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Development Cooporation

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Documents

Statistics for Development, Policy and Democracy

Successful Experience and Lessons Learned through 10 years of statistical and institutional development assistance and cooperation by Statistics Norway

Abstract
A separate unit for statistical development cooperation, now Division for development cooperation in Statistics Norway was established in 1994, institutionalising a long term tradition of short and medium term development assistance and cooperation on individual and team basis.

8 out of 10 articles present experience which was and still is important for how we conduct and organize this work in Statistics Norway. But first we present our institutional approach as it has developed over these years and summarize strategy and experience in development of official statistics.

The presentation of our experience starts with two large country cases from Zambia and Uganda. Here our staff contributed substantially, but not Statistics Norway as an institution. This experience was however instrumental in preparing for the later institutional cooperation. In parallel Statistics Norway made its staff available for the professional support to former communist countries in Central and Eastern Europe with a focus on national accounts and related areas such as foreign trade statistics.

This experience has made us both qualified for and realising that institutional cooperation would be likely to serve the development purpose better in many situations. Hence we were very motivated to embark on the first institutional cooperation project with Palestinian colleagues from 1996. The experience gained here prepared us for the following broad based institutional cooperation projects which we are now embarking upon in Angola, Malawi and Eritrea.

While we find broad based institutional cooperation projects well designed for development, there might also be valid reasons for other ways of organising development cooperation. In the last chapters we present institutional cooperation on agricultural statistics in Uganda and a component of cooperation on consumer price indices in a broader setting in Mozambique.

Since we consider presenting a short version of this document, we would greatly appreciate any comments.

Keywords: Statistical development, development cooperation, institutional development, institutional cooperation, twinning cooperation, Norwegian development cooperation, UN principles for official statistics, Statistics Norway, Central Statistical Office - Zambia, Uganda Bureau of Statistics, National Accounts, Central and Eastern Europe, Palestine Central Bureau of Statistics, Instituto Nacional de Estatística - Mozambique

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Foreword

This report on statistical development cooperation is prepared for a dual audience, the global development community and our professional colleagues in sister organisations across the world.

Hence we start by presenting our approach for institutional development cooperation in statistics including both strategy and modalities of cooperation. The following chapters present our experience from various perspectives for a series of countries, ranging from our own perspective as a National Statistical Institute (NSI) in the North to our sisterorganizations in the South and from the individual statistician in the North to her colleague in the South, from programs designed by international agencies to institutional cooperation designed in a collaborative effort by two NSIs, and from single issue projects to broad based institutional cooperation.

But our focus is wider, we want to address how an active tripartite cooperation with an active development agency such as NORAD as an active participant in between an NSI from the South and one from the North could facilitate a balanced cooperation with gains for all partners involved.

There were several reasons for institutionalising our development cooperation 10 years ago; the Norwegian development authority encouraged public institutions to strengthen their development cooperation; as the only national public institution in our profession in Norway we acknowledged a special responsibility; and at the same time the international statistical community had embarked on a series of efforts to standardise not only technical issues but even the policy and strategy of the NSIs. When this push and encouragement from outside was matched by an active interest from the staff it was reasonable from a management point of view to move from an individual approach to an institutional model in statistical development cooperation.

Our mandate as a national statistical institute did not however allow for using ordinary public funds allocated for production of official statistics for development cooperation, hence we had to depend upon external financing. The only option was to start slowly and apply for funding from various sources. That had the advantage of allowing an organic growth while gaining experience from various types of contracts both directly with donors and through sister organisations. But now 10 years down the road we find that we have acquired quite some experience both with our preferred institutional cooperation approach and other more donor led modalities. We imagine that some of our experience could form an interesting and useful platform for consideration, not only by sister organisations in the South and North and the development community, but even for colleagues in related organisations such as planning authorities and research institutions, in ministries, universities and other public institutions.

We consider presenting a summary version of this document and would greatly appreciate any comments.

Svein Longva

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Introduction

Bjørn K. Wold

In 1994 Statistics Norway established a separate unit for statistical development cooperation, now Division for development cooperation. Then we institutionalized a long term tradition of short and medium term development assistance and cooperation on individual and team basis. Hence it is a quite mature 10 year old unit which now takes a look behind the shoulder order to prepare for new and old challenges in the years to come.

Our focus is on institutional statistical development cooperation and in 8 out of 10 articles we present experience which has been and still is important for how we conduct and organize this work in Statistics Norway. We start however in chapter 1 by Mr. Bjørn K. Wold presenting our institutional approach as is has developed over these years. Here we present both some important elements of the history of development assistance and cooperation in Statistics Norway, the rationale and objectives of this work and a comprehensive presentation of our approach and modes of work and organization. This is followed by chapter 2 where Hans Viggo Sæbø presents both the international recommendations for independent National Statistical Institutes (NSIs), including principles, strategies, standards and quality approach. These presentations are followed by a presentation of our experience from contributing to and participating in further development of NSIs. One central issues is then how strategy has guided practice.

Presentation of experience follows from chapter 2. We start by presenting two large country cases, from Zambia and Uganda in chapters 2 and 3. One of our current staff members was instrumental in initializing both these projects in a former position in the World Bank. They were both initiated by the large scale Social Dimensions of Adjustment (SDA) drive pushed forward by a large number of donors and implemented by the World Bank from the end of the 1980s. The programs in Zambia and Uganda started from 1990 and as other SDA program comprised a large scale social action fund with small scale statistics and analysis components. At that time the idea of a strong direct link between statistical activity and users of statistical information was not at all common. And here both intermediate users and end users were part of the same program. As the readers will learn, the implementation was still quite different in the two countries. In Zambia we provided a series of consultants for household survey work, including a long term consultant, Ms. Gunvor Iversen Moyo, who jointly with one of her Zambian colleagues, Mr. Gandson Moyo recapitulate the story in chapter 2. As the other consultants she was hired on individual contract and while a system was designed to ensure project memory when activities were handed over to new consultants, this system weakened over time. The Central Statistical Office (CSO) in Zambia managed to use this support to build a strong household survey capacity and the statistical information on poverty was used and demanded by central policy makers in various ministries and to a certain but limited degree by intermediate users for some further analysis[1]. In Uganda the statistical component of the program was implemented by Department of Statistics (later turned into the independent Uganda Bureau of Statistics, UBoS) which also received institutional capacity support in economic statistics. In Uganda the analytical component was however considerably larger and stronger and the demand for a broad set of data for central policy issues was there from the outset. In Uganda quite a number of well educated national staff working in public service were hired to work for the program. This ensured a core of motivated staff with strong links to various institutions such as Department of Statistics, the planning unit in what is now Ministry of Finance and Planning, sector ministries, various faculties at Makerere University and even private consultancy firms. This core of staff is now well positioned to use and actively demand statistical information. We were lucky enough to get one of them, Ms. Margaret Kakande to summarize the program from her perspective in chapter 3. In the case of Uganda Statistics Norway provided only short term consultants, but still ensured an active

[1] The survey data were also used for further analysis by a joint Norwegian - Zambian team from 2 institutions in each country including Statistics Norway and CSO in Wold et al, 1996.

involvement over quite a time period. A common denominator in both these cases was our status as provider of technical assistance within a framework given by other institutions.

While the new focus in statistics from around 1990 was on social dimensions following economic structural adjustment in developing countries, the new focus in statistics for the former communist countries in Central and Eastern Europe was more on economic statistics and especially on National Accounts related statistics. In this area Statistics Norway and Norwegian economic science have a special position since the Norwegian Nobel laureate Prof. Ragnar Frisch invented the term in the 1930s and Statistics Norway is one of just a very few NSIs which has been in front of establishing and developing national macro economic models and national accounts supply and use tables. Hence staff from SN participated in the planning and implementation of support to national accounts and related areas of statistics to Central and Eastern Europe from 1990/91. Among these, the head of national accounts in SN, Ms. Liv Simpson, the senior advisor for national accounts, Mr. Erling Fløttum and the senior advisor in foreign trade statistics Mr. Hans Kristian Østereng present some lessons from their experience with statistical technical assistance and cooperation in this area in chapter 4, 5 and 6.

As Ms. Simpson documents in chapter 4, our support has developed in three phases. At the very start of economic transition she and other staff from SN participated in several workshops which aimed both at presenting the UN approach for national accounts replacing their old Material Production System approach and discussing and agreeing upon the way ahead. All CEE countries aimed at moving to UN SNA68, now SNA93, as soon as possible. In the second phase during the mid 90s Statistics Norway was host for a number of visiting study delegations. Then in a third phase in the end 90 and early 21st century Statistics Norway embarked upon institutional cooperation with our colleagues in Bulgaria, the Czech Republic and Slovenia.

As reported in the introductory chapter, international statistical cooperation has moved several steps ahead from the beginning of the 1990s to the second half and then with a special emphasis on economic statistics. In the second half of the 1990s there was an even stronger focus on EU harmonization among the candidate countries. This caused a strong demand for implementation of EU required international standards and hence the issue of linking producers and users of statistics was not highlighted. Not only EU candidate countries, but also existing EU countries and Efta countries including Norway all had to live up to common standards. Hence, when SN brought along their approved approach for national accounts following the SNA93, the CEE countries did not at all viewed that as an intrusion upon their national right to choose direction but rather as a welcome assistance along the way they already were heading. Ms. Simpson outlines in further details how Statistics Norway staff have used their professional knowledge and experience mainly for long term commitments and short term visits but also for study visits to SN. She also presents the interesting story behind SNA-NT, a national accounts software developed during statistical development assistance and cooperation with Jamaica and Zimbabwe, taken back home and further developed into the software backbone of our own national accounts before now moving the circle back to development cooperation in CEE countries, and while not documented here, even planned for Malawi and Eritrea in the years to come.

The Eurostat and Efta support for national accounts, first in the CEE countries (the Phare projects) and then also in the Mediterranean countries (the MEDSTAT program with the MED-NA project), has included a mix of institutional support and specialist support by individual senior advisors. Mr. Erling Fløttum has served this latter role in six countries during assessments, single short term technical assistance missions, series of short term missions and synthesis reports to MED-NA working on several components of national accounts. In chapter 5 he presents his work including two stages, first assessing, evaluating and identifying the needs of the NSIs and then providing technical assistance. His presentation is modest, but he has in fact faced the challenge of assessing the needs, providing traditional technical assistance and assessing how the various countries have complied with the SNA93 standards. With other words he had to serve as attorney, judge and legal advisor for each NSI while still remaining a nice colleague.

In chapter 6 Mr. Hans Kristian Østereng presents his work in Foreign Trade statistics. His efforts have similarities to the core national account work, but one important additional element is to ensure trade sector cooperation between the NSI and the custom authority. Then we are to a larger degree back to the standard institutional cooperation which requires extended provider - producer - user contacts. Mr. Østereng shows that the way to handle this challenge is by organizing a tripartite or even two times two cooperation between the NSI and Custom authorities in both the partner country and Norway.

In chapters 7, 8, and 9 we return to the large scale institutional development projects and includes both an overall presentation for the cooperation with the Palestinian Central Bureau of Statistics (PCBS), a sub-component with a large institutional cooperation project with Instituto National de Estatística in Mozambique and a sector institutional cooperation project on agricultural statistics in Uganda Bureau of Statistics.

From the PCBS side the institutional cooperation with SN was a follow up of financial support from the Norway through UNDP. PCBS had already received technical assistance from the Norwegian applied research organization FAFO and several individual academics including one of our staff. The Germans were also providing financial support including a series of technical experts, among those a small team of three Norwegian national accounts and economic statistics experts. Hence they had the experience of working with Norwegian, but were now ready to embark upon an institutional cooperation arrangement and the so called Twinning project was initiated. It is presented in chapter 7 by the two long term coordinators, Ms. Elisabeth Gulløy in Oslo and Mr. Yousef Falah in Ramallah.

For Statistics Norway this was the first institutional cooperation project where we were fully involved from the start and at the same time our first NORAD supported project. NORAD pushed the triangle cooperation NORAD - PCBS - SN with two strong links as drawn and a weaker contact between NORAD and SN. The plans were made in active cooperation with the PCBS management and the design combined responding to the needs of PCBS and the modalities set forward by SN. We agreed to include support to management cooperation, but only when the German support ended. By the end German support was prolonged a number of times and our cooperation in management never took off. But as a hindsight it was probably important to push the cooperation at top level management during a number of visits in either direction.

The need to demonstrate accountability is likely to have been higher in the Palestinian areas that in other countries and NORAD requires strict activity reporting and audited budgets at the annual meetings which alternated between Ramallah and Oslo. That not only ensured accountability but also gave us the space for being a go-between agent serving as PCBS attorney towards NORAD and a NORAD attorney towards PCBS. Our formal role was to assist PCBS at these formal annual meetings. In fact the three institutions served as quality advisors for each other.

The close relationship which evolved can be illustrated by the saying of the PCBS President about our director general and himself. Either they both climbed to success together or went down the drain together. We were happy to learn that he viewed our cooperation as an active partnership and SN learned a number of lessons on how to turn some initial frustrations to successful implementation.

