a concretização das suas atribuições o Ministério da Agricultura e Segurança Alimentar tem as seguintes competências:

Na área da Agricultura:
- Propor a aprovação de legislação, politicas e estratégias de desenvolvimento agrícola.
- Implementar políticas, estratégias, planos, programas e projectos do sub-sector.
- Estabelecer normas para licenciamento, fiscalização e monitoria das actividades do sub-sector;
- Estabelecer normas para a implementação de projectos e programas de fomento das actividades agrícolas;
- Garantir a defesa sanitária vegetal e controlo fitossanitário;
- Promover programas de investigação agrícola e disseminar os resultados;
- Promover e garantir a assistência técnica aos produtores através dos serviços de extensão agrária, para o aumento da produção e produtividade;
- Promover e garantir a capacitação dos produtores.
- Promover a criação e desenvolvimento de infra-estruturas e serviços de apoio às actividades agrícolas;
- **Produzir e sistematizar informação sobre a agricultura no país.**

Na área da Pecuária:
- Propor a aprovação de legislação, politicas e estratégias de desenvolvimento pecuário.
- Implementar políticas, estratégias, planos, programas e projectos do sub-sector.
- Estabelecer normas para licenciamento, fiscalização e monitoria das actividades do sub-sector;

- Estabelecer normas para a implementação de projectos e programas de fomento das actividades pecuárias;
- Garantir a defesa sanitária animal, incluindo animais aquáticos, controlo zoo-sanitário e saúde pública;
- Promover programas de investigação pecuária e veterinária, e disseminar os resultados;
- Promover e garantir a assistência técnica aos produtores através dos serviços de extensão agrária, para o aumento da produção e produtividade;
- Promover e garantir a capacitação dos produtores.
- Promover a criação e desenvolvimento de infra-estruturas e serviços de apoio às actividades pecuárias;
- **Produzir e sistematizar informação sobre a pecuária no país**.

Na área da Hidráulica Agrícola:

- Propor a aprovação de legislação, politicas e estratégias de desenvolvimento hidro-agrícola;
- Definir, elaborar e promover programas e projectos para o desenvolvimento de infra-estruturas hidro-agrícolas.
- Promover a gestão e o uso sustentável da água para o aumento da produção e da produtividade agrária;
- Elaborar e implementar normas e procedimentos sobre o acesso e uso sustentável de infra-estruturas hidro-agrícolas.

Na área de Plantações Agro-florestais:

- Propor a aprovação de legislação, políticas e estratégias de promoção e desenvolvimento de plantações agro-florestais;
- Implementar políticas, estratégias, planos, programas e projectos do sub-sector.
- Estabelecer normas para a implementação de projectos e programas de fomento de plantações agro-florestais;
- Assegurar o desenvolvimento de plantações agro-florestais para fins de conservação, energéticos, comerciais e industriais;
- **Promover programas de investigação florestal e disseminar os resultados;**
- Promover o processamento interno dos recursos provenientes das plantações agro-florestais.

Na área da Segurança Alimentar:

- Propor a aprovação de legislação, politicas e estratégias de segurança alimentar;
- Promover boas práticas de preparação e uso de alimentos para garantia da segurança alimentar e nutricional;
- **Produzir, sistematizar e divulgar informação sobre a segurança alimentar no país;**
- Promover programas de educação pública e informação sobre acesso, conservação e processamento de alimentos;
- Garantir a segurança alimentar através da educação nutricional das comunidades priorizando os alimentos mais nutritivos;
- **Assegurar a promoção e coordenação intersectorial na formulação, monitoria, avaliação e implementação do quadro de políticas e estratégias para garantir a segurança alimentar e nutricional da população.**

Annex 6 - A preliminary monitoring framework for the INE-MASA project

This project monitoring framework is in draft format. It needs further specification at project start-up (see component A/P8) and a subsequent full assessment at the time of first review. The INE and the MASA are currently involved in a development and modernization process to which this project will contribute.

This monitoring framework is, like the project itself, described in 3 parts focusing on different facets:	*Main promoter:*
- The first part is about the specific GSBPM building components (A-D) used as building blocks within the National Statistical System of Mozambique.	*The INE*
- Then the second part (component E) is dealing with strategy and leadership, capability and general corporate support within MASA statistics.	*The Project*
- And finally we deal with the output oriented component (F), as already described in the MASA Master plan 2012-2022 (PDEA 2012).	*The ODINE MASA*

Specific capacity building components (A-D)

COMPONENT A/P1	**Architecture, Planning and Monitoring (GSBPM processes 1, 2, 3 and 8)**	**GSBPM P1 => Specify needs**
Comp. objective	Secure an efficient system for user contacts necessary for the production of quality statistics.	
Specific objective 1	*Contribute to the reliability of statistics in cooperation with other actors in the field.*	
Specific objective 2	*Create a functional producer-user forum.*	

Level	Indicator	*Aspect*	BL 2015	2016	2017	2018	2019	Target 2020
Outcome	Level of user satisfaction and confidence (User survey to determine).	*quality*	low				medium	*improved*
Output	User-producer forum composition definition.	*utility*	n/a	June				*created*
Output	Forum Terms of Reference.	*utility*	n/a	June				*created*
Output	Annual forum meeting minutes.	*the NSS*	0	August	July	June	June	Σ 4
Output	An updated list of variables / key indicators to be produced, agreed with the main users.	*needs*	PDEA 2012		July	June	June	Σ 3
Output	2 persons x 3 times trained in elaboration of statistical projects.	*capability*	n/a		Dec (2)	Dec (2)	Dec (2)	Σ 6
Output …								

COMPONENT A/P2	**Architecture, Planning and Monitoring (GSBPM processes 1, 2, 3 and 8)**	**GSBPM P2 => Design and plan**
Comp. objective	The staff of the statistics unit trained and experienced to design and plan necessary recurrent activities.	
Specific objective	*The introduction of new work and modelling techniques.*	

Level	Indicator	*Aspect*	BL 2015	2016	2017	2018	2019	Target 2020
Outcome	A flexible unit prepared to meet current and future challenges.	*efficiency*						
Output	Well adopted guidelines on how to proceed at next GSBPM levels together with the rest of the National Statistical System.	*quality*	n/a	Dec(2)	Dec(2)	Dec(2)	Dec(2)	*Σ 8, one for each GSBPM process*
Output	4px4t trained in sampling and statistical methods.			Dec (4)	Dec (4)	Dec (4)	Dec (4)	*Σ 16*
Output …								

COMPONENT A/P3	**Architecture, Planning and Monitoring (GSBPM processes 1, 2, 3 and 8)**	**GSBPM P3 => Build and test**
Comp. objective	Ensure that there are staff within the National Statistical System who are skilled in turning designed projects into reality by building and/or assembling the needed instruments.	
Specific objective	*That the system is supporting the design and plans created and approved in previous steps.*	

Level	Indicator	*Aspect*	BL 2015	2016	2017	2018	2019	Target 2020
Outcome	Increased ability to adapt to new demands.	*efficiency*	low				medium	
Outcome	Raised level of cooperation within the SEN.	*quality*	low		medium		high	*high*
Output	An unified system for the IAI.		medium				high	*high*
Output	Manual for testing	*quality*			Dec			*approved manual*
Output	Robust applications	*efficiency*	medium		June			*high*
Output	10 persons x 2 times trained in GIS.	*capability*		June (9)	June (11)			*Σ 20*
Output …								

COMPONENT A/P8	**Architecture, Planning and Monitoring (GSBPM processes 1, 2, 3 and 8)**	**GSBPM P8 => Evaluate & feedback**
Comp. objective	To have a systematic way of monitoring and evaluating the statistics produced.	
Specific objective	*The monitoring of system* processes and quality indicators.	

Level	Indicator	*Aspect*	BL 2015	2016	2017	2018	2019	Target 2020
Outcome	*Process efficiency (Timeliness, cost-efficiency, punctuality)*	*quality*						
Outcome	PAF in monthly/quarterly operation	*efficiency*						
Output	Performance Assessment Framework (PAF) designed, in use and actualized.	*efficiency*	n/a	Aug				*in use*
Output	Recurrent needs assessment performed for products X, Y and Z	*efficiency*	PDEA 2012	*Nov*	*Nov*	*Nov*	*Nov*	*annual updates*
Output …								

COMPONENT B/P4	**Collecting data (GSBPM process 4)**							**GSBPM P4 => Collecting data**
Comp. objective	Secure that the data collection is done in efficient ways, regardless if made using surveys or by using administrative data.							
Specific objective 1	*Adopt to the use of digital technologies in data collection.*							
Specific objective 2	*Establish linkage to the INE Territorial Statistics for better use of existing administrative data.*							
Level	Indicator	*Aspect*	BL 2015	2016	2017	2018	2019	Target 2020
Outcome	More timely data is collected at lower cost.	*efficiency*						
Outcome	Raised level of data Qualidade.	*quality*	medium		high			*high*
Output	Digital data capture	*efficiency*	Laptops		Tablets	Web		*modernized*
Output	Reduction of input errors in filling in the questionnaires.	*quality*	n/a					*20% reduction*
Output	5px3t technicians trained in the use of new technologies.			Dec (5)	Dec (5)	Dec (5)		*Σ 15*
Output …								
COMPONENT C/P5	**Processing and Analysing (GSBPM processes 5 and 6).**							**GSBPM P5 => Processing data**
Comp. objective	Secure that the data processing is done correctly and swiftly, whether by MASA, INE or other institution.							
Specific objective 1	*Define procedures and manuals on how to do the processing.*							
Specific objective 2	*Establish a division of labour that works well between the ODINE (the MASA), the INE and other parts of the NSS.*							
Level	Indicator	*Aspect*	BL 2015	2016	2017	2018	2019	Target 2020
Outcome	Timeliness of targeted statistical products.	*efficiency*	n/a					*20%*
Outcome	Usefulness of targeted statistical products.	*quality*	n/a					*raised*
Output	New processing system in place, updated hard- and software	*efficiency*			Dec			*operational by 2018*
Output	Instruction manual for data analysis	*quality*	old		July			*approved manual*
Output	Instruction manual for data processing	*quality*	old		July			*approved manual*
Output	A work programme incl. documentation & archiving routines		old	Nov	Nov	Nov	Nov	*draft + updates*
Output	4 persons x 2 times trained in database management.				*May (4)*		*May (4)*	*Σ 8*
Output	3px3t technicians in trained processing (in the field)			Dec (3)	Dec (3)	Dec (3)		*Σ 10*
Output …								
COMPONENT C/P6	**Processing and Analysing (GSBPM process 5 and 6)**							**GSBPM P6 => Analysing data**
Comp. objective	Secure that the data analysing is done correctly and swiftly, whether by MASA, INE or other institution.							
Specific objective 1	*Contribute to the cooperation with other actors in the field.*							
Specific objective 2	*Introduce modern techniques for analysing data.*							
Level	Indicator	*Aspect*	BL 2015	2016	2017	2018	2019	Target 2020
Outcome	Increased analyse and use of statistics.	*efficiency*	low				medium	*medium*
Outcome	Raised level of producer cooperation.	*quality*	low				high	*high*
Output	18p,11p,11p,11p trained in processing and analysis of data.	*Feb/March*	0	18	11	11	11	*Σ 51*
Output …								
COMPONENT D/P7	**Dissemination and Communication (GSBPM process 7)**							**GSBPM P7 => Dissemination & Communication**
Comp. objective	Provide the statistical information collected to the public.							
Specific objective	*Promote and facilitate the delivery and feedback regarding statistical products.*							
Level	Indicator	*Aspect*	BL 2015	2016	2017	2018	2019	Target 2020
Outcome	Increased demand on statistical information.	*demand*	0		+5%			*15%*
Outcome	Increase the number of social media and web page views.	*accessibilty*	n/a		+5%			*10%*
Outcome	Increased use of the 11 provincial information centres.	*accessibilty*	n/a					
Output	Created web space for the dissemination.		0	Dec				*created*
Output	Statistical Yearbook published. (4)		2		Apr(1)	Apr(1)	Apr(1)	*Apr (1) = Σ 4*
Output	Green Line activated as a Help Desk		0		May			*created*
Output	18p,11p,11p trained in publishing and reporting.	*accessibilty*		June (18)	June (11)	June (11)		*Σ 40*
Output	A comission, working group, on dissemination created		0	Sept				*created*
Output …								

Strategy and leadership, capability management and corporate support (E)

COMPONENT E/P9	**Management, strategy, capability and corporate support (GAMSO, INE process 9)**							**GAMSO P9 => Management, capability and support**
Comp. objective	To improve management, strategy, capability and corporate support.							
Specific objective 1	*Develop organizational capabilities in relation to the portfolio of statistical products and services to be offered.*							
Specific objective 2	*Promote the reuse and sharing of infrastructure (statistical and technical), both within the organization and between organizations.*							
Specific objective 3	*To promote the training and recruitment of human resources.*							
Level	Indicator	*Aspect*	BL 2015	2016	2017	2018	2019	Target 2020
Outcome	Acquired technical skills in statistical production at all levels of MASA and INE.	*skills*	medium				reasonable	*aquired*
Outcome	Strengthened intra- and inter-instituticional coordination.	*producer contacts*	low				medium	*strengthened*
Output	Created 1 coordination forum.	*coordinatio*			March (1)			*created : Σ 1*
Output	20p,11p,11persons trained in Statistical Management.	*skills*			April (20)	April (11)	April (11)	*Σ 42*
Output	10p,15p,15p,15p persons trained in English.	*Feb/March*		10	15	15	15	*Σ 55*
Output	2 long-term trained technicians in sampling.	*skills*			Dec	Dec		*Σ 2*
Output	10p,15p,15p,15p	*skills*		July (9)	July (9)			*recruited : Σ 18*
Output …								

The output oriented component (F)