The experience gained from the Twinning project with PCBS served as a learning experience which we have used for designing the following broad based institutional cooperation project which we now embark upon in Angola, Malawi and Eritrea.

It has of course also served as a base for other projects which have been organized in different manners, such as the Scandinavian project in Mozambique and the sector statistics project for agricultural statistics in Uganda. The Scandinavian project in Instituto Nacional de Estatística (INE), Mozambique is organized differently both from the donor side and the technical side and we have preferred to present the experience from one sector, i.e. consumer price index work. This is an example of long term commitment and short term visits. From Statistics Norway a team of two staff members have

participated, one to initiate the project and later the other being introduced to our Mozambican colleagues at a joint mission. This type of long term commitment gives the partner a chance to develop thrust and a common understanding besides presenting technical advises and pushing the issues. Ms. Randi Johannessen presents the long term commitment by herself and a colleague to rehabilitate and strengthen the capacity for the Consumer Price Index system and work in INE in chapter 8.

The first institutional cooperation to follow after the Twinning project was on agricultural statistics in Uganda. This project was designed for Uganda Bureau of Statistics (UBoS) by an FAO consultant based upon a traditional FAO approach with a chief technical advisor at a very senior level and short term specialists. However UBoS had at the time established an institutional cooperation project with Statistics Denmark, expressed their satisfaction with this type of cooperation with the Scandinavians and accepted our proposal for a similar arrangement for agricultural statistics. The three members of the management team comprising the head of agricultural statistics in UboS, Mr. J. Magezi-Apuuli, the national expert Dr. E.S.K. Muwanga-Zake, and the long term advisor from Statistics Norway Mr. P. Schøning tell in chapter 9 the story of how this project stumbled over some initial obstacles but then moved into a very successful lesson. While organized as institutional cooperation it should be added that the lack of staff in UBoS and shortage of time only allows for the first study visit by the agricultural statisticians later this year, being two years into the project period. Still we have developed a close cooperation and a mutual trust which has allowed for testing several methodological developments which have increased the motivation and interest at both sides. This project is also an important example of evolving cooperation. During the project period, we have assisted in designing a proposal for cooperation on Poverty Mapping and Register planning, as well as initiating other activities. These projects are likely to open up for a broader cooperation from 2004.

The introduction in chapter 1 is also a summary of our experience and reflects what and how we have been learning from the best practice for the years to come. We encourage the readers to take the opportunity summarizing the experience presented here jointly with their own. If so, we have reached our objective with this report of contributing to a more reflected institutional cooperation and further strengthening of the capacity for collection, production, dissemination and use of statistical information for fact and evidence based policy decisions in the short, medium and long term in developing countries and countries in transition.

On our hand we have already started to draw upon the lessons presented and will continue doing so when we this year are sending long term resident advisors to two new institutional cooperation countries, Malawi and Eritrea, replacing former long term advisors in Mozambique and Albania, retaining two long term advisors in Angola, and continue and start new activities in several other developing countries and countries in transition.

Chapter 1. Success Histories in Statistical Institutional Co-operation

Bjørn K. Wold

The History

When Statistics Norway in 1994 formed a new division, which today is Division for Development Co-operation, we did not enter a totally new field of operation, but we institutionalised activities which had quite a long history at the individual level. This includes assistance to and cooperation with both developing countries and transition countries, such as for policy planning in Pakistan in the 1960s and statistical co-operation with Portugal in the 1970s. In the years that followed, Statistics Norway staff ran a number of co-operation programs, often by a team of staff, but always on individual contracts for other institutions and agencies such as in Zimbabwe, Jamaica and Indonesia. Our research department has their own history of professional co-operation with a special emphasis on empirical statistical and econometric analysis such as with China.

But in the 1990s demand for and supply of statistical institutional co-operation both increased and made it desirable and possible to institutionalise our efforts. National statistical institutions - NSIs, international statistical bodies, international organizations such as various UN agencies and World Bank as well as our own bilateral agency NORAD, all recognized the need to move from ad hoc technical support to institutional capacity-building both in general and within the statistical profession. Statistics Norway acknowledged this need, realized that we had a small but still sound professional base of staff for this work and saw the possibilities for ensuring financial support. Our mandate from the Norwegian Parliament did not and still does not allow us to use the general government budget allocation for these tasks but we realized that with a slow start and establishment it would be possible to provide our contribution to development of national statistical capability and capacity in other countries with financial support from NORAD and international donor agencies. At the same time we had already faced quite an interest for this type of an extended professional challenge from our staff and learned that in the proper context the staff might broaden their professional horizon in a manner which is of mutual interest for the future work within Statistics Norway.

The Tradition and Context

The tradition of statistical technical support and co-operation

Statistical technical and professional support and cooperation is nothing new. In the early days of statistics, Statistics Norway sent staff to United States first to learn about and then to learn how to operate a census counting machine. In fact we then arranged a machine to be skipped to Norway and used for our Census at the beginning of the 20th century. This type of co-operation has continued ever since and among groups of countries, such as among the Nordic countries and within Eurostat. This cooperation is still continuing with international co-ordination and standardization ensured by the UN agencies, OECD, World Bank and IMF.

When the large number of new nations finally got their independence in the 50s, 60s and early 70s, the statistical base was fragmentary and there were no traditions for fact or evidence based policy planning. They did join the international statistical co-operation but clearly, technical support was needed to build and later strengthen the national capabilities and capacities. Over the years substantial support has been given. When we institutionalised this type of cooperation 10 years ago, we learned that the following types of cooperation were common:

- *Human resource capacity building.* The need for formal training was early acknowledged and a number of countries offered formal Bachelor and Master Degree training in their own country. Support was also given to regional training institutes such as East Africa Statistical Training

Institute in Dar es Salaam and to statistical programs at university level, such as Institute of Applied Economics and Statistics at Makerere University in Kampala.

- *Technical consultant or team moving in to compile and present statistics based upon available data in the NSI in a developing country*. This is the standard fly in - fly out concept with consultants producing what their employers need and demand. Unfortunately such an approach hardly build any capacity. However, in some cases such a parachuting consultant may be able to and interested in transferring necessary knowledge and experience to one or more staff members at an NSI. Such consultancies might anyhow be well justified for reviewing or advising on technically critical issues.
- *Project and program support to an NSI on the ground in each developing country, such as to a census, national accounts or a household survey.* This is the long term equivalent of the fly in - fly out consultant. The typical cases are for a population census or for basic economic statistics, national accounts and simple economic forecasts such as of GDP etc. The main objective is again to produce an output as demanded by the donor agency. The long term horizon makes it more likely that capacity and experience are gained by local NSI staff-members, but again the overall impression was that this is hardly not always the case.
- *Project and program support implemented partly in donor country or organization and partly in the NSI of a developing country.* Justified by the need for internationally consistent data, a number of donor agencies were (and still are) running their own statistical exercises just partly implemented by the local NSI. The typical examples are donors running a household survey, where the questionnaire, other survey instruments, sampling and all methodological features are fixed at the international level, data are collected by the NSI (but supervised from outside) and taken back for data-checking, analysis and reporting. These projects might build field work capacity but since even field supervision is done by outsiders, they hardly build self-confidence even for field work.
- *Capacity-building projects and programs*. In the early 90s capacity-building projects and programs were not the most common, but some NSIs had received support for building capacity for statistics in general or for economic statistics in particular. And around 1994 some projects aimed at building support for social statistics had started. These programs typically received financial support from an international donor and technical support either from individual long term consultants or private consultancy firms in either case with a Chief technical advisor and a few short term specialists. They claimed to produce improved or extended statistics in short and long term while building capacity in the long term. But our impression has been that the emphasis was on producing statistics and when the long term Chief technical advisor left, institutional memory left with her or him.
- *Twinning programs.* Our Swedish sisters and brothers were one of the first institutions to start so called twinning projects, where the concept was to initialise institutional co-operation in both directions. The main emphasis was very much on long term consultants and a few short term experts, but Statistics Sweden included other means such as study visits to Sweden. This time our impression was more mixed. In some NSIs we happened to visit, long term advisors had clearly managed to build a capacity, but in some others their impact was either small or institutional memory left with the long term advisor.

Two new challenges

The early 1990s were also the time for two additional challenges, one to materialize stronger than before and one really new:

- the global challenge of designing statistics as demanded from, as needed by, and attractively served for users of statistics and ensuring that they have the capacity for using statistics; and
- the challenge of reforming NSIs in countries of transition.

The statistical producer - user challenge

Statistical offices around the world have always faced the need to produce and publish statistics as needed by the users. But around 1990 a general challenge of public institutions to serve users, being

institutional users, individual users and the public at large confronted the NSIs as well. Electronic means made it possible with tailor-made statistical information in the early 1990s and the option of releasing and publishing by Internet changed this from option to requirement. Statistics and data are required in a tailor-made and policy appropriate fashion faster and cheaper than before.

The additional challenge from NSIs in countries in transition

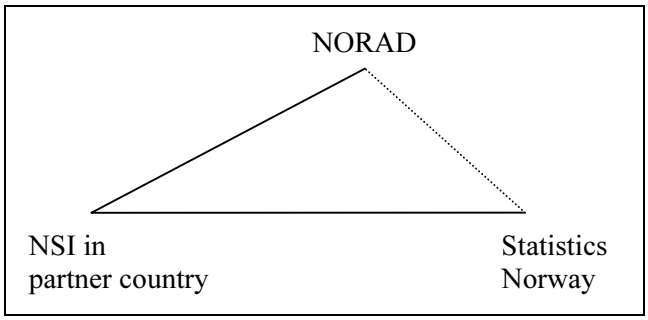
In the previous Soviet and Eastern European countries the NSIs traditionally produced two sets of information, one internal non-public set for government planning and one show off set for publication and dissemination. The challenge is now double, a technical challenge and an organizational one. The old type of "statistics" was to a large extent either internal figures aggregated from detailed administrative information or just policy planning figures assuming policy target were met 100 per cent. The staff knew their theoretical statistics, but hardly had any relevant experience. The organizational challenge has been to gain acceptance for the right and duty for independent publishing of statistical figures. NSIs in transitional countries started quite fast to apply statistical methods, but the governments took it for granted that they could "adjust" or at least delay for some years, unpleasant statistical facts. Even last year, the management in the NSI in a country in transition would not believe that Statistics Norway did not clear statistics with our ministry before official release.

The donor context

In the early and mid-90s overall donor support was still mainly a combination of import/ balance of payment support and project/ program support, while the discussion on moving to sector support and budget support had started. The move towards allowing the recipient countries/ partner-countries, to decide upon priorities was only at an early stage. NORAD moved however faster in this direction than many other donors. Partner-country orientation was the slogan of those years.

Statistical development co-operation was to be financed under new cross-cutting "sectors" as institutional development, strengthening of democracy, good governance etc. Then the most essential framework was given by NORAD's model for institution building, as follows:

- NORAD agrees with the donor country to give support to a certain sector or a certain institution such as an NSI for a certain project.
- This institution would then sign a contract of technical support and co-operation with an institution in an industrialized country, usually but not necessarily from Norway.
- No formal contact between the institution in the industrialized country and NORAD even for Norwegian institution.



With assistance from Statsconsult[2] NORAD presented this type of co-operation as a triangle between a) NORAD - b) a partner country institution such as an NSI - c) a Norwegian institution such as Statistics Norway. This would however be a triangle with two strong links as mentioned and a very weak, if any formal link at all between the developed institution as Statistics Norway and NORAD.

For Statistics Norway the focus on institutional development, peace and democracy building, and good governance was an opening for financial support to statistical development co-operation. The challenge was the partner-country orientation. We fully saw the need and supported such an orientation. But in real life there were some challenges. We learned from a private Norwegian company that they demanded a guarantee from NORAD if they were to sign such a contract. We learned from a Norwegian university faculty that when they had assisted an African university faculty in designing a program of

[2] A Norwegian governmental consulting directorate specializing in organizational development.

Risk factor: NSI taking cost-saving too far by proposing to get rid of us as partner without proper consideration. Only two partner NSIs have raised this issue and then only indirectly by asking us to cut the rates or by proposing other long term consultants. Our answer has been double, we show and demonstrate our institutional strength and at the same time we insist on any reallocation discussions to be raised during preparations for an annual meeting.

research co-operation and NORAD had provided the funding, it took less than a year for the African university to learn that they could get development assistance from an Asian research institution for a fraction of the costs. Hence they stack to the annual contract but the next year they switched away from the Norwegian university. That might sound cost-efficient, but at least in our case a large number of well educated statisticians does not automatically give an efficient national system. India is probably educating more qualified professional statisticians than any other country, but at the same time World Bank has deemed it necessary to launch a large program supporting the strengthening of the national statistical system in India. We further learned from another public Norwegian institution that the partner-institution might delay the start up of an agreed long term assignment just a couple of weeks before departure and later ask to cancel the assignment, not for professional reasons but political ones. We also remember the comments from one of our African partners when we stressed the need for them to be in the driver's seat that "as you know, we African statistical directors neither ask to sit in the driver's seat, nor are we allowed, it is mandatory to hire a driver !"