COMPONENT F	**Activities focused on output of statistics (MASA Master plan, PDEA 2012-2022)**				**Statistics on agricultural production, livestock and food security.**			
Comp. objective	The implementation of the MASA Master Plan for Development of Agricultural Statistics 2012-2022.							
Specific objective 1	*Produce and make available statistical reliable data on agricultural production, livestock and food security.*							
Level	Indicator	*Aspect*	BL 2015	2016	2017	2018	2019	Target 2020
Outcome	A robust collaboration between stakeholders in the area, ensuring an open data flow between the entities with their respective responsibilities identified.	*efficiency*	weak			medium		*robust*
Outcome	Fulfilled the Master plan intention to integrate the two parts of the Integrated Agricultural Survey (IAI).	*efficiency*	delayed		revita-lized			*fulfilled*
Output	Methodological document for the IAI.	*efficiency*			*Mars*			*created*
Output	Prepared master plan for the CAP in 2019	*efficiency*				*May*		*created*
Output	The plan for the production of data at the district level prepared. (Sample, methodological documents).	*scope*		Dec				*created*
Output	The MASA Agricultural Statistics Publishing Plan	*accessability*		Sept (1)	4	4	*4*	*updated and revised querterly*
Output	The statistical products as described in the publishing plan and in component D/P7 Dissemination and Communication	*accessability*						*produced*
Output	36 - Published monographs.	*output*			Apr(9)	Apr(9)	Apr(9)	*Apr (9) = Σ 36*
Output	1 - Statistical Yearbook published annually.	*output*	March	May	March	Feb	Jan	*Jan : Σ 5*
Output	8 - Thematic monographs published annually.	*output*		June (8)	June (8)	June (8)	June (8)	*June (8) : Σ 40*
Output	1 - Annual technical report published	*output*		Feb	Feb	Feb	Feb	*Feb 1 : Σ 5*
Output	1- Brochure - Agriculture in numbers published each year.	*output*		Feb	Feb	Feb	Feb	*Feb 1 : Σ 5*
Indicators	Timeliness (reduction in production time) apropriate quality indicator (sampling error or similar) will be defined by specific product	*quality*		Sept (1)	Dec	Dec	Dec	*Updated and revised querterly*
Output …								
Specific objective 2	*Produce and make available information on agro-business.*							
Level	Indicator	*Aspect*	BL 2015	2016	2017	2018	2019	Target 2020
Outcome	Internal statistical literacy and use of statistical information elevated at the level of top management of MASA.	*use*	n/a					*raised*
Outcome	National priorities determined and revised, the decision on core agricultural statistics confirmed.	*NSS/MASA*						*annualy updated and approved*
Output	Statistics produced by MASA is in accordance with national requirements and international standards - (statistical yearbook and thematic monographs).	*standards*	n/a		1	+1	+1	*all products certified by the INE*
Indicators	Timeliness (reduction in production time) apropriate quality indicator (sampling error or similar) will be defined by specific product	*quality*		Sept	Dec	Dec	Dec	*updated and revised querterly*
Output …								
Specific objective 3	*Integrating the two phases of Agricultural Survey (TIA/Early Warning)*							
Level	Indicator	*Aspect*	BL 2015	2016	2017	2018	2019	Target 2020
Outcome	Alignment between forecast and post-harvest data.	*consistensy*						
Outcome	Sample error reduction.	*quality*	medium					*low*
Outcome	The agricultural campaign report disaggregated to the district level. (Have to be discussed, it might be difficult)	*level of detail*			Dec			*complicated, needs assessment*
Output	A representative sample to the district level designed. (Have to be discussed, it might be difficult)	*level of detail*				June		*complicated, needs assessment*
Output	Guide on collecting season forecast data using the sample of IAI.	*efficiency*			May			Σ 1
Output …								
Specific objective 4	*Conduct and timely disseminate (4) special surveys of the Master Plan (Fruit trees, Livestock, Horticulture and Cashew)*							
Level	Indicator	*Aspect*	BL 2015	2016	2017	2018	2019	Target 2020
Outcome	A better understanding of the actual agricultural situation.	*use*						
Output	Forecast report of the agricultural season.	*use*		Apr	Apr	Apr	Apr	*Apr : Σ 5*
Output	Post-harvest report on the agricultural season.	*result*	Mar	Apr	Mar	Feb	Jan	*Dec (a-1) : Σ 5*
Output	Survey report on fruit trees.	*output*	Dec				Dec	*Σ 2*
Output	Survey report of vegetables.	*output*		Dec				Dec *: Σ 2*
Output	Survey report of cashew.	*output*			Dec			*Σ 1*
Output	Survey report of livestock.	*output*				Dec		*Σ 1*
Output …								
End of draft INE-MASA Project Monitoring Framework							End of draft INE-MASA Project Monitoring Framework	
This project monitoring framework is in draft format. It needs further specification at project start-up (see component A/P8) and a subsequent full assessment at the time of first review. The INE and the MASA are currently involved in a development and modernization process to which this project will contribute.								
This monitoring framework is, like the project itself, described in 3 parts focusing on different facets:								*Main promoter:*
- The first part is about the specific GSBPM building components (A-D) used as building blocks within the National Statistical System of Mozambique.								*The INE*
- Then the second part (component E) is dealing with strategy and leadership, capability and general corporate support within MASA statistics.								*The Project*
- And finally we deal with the output oriented component (F), as already described in the MASA Master plan 2012-2022 (PDEA 2012).								*The ODINE MASA*

Annex 7 The content of the project: July 2016 - December 2019

The proposal engages in the following six project components where the first five are concentrating on capacity building and institutional development and where the sixth component is dealing with output centred activities (in parentheses the origin of the component):

- **A.** Architecture, Planning and Monitoring (GSBPM processes 1, 2, 3 and 8)
- **B.** Collecting data (GSBPM process 4)
- **C.** Processing and Analysing (GSBPM process 5 and 6)
- **D.** Dissemination and Communication (GSBPM process 7)
- **E.** Management, strategy, capability and corporate support (GAMSO, INE process 9)
- **F.** Activities focused on output of statistics (MASA Master Plan, PDEA 2012-2022)

In this annex a more detailed discussion of the content of the different components is presented. The first components (A-D) are about general capacity building and used as building blocks within the National Statistical System. Then we have a component (E) dealing with functions like strategy and leadership, capability management and corporate support within MASA statistics. And finally we have the output oriented component (F) taken from the MASA Master Plan 2012-2022. As said before, the underlying idea of this project is that there is a need for MASA to have access to the proper capacity to be able to handle each of the GSBPM processes 1 to 9 in one or way another, by MASA itself or through some other institution, to ensure that statistical information of good quality will be produced as the result.

Note that when we say that all 9 processes should be treated in a way or another, this does not necessarily mean that each institution of the Mozambican National Statistical System has to have the ability to do everything in all the processes. On the contrary. It is now getting more and more relevant to look upon the National Statistical System as the system the name suggests and look for synergies between the institutions coordinated by INE when it comes to official statistics. In this project INE expertise will to a great extent be used to assist the capacity building at MASA and vice versa to take advantage of experience gained.

The Annex is organized using the GSBPM processes. Grouped into the six components of the project it describes, process by process, the ideas behind the project interventions, the expected results and the actors (including key actors) that will be involved.

A Architecture

This component contains the GSBPM processes needed to plan, set up and monitor the system, the GSBPM processes 1,2,3 and 8. The main objective of this component is to secure a system for user contacts and for the planning, design and construction of the subsystems necessary for an effective and efficient production of quality statistics on agriculture and food security.