However, rather than looking for security against the possible pitfalls we decided to look for the possibilities. The challenge was how to utilize this triangle as a tool rather than a barrier. In our opinion there were obstacles, but obstacles to overcome, the real challenge was to balance two critical scales:

- the old challenge: the need to get things done in the short term and at the same time to build capacity in the long term.
- the new challenge: the right and need of the partner country to decide what is their future and still ensure that they listened enough to our knowledge and experience before they took their decisions.

With this tapestry we set out to form and build what is now Statistics Norway's Division for Development Cooperation.

Statistics Norway Development Co-operation

Objectives
So tapestry and challenges were given, but why should Statistics Norway as an institution embark on these activities ? Which were the external and internal objectives ?

External objectives
The external overall objectives for an NSI and a national statistical system in a developing country are similar to those of Statistics Norway and the Norwegian statistical system and would typically be as follows:

Free benefits: SN as promoter of the use of statistics in partner country
As stated SN is a more active intermediate user of statistics than NSIs in most other countries. Hence we may promote the use of statistics for fact and evidence based policy planning more and better than most other NSIs.

- Contributing to increased human welfare; *Statistics for Poverty Reduction*.
- By providing statistical information which can serve fact and evidence based public resource allocation and other public policy management; *Statistics for Good Governance*.
- By providing statistical information which can serve a fact and evidence based

democratic discussion and decision process by public at large, by media and by democratic decision making bodies; *Statistics for Democracy Building*.

- By providing statistical information which can serve small, medium and large businesses for efficient resource allocation and business decisions and the Government for providing a stable macro-economic situation and a conducive bureaucratic environment; *Statistics for Economic Growth*

In order to work towards these overall objectives, the main objective for any NSI and any national statistical system would be

- To produce, compile and disseminate relevant and reliable statistical information with a proper accuracy and speed in a cost efficient manner.

Free benefits: SN as promoter of statistics in partner country
As all NSI we have a long experience in promoting the use of statistics in our own country. But here in Norway we have our several decades developed a national statistical system where we both show that we can take well care of a broader set of statistics production as well as of macro-economic planning and analysis. Hence we know better than most other NSIs the need of the users and are in a better position than most NSIs to advocate for a strong NSI.

The external objective of Statistics Norway's development cooperation is to contribute to the process towards these objectives. It is useful to split this objective between the use and the production of statistics and view the objectives both in the short, medium and long term, as follows:

- To strengthen the capability and capacity of an NSI and a national statistical system to produce, compile and disseminate relevant and reliable statistical information with a proper accuracy and speed in a cost efficient manner in the short term.
- To increase the use of statistical information for poverty reduction, for good governance, for democracy building, and for economic growth in the short term.
- To strengthen the capability and capacity of an NSI and a national statistical system to produce, compile and disseminate relevant and reliable statistical information with a proper accuracy and speed in a cost efficient manner in the medium and long term.
- To increase the use of statistical information for poverty reduction, for good governance, for democracy building, and for economic growth in the medium and long term.

The comprehensiveness and order of the objectives are essential. While the general objectives go from overall to specific ones which could be made operational, our approach would be to contribute to a process by working from the bottom i.e. the working level where the real work gets done, and upwards to the use of this statistical information[3]. In our opinion the classical trade off discussion between short term and medium/long term goals is marketed under a flawed tag. A donor might support short term projects with the sole aim producing a statistical report or a donor might support projects and programs aimed at building capacity, producing statistics and promoting the use of statistics in both the short and long term. The concept of a pure long term project is hardly an alternative for any government or donor and is easily turned into a pillow providing an excuse for not doing anything in the short term and hence neither a carrot nor a stick to find a way ahead.

From the perspective of a national statistical system, the pure short term approach is counterproductive and so for the following two reasons:

- Fly in - fly statistical data collection does not build any capacity, but rather destroys self-confidence.
- Despite international standards, any outsider designed statistical data-collection is deemed *not* to be consistent with similar national statistical data-collection activities. Hence such a project

[3] In reality this is a circular process, feed back would guide the redesign of statistical production. We return to that issue.

does create confusion when statistical data are to be compared across geographical areas, socio-economic groups or over time.

The issue should therefore be how to balance short and medium term goals and how to develop a productive user-producer dialogue.

Internal objectives

There is no reason to hide that statistical development cooperation also has some internal objectives for Statistics Norway. There main objectives are as follows:

- The professional challenge of working under another and broader statistical horizon, under other conditions and in another context than the day-to-day work.
- The personal chance to learn and experience other statistical systems, other cultures and countries.

The professional challenge

Today the statistical profession is growing more specialized. One or two mathematical statistician may design approach and procedures for all statistical samples used by Statistics Norway whether master samples or ad hoc samples. Other statisticians are not designing any sample. In fact even the one or two statisticians may inherit the stratification design from the predecessor. A national accounts statistician may end up working only with the consumption side or even only with service production or government finance statistics. In a developing country NSI, a statistician has to face the overall situation and work down to the detailed level. Applied sampling suddenly gets a real content, national accounts suddenly requires a comprehensive approach, not only by the very senior staff, but from staff at all levels. The first time you get data on agricultural production and consumption from several sources and try to triangulate, standardize and harmonize the data, you find yourself really in trouble. But when you have linked up with the different actors and sorted out the pitfalls and ensured a common standard, you really have learned the statistical craft by heart. You might think that home-country statistics might be boring after such experience, but the situation is rather that you see home-country statistics in a new perspective making it more interesting.

The personal reward

Any statistical office is both a creative development organization and a production organization. Most staff members work the grades from learning production to being in charge of production and/or move to development and implementation of new methods. Unfortunately there is often a lack of balance, and quite some staff members are left on the production line to a larger degree than preferred. For all staff, but especially these staff, the chance to learn and experience other NSIs, other national statistical systems and view their traditional statistical tasks in a new perspective is a personal incentive and reward. A part of this is of course also the chance to learn other people, other cultures, and other countries to know, either through field work or as a tourist. Quite a number of our staff have combined a technical cooperation visit with some days off, or even a vacation. And then you have all of us who dream about it or even plan for it, but in the end spend the time to complete the mission as best as possible looking forward to the opportunities during the next trip.

"Mutual benefits"
Some donors tend to present institutional development cooperation as giving mutual benefits. As discussed here, there are definitely some benefits for an institution like SN. But in order to justify a term like mutual benefits, the cooperation would have to include time and resources not demanded by the partner NSI, but rather by us to allow for writing proper reports and articles on development of statistical methods or scientific analysis. That would however rather build the capacity of SN ran of the partner NSI and hard to justify as development cooperation

Statistical institutional cooperation - the Statistics Norway approach

Professional coaching within Statistics Norway
Our approach for development cooperation is based upon how we build and strengthen the capability and capacity of new and rotating staff and units within Statistics Norway. We will provide our newcomers with a general introduction, give them a chance to follow our production work i.e. to demonstrate how we as an institution do our work, ideally they should have a junior role when they participate in their first round of modification of existing methods or development of new ones, before they can take the lead in further redevelopments or establishment of new statistics. Relatively fresh staff might also be given charge of redesign tasks, but then with senior supervision and support. In parallel we have several crosscutting systems, such as institutional methods and standards, draft publication review processes, systematic quality control, and an annual planning process to ensure coordination and accountability.

With external requirements and our own internal approach in mind we have designed our development cooperation around three central principles, as follows:

- A detailed plan with follow up
- A comprehensive set of issues and modalities for cooperation
- Accountability

A detailed plan with follow up
A detailed plan is essential for several reasons, as follows:

- **Logic framework.** The process of establishing a plan is essential for development of the logic of a project or program. The plan will build upon overall objectives of an NSI, requests, needs and capacity for utilization of statistical information by national, regional and international users, resources which are available or which could be mobilized and then be presenting a detailed plan for resource inputs from one or more donors and from the government, planned outputs such as statistical products and planned outcome such as a certain capacity of the NSI and the use of statistics by intermediate and end-users of statistics. The plan would usually be detailed for a first phase of 3 or 4 years and indicate one or more phases to follow.
- **Information for different types of stakeholders.** Any type of institutional development cooperation has stakeholders at several levels; users or beneficiaries, implementing institutions, government and international donor organizations, and parliament/constituency. An NSI has a broad set of users ranging from intermediate technical users in research institutions, universities and government organizations, through policy makers, to the civil society and public at large and in the next round of people affected by policy change following from statistical knowledge presented. It is neither required nor possible to design one plan which could provide information for all theses stakeholders, but it is required with a plan which inn the next round could be linked to other more specific plans addressing the needs and interests of one or more stakeholders.
- **Donor coordination.** The plan must be coordinated with any other existing donor support in order both to avoid unnecessary overlap, ensuring consistency and ensure that even the low profile issues will be ensured support.
- **Technical coordination.** The need for coordination is equally large among professional actors. Again the plan must ensure avoiding unnecessary overlap, coverage of low profile areas and taking care of consistency. There is a special need to ensure consistent strategic coordination, such as sticking to one approach, applying common user-interfaces / software solutions for each technical areas such as national accounts, data entry, survey analysis, statistical databanks, and Web-presentations.

Risk factor: Tricky time scheduling - both too rigorous and too flexible
An advantage with a detailed plan and annual revision is that both we in Statistics Norway and the partner NSI have a detailed time schedule. For a combined production and development organization that is essential. However, of the time schedule will need a short adjustment such as two weeks. But then our staff are again busy with production assignments and the project is loosing the momentum. Our solution is long term presence such as by a long term advisor to ensure a rolling planning and adjustment.

- **Project coordination.** Any institutional cooperation project will involve a number of staff both in the partner NSI and Statistics Norway on part-time. Hence it is essential for coordination of staff availability with a detailed time schedule. This should be a flexible plan agreed upon at an annual meeting. Rolling the plan is a must, but that requires mutual information.
- **Monitoring and accountability.** An essential requirement is a plan which allows for monitoring of the activities in a manner serving a process of accountability.

A comprehensive set of modalities for cooperation
It has been our experience that cooperation based upon a single modality of cooperation will face trouble. In order to ensure momentum and continuity in a program you will need regular contact. The only way to achieve this at an initial stage is by long term presence. Later on you might be able to continue the cooperation without regular contact but only for a short period. Statistics Norway has some long distance staff working in other parts of Norway or even other countries. This works fine for some time, but unless you ensure regular contact on the ground, these will over time risk being unrecoverable satellites. And just for the same reason, long term consultants need support, both from short term consultants and a coordinator in Statistics Norway. Just as we have learned that this is necessary for Statistics Norway staff working in a partner NSI, we have learned that staff in a partner-country do not have less need for a more comprehensive set of cooperation modalities. As our own staff, they need to be exposed to various elements of statistical work. This is the case for technical elements, e.g. a statistical databank requires standardized approaches, concepts and variables as well as systematic triangulation of data. This is also the case for management. What looks like a very relaxed management-style might be deceiving, it is only possible when you have a regular system of planning, accountability and follow up.

Modalities and assignments
When Statistics Norway is designing a program of development co-operation we consider the following range of modalities and types of assignment:

- *Annual meetings*. At the start of project implementation and later on an annual basis, there will be a meeting to present and discuss the work program and accounts for the last year and a revised work plan and budget. These meetings are the reference points for the accountability of the partner NSI. With support from Statistics Norway they are to present and justify both performance and plans for NORAD.
- *Institutional back-up support.* Institutional back-up and follow up support is designed to work at a number of levels, including s overall supervision, activity planning, technical discussion partner, link to the international statistical arena, ensuring contact with technical specialists in the other divisions of Statistics Norway, practical support and other tasks and issues raised.
- *Senior advisors*; They will usually make 1-2 short short term visits a year and have long term commitments and e-mail follow up.

Risk factor: SN staff being gap-fillers
For under staffed partner NSIs getting a well experienced long term advisor and well as for the advisor herself it is tempting to assign the advisor fill gaps in the workplan. That is extremely dangerous, no capacity is built and without the pressure the likelihood of getting a new position for that task is even less. In such cases there is a need to make a plan for the NSI and the Government to take responsibility may be not from the first month but at least within an agreed time period in order both to build capacity and to ensure continuity when the project is terminated. In these case the support from NORAD at an annual meeting is essential.