So - What are the capabilities that the system presently has, and which needs to be further developed? As can be seen in Annex 1 we have combined the perspective of the GSBPM with a traditional SWOT analysis for each process. In this way we have used a new model applied within a well-known model to ensure that we are communicating in a comprehensive

way, covering most of the aspects related to the production of agricultural statistics, to give a background and baseline to the present project proposal.

Let us begin with the production processes of the Architecture project component, one by one, and see what the project can do to make them function better at MASA, within the National Statistical System:

P1 Specify needs

P 1.1. Background and baseline

What kind of statistics is needed to solve the problem at hand? This process P1 is normally activated when new statistics or information is initiated and the needs have to be identified and organised. It can however also be activated for recurring statistics, indicating the need for a review. The process determines whether there is an unmet external and/or internal demand for the identified statistics, and if MASA and the system of agricultural statistics can produce what is required for. Some needs are of a repetitive nature, while others come less frequently and are specified in the National Statistical System Strategic Plan and the MASA Master Plan for Development of Agricultural Statistics. There is also a need to be prepared for new upcoming surveys and ad hoc work made to satisfy suddenly or unforeseen needs.

The key for success regarding agricultural statistics is for the Ministry to have access to expert statisticians who can act as a link between users, agronomists, livestock specialists and other subject matter staff, helping them to document their needs for statistics and setting these needs in relation to available resources. This initial planning is done in this process P1 and it is important because if you do not do this well one can end up spending efforts on producing statistics that nobody really requires. This process P1 Specify needs is mostly about communication and communication always needs actors. Therefore, it is not enough to only discuss this with the statisticians, MASA also need to develop its specialists, agronomists, husbandry experts and even external politicians at different levels regarding effective two-way communications.

P 1.2. The project

The goal is to have this process use the most appropriate means to secure that the project delivers best possible value for the resources used. Specifying the needs is ultimately based on more or less advanced policy analysis and done at several levels - from internal MASA directorates, governmental institutions, international institutions to common users. Regarding official statistics, INE and the High Council of Statistics has an important role.

In short – in this project there is a need for long and short term training, workshops, awareness material, study visits etc.

Actors:

- Upper management of MASA
- MASA/DPCI/DEST
- The High Council of Statistics and INE
- Mozambican user groups and organisations
- FAO, African Development Bank (BAD), World Bank, PARIS21 and other external agents

Results:

i. The establishment of a well-functioning user-producer forum

ii. A fact based revised decision on the content of core agricultural statistics, including the SDG indicators that are related to the areas covered by the project.

iii. Established forms to prioritize what statistics should be produced. This should be based on advanced policy analysis, taken into account user needs and financial and other constraints.

P2 Design and plan

P2.1. Background and baseline

This phase starts by combining the output from the previous process with an extensive results based planning session, of type RBM. The process will be executed by agronomists and statisticians working together. The actual situation is described in Annex 1.

Introducing new work and modelling techniques will facilitate the design of new projects. Although the statistical products of MASA are not many there is a constant refining of existing products and development of new products to meet changing user requirements.

There is a need for strengthening the overall capacity in this area. This can be made along with the INE National School of Statistics and other international schools selected within Africa and elsewhere. In parallel this will increase the capability to understand agricultural issues (along with international organizations like the FAO, the ADB, PARIS21 and others).

By INE and MASA monitoring international initiatives and spread to their staff what looks like interesting news they will continue to be up to date with current development.

P2.2. The project

To have the staff of MASA/DPCI/DEST used to, by themselves, design and plan necessary recurrent activities. When it comes to other activities there will be created clear guidelines on how to proceed at next levels together with the rest of the National Statistical System.

Actors:

- MASA/DPCI management.
- Subject matter specialists at MASA (agronomists, livestock specialists, veterinaries, agro economists etc.) and statisticians at MASA/DCPI/DEST and INE.

Results:

i. The refinement and operationalisation of the necessary initial steps of the Master Plan.

ii. The establishment of a well-functioning system for monitoring and evaluation, built on RBM methodology.

P3 Build and test

P3.1. Background and baseline

INE has competence in the area of building and testing but still MASA needs to have staff master issues like sampling and statistical methodologies, mapping and GIS as well as the necessary ICT knowledge on how to collect, process and disseminate statistics. The staff should be stimulated and encouraged to continuously perform quality work. For baseline see Annex 1.

There is a need to ensure that there are staff within the National Statistical System who are skilled to turn the designed projects into reality by building or assembling the needed instruments (mainly questionnaires and IT systems for collection and processing) necessary for carrying out the activities of this processes.

P3.2. The project
That MASA, together with INE, have staff mastering the necessary issues like sampling and statistical methodologies, mapping and GIS as well as the ICT knowledge to collect, process and disseminate statistics. The actual work will be carried out by methodological experts, statisticians and ICT technicians. Some of the more specialised tasks will be done together with external experts at INE or elsewhere. The important issue in these cases is that the division of responsibilities are clearly defined and approved by all parties involved.

Actors:

- MASA/DPCI management.
- Agronomists at MASA and statisticians at MASA/DCPI/DEST and INE.

Results:

i. MASA statistics contributes as a reliable supplier of agricultural statistics and food security information through own or shared capabilities and cooperation with other stakeholders in the field.

ii. System developed that supports the design and plans created and approved in previous steps.

P8 Evaluate and give feedback

P8.1. Background and baseline

At the moment there are no processes implemented that in a ***systematic*** way monitor and evaluate the statistics produced.

This activity is traditionally not very well treated in organisations facing exaggerated day to day problems, but now that P8 Evaluate and give feedback is made an overarching process within the GSBPM it stresses that it is an extremely important component contributing to ensure the production of quality statistics. Within this process one is dealing with methods like Lean, RBM, etc. The ability to look upon all processes in a holistic way is important.

P8.2. The project
A basic goal is to have a fully functional system that allows the Results and Monitoring Framework (see Annex 6) to be evaluated regularly. This is a competence field where Scanstat has a strong experience that will be shared with the staff of MASA in the form of suggestions on policies, working routines, manuals and training.

Actors:

- MASA/DPCI management
- Subject matter specialists and agro economists at MASA and statisticians at MASA/DCPI/DEST and INE

Results:

i. Archiving of statistical products secured.

ii. The Provincial Documentation Centres reactivated.

iii. A well-functioning system built on RBM established for monitoring and evaluation.

B Collecting

P4 Collect data

P.4.1. Background and baseline

When it comes to process 4 MASA already has experience of using various modern methods. The country is however not easy to work in due to bad roads and unreliable communication. Rural surveys are expensive, costs have to be controlled and MASA can probably make a win-win by an increased cooperation with INE and other institutions working in the rural areas. New administrative sources will gradually also be more important in data collection for statistical purposes. A large part of the holdings in agriculture are still unregistered, small and household based, and it is common that owners and managers do not know how to read and write. This still makes traditional surveys an important way of collecting data.

To secure that data collection is done in efficient ways, regardless if made by surveys or by using administrative data, the sub processes should be aligned with the ones of the National Statistical System.

P4.2 The project

The project will train staff in best practices and methods of preparing, implementing, monitoring and documenting the data collection process.

There are probably a lot of benefits to gain by a closer cooperation within the National Statistical System when it comes to this process *4 Collect data*. The project will stimulate any initiatives going in this direction.

Actors:

Survey data

- Statisticians at MASA/DPCI/DEST and INE
- IT staff at MASA and INE
- Interviewers, guides and drivers at MASA/DPCI/DEST, MASA/PROV and INE

Administrative data

- Staff at MASA, INE/DESE/Territorial Statistics and other Ministries and institutions

Results:

i. Fulfilment of the Master Plan intention to integrate the two parts of the Integrated Agricultural Survey (IAI)

ii. IA possible integration of the household based parts of IAI and the INE Continuous Multipurpose Household Survey (INCAF)

iii. To have the other surveys, planned in the Master Plan, realized and published on time

C Processing and Analysing

P5 Process data

P5.1. Background and baseline

MASA needs to strengthen its competence in computer related areas and ensure an organization of data that guarantees sustainability, rigor, good standardized documentation and archiving.

There is a need to recruit and train more experts in IT in order to ensure the completion of the various tasks related to the processing and facilitating the following processes of analysis and dissemination. Systems for documentation and archiving data in the various stages of the production process, has to be developed along relevant international guidelines and metadata standards. The use of standardized tools within the National Statistical System has to be promoted.

P5.2. The project

To secure that the data processing is done correctly and swiftly, whether by MASA, INE or other institution, the project has to deliver routines for creating timely data apt for analysis.

Actors:

- MASA/DPCI management
- Subject matter specialists at MASA and statisticians at MASA/DCPI/DEST and INE

Results:

i. Defined procedures and manuals on how to do the processing.

ii. Upgraded and modernized hardware, software and system components for processing.

iii. A well-functioning division of labour established between MASA, INE and others regarding agricultural and food security statistics.

iv. Competence secured for the data processing tasks that has to be done.

v. Archiving of statistical data and metadata secured.

P6 Analyse data

P6.1. Background and baseline

Basic analysis is to be done by MASA/DEST technicians while more advanced analysis should be carried out jointly with experts on agronomy, husbandry, veterinary, agro economy

and other fields at the Ministry, at the universities and possibly together with NGOs and the private sector when it comes to matters of agriculture and food security. Analysis will also be made together with the Ministry of Economy and Finance and the Ministry of Land, Environment and Rural Development when it comes to issues of poverty, food security and rural development. However, regardless of where it is made, the analysis needs the input of good competence and of quality data. Also the users need to be trained.

Analysis of surveys and censuses have often been made by external consultants, sometimes outside of the country and less than needed capacity building has taken place. Strengthening the expertise to analyse data and better inform the community about the results aim to increase the use of statistics and help policy makers in evidence-based policy making. This is not only valid for statisticians but also for most of the subject matter specialists within the ministry. The staff members of MASA/DPCI/DEST must be able to act as intermediates between the various specialists involved as well as between the common users in general of statistical information.

P6.2. The project

The cooperation with universities will be promoted in order to create a basis for recruitment of methodologists not only for MASA but also to increase and spread the knowledge about the production of official statistics to other government agencies that are part of the National Statistical System. Previous experience from Scanstat show that this is a long-term process.

The project will support the analysis process to be better planned and supported by the appropriate tools. Existing senior, intermediate and junior analysts will be identified and involved in the work such as;

1. Analysis activities on already existing data. It could be in the form of local consultancies on various themes, using mixed teams involving experts from MASA, the Ministry of Economy and Finance, INE and the universities;
2. Conducting producer/user seminars facilitated by Scanstat, PARIS21, FAO, and/or African Development Bank (AfDB, BAD), in order to increase the relevance and quality of produced and available data;
3. Actions like on-the-job training guided by senior analysts (from universities and other institutions, as well as planners and other users within the government).
4. Train users of agricultural statistics, both within and outside MASA.
5. Training on how to elaborate reports and use statistical data.
6. Promote publication and dissemination of statistics to encourage its use in planning and decision-making processes.

Actors:

- Subject matter specialists within MASA and related institutions
- Statisticians at MASA/DPCI/DEST and IT staff at MASA
- Universities, other organisations, mass media, policy analysts and the public in general

Results:

i. Collected data made available for analysis
ii. The internal and external competence for analysis is better used
iii. Routines for documentation of statistical products are implemented

iv. Better use of statistical information for planning, policy and decision-making processes.

D Dissemination and communication

P7 Disseminate and communicate

P7.1. Background and baseline

Nowadays there are many channels for dissemination: Reports, Brochures, Flyers and Press releases, Workshops, Internet, Tablets, SMS, YouTube, Seminars, Libraries, Schools, Radio and Television, social media, etc. But whatever the channel used the basics have to be structured and a study of the Statistics Norway document *User-friendly presentation of statistics*[13] is recommended. A publication plan should be done and published (stressing the importance of fulfilling the commitments on timely availability of results). The capacity to organize the work will be increased.

The dissemination process is one of the weakest in the system of agricultural statistics, there is plenty of work to be done here. It is necessary to make collected and analysed information available to the public. Information that should be available to the public through the media and social media. Deeper analysis can be used in addition to traditional tables. Making de identified micro-data available to scientists in a controlled way is important. There is also a need to create robust routines for regularly providing information to international institutions like FAO and the CountryStat system.

P7.2. The project

The project will assist in improving the documentation centres at the central and provincial levels and facilitate that collected information is made available to the public in a standardized way. If external dissemination should be done by MASA, INE or by using the FAO CountryStat is still to be decided. Wherever located the web page on agricultural statistics will be an important channel for dissemination. Internally within MASA a detailed database should be set up with easy and user friendly access. The use of a public publishing plan with strict time lines ensures trustworthiness and helps underline the independent and non-political aspects of SEN.

Actors:

- Subject matter specialists within MASA and related institutions
- Statisticians at MASA/DPCI/DEST and ITC staff at MASA
- Journalists at media, policy analysts, politicians and the public in general
- National and international organisations

Results:

i. The publishing calendar published, containing all products to be produced
ii. All products made easily available and promoted
iii. A well-functioning place for disseminating on web
iv. Secured routines to feed data in a systematic way to INE, the FAO Country Stat and other national and international organisations
v. Secured archiving of statistical products

[13] See document MZ:2007:12 at www.dst.dk/mozambique or full version at Statistics Norway

vi. The Provincial Documentation Centres reactivated
vii. A “green line” acting as a Help Desk for everyone having the need to communicate about agricultural statistics

E Strategy, capability and corporate support

Sometimes projects initiated by statisticians or agronomic and other subject matter experts forget the importance of these supporting activities. As the content of this process is extremely interlinked with the surrounding administrative systems of MASA it is however difficult to set special goals valid only for the MASA/DPCI/DEST unit. The project has to accept this and make as good as possible within the existing framework.