- *Long term resident advisors, general/ specialized.* The long term resident advisors will usually stay for 2 years but even 1-3 years are common. They might allocate 50 percent of their time for cooperation within their specialty and 25 per cent for each of general cooperation and project management.
- *Short term advisors* with e-mail follow up. They will typically be on a 2-3 weeks visit for 2-3 times during a project period.
- *Short term study trips*. It is essential that our counterparts and their national main contacts are exposed to other ways of working such as in Statistics Norway and other Norwegian institutions.
- *Mid term study trips/ trainees*. In some cases staff in our partner-organizations may visit Statistics Norway and work as a trainee to learn specific skills or get a certain experience.
- *Long term training*. It is important to acknowledge that a highly professional institution as an NSI has a need to ensure the necessary educational level of their staff. NORAD and other donors would however often ask for applications to special long term training programs rather than include this in project support.
- *Short term training in country or abroad.* Short term training from one week to a couple of months is needed in a range of technical and management issues. It is a case by case job to design a program including both in-country training for large numbers of staff and training abroad for 1-2 staff members.
- *Participation in international conferences and workshops.* Just as in Statistics Norway it is important for staff in any NSI both to present their own experience and work and learn from other countries. It would usually be a prerequisite that the participants have prepared a conference paper.
- *Junior advisors.* This is a special allocation for staff who are well trained and experienced in their own field of expertise but lack experience from working in developing countries.
- *Joint projects*(methodological and/or analytical papers). It is of mutual interest both for staff and institutions to document specially interesting methods and analysis and no project should be without. It is however a challenge to retain priority and budget allocation for this type of medium perspective work.
- *User - producer workshops.* It is essential that statistics is not an end product, but only justified to the extent being used. Over the last year all NSIs have learned the need to develop proper mechanisms for dissemination, being electronic or on-paper dissemination. The base for production and dissemination is the user-producer dialogue and hence user-producer workshops are essential for producers to learn not only which data are needed but also how they are to be used in order to develop a better understanding of user requirements.
- *Seed money for national cooperation* between a national statistical office and the providers and users of statistics. Sooner or later in the development of each field of statistics any NSI will face a situation were data are under-utilised and under-analysed. While the NSI could improve their own capacity, there is still a need to ensure that inter-mediate users are taking data further to other types of use and analysis. We try to promote two modalities to push this development, by documenting and distributing data on CD-Roms and if possible also some small seed-money to encourage further analysis across the NSI and other national institutions.

Core modalities and assignments

Any institutional development co-operation should include the following five modalities:

- *Annual meetings.* Each year there will be a preparatory meeting between the partner NSI and Statistics Norway and then a main annual meeting between NORAD/the Norwegian Embassy and the NSI with support from Statistics Norway. These meetings are the reference to ensure a frame for the accountability of the project and the partner NSI.
- *Institutional back-up support.* Statistics Norway will assign one staff member to coordinate, to follow up and to support the cooperation by regular telephone meetings once a fortnight or month with the long term advisor and the counterparts and frequent e-mail contact as need be.
- *A long term resident advisor* to live and work for one or more years with a terms of reference to include a combination of technical cooperation with one or more counter-parts, general cooperation with any staff member in the partner organization and coordination of the cooperation.
- *Traditional short term missions*. One or more expert on short term assignment comprising one week or more working with a counterpart on fact finding, discussions and report writing.
- *Study trips*. In order get exposed to our way of working, to present the way of working in the partner country and for follow up discussions, it is essential that both top management, mid-level management and working level staff from the NSI as well as main user-institutions visit both Statistics Norway and user-organizations in Norway.

Risk factor: Loosing continuity in Statistics Norway
As a combined production and development organization, quite a large share of our staff is involved in monthly production and it might be difficult to be away for periods of 4 weeks. Hence we have switched to 2-3 weeks stays. Lucky enough our experience is that this increases efficiency, but on the other hand it requires follow up by a long term advisor.

Focus of cooperation

As stated, institutional development cooperation may be either specific or general. We focus on three focuses of cooperation, as follows:

- Cooperation on technical statistical issues and the statistical system
- Cooperation on management issues
- Cooperation addressing the dissemination and use of statistics

Cooperation on technical statistics and the statistical system

We would often start the cooperation with technical issues. There are quite some challenges in technical cooperation, but this is what all statisticians are trained and experienced in. In fact quite some staff members would even insist that this is their sole task. Hence it is usually the best subject on which to start cooperation. With the technical possibilities having materialized during the last 10 years, the need for common standards and methods and hence a standardized national statistical system is however becoming more and more pressing and nowadays it does not make sense to cooperate just on technical issues except for an introductory period. However for such an introductory phase a cooperation project focusing on technical statistics and the statistical system does make sense and would allow for interesting work for all staff, both in the NSI and Statistics Norway. Such a focus will also give us the opportunity to learn each other to know and build thrust.

Cooperation on management issues

Sometimes there is a need to embark on management cooperation at an early stage, and in a second stage there is hardly a way around this. With management cooperation we include several elements as follows:

- Project planning and management
- Mid-level planning and management such as for divisions and departments
- Top-level management

Project planning and management is a technical skill and would not be very different from any other statistical technical skill. A more challenging issue is how to build institutional accountability where staff learn to plan resource and time requirements and a system where project leaders are made accountable.

Management at least at mid-level is to a large degree a technical skill and the issue is how to train staff to present annual plans with time and resource requirements. As for project planning the challenge is how to establish a system with institutional accountability. In our experience the only way is some decentralization of resource and budget control where top level management rewards savings but also requests some "repayment" of overspending.

Top-level management is both a technical and policy issue. A successful leadership of an NSI requires both policy qualifications for external "marketing" of the statistical office to get support and resources from government, donors and others, to ensure that the statistics produced is utilized and vice versa and also ordinary institutional leadership qualifications. In our opinion any director general can gain considerably from learning how an NSI such as Statistics Norway is organized and headed and by return visits by our director general or some of the deputy director generals who may give lectures for staff and get involved in management and policy discussions at top-level. However, cooperation at this level is obviously also dependent upon developing a personal relationship between the two heads.

Cooperation addressing the dissemination and use of statistics

The contribution of statistics to increased welfare etc has always relied upon the use of the statistical information produced. During the last decade this has been more exposed than before. Electronic means make it possible to disseminate more statistics faster and cheaper than ever. Users are demanding and getting statistics more tailored to their needs both in the matter of content and time. Statistics Norway has now a daily release of statistics and we are able to respond to user demands at an unprecedented pace, but the main approach is still to plan ahead and anticipate the demands to come.

For an NSI in a developing country this increases both the possibility and pressure of producing and disseminating more statistics in a timely manner. Hence quite a jump in development is required. Fortunately it is possible to move step by step. An essential step would be to start dissemination by an NSI Web-site, such as Uganda Bureau of Statistics has done on their Web-site www.ubos.org with support from our Danish colleagues using the Nordic software PC-Axis developed by our Swedish colleagues.

It is however important to stress that while a Web site is a rather useful tool to develop cooperation with users, active follow-up contacts are still needed.

Accountability

We have no problems admitting that we originally considered the annual meetings a nuisance. Obviously regular reporting is essential and we saw and see advantages and drawbacks with any frequency, quarterly, semi-annually or annually. But an annual unpredictable meeting was a not very welcome additional challenge. *We were proven wrong.* We have worked to avoid the unpredictability and learned how useful the annual meetings could be. The annual meetings are essential, first and foremost to build accountability, but as a part of this to ensure that the partner institution is in the driver's seat with or without a hired driver.

Again we follow the principle of teaching, demonstrating, supervising before moving to the role of a backbencher advisor. The project plans are usually based upon priorities made by the partner NSI, goes through several rounds of discussions, but the first draft plan is then put on paper by us. The first annual report, budget review and revised workplan for the year to come are usually drafted either by us or jointly. During the second project year, the partner NSI will usually realize what they can gain from being in charge, and our role moves to serving as advisors and supervisors and later on to the backbencher role.

At this stage the discussion usually moves to where it should go, a common discussion of options for resource allocations. Some partner institution may at this point in time consider whether to replace expensive Norwegian experts with local experts or foreign experts from cheaper countries. This has forced us to reflect upon the comparative advantage we have, and in our opinion this is the institutional approach. Being a small country with limited resources and high degree of equality has taught us the need but also given us the possibility to establish efficient and hence common approaches across statistical production and use of statistical information. From Statistics Norway the partner NSI may not get the Chief Technical Advisor (CTA) with the most outstanding CV (most of these prefer to remain in Norway), but probably one of the best package deals for institutional cooperation. The package prize will be at line with hiring an international CTA. And while a CTA has a wasted interest in making herself indispensable, Statistics Norway has a wasted interest in building medium and long term capacity in our partner NSIs.

But also we have a need for predictability and hence the plans are written with three budget-lines, one for each of local expenses, foreign expense for the partner NSI and technical cooperation expenses. Changing these budget-lines requires a joint discussion and revision of plans at an annual meeting. This will regularly happen, not at the first annual meeting, but at later ones and then lead to some minor changes. At the same time we know very well that we have to ensure that both the NSI and NORAD are satisfied with our work, to ensure that we can continue with a required second phase of cooperation.

Statistics Norway as a consultant for the partner NSI towards NORAD.
From the partner NSI's perspective Statistics Norway is also a door opener towards the Norwegian Embassy and NORAD. Since we share the interest of a well working project, we are just happy to assist the partner NSI to find flexible solutions. This might be such as small reallocations for new elements which could not be anticipated, but obviously will improve the outcome of the project.

Recent developments in the tradition of statistical technical support and co-operation

Initiatives
Statistics Norway was definitely not the only institution embarking upon statistical development cooperation in the mid 1990s. The UN statistical system had already started a process to agree upon a number of principles of official statistics. In April 1994, a session of UN Statistical Commission agreed upon ten Fundamental Principles of Official Statistics[4] stressing issues as professional independence, quality, timeliness, costs, respondent burden and confidentiality. The last principle presented the need for bilateral and multilateral cooperation in statistics for the improvement of systems of official statistics in all countries.

The general UN principles were followed by several initiatives. The first major initiative was the Special Data Dissemination Standard (SDDS) and the General Data Dissemination System (GDDS) approved by the International Monetary Fund Executive Board [5] in March 1996 and December 1997.

In September 1999 at the annual meetings of World Bank and IMF a special concessional lending and debt relief facility named the Heavily Indebted Poor Countries (HIPC) initiative was opened. This HIPC initiative required comprehensive Poverty Reduction Strategy Papers (PRSPs)[6] and during the following years PRSPs and then PRSP monitoring and evaluation plans were developed.

In November the same year the PARtnership In Statistics in the 21st century initiative - PARIS21[7] promoting cooperation between producer and users of statistics was launched. This initiative soon

[4] http://unstats.un.org/unsd/statcom/doc94/e1994.htm
[5] http://dsbb.imf.org/Applications/web/gdds/gddswhatgdds/
[6] http://www.worldbank.org/poverty/strategies/overview.htm
[7] http://www.paris21.org

stressed the development of statistical master plans and PRSP monitoring and evaluation plans as core activities.

In September 2000 the United Nations Millennium Declaration was approved by 189 nations agreeing in the goals from the UN summits in the 1990s, systematized as 8 Millennium Development Goals - MDGs[8], 18 targets and 48 indicators (or really 66 since some comprises two or more indicators). The UN system including the World Bank and IMF, as well as OECD/DAC agreed to promote the monitoring of these global and national goals. UNDP is now playing an active role in global MDG monitoring.

Bilateral donors as Norway, UK, and the Netherlands have also been promoting monitoring and evaluation, in general, linked to the PRSPs, and the MDGs (including donor support).

This large support and interest for monitoring and evaluation and statistical information in general has generated extra resources for statistical capacity building. The main focus is still either on global monitoring by the international agencies or by national monitoring, but again driven by international agencies. Some donors are however also providing increased bilateral or multilateral support to activities for strengthening national level statistical capacity, such as Norway and the other Scandinavian countries, EU, Germany, Japan, and UK.

Norway is providing support both for increased capacity building in general and for establishing monitoring systems such as the pilot Basic Social Policy Data[9] where Statistics Norway cooperate with sister-organizations in Malawi and Uganda[10].

The current situation
These new initiatives have given the international statistical community a golden opportunity, but also responsibility of cooperating to build the capacity in the short and medium term for improved policy impact monitoring. At this stage there is still a tendency to focus at the international level and how to share the monitoring responsibilities among the international agencies. There is also considerable support for work at country level, such as from World Bank for PRSP monitoring, from UNDP for MDG monitoring and from UNICEF for small scale national CD-Rom and Web databases in Southern and Eastern Africa.

At the national level there is however still quite a shortfall in technical cooperation between NSIs in OECD countries and developing countries. This is even larger when focusing on use of statistical information for policy planning. There are all reasons to expect that this need will become evident as the monitoring of global efforts to reach the Millennium Goals might show a variable or insufficient pace and the need to trace policy impact and conduct studies and analyses become evident. The years 2004 and 2005 are likely to be critical for contributing to this capacity building for the systems to produce and use statistics.

Statistics Norway and its Development Cooperation is committed to continue contributing to this capacity building through the approach for institutional cooperation as presented here.

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[8] http://unstats.un.org/unsd/mi/mi_goals.asp
[9] Statistics Norway, 2002
[10] Forthcoming documents on Tracing Policy Impact, in Norwegian main partner countries, in Malawi and in Uganda.

Chapter 2. Strategy and practice in developing official statistics

Hans Viggo Sæbø

Introduction

The United Nation (UN) principles for official statistics adopted in 1994[11] in short state that official statistics as a basis for democracy and development must be:

- produced on an independent basis and impartial
- widely spread and equally accessed by everyone
- of high quality

In addition, the protection of individual data collected for statistical compilation is emphasised.

Most countries also have statistics acts based on the same principles. These normally also entitle the National Statistical Institutes (NSIs) to collect data and give them access to administrative registers for statistics production.