This is however an extremely complex area, as can be seen below. The main goal is to improve the production of agricultural statistics having an outcome influencing the whole agricultural system of Mozambique. To reduce the complexity, we have used the GAMSO extension process 9 of the GSBPM. Here the process is subdivided in 3 parts, namely; P9.1 Strategy and leadership; P9.2 Capability management; and P9.3 Corporate support. Although this process 9 is important for the entire Ministry of Agriculture and Food Security the current project is focusing on the sub-processes that are directly linked to statistical production. The project will advocate for provision of adequate resources for statistical production, as recommended in the Master Plan.

P9.1 Strategy and leadership

This sub-process is dealing with the high-level strategic activities that enable statistical organizations to deliver products and services that are necessary for governments and national and international communities. The activities influence, shape and drive the direction and future investments by developing high-level strategies on how to develop organizational capabilities regarding the product portfolio and statistical services to offer. The sub-process 9.1 is further divided into three parts:

P9.1.1 Defining the vision;
P9.1.2 To govern and give guidance;
P9.1.3 Managing collaboration and strategic cooperation.

The vision and goals of MASA’s statistical production is derived from INE and the Statistics Law. The statistics are produced within the framework of the National Statistical System and its Strategic Plan. The official statistics produced by MASA is produced according to the rules of the National Statistical System, being autonomous, independent and objective. Both INE, as the coordinator of the National Statistical System, and MASA understand the needs to implement the Master Plan for the Development of Agricultural Statistics 2012-2022 and are dedicated and committed to move the agricultural statistics forward. The Parliament and Government of Mozambique define the organisational structure of MASA (an organisational chart is found in Annex 5). As the vision already is set at the political level the project will concentrate on the other two sub-activities helping MASA to implement it. That means to help the directorate under which statistics is placed to govern and guide the aspects that are important for the implementation of the Master Plan. Managing collaboration and strategic cooperation are important components of this work.

Planning methods as Results Based Management, which focuses on measurable results and the outcome of activities, will be of great use in this work. Management support covers planning and monitoring of the statistical production system, including management of metadata.

P9.1.2. The Project

The project will help MASA/DPCI/DEST to spread the vision and promote acceptance within the whole of MASA and its surroundings. User contacts and dialogue are essential for quality improvements and the development of statistical content. An institutional communication plan with regular meetings with main users of agricultural statistics, national and international, will be established. Exchange of experiences between producers, data providers and end users in order to improve quality and cooperation is an important area to cover.

MASA has cooperation agreements with some universities. The University of Eduardo Mondlane have recently initiated a Centre for Agriculture Policy Studies at the Faculty of Agronomy. The project will actively support this initiative.

Actors:

- Upper management at MASA, MASA/DPCI and MASA/DPCI/DEST
- Statisticians at MASA/DPCI/DEST
- Staff on other institutions producing agricultural statistics
- Universities, like the UEM Centre for Agriculture Policy Studies

Results:

i. Raised internal statistical literacy within upper management at MASA (maybe using STAC-courses (Statistics in Action)).
ii. A well-functioning project management, helping to secure that budget means are allocated and available for the whole agricultural year.
iii. Project management and other key personnel using modern methods like GSBPM and Quality Frameworks.
iv. Cooperation with external institutions.

P9.2 Capability management

This sub-process and its activities support the development and monitoring of resources that sustain the ability of MASA to conduct its statistical business within the National Statistical System. They aim is mainly to promote the reuse and sharing of infrastructure (statistical and technical), both within the organization and between organizations, thereby facilitating the harmonization and consistency of the statistical results. The sub-process is divided in four parts dealing with the planning, developing, monitoring and supporting of capabilities.

P9.2.1 Plan capability improvements;
P9.2.2 Develop capability improvements;
P9.2.3 Monitor capabilities;
P9.2.4 Support capability implementation-

P9.2.1 Background and baseline

Statistics produced by MASA shall meet up to national requirements, international regulations and recognized standards and be ready to respond to new demands and possibilities. Capabilities of MASA in general statistical methodology and specific

methodological domains, like survey sampling, are a prerequisite for this. This section deals with the identified needs of MASA.

Short base level courses are relevant for staff and subject matter specialists who have background in statistics at undergraduate level. This will be of great use especially to the statisticians working at the county level. The INE National Statistical School is doing this type of courses. Problems and needs expressed by different directorates at MASA seem to have a common root, i.e. the lack of a widespread and deeper knowledge about modern statistical theory and practise.

There is a lack of capacity in methodology for the planning of complex surveys within the National Statistical System (although there are of course exceptions to this). There has until the establishment of the Modernisation Commission at INE been no unit within the National Statistical System (INE, MASA and others) exclusively dedicated to statistical methods. The Modernisation Commission is making an overview of what happens internationally in this domain and is able to help MASA to see what methods that can and should be used in different statistical products. Work is still going on to create a policy about what kind of methods to be used in different situations within the National Statistical System.

It is assumed that the National Statistical System will gain from a number of activities at different levels with the purpose of transferring knowledge and experiences of modern, basic and advanced survey methodology to MASA in order to facilitate the implementation of good solutions and quality for the statistical production.

The proposed activities are basic courses like Statistics in Action, workshops and on-the-job-training. It should be emphasized that courses themselves can never solve the problems but that they are necessary prerequisites for the efficiency of the important on-the-job training. The courses suggested here are generally not found in the curricula offered by universities. MASA is also planning to send some of its DPCI/DEST staff on long term university studies.

Basic course (STAC-Statistics in Action)

After this two x two week long course the participants will have a good understanding of what a survey is and how it can be planned, implemented, disseminated and evaluated. The contents will be a mix of theory and practice following the normal GSBPM process model (1 Specifying needs, 2 Design and plan, 3 Build and test, 4 Collect, 5 Process, 6 Analyse, 7 Disseminate and communicate and finally 8 Evaluate and give feedback). The participants are managers and subject matter specialists with at least some experience from statistical production. The course will be given together with the INE National Statistical School to MASA staff at central and provincial offices, but also to staff at other institutions within the National Statistical System.

Workshops

General workshops should last for a couple of days giving the participants a better understanding on specific topics. The contents may for example be, a) a number of lectures of the theme of the workshop held by invited experts, b) presentations from the participants, c) discussions. Although the participants primarily are assumed to come from MASA also other government agencies within the National Statistical System, the universities and important users of statistics will be invited. As far as possible the workshops will be administered by the INE National Statistical School.

On-the-job training

This is probably one of the most important components of this section. It aims at transfer practical and theoretical knowledge from Scanstat to MASA. On-site consultants will work together with the MASA staff during a short period on specific subjects, jointly identified. The consultant and his/her counterpart are supposed to work actively with practical applications of the theory and together contribute with their knowledge and experiences to improve the state of affairs. The Scanstat long-term consultant will support the work on a prolonged scale.

A Regional Network on Methods

Issues in methodology are often common for the Ministries of Agriculture in several countries. Therefore, the SADC regional network is of mutual benefit for the member countries, where experience and solutions can be shared. The project can support this by providing consultants and lecturers strengthening the role of MASA within the international community. The experience from regional cooperation for methodology from other regions is that workshops for a common topic have been met with overwhelming approval and appreciation by the region. Here it will be important to cooperate with the FAO, the PARIS21 and the AfDB.