The UN principles are generally acknowledged, and (implicitly) included in strategic plans for official statistics in most countries. However, the interpretations and implications of the principles in practical terms are often an issue of consideration and discussion, not only in developing countries. Theory and practice may differ. This in particular concerns measures to ensure independence, but also how to ensure user orientation and quality in practice. Besides, constraints such as limitations linked to funding and human resources are crucial for the possibility to follow strategic plans.

Some issues linked to the fundamental principles for official statistics, and the possibilities to follow them, are considered in the following. The paper is based on experiences from several countries, among these Mozambique where the author has been advising on strategic planning and quality. The issues considered are believed to be relevant for many countries.

The independence of official statistics

The professional independence of the NSI implies that it has to be free from political or other outside interference in deciding which statistics to produce, how to produce and how and when to disseminate statistics. This has implications for the organisational and managerial set up of the NSI, the professional ethics of the employees and for the procedures for releasing statistics.

Normally a NSI is organised under a ministry, often under the Ministry of Finance. This is the case in Mozambique as well as in Norway. Statistics Norway has an independent board appointed by the government. In many developing countries the board (or unit with corresponding responsibilities) consists of or includes (politically appointed) ministers. Then it is important that the role of the board is communicated to the public in a clear way, to avoid suspicion that it will interfere with the professional independence of the NSI. The importance of procedures for the recruitment of NSI management that ensures the independence should also be mentioned.

Independence also has to do with funding. Usually the major budget originates from the relevant ministry. However, in Europe a considerable and increasing part of the funding is direct payments from public and private customers. Such user funded assignments or commissions concern both development and adaptation of statistics, analyses and in some cases production of on-going statistics. Some user funding is useful in order to maintain quality and ensure development of official statistics. However, if

11 UN website: Fundamental principles of official statistics: http://unstats.un.org/unsd/statcom/doc94/e1994.htm

such funding becomes dominating, the statistical institution's independence might be questioned. Earmarked funding will always affect priorities.

In developing countries a considerable part of the funds may come from donors, such as national development agents or international organisations such as UN and the International Monetary Fund (IMF). This means that the same type of questions raised about commissioned work and priorities in European countries can be raised in the case of developing countries. Information needs of donors may differ from national information needs. This should be kept in mind in our work on supporting NSIs in developing countries.

Public access to statistics

Simultaneous access to statistics for everyone is an issue closely linked to the independence of the NSI. The first UN principle states that official statistics have to be made available on an impartial basis to honour citizens' entitlement to public information. A major tool to achieve this is an advance release calendar announcing when the various sets of statistics will be published. The UN Statistics Division has just conducted a global review of the implementation of the fundamental principles, in the connection with the 10th Anniversary of the Fundamental Principles of Official Statistics. A questionnaire has been sent to all NSIs. One of the questions is about the publishing of a release calendar. IMF also emphasises and recommends such a calendar in its evaluations of statistical systems such as in connection with the GDDS - General Data Dissemination Standard[12]. Many developing countries are in a process of developing such a calendar.

However, one thing is the existence of a release calendar; another issue is whether it is lived up to, that is whether anyone, such as the authorities or private agents is given earlier access to new statistics than others. One often meets the argument that for instance the ministries need to know the content of new statistics in advance of general dissemination for the public, in order to be able to comment upon it and answer questions from journalists and others. In cases where anyone is given access to statistics prior to the general release, it is important that the reasons for this is publicly identified and announced (transparency).

Another obstacle to the public access to official statistics is the pricing policies pursued by some NSIs. Even if many NSIs have parts of their income from commissioned work, it is important that official statistics produced in commissioned projects still are made publicly available. The general users of statistics should only cover extra costs related to the dissemination. Users that demand special adaptation of statistics for their specific needs should cover the costs of this. The price of paper publications is normally set to cover expenses for printing and mailing only. The Internet does not have costs that can be directly related to the individual statistics released, or to the individual user. Official statistics published on the Internet should therefore be free of charge.

However, income from data sales is often a valuable addition to the budgets of many NSIs, and the temptation to sell data that ought to be free is large. To regard statistics as market products ready for sale to those willing to pay is in line with general financial principles, which in recent years have been applied in governmental sectors all over the world. However, applied for official statistics, this principle violates the principle of equal access to official statistics. In addition, this could hamper the development of statistical web services since it traditionally has been easier to charge users for data that have to be submitted by other means (for example by CD-ROMs).

12 IMF: Information on dissemination standards and metadata: http://dsbb.imf.org/Applications/web/dsbbhome/

User orientation and quality

Quality is a key word in all strategic plans. The daily work as well as planning exercises in a statistical institute should be based on total and systematic quality thinking, with the user needs as the point of departure. Quality can most simply be defined as *fitness for use* in terms of user needs.

The dimensions of quality for statistics are often described according to Eurostat's criteria[13] :

- Relevance and completeness
- Accuracy
- Timeliness and punctuality
- Comparability and coherence
- Accessibility and clarity (documentation)

The production of statistics has to be as effective as possible, and costs always have to be taken into account.

However, in practice, it is not obvious that all user needs are taken into account when producing statistics. Statistical institutes are often oriented towards the needs of the authorities, which are planning and monitoring in or for major ministries such as the Ministry of Finance. This is partly due to the funding structure, but can also be seen as a consequence of the lack of registration and advocating of general user needs. Often the institutes are rather production oriented as well, which means that emphasise is put on the production of statistics (not on dissemination). Considerations of various users and possible ways of using statistics are always an issue when developing strategies and plans. User needs should be kept in mind in our advisory during the daily work in a statistical institute.

Insufficient user orientation does not apply to development countries in particular. In earlier days, Statistics Norway's main products were publications designed to satisfy the needs of users within planning and research in particular. But during the last 10 years we have gradually changed our dissemination policy towards meeting the needs of the broader public, as well as targeting more specialised users. This change has been facilitated by the development of new technology, in particular the Internet. Today all official Norwegian statistics are disseminated for free by the Internet, and it is an objective to reach the general public directly or via different public media. For this purpose we have actively recruited journalists to work within Statistics Norway.

Sufficient quality according to the dimensions above is necessary to satisfy user needs, but improving production processes is a precondition for better quality at an acceptable cost. Other aspects of systematic quality work are the participation of all relevant parties in improvement processes, teamwork, and motivated and satisfied employees. Participation is a key issue here. Statistical institutes are often organised according to a "stove-pipe" model, with parallel production lines for each statistics. This is efficient, but coordination and spreading of good practices across the organisation represent a challenge. Hierarchical organisations with many organisational levels can also make (vertical) communication difficult. Improved communication and better methods in project- and teamwork are often issues when implementing strategies for better statistics.

Setting priorities and balancing quality aspects

Setting priorities and balancing various quality aspects is an important part of quality work in all NSIs, but always difficult in practice. In general, strategies and plans are often too ambitious compared to available resources. Development projects are often highlighted, and there is a tendency towards easier funding opportunities for new projects than for currently improving the quality of existing statistics.

[13] Eurostat (1998): "*Definition of quality in statistics*". Doc. Eurostat/A4/Quality/98/General Definition.

There might be a need for reconsidering the priorities set in strategic plans. In particular this concerns conflicting activities and quality aspects. There is a classic conflict between timeliness and accuracy. A specific example from Mozambique is that production of quarterly national accounts to increase relevance and timeliness of short term statistics might be in conflict with accuracy and hence reliability of existing annual national accounts - more or less are competing for the same resources (financial and human). One should be careful to propose extensions in statistics production before ensuring the quality of existing products. Increased response burden following new surveys also leads to increased society costs and can harm the quality of existing and new statistics by increasing non-response and measurement errors.

Documentation

Documentation of statistics, or metadata, is a precondition for proper use of statistics. Information about production processes is often needed in order for the users to understand the statistics as well. Such information is also crucial for improving production processes. But there are many examples where developments of new systems and statistics have not been followed by satisfactorily documentation. Often documentation has been regarded as the last step in the development. This may cause severe problems if key persons leave during the development process. Too often one can observe that routines and large systems such as national accounts are "black boxes" without proper documentation. In particular this concerns systems developed by external advisers acting as "gap-fillers". Changes and improvements will then be extremely difficult at a later stage, and the very expensive alternative might be to develop completely new systems from scratch.

The issue of documentation has to be kept in mind in all advisory work, and ideally, development tasks ought to be carried out by permanent staff. External advisers can support the process by repeated consultancies throughout the different development phases.

Protection of individuals

Data on individuals are to be treated confidentially. This is stated in the UN principles, and the issue of confidentiality is central in modern statistical acts. But in many countries with statistical systems historically based on central planning, with a totalitarian structure or with "democratic deficits" there is no strong tradition for confidential treatment of data on individuals. Keeping data only for statistical purposes may conflict with the society's needs to fight and reduce crime. Another example is that the need to have a well-functioning market economy may put pressure on the statistical institution's protection of data on individual establishments - in the case of suspected price cooperation. It is not obvious that the statistics act supersedes other laws. Confidentiality is an issue where strategy and practice may differ.

Coordination of statistics production

The organisational set up of the statistical system in a country affects the possibilities to follow strategic plans. Organisation of the management has been mentioned (i.e. a board with politically appointed members). Another organisational matter is the degree of centralisation within the statistical system. Official statistics have to be well coordinated, to ensure use of common standards, methodology and quality of statistics, in particular the quality dimensions of comparability and coherence. This has led to the establishment of one central, national statistical institute in most countries. However, in some countries there are different statistical institutions with responsibility for different parts of the official statistics (USA and Pakistan are examples). This may be well functioning, but the organisational set-up is still an issue to be considered (which has been done in Pakistan). How can independence and statistical quality best be secured?

Another issue is the internal organisation of a national statistical institute with several provincial offices. This is the case in Mozambique as in many other countries, for the obvious reasons of large regional distances, differences and logistic challenges. In such a setting, national surveys often require regional organisations. Hence, a geographical distribution of tasks linked to the data collection phase is efficient. The same may not be the case when it comes to other stages in the statistics production chain, such as dissemination. But Internet dissemination may be centralised (one common web page) even if staff works at different locations.

Although most countries have one national statistical institute, many other institutions still produce and disseminate official statistics. Usually the NSI is responsible for the coordination of such statistics. This may be reflected in the organisational setup. As an example, in Mozambique the National Statistical Institute and the National Bank are the major producers of official statistics, but there are a number of institutions with delegated responsibilities for statistics in different areas (such as the ministries for education and health). Coordination (at the top level) is taken care of by a statistical council with members from the institutions involved. Our experience from advisory work, especially from discussions in seminars with participants from several such institutions, indicates that there is a general potential for improved (day-to-day) cooperation between the different statistics producers.

The use of international statistical standards is central to the consistency and efficiency of statistical systems. The main international classification schemes are largely implemented or about to be implemented in NSIs. However, many different international organisations promote statistics and act as advisors in developing statistics. This may lead to coordination problems when it comes to standardisation as well as prioritisation. In developing countries, NSIs are supported and influenced by organisations or institutions such as the World Bank, IMF and different UN agencies (i.e. FAO and WHO) in addition to the UN statistical bodies and other NSIs. Work on coordinating the frameworks and concepts of international statistical organisations (in a broad sense) is important to facilitate the development of official statistics in countries with relatively young statistical systems.

Technology

Information technology (IT) makes up the backbone in a statistical institution's activity and affects all processes, from collection and processing of data to dissemination of statistics and analyses. IT is a means to reach the institution's goals, and hence affects most of the issues considered in this paper, in particular user orientation, quality and production costs. Important issues in the IT strategies of most NSIs are:

- Electronic dissemination on the Internet
- Data collection from administrative registers and by web questionnaires
- Databases, also databases with statistics and metadata to be accessed directly by users on the Internet
- Standardised technology solutions
- Security systems

The possibilities and level of development of utilising new technology vary from country to country, but the strategic goals are mostly the same. However, a decentralised structure of the NSI and a large degree of support from external advisers may hamper the possibility to achieve such goals. Different advisers with background from different institutions or organisations may bring or promote their own solutions. Seen individually, each of these solutions may be fine, but the receiving institution may often end up with several differing solutions that together represent the opposite of standardisation. In addition, the solutions may have to rely on continuing external support for maintenance. Here we all have to be careful. Robust and simple solutions in frequent use by many NSIs (and thus with expertise more easily at hand) might be preferred, even if better solutions exist from a technical point of view.

Human resource development

The availability and development of human resources are crucial for the success of any strategy or plan. This applies to all countries, but in developing countries the lack of human resources with high education is a major general problem. The abilities of national statistical institutes to attract (scarce and skilled) human resources vary; to keep such resources in the institution for some years is a problem in most countries.

One could question whether the production of statistics always requires persons with university degrees. In Norway, all new employees have such high education today, but this was not the case 30 years ago, at a time when the production of statistics really expanded. Most of the staff employed at that time received their education inside the institution. They were the backbone of the institution for many years, and they still are in several departments.

Anyway, there have to be many employees with high education in a statistical institution today. Development possibilities and motivation measures are very important. In most programs for institutional support there is a considerable part of training, on the spot or abroad. The latter may be motivating, but it is important to assure that developed human resources will serve their institution of origin after education or training periods.

Constraints linked to human resources are a major obstacle when developing official statistics, and should regardless of measures in this area call for realistic planning ambitions.

Conclusions

The issue of (the difference between) theory and practice when it comes to implementing strategic plans for official statistics does not only apply to development countries, but it is more visible and often more discussed in countries with relatively new statistical systems and in countries that have undergone major changes in political and economic systems. Many of these countries are major receivers of international financial and technical support to develop their systems for official statistics.

The strategic plans usually are in accordance with the UN fundamental principles for official statistics. It is the implications of the principles, and its consequences for the day-to-day work in a statistical institute, which might be hard to live up to, and which have to be considered - again and again. This concerns issues linked to the independence of official statistics, the user orientation and quality.

The independent and impartial role of official statistics may be hampered by the organisation of the statistical system and the structure of the funding of the NSI. User orientation and quality are affected by the same factors, in addition to more internal conditions in the statistical institutes. Balancing quality dimensions means that one has to consider the development of new statistics versus maintenance and improvement of existing statistics. Statistics have to have sufficient accuracy and timeliness, and be followed by necessary documentation. The scarcity of human resources is a major obstacle in the following up of strategies, and should always be kept in mind.

Some of the issues considered above represent a challenge for all parties in a statistical cooperation. They challenge our way of understanding the role as external advisors to national statistical institutes, as well as the role of donors. We influence on priorities of the work, both with earmarked funding, advices and technical solutions (such as IT systems). This may affect the cooperating institution's independence, both with regard to which areas statistics will cover and in balancing quality aspects such as accuracy, timeliness and comparability.

All advisory activities ought to focus on or bear the fundamental principles for official statistics in mind. They are crucial for the sustainability of the statistical system and need to be addressed continuously.

Chapter 3. Introducing a Living Condition Monitoring Survey: The Case of Zambia

Gunvor Iversen Moyo and Gandson Moyo

Background

Already in 1990 Statistics Norway was asked by the World Bank to provide short- term consultants for a survey component for the Social Recovery Project in Zambia. We identified consultants who were given absence of leave from Statistics Norway and hired as individual consultants by the World Bank. In the third survey round one of the former short- term consultants was hired as a long- term consultant. She worked as a World Bank consultant with no follow- up from Statistics Norway, but her experience became important when embarking on institutional cooperation work by the new division ten years ago.

Introduction

In 1994-95, The Central Statistical Office (CSO) in Zambia started planning for the Living Condition Monitoring Survey (LCMS). The project was initiated and funded by the World Bank as a part of the then Social Recovery Project, SRP. SRP consisted of three components, one comprising micro projects to be carried out by local communities with funding from the Project, such as rehabilitation of schools, building new clinics etc, a second statistical component, aiming at monitoring the social development in the country, and a third one being a Study Fund facilitating analysis of data concerning social development and poverty, carried out by local research personnel. SRP was initiated by the World Bank with a time frame of 4 years. Initially 4 surveys were to be carried out by the statistical component, but due to increased costs in planning and implementation of the survey, only one was carried out under the original funding.

When introducing the LCMS in Zambia, the main idea was to implement a system of "light monitoring" surveys, carried out regularly, such as annually, and tailored to the country's specific needs. This was meant to be a more "home-grown" approach to monitoring poverty and living conditions, as opposed to just applying one of the surveys from the standardized system of household surveys introduced by the World Bank around 1990 comprising a Priority Survey, an Integrated Survey and a Community Survey. the CSO had already carried out two Priority Surveys, PS1 and PS2, in 1991 and 1993 as well as a community survey attached to the PS2.

The main idea was that the LCMS would provide data geared especially to the data needs as defined by Zambian policy makers and relevant for planning purposes in Zambia. Hence also the need for data on a more disaggregated level (district level) than foreseen by the standardized World Bank packages. At that time, Zambia was one of only a few countries venturing into this approach of more "home-grown" surveys.

The LCMS was initially planned to monitor living conditions in general and non-monetary aspects of poverty, such as access to services, to health care, education and income- generating activities, rather than collect data suitable for analysing monetary aspects of poverty, such as constructing poverty lines and construct poverty indices. However, as it turned out, the survey in the end provided data for both kinds of poverty analysis. Data needed for constructing poverty lines are normally collected through fully-fledged household budget surveys. Incidentally, a Household Budget Survey (HBS) was carried out in Zambia at the same time as the LCMS was in its planning stage. The HBS was based on a rather small sample and designed basically to satisfy the needs for providing updates of the weights for the CPI, and not to provide detailed information for monitoring poverty. Tthe need was therefore felt to include data in consumption in the LCMS, although not as detailed as in a full- fledged HBS.

Organizational setting

Under the Social Recovery Project a certain amount was granted to cover all the costs concerning the monitoring component, that is the LCMS. The grant included costs related to the Long Term Technical Advisor (LTA), planning costs for the survey including workshops, short- term consultants as well as local costs involved in data collection, data processing, analysis and publication of results.

A Statistics Norway (SN), employee was recruited by the World Bank as a LTA with absence of leave from SN and reported to the Task Manager for the project in Washington. However, the LTA also worked closely with the national counterpart, Assistant director for social statistics at CSO. All funds to be spent had to be approved by the financial controller for the Social Recovery Project in Zambia, meaning that CSO alone could not release funds for the survey work.

A new unit was set up at the CSO called the Living Conditions Monitoring Unit (LCMU), whose responsibility was to be in charge of the new monitoring system. In the beginning, the LCMU consisted of 1 head, 2 statisticians, and 1 assistant. Subsequently, the LCMU was strengthened with 3 additional statisticians and, upon his return from a study leave in the UK, another person joined, so that in the end the LCMU consisted of 1 head, 6 statisticians and 1 assistant. The LCMU reported to the Assistant Director responsible for the Social Statistics Division in the CSO.

The LTA spent most of her time on on-the-job training with the purpose of enabling the LCMU to carry out similar surveys in the future. Most of the on-the-job training consisted of workshops outside CSO, and this had the important advantage of increasing remuneration for the LCMU staff. The short- term consultants engaged in the project were almost exclusively engaged in training the LCMU staff. The short- term consultancies to be held were mainly proposed by the LTA and most of them were recruited from Statistics Norway. Most of the short- term consultants had also worked with CSO staff previously, mainly in connection with the PS1 and PS2.

The new unit was staffed partly by individuals formerly involved in the planning and implementation of the Priority Survey 1 (PS 1) and Priority Survey 2 (PS 2). This organizational and individual experience turned out to be an important element in CSO's attitudes towards survey design and user needs. There was a general unwillingness, or dissatisfaction towards reducing the coverage of information to be provided by the LCMS compared with previous surveys. The main argument was that the general public and professional (external) users already were well acquainted with the type of information provided by PS 1 and 2. Iit was therefore difficult to change or reduce any of the information to be provided by LCMS. CSO's own survey unit had a perceived responsibility towards the national users to continued provision of data of (more or less) the same type and format. But the initial idea from the World Bank, represented by the LTA, was of producing a different type of survey from the previous ones, with fewer topics covered and each topic not extensively covered. The main deviation from the original intentions was to include relatively detailed information on consumer expenditures and incomes, in order to be able to generate poverty lines in the same way as the PSes. One could say that the final data set ended up as a compromise in order to give time series on the most important poverty and living conditions variables.

Training

The training element was a very important feature in the project, because part of the project objectives was to set up a survey unit at the CSO. This Unit should not only be capable of carrying out surveys on living conditions and poverty, but also any other social survey that would be required. This implied that the unit had to be trained in every aspect of survey taking, from deciding relevant information to be provided by the survey, design of questionnaire, sampling and report writing, and finally analysing the survey data using software suitable for the purpose, in this case the SAS package.

Apart from the technical assistance provided on a day–to–day basis by the LTA, training was also provided during various workshops, most of which used consultants from Statistics Norway. The on-the job training performed by the long- term consultant concentrated mainly on how to plan a survey, and necessary preparations for a smooth survey operation from the nitty-gritty of providing stickers for the listing phase to what training would be necessary for the supervisors and enumerators that should participate in the survey.

The most important training workshops held were as follows:

- A workshop to determine the core content of the LCMS,
- a training workshop questionnaire design, a training workshop in sampling,
- a training workshop in how to make a tabulation plan and finally
- a training workshop on how to analyse data using SAS software.

Core content workshop

A very important phase in the implementation of the LCMS was to determine what indicators to be included and how these indicators could be measured. The unit and the LTA spent more than 2 weeks in a workshop where all relevant indicators for the Zambian environment at that moment were discussed and the various methods of measuring them were considered. This workshop ensured that the LCMU had a clear understanding of why the chosen information was being included in the survey and measurement problems to be encountered. It also became clear at this time that it was difficult to discard certain specific information that might have had no relevance to the LCMS per se, but had to be included merely to maintain comparability with information from PS 1 and 2. The lesson learned is that while it was important to allow as many indigenous ideas as possible in the planning process, it was absolutely necessary to draw the line somewhere. How many such themes should be included in the survey? At the risk of budget overruns, this discussion was important, but also difficult.

Sampling Workshop

Sampling was taught by a consultant from Statistics Norway during a 2 weeks' workshop, where also the actual sample was drawn and the weights determined. The pre–census mapping and cartographic exercise, as well as the 1990 population and housing census provided the required sampling frame for the LCMS.

Questionnaire design

Questionnaire design was also taught to the LCMU staff by a consultant from Statistics Norway during a 2 weeks' course, using relevant subjects areas to be covered and problems to be encountered in the actual survey to be carried out. The course was instrumental in deciding the number of questionnaires to be administered to each household during the survey. The most important consideration was what types of questions are suitable for indirect interviews and which are not. This was an important consideration, because the survey was to include questions on political participation and victimization, questions deemed too sensitive to be asked in an indirect manner. It was therefore decided to use three sets of questionnaires: A household questionnaire, an individual questionnaire for each household member 16 years and above, and a child questionnaire, to cater to information on child health, nutrition and some aspects of child labour.

During the planning period, using three separate questionnaires per household seemed to be a good idea, and it made the field work run very smoothly for the enumerators. However, a big problem was encountered during data cleaning. When information from the various forms was to be merged, the amount of mismatches between ID information in the various forms was substantial. This problem originated either from lack of supervision in the field, or during the data entry process. A lot of work had to be done manually in order to merge the forms. When the mismatches were discovered, the data entry staff had to go back to the original batches of questionnaires from the field, and as much as possible identify questionnaires belonging to the same household, using the information provided on name of head of household, enumeration area etc. This could be a complex task and really a job for the

professionals, but in CSO professional staff insisted in assigning clerical staff for this work. By participating herself, the LTA managed to get the professionals involved but only to a certain degree.

Tabulation plan Workshop
The tabulation plan was elaborated during a workshop with the LCMU staff and conducted by the LTA. The indicators specified at the workshop defining the content of the survey (see above) were tabulated using relevant background information. A more or less standard format for presenting results was selected, and each member of the LCMU was made responsible for tabulations in a certain defined area, and was to propose dummy tables and explain the way they were supposed to be compiled once the data became available. This provided the LCMU staff with useful experience in setting up tables and distinguishing between dependent and independent variables and also the difference between presenting percentage distributions as opposed to proportions.

Data analysis Workshop
Finally, a workshop on SAS was organized and conducted, enabling the LCMU team to produce tables relevant for the section(s) of the questionnaire assigned to each team member. A World Bank expert taught the basic SAS skills, and the LCMU team generated tables and the subsequent analysis.

Capacity building at the Provincial level
One of the main purposes of the LCMS exercise was , as mentioned above, capacity building for coming survey work. Ideally this should comprise the whole CSO organization, not only the Head Office staff. The CSO is organized with 9 provincial offices, led by a provincial statistical Officer, whose main responsibility up till then had been to organize and implement the data collection and data processing phase of all survey work, while analysis and publication were carried out by the Head Office. However, over time, some of the provincial offices had been staffed by qualified statisticians, and it was expressed a need also for those to participate in the analysis phase of the LCMS, in order to gain experience also in this stage of a statistical undertaking. As a result of this concern, it was decided to involve qualified statisticians at provincial level in the analytical phase of the LCMS, i.e the report writing. To make the results more user- friendly for the planning authorities at the provincial level, it was also suggested that each province should have its own special report from the LCMS.

Unfortunately, this approach was not sustainable. Even though the statisticians who participated got a good working knowledge of SAS and improved their analytical skills, these reports were never finalised upon project finalization, and only one of the 4 statisticians included in the exercise still works at the CSO.

Implementation of the survey and dissemination of results

The sample size was decided to be 610 enumeration areas at national level, 67 enumeration areas at provincial level and a minimum of 7 enumeration areas at district level. The sample design yielded a total of 11770 households to be interviewed, 6 550 of which were in urban areas, while 5 220 were in rural areas. It was concluded that this sample size and distribution would ensure that the sample was representative at the district, provincial and national levels. To have good district estimates was regarded extremely important, and this obviously increased the sample size. When sample size increases, so obviously does the costs, since in African surveys, and generally in less developed countries, the length of the interview may not matter as much as the sample size. When, as in the Zambian case, enumerators were deployed in one enumeration area, in principle they were to complete the listing and enumeration in that particular area in two weeks' time. Then the enumerator would be moved on to the next area. Thus, sample size more than actual time to carry out the interview was the most important factor in determining the costs, because it affected the number of enumerators to be used and the time they would spend in the field. *Sample size, per diems and travel costs (fuel and cars) are by far the most important factors in determining the costs*, and not the length of individual interviews.