Actors:

- Upper management at MASA/DPCI and MASA/DPCI/DEST
- Statisticians at MASA/DPCI/DEST and INE
- FAO, PARIS21 and the AfDB

Results:

i. Statistics produced by MASA is meeting national requirements, international regulations and established standards.
ii. The possibilities to respond to new demands and challenges are enhanced.
iii. Required competence secured for the implementation of the Master Plan.

P9.3 Corporate support

This activity area is broken down into 10 sub-activities making it the core of the backstopping part of the project. Neither the project nor the DPCI have full control of all the sub-activities of this activity area. Statistics is just one part of MASA and thus we have to realise that the project need to adopt its methods and proposals to the surrounding environment. Here the sub-activities are listed to give a hint of the complexity of SP9.3:

1. *Manage business and performance*
2. *Manage finance*
3. *Manage human resources*
4. *Manage IT*

The lack of a directorate dedicated to ICT: A dedicated directorate of ICT should ideally be an advantage introducing modern technology to MASA. The tasks related to statistics are, among other things, i) data entry, ii) cleaning the data, i.e. check the logic, allowed values, etc. iii) storage and iv) dissemination. Unfortunately, this directorate was not created during the latest round of organisational changes at MASA. Let us see what will happen next time. An extended cooperation with INE regarding ITC is anticipated.

5. *Manage statistical methodology*
6. *Manage information and knowledge*

Communication: To strengthen the system for planning and follow up a communication policy for internal communication will be in place. External communication is of great importance for quality improvements, development of statistical content and visibility of the National Statistical System in Mozambique. Improved external communication is also necessary to strengthen the role of MASA as coordinator of the agricultural part of the national statistical system.

7. *Manage consumers (users)*
8. *Manage data suppliers (households, business entities)*
9. *Manage buildings and physical space*
10. *Manage quality*

Quality assurance: Recently INE launched a Procedural Guide for the Production of Official Statistics within the National Statistical system and also a Guide for Technical Approval and Standardization of Methodological Documents of the Statistical Operations within the National Statistical System. There is still not much experience in the application of these guides but MASA will be one of the first to adhere to them.

Currently MASA is producing quality reports for its specific processes or products, but conclusions are not systematically assessed nor incorporated in a larger framework of performance assessment. Quality issues need attendance. By systematically monitoring the whole statistical production process by means of GSBPM, experience is gained that will be used to fine-tune the mechanisms for further improvement of the production systems. Methods for standardising and monitoring the statistical production are gradually introduced by INE as part of the modernising effort and the work on having official statistics certified is also being conducted.

The details of the 10 sub-activities will be further worked out using internal and external support during the project period.

Actors:

- Upper management at MASA, MASA/DPCI and MASA/DPCI/DEST and INE
- Statisticians at MASA/DPCI/DEST and INE

Results:

i. The INE recommendations on statistical methodology are followed.
ii. Adequate tools, procedures and expertise ensured, improving quality of statistics produced.
iii. A technical evaluation committee in place.
iv. A healthy and updated ITC environment.
v. A vehicle and assets management plan in place and monitored.
vi. MASA accepted by INE as provider of territorial statistics at district and provincial levels.

F Activities focused on the output of statistics

Apart from the important Integrated Agricultural Survey (IAI) there are some other major areas where the input of agricultural statistics is extremely important for good decision making at different levels of the society. In this project we want to especially focus on environmental statistics, gender statistics and food security statistics. These areas and the statistics they rely on will benefit from the GSBPM process thinking of components A to F.

The actual MASA Master Plan contains suggestions and plans for how specific agricultural statistical products are to be developed, as well as in what specific areas capacity building is most needed. The GSBPM process approach is used to facilitate the implementation of the goals in the Master Plan for Development of Agricultural Statistics. In the INE modernization project some provinces have mapped one and then two products according to the steps of the GSBPM and there has been the beginning of benchmarking between provinces and products to find the best way to work. The modernization project at INE shows the importance of using existing experience to find common solutions.

O10.1 The annual Integrated Agricultural Survey - IAI

It has been decided that the former annual agricultural survey (TIA) and the former early warning system (Aviso Prévio) are to be integrated. However, all steps for the integration has not yet been fully realised.

O10.1.1 Background and baseline

The aim of a well-functioning statistical system is of course to produce and disseminate the quality statistics that the users expect. Subsequently it is important that the development of statistics is hand in hand with recent development of the statistical production processes. This is the major challenge for statistics at MASA. The IAI contains two phases where the first aims at producing a crop production forecast while the second phase is a post-harvest survey to holdings and a socioeconomic rural household survey. The latter should probably best be combined with the rural part of the INE Continuous Multipurpose Household Survey, INCAF.

The first strategic goal in the MASA Master Plan for Development of Agricultural Statistics, is to develop a core set of agricultural statistics. This will have good help from established techniques in the GSBPM process P1 Specify Needs and intends to set national priorities in selecting what content to include in the agricultural statistical system of Mozambique. The establishment of core variables is in line with FAO recommendation. The list of core variables is to be converted into a statistical work-programme.

O10.1.2 The project

The following has to be done:

- Establish a list of core variables that is decided together with main users. The variables have to be possible to publish given the amount of resources available.
- Establish a work programme for agricultural statics. Decrease, reduce and prioritise the number of variables needed to feed the set of basic core indicators. The set can in the future be extended when the production processes are well-functioning and as funding becomes available. Here all of the GSBPM-processes are important, but especially process P1 Specify Needs.
- Establish what level of quality that is to be expected from the different products.

Actors:

- Upper management at MASA, MASA/DPCI and MASA/DPCI/DEST and INE
- Statisticians at MASA/DPCI/DEST and INE
- Main users / external stakeholders.

Results:

i. National priorities determined and a revised, realistic, updated decision on core agricultural statistics confirmed.

ii. Inputs made to the further design of the annual integrated agricultural survey (IAI) and next agricultural census (CAP-2019).

iii. A realistic plan for production of district level data.

iv. Fulfilment of the Master Plan intention of integrating the two parts of the annual integrated agricultural survey (IAI).

v. Integration of the household based parts of IAI with the INE Continuous Multipurpose Household Survey (INCAF)

O10.2 Other Special Statistics - Development of statistical products

O10.2.1 Background and baseline

The Master Plan for Development of Agricultural Statistics as well as the fact finding mission pinpoints some areas where improvements are necessary. One of them is livestock statistics.

O10.2.2 The project

Actors:

- Upper management at MASA, MASA/DPCI and MASA/DPCI/DEST and INE
- Statisticians at MASA/DPCI/DEST and INE
- Technicians specialists in the actual area (e.g. Livestock).

Results:

i. The other surveys as planned in the Master Plan implemented

ii. Livestock statistics developed. The recommendation at this stage is to explore possibilities of using administrative records from the livestock enrolment. But more studies on this have to be done.