Data collection was originally envisaged to take place in the period August-October 1996, and went beyond this period by only 1 month.

The main implementation problems arose from low salaries in the civil service in Zambia. Low LCMU staff salaries led officers to schedule too many workshops as a way of getting extra allowances from the project. Since these expenditures were not provided for in the original budget, it meant that funds intended for subsequent rounds of the survey system were depleted before the intended activities. Because of this the budget allocation for continuing LCMS activities from the original World Bank grant was not sufficient to cover the planned subsequent rounds of the survey. However, through new grants from the World Bank, the CSO has been able to carry out one more round of an "ordinary" LCMS, and has also been given funds to carry out a Household Budget Survey within the Social Recovery Project framework (or ZAMSIF as it has been renamed).

User-producer contact

Survey content
When the draft questionnaires were finalized, a user-producer workshop was set up lasting for 10 days. The purpose of the workshop was to get the various user groups' evaluation of the survey content and possible amendments of the questionnaires. Users relevant to specific subject matters covered by the survey were invited to participate and attend the discussion of the different parts of the questionnaire.. For instance, when health was the topic, the Ministry of health, UNICEF and other NGOs related to health were invited. Some institutions, for example those linked to gender issues, were invited to participate in all sessions. Unfortunately not all users were interested, and some did not show up at the workshop. However, when the survey results were published, the reception of the results and the topics covered were evaluated favourably.

Publication and Dissemination
A preliminary dissemination workshop was undertaken in June presenting main results. The final publication was released in February 1998, which was about 1 year and 4 months after the end of data collection.

Prior to finalizing publication, a lot of analytical work was done with many comments generated on each table. This was of course useful for the readers and users, but on the other hand contributed to the delay in production of the final report.

Sustainability

There are strong indications that the project objective of achieving sustainability was by and large attained. Currently, round 3 which include a full fledged Household Budget survey component, is in the field. Round 2 of the LCMS was successfully undertaken in 1998. The implementation of round 3 was delayed due to funding problems, though the Social Recovery Fund, now called ZAMSIF, took over financing.

The LCMs unit was until very recently more or less intact. Its size had grown a bit, but a majority of the original team members were still there. However, due to recent re - organizations of the CSO, only 2 of the original team members remain in the LCMU, the others have either moved on to other institutions or to other positions within the CSO. The new members of the LCMU have not been exposed to the extensive training that was initially given, but hopefully they have learned from the experiences of the initial team through on-the-job training.

Is this a success-story?

The project can be defined as a success, but not merely so. Instead, we use the term "mixed bag of trial and error", which generated useful lessons for future projects to be undertaken by Statistics Norway.

The objective of forming a specific unit and train a group of persons at the CSO with the capacity to plan and carry out Living Conditions Monitoring surveys was accomplished, due to the intensive training and incentives provided: funds, transport, office equipment and office space etc.

The survey was originally planned to be a *light monitoring survey*, but this was not achieved, as the LCMS little by little became very complicated, or even more so than the preceding surveys. However, users and the CSO staff felt in the end that all important aspects were covered, and perhaps this was an incentive in itself.

In other words, the extensive training component secured sustainability. The trained staff was able to continue the work after the long- term consultant's departure, even though of course normal career moves over time have tended to deplete the original resources of the unit. This leads to the discussion of how to maintain human resources to avoid resource flow away from the beneficiary institution.

Since the LCM unit was deeply involved in the whole process of planning the survey, they learned through discussions and practical exercises what a painstaking and detailed process the planning of a survey is, from the outset of the planning to the final report. They came to know that you can have a perfect sample, a perfect questionnaire and manuals, but if you forget to include printing time and the cost of paper in your planning process, the rest of the programme risks getting completely derailed.

The focus of the technical assistance was on carrying out a definite project with a definite objective, time frame and budget. This maintained a very definite focus throughout the support period, and relatively little “slack time”, which can more easily be experienced in projects where the technical assistance is supposed to be more of a general advisory type.

Based on the experiences from this project, we will mention some key elements that seem to increase the chances of creating a success story:

- A specific project objective, for instance the performance of a specific survey or system of surveys.
- Specific human resources, i.e. substantial training elements directed towards a clearly defined staff segment or organization unit in the receiving institution, with clear and transparent criteria definitions and time schedules.
- A combination of on-the-job training, courses/classes and workshops throughout the project period.
- A possible use of "binding periods" or other tools to avoid brain drain among newly trained staff.
- Long- term technical assistance devoted to specific project tasks, not only in a general advisory role.
- A project document which clearly defines which parts of the national statistical system that are to receive support - to avoid a competition for funds between too many system levels even within the Statistical Office.

These factors will give a direction , or framework, which cannot so easily be achieved in a general advisory project. The framework will be helpful both for long- term consultants and the receiving institution. Therefore we suggest that even within a general advisory project, it will be advisable to create special “sub-projects” with the same properties, defined objectives, allocated persons, time frame and, if possible or necessary, even a budget frame.

Chapter 4. Developing an Effective Statistical System with Targeted Technical Assistance: Ten lessons from Uganda

Mrs. Margaret Kakande.

Introduction

Uganda suffered nearly 15 years of political turmoil and economic decline during the seventies and early eighties. From 1987, the Uganda government implemented economic stabilisation and structural adjustment programmes aimed at reversing the negative trend. Like all other public institutions, the Statistics Department in the then Ministry of Finance and Economic Planning, had collapsed during the 15 years, leaving Government with inadequate information for informed decision -making.

When the Program to Alleviate Poverty and the Social Costs of Adjustment (PAPSCA)[14] was designed to provide safety nets for the vulnerable groups, a component of Social Dimensions of Adjustment (SDA) was included. The SDA project, which aimed at enhancing social policy planning, was in the short term to provide:

- Technical support in the areas of social research and statistical analysis so as to strengthen social policy planning
- A statistical database on the level and evolution of household living conditions, and
- Experience in designing and implementing actions that would address the basic needs of Uganda's most disadvantaged groups.

So, from the inception of the SDA project, a living conditions survey sub-component was linked to two other sub-components: policy studies and institutional capacity building[15]. The survey component was to provide the data that was to be used for the commissioned policy studies, as well as the practical training in statistical analysis.

The technical Support was offered by the World Bank and Statistics Norway, and it was targeted at government ministries including Department of Statistics and departments of Makerere University[16]. The support took the form of technical advise to government officials on choice of priority research areas to inform policy making and designing research questions .There was also support in terms of training in the areas of statistical analysis and use of specialized computer packages, social sector analysis, development management and human resource management. For the researchers advise was on research methodologies and their applications. The statistics department on the other hand, received technical support in terms of advise on sampling designs; data collection, processing and analysis.

The purpose of this paper is to illustrate how the activities of the SDA project followed by other projects enhanced the development of an effective statistical system with reliable and timely data generated from regular household, community and enterprise surveys that Uganda boosts of today, identifying some key lessons for this success.

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[14] PAPSCA was funded by IDA, SIDA, Norway, Action Aid, World Vision and Government of Uganda. The program became effective in 1990 and closed in 1995. Supervision was done by IDA/World Bank and their Task Manager for the statistical component was Mr. Wold, now a Statistics Norway employee.

[15] Details of the linkages will be explored in section 3.0

[16] The government ministries that benefited include: Finance and Economic Planning (departments of Macro, Statistics, Manpower Planning, Social Services and Population Secretariat); Education and Sports; Lands, Housing and Urban Development; Industry and Technology; Health; Women in Development; Labour and Social Affairs. The university departments were: Institute of Statistics and Applied Economics; Economics; and Institute of Social Research. In addition the Bank of Uganda also received technical assistance.

Development of statistical capacity

The statistics department of the then Ministry of Finance and Economic Planning implemented the surveys component of the SDA project. Four surveys were carried out, namely:

1. An Integrated Household and Community Survey (IHS) 1992/93
2. The First Monitoring Survey (FMS) 1993/94
3. The Second Monitoring Survey (SMS) 1994/95 and
4. The Third Monitoring Survey (TMS) 1995/96.

The objectives of these surveys were modified and enhanced. First, they had to collect data in connection with the Social Dimensions of Adjustment program. Second, they had to fill in gaps in the existing socio-economic data base for the country , both to meet the needs for monitoring and evaluation, and also for planning purposes to achieve social and economic development, more specifically in formulation and implementation processes. The objectives were:

- To provide integrated data sets needed to monitor the effects of the adjustment programs at the household and community levels,
- To provide time-series data to measure economic growth and social development,
- To improve the estimates of inputs, outputs and value added of the household and small-scale enterprises disaggregated at the two digit industrial classification level,
- To build a permanent national household survey capability in the Statistics Department.

Each of these surveys consisted of three components of the main integrated survey. First, it covered all socio-economic aspects of the household. Second, it covered small-scale establishments and household enterprises. Third, a community survey module at village level was included. In addition, the SMS had a diagnostic agriculture crop module, while the TMS had an agricultural survey component.

Although the SDA project came to an end in 1995, with the closure of PAPSCA, the Statistics Department continued with the national surveys. In 1997 the Uganda National Household Survey (UNHS) was conducted with a labour-force module in addition to the socio-economic and community modules. In 1999/2000 another UNHS was conducted which comprised of an agriculture (crop), socio-economic and community components. The most recent UNHS of 2002 again comprised a labour force module, in addition to the socio-economic and community components.

The choice of type of surveys to be conducted mainly depended on the identified needs of the government. At the inception time, the data users – mainly government ministries and departments and some development partners, would meet with the statistics department[17] to agree on what data was to be collected. However, the needs had to be prioritized annually according to the need for time series in a longer perspective.

Lesson 1: The scope of coverage for the different surveys varied with the identified data needs of the country as perceived by different government ministries and development partners. This was an illustration that the statistics produced were demand driven: an issue that enhances both the use of data for planning and policy purposes and the availability of funding, as will be explored below.

Organisation of work

The surveys under the SDA project were implemented by the then Department of Statistics in the Ministry of Finance and Economic Planning. This was under the overall guidance of the Chief Technical Advisor (CTA) who was also the project coordinator. He was supported by the Principal Statistician (PS) of the department, who was also attached to the CTA as a counterpart.

[17] The user-producer contacts are described in more detail in section 2.3

Institutional development was a central objective within the SDA program. To strengthen the small Survey Unit that existed at the time and establish a permanent survey organization, a new set-up was introduced.The set up had strong similarities with survey organizations in other African statistics organizations. The new organization consisted of one survey design and manual scrutiny unit (SDU), one field operations unit (FOU), one data processing unit (DPU) and finally one administrative unit. The Survey Design and Manual Scrutiny Unit (SDU) consisted of one Statistician supported by two statistical assistants for sample selection. Sampling design was prepared by the chief technical advisor, and the statistician heading SDU was fully appraised with the various stages of the design and trained to proceed with the task of sample selection. The scrutiny cell within SDU, manned by 6 officers, was charged with improving the overall quality of collected data and also to prepare data for entry and tabulation. It was the scrutiny cell that issued and received questionnaires from the field.

The Field Operations Unit (FOU) manned the data collection activities. The requirement of field staff was assessed on the basis of analysis of time-record schedules filled in during the pilot studies. The entire field staff were initially trained at the headquarters for a period of one month on the basis of classroom lectures, practical field work and feedback reviews. A detailed manual of instructions for field workers was prepared and distributed to all the field staff for reference during the field work. The central training was followed up with regional training at selected centres to get a feel of the operational conditions and problems. There was a two-tier supervision mechanism, with each field team having a supervisor in addition to a senior supervisor who oversaw three field teams.

The Data processing Unit (DPU) carried out the data processing. The unit had national experts who functioned as the data manager, supervisors, data-entry operators and programmers. The staff were given practical training by the National Expert and World Bank technicians. Rode-PC entry package was used for data entry, Dbase III was mostly used for the data management and editing, and SAS-PC was used for analysis and tabulation. Lotus1-2-3 and Wordperfect were used for formatting some end tables.

The administrative Unit was for strict financial management and control of field vehicles and other equipment and supplies.

A Statistician from the department was head of Survey Design and Manual Scrutiny Unit and Field Operations Unit, under the overall supervision of the Chief Technical Advisor and the Principal Statistician. A National Expert in data processing was head of the Data Processing Unit. The Administrative Unit was manned by an administrative officer who also served as the finance officer, and was appointed by UNDP[18]. The re-modeled Survey Unit was operated as a project, but plans for further development towards a separate statistical organization were in the pipeline.

This team was also supported by a total of eleven supervision missions by the World Bank and/or Statistics Norway staff. The missions consisted of one or two technical statistical advisors per visit for a period of a week or two. In most cases it was the same people coming back and again.

Uganda Bureau of Statistics (UBOS) was established by an Act of Parliament in 1998 after a process of consultations and negotiations[19]. The main reasons for setting up the Bureau, were to enhance professional independence[20], trustworthiness by producing data that are comprehensive and impartial, and usefulness by producing timely data that is appropriately packaged and disseminated to the different users. All the UNHS surveys except for the first (conducted by the statistics department in 1997) were carried out by the Household Survey Unit of the Uganda Bureau of Statistics (UBOS). The main tasks of the Bureau are to:

[18] The SDA project was funded through a World Bank loan and executed by UNDP- OPS.

[19] UBOS is a semi autonomous body within the Ministry of Finance, Planning and Economic Development. It is the principal data collecting and dissemination agency responsible for co-ordinating, monitoring and supervising the national statistical system in Uganda.

[20] UBOS has a Board of Directors with seven members responsible for policy guidance and approval of annual plans and budgets, and serving on three-years contracts. The Board reports to the Minister of Finance, Planning and Economic Development.

- Provide high quality central statistical services in collaboration with other data producers
- Promote standardization in the collection, analysis and publication of statistics
- Provide guidance, training and other assistance to other users and producers of statistics and
- Promote co-operation, co-ordination and rationalization among data producers and users

The Survey Unit that originated as a project in the Ministry of Finance, and Economic Planning[21] is now under the Directorate for Population and Social Statistics in UBOS. By this move, a more permanent arrangement gave the leadership roles to the local personnel within an institutional framework. However, the local staff continued to receive technical support from the World Bank and other bilateral partners as was deemed necessary. For example, Statistics Denmark was very instrumental in providing consultants that helped with enhanced data cleaning and dissemination. With effective capacity in data cleaning, for example, UBOS is now able to produce results of surveys within six months after completion of field –work. This is an aspect that has greatly boosted the timeliness of such data.

Lesson 2: Developing countries can evolve efficient statistical systems but need both funding and technical assistance (TA) from time to time as their capabilities are developed. For a start, it is very useful to have long–term TA stationed in-country with national counterparts for effective skills transfer.

Lesson 3: An effective statistical systems must have a permanent national organization charged with coordination to balance the various needs of standardized data.

Analytical Capacity

With time, UBOS has moved away from producing simple descriptive statistical reports to quality analytical reports. The data analysis is being carried out in collaboration with both local and international research institutions, and this has enhanced the analytical skills of the UBOS staff. As an example, UBOS has worked with Oxford University, the Economic Policy Research Centre in Uganda, and the University of Nottingham. The cooperation has entailed short study tours by both the UBOS staff abroad and the staff of the other foreign institutions to Uganda.

The joint analytical work has comprised of :

1. An analysis of poverty trends using an absolute poverty line, for 1992-96 and 1997-2000, done in collaboration with the University of Oxford.
2. Determination of poverty correlates (the 15 best indicators) that would be used as predictors of poverty, done with Nottingham University
3. Establishment of poverty levels for 2002, done with Nottingham University and the Economic Policy Research Centre[22].

The findings of the poverty trends analysis were used to design the Poverty Eradication Action Plan (PEAP)[23] of 1997 and its subsequent revisions in 2000 and 2003. In addition, the results also were basic information for the Poverty Status Reports of 1999, 2001 and 2003.

Lesson 4: Statistical analytical capacity is stimulated from partnerships with recognized policy research institutions.

User –Producer Contacts

During the initial stages for the IHS and Monitoring Surveys, the consultations with the data users were at the design stage, mainly performed through workshops. At these workshops, identified key stakeholders were invited to comment on the scope and priority issues for data collection. Draft questionnaires prepared by the Statistics Department were presented in the workshops. The priorities were discussed and agreed upon with the users, and the statistics department would then re-design the questionnaires to accommodate

[21] The Ministry of Finance and Economic Planning was re-named the Ministry of Finance, Planning and Economic Development

[22] Economic Policy Research Centre was involved to ensure that future poverty analysis is done in-country.

[23] The PEAP is the national planning framework that determines the priorities for public funding.

the agreed data needs. The data producer user contacts are explained further under the section on *linkages to other activities,* where examples of data use linked to the SDA surveys are shown.

By 1999, these consultations had extended to include contacts with users during the preparation of reports and other publication activities, contacts to present and disseminate results, and contacts to discuss interpretation, use of information and further analysis of data for policy issues. These producer - user contacts largely explain the consistently rising use of statistical data in Uganda. I come back to review this under the section on use of statistical data for policy making.

In 2000, the contacts were not just with the data users but also to other data producers, like other ministries. A producer - producer committee that included major data producers was formed. The main objective was to minimize duplication of effort and ensure optimal use of scarce resources. As a starting point, a *Compendium of Statistical Concepts and Definitions Used in Uganda Statistical System and Services* was prepared by UBOS in collaboration with other data users, to be used as a coordinating tool for standardization of statistical production.

In 2002, the producer- producer committees became effective with the formulation of four sub-committees, namely:

- Industrial Statistics Working Committee: consisted of the relevant line sector ministries, the manufacturers associations, and UNIDO.
- District Statistics Working Committee: consisted of representatives from local government organizations, representatives of non- governmental organizations and UNICEF.
- Macro-economic Statistics Working Committee: consisted of the relevant central institutions.
- Social Data Working Committee: consisted of the social sector ministries, Save the Children (UK) and UNESCO.

The main objectives of establishing these committees were to strengthen linkages in production of statistical data, ensure standardization and thereby quality control, share best practices and finally to enhance capacity building within institutions. The overall responsibility of ensuring the coordination role was given to UBOS. Each committee was to be automatically linked to the relevant directorates within UBOS, that was to provide secretarial services to all the committees.

Lesson 5: There is a strong need for dialogue between data producers and users to ensure relevance of data produced by statistical agencies. In addition, it is advisable to extend the collaboration to other data producers to exploit synergy effects, to minimize duplication of efforts, and to foster effective use of resources.

Financing of Statistical Work.

At the design stage of the SDA component funds were mobilized from the World Bank, with government contributing 10% towards local expenses. This was in addition to the government funding of the local staff at the Statistics Department.

As the statistical program expanded, more funds were also mobilized from other development partners, namely DANIDA, NORAD, UNICEF, UNDP, USAID, Government of Japan, the Nordic Development Fund and DFID.

The fact that the government gradually was taking on a larger share of funding of the statistical activities is of particular interest. By 2002, the Government funds to UBOS was equivalent to 30 percent (excluding the Population and Housing Census). With the donor move towards basket funding, it is predicted that by 2007, the government will be contributing 75 percent to UBOS, leaving only 25 percent to be directly donor funded.

Lesson 6: Governments of developing countries ought to take on the funding of statistical activities within their countries to ensure that national data needs are met on a sustainable basis. Leaving a major share of the funding to external stakeholders give a risk of building systems too extensive to be sustainable in the long run. However, this requires that the statistical agencies gain government confidence in turn, by producing reliable policy relevant data that is both timely and adequate. Therefore, each agency must plan for actions to gain this confidence from their own government, at the same time as the relevance is constantly reviewed.

Dissemination of Results.
The results of the Integrated Household Survey and the three Monitoring Surveys were produced in extensive reports, meant to cover both methodological documentation needs, main national results, and results on different geographical levels. By including small -scale establishments and household enterprises, the data are enriched by covering another related dimension when it comes to social and economic development, namely the informal sector and subsistence agriculture debate.

The bulk of the text was tables with no explanations. In addition, the concluding remarks were in light of future survey operations and not on policy implications of the survey data findings and their respective use for decision making. The reports gave introductions and survey objectives; the legal basis, publicity and response; coverage of the surveys and survey calendar; planned budget and costs of the survey; survey organisation, recruitment and training of staff; pilot study and its findings; sampling frame and sampling design; questionnaires and manual instructions; field operations, supervision and control; estimation procedure; data processing and a few pages on summary of results and concluding remarks.

The Integrated Household Survey had three volumes, namely:
- Volume 1 with the Technical aspects of the survey, Basic tables of the Main Socio-Economic Household Survey on Central and Eastern regions, as well a the Basic tables of the Small-Scale Establishment and Household Enterprise Survey.
- Volume II with Basic Tables of the Main Socio-Economic Household Survey for Northern and Western regions
- Volume III with the Basic tables of the Small-Scale Establishment and Household Enterprise Survey, as well as the Community Survey.

The Monitoring surveys were produced in two volumes each .The first volume had the technical aspects of the surveys, and the basic tables on demographic particulars and consumption expenditure of households. The second volumes had tables on socio-economic characteristics of the household comprising education, health, economic activity, housing, migration and household income. The reports with basic tables were just a list of cross-tabulations of data with no text. The dissemination of these reports was limited to the Ministry of Finance and Economic Planning.

The UNHS Reports that followed since 1997, were produced in single reports that had tables with text that gave an interpretation of the data. From 1999, the dissemination was to a wider audience through workshops, briefing papers and, more recently, a web site. Plans are under way to disseminate the UNHS of 2002 using CD-ROMS.

To sum up, the dissemination of results has gradually changed from producing extensive tabulation reports mostly without comments but with methodological information to using more diverse methods where numbers and results are analytically commented.

Lesson 7: In order to reach out to a wider audience, there is a need to meet the needs of different audiences by packaging information and disseminating it appropriately. With effective producer-user contacts, the appropriate type and depth of analysis can be chosen in cooperation with other institutions.

Linkages with other projects/activities.
As was noted in the introduction, the SDA project had inter-linked components. The purpose of linking the survey and policy studies components was to ensure enhanced use of the survey data that was to be generated for informed policy making. In other words, it was to give the demand for statistical data in Uganda a kick-off.

A number of policy studies were undertaken under various institutions:

- Conversion factors and regional price indices at the Statistics department, Ministry of Finance and Economic Planning
- A nutrition based absolute poverty line for Uganda, at the Institute of Food science at Makerere University
- A poverty profile for Uganda, at the Institute of Statistics and Applied Economics of Makerere University
- Factors influencing access to and attendance of primary education in Uganda, in Ministry of Education and Sports
- Factors affecting access to education for the marginalized and disadvantaged groups in Uganda, in Ministry of Education and Sports
- An inquiry into the disparities in the cost of provision of primary education in rural and urban areas, in Ministry of Finance and Economic Planning
- Effects of adult literacy on poverty, performed by a private consultancy firm
- Factors affecting access to incomes and economic opportunities for the disabled persons in Uganda, by a private consulting firm
- Contribution of children to family income, by a private consulting firm
- Employment and income opportunities for low income economically active women in rural and urban squatter settlements in Uganda, performed by a private consulting firm
- A food balance sheet for Uganda, at the Institute of Statistics and Applied Economics of Makerere University
- Effects of access to land by the rural poor on food production in Masindi district, at the Centre for Basic Research
- The effects of price and market liberalization on household food in Uganda, by private consulting firm
- Technology change and food security: Analysis of the impact of irrigated rice production on rural food security systems in Eastern Uganda.
- Profile of civil servants, in Ministry of Public Services
- Support strategy for laid off civil servants, in Ministry of Public Services
- Absorptive capacity of the markets for labour products and services, by a private consulting firm

The results of these studies were widely circulated to interested institutions, and indeed they did have an influence on some policies, as will be explained under *Use of statistical data for informed decision-making* below**.**

As was noted in the introduction, some technical support took the form of institutional capacity building consisting of both training and provision of logistical support to some government ministries and departments of Makerere University. The training was in data processing and analysis, and development management. The training courses, ranging from in–country week-long workshops to short-term courses of 1-3 months, included:

- 5-weeks computer course and analytical workshop
- 2-weeks social sector analysis workshop (health and education)
- Short-term courses abroad namely:

1. Development Management Program for officers in government and non- governmental organizations held in Lusaka, Zambia.
2. Human Resources Management and Development course held in Arusha, Tanzania.
3. Social Dimensions of Adjustment regional training program held in Dar- es-Salaam, Tanzania.

Lesson 8: Enhancement of local analytical skills and demand for statistics entails creating links or meetings points between different data users, both from government, research institutions and the private sector.

Lesson 9: Development of effective statistical systems entails creating linkages between the various training institutions and producers of statistics to ensure that appropriate training in all aspects from data collection to processing and analysis is provided when deemed necessary for statistical development.

Use of statistical data for policy making.

The specific issue of use of statistical data has been alluded in various sections above. However, it is also being given a separate section here because of the influence that it has had on the evolution of the statistical system in Uganda. As noted, at the onset of the SDA project the surveys component was linked to the policy studies that were listed. In particular, the education sector studies greatly influenced the policy developments in that sector. In addition, the study on a food balance sheet was an input in the development of strategies for exports promotion.

By 1995, there were outcries of massive poverty in spite of the buoyant economic growth enjoyed by Uganda. The statistical analysis of the 1992 UNHS data confirmed that 56 percent of Ugandans were not meeting their basic requirements. This piece of information formed the basis for government in formulating the Poverty Eradication Action Plan (PEAP) in 1997. This was years before World Bank the launched the Poverty Reduction Strategy Papers (PRSPs) format for poor countries, thus making Uganda a pioneer in this area of making poverty the central issue in economic growth and development strategies.

Another example illuminates the impact of statistics on government actions. In the late 90s, the government of Uganda was increasingly getting criticized for the macro-economic stance of its policies by many non-governmental organizations claiming that these policies were impoverishing