O10.3 Environment - Agricultural statistics as input to environmental statistics

10.3.1 Background and baseline

In Mozambique most of the environment statistics will be produced by the new Ministry of Land, Environment and Rural Development. Previously this was done at the Ministry for the Coordination of Environmental Affairs with the involvement of INE and Scanstat. Statistics related to the environment cover a broad range of areas like pollution, emission of greenhouse gases, water statistics, weather statistics, mining, gas and oil statistics. Even though environmental statistics is not one of the primarily responsibilities of MASA some of the agricultural statistics is of high importance as input for environmental statistics, i.e.:

- Agriculture (areas; irrigation; land use; inputs like fertilizers and herbicides; plantation; harvesting, actual agricultural techniques and practices used, etc.)
- Livestock (numbers; vaccinations; production; veterinary treatment; use of animal traction; etc.)
- Forestry (planting, management and cutting of trees)
- Wildlife

- Land use (way of obtaining land, ownership, form of land use, etc.)

There is a need to continue assisting the process of establishing a system for environmental statistics in Mozambique. This will benefit from a systematic and close coordination and cooperation between producers and users of environmental statistics. In this sub-component it is easy to point to the usefulness of the GSBPM processes P1 Specify Needs and P2 Design and plan.

10.3.2 The project

The work will focus on the establishment of an environmental information system, identifying the most pressing environmental concerns, defining the core indicators and ways to provide the system with data and statistics.

Actors:

- MASA, INE and Ministry of Land, Environment and Rural Development upper management
- Subject matter experts at MASA and the new Ministry of Land, Environment and Rural Development
- Statisticians at MASA/DPCI/DEST and INE

Results:

i. A robust collaboration between the stakeholders in the area (possibly described in some MoU), securing an open data flow between the entities with their respective responsibilities identified.

ii. MASA and others assisted in using administrative registers for environmental statistics, as part of the more general use of administrative records for statistics.

O10.4 Gender statistics

10.4.1 Background and baseline

Gender mainstreaming i.e. to include the perspective of gender in all areas of the society is important and statistics on gender should therefore also be included in agricultural statistics. The improvement of gender equality is one of the goals in the Master Plan for Development of Agricultural Statistics and gender statistics has been included in the annual agricultural survey from the very beginning. The gender of the holder and the persons working on the farm has also been within the information asked for in the agricultural census. Unfortunately, the gender aspects are not very visible in more recent yearbooks on agricultural statistics.

The objective of the component is to further develop existing capacities at MASA improving the quality of gender statistics for better decision making and coordination of gender statistics within the agricultural area of Mozambique. This will be done by raising the necessity of the gender perspective and to show how to integrate this into surveys and analysys. Another important aspect of this component is cooperation with the Gender Unit at MASA as well as with other stakeholders in the system of official gender-related statistics and to develop capacity among the stakeholders. Certain developments have taken place during the last 20 years in the field of gender statistics. Therefore, contents, indicators and methods ought to be revised and a model for analysis and dissemination to be elaborated together with the INE. One concrete result could be to publish an agricultural/rural chapter of the Women and Men booklets on regular basis, to improve quality of gender statistics and publish statistics in a user friendly layout. The idea of the booklet made by INE is to display the situation of women and men in different areas in society in a clear and simple manner so that it can be

used by a broad spectrum of users. All thematic analyses to be carried out after the surveys could in fact include a theme related to gender in agriculture.

10.4.2 The project

An expected result from the project is that in all statistics produced by MASA the gender aspects are treated in an internationally accepted way.

This will be done by raised awareness of gender issues and demonstrating techniques on how to integrate a gender perspective into surveys and censuses.

- The MASA gender policy could be updated and reapproved by MASA. Gender disaggregated data should be collected on staffing, training and other bureau activities.
- Form an established cooperation with other stakeholders in the system of official gender-related, statistics and develop capacity among the stakeholders.
- Identify national stakeholders to strengthen the demand of gender statistics. The stakeholders should be trained together with statisticians.
- Identification of gender problems/issues in agricultural/rural Mozambique and identifying how agricultural statistics could improve the knowledge about the problems.
- Identify the need of new/revised indicators
- Complement existing information (Population Census, Household Budget Survey, Demographic and Health Survey etc.) with agricultural/rural data in the production of gender statistics
- Publish an agricultural/rural chapter of the Women and Men booklets, to improve quality of gender statistics and publish statistics in a user friendly layout. The idea of the booklet made by INE is to display the situation of women and men in different areas in society in a clear and simple manner so that it can be used by a broad spectrum of users.
- Publish tables by gender in the agricultural publications

The actual content and objectives regarding gender in agricultural statistics has to be revised and a model for analysis and dissemination has to be elaborated together with INE. A closer relation with the continuous multipurpose household survey, INCAF, will facilitate this work.

Actors:

- The Gender Unit within the MASA/DPCI
- Gender specialists at the Ministry of ...
- Statisticians at MASA/DPCI/DEST and INE

Results:

i. A gender stakeholder group established within the National Statistical System.
ii. Gender problems/issues in agricultural/rural Mozambique identified.
iii. Existing information (from Population census, House hold budget surveys, Demographic and health survey etc.) accompanied with agricultural/rural data in the production of gender statistics.
iv. New gender statistics/indicators added.
v. Regular contributions to the INE Women and Men booklet.

O10.5 Food Security statistics

10.5.1 Background and baseline

The national Food Security and Nutritional Strategy was approved by the Council of Ministers in 1998. A national Secretariat for Food Security and Nutrition (Secretariado Técnico de Segurança Alimentar e Nutricional, SETSAN) was established under the Ministry of Agriculture to coordinate the implementation of the strategy in a multi-sectoral framework.

The MASA Early Warning Department is responsible for providing a forecast of crop production, while SETSAN with the assistance of the FEWS.NET assess food security on a regular basis, relying heavily on satellite imagery and modelling using advanced techniques as normalized difference vegetation index, Meteosat rainfall estimation and water requirements satisfaction index.

SETSAN leads a Vulnerability Assessment Group and provides livelihood assessments within the context of food security. SETSAN also has a provincial base and is inter-ministerial since food security and nutrition issues are multi-sectoral. SETSAN uses secondary information for their work, information provided by parent ministries in respect to key indicators. The main challenge is that the information available is not always timely and that it is very costly to get on ground information below the provincial level. When information is not available, then SETSAN proceeds to obtain what is missing from other sources. TIA/IAI is used as a reference point, but the TIA/IAI post-harvest results are naturally too late to have significant impact on evaluating current food security and nutrition status. It can however be used for calibrating the system. SETSAN can also conduct own crop-forecast surveys if necessary.

10.5.2 The project

There are several actors involved in the area of ensuring food security. Naturally agricultural statistics plays an important part and all surveys in agriculture needs to be developed in line with the needs from food security. Initiatives like *the African Risk View system*[14] will benefit from input from the TIA/IAI, INCAF/IOF and the coming census on population and housing. A good system for estimating the crop production early in in the year is important.

Actors:

- SETSAN, MASA Department of Early Warning, INE
- Ministries of Health; Commerce; Land and Rural development
- Subject matter specialists and Statisticians at MASA/DPCI/DEST and INE

Results:

i. The processes and sources needed for food-security estimates mapped in order to find gaps that to be filled or better co-ordinated.
ii. A plan made to fill these gaps.
iii. Analyses developed in the perspective of food security and nutrition to support the design of interventions in the field of food security and nutrition.

[14] http://www.africanriskcapacity.org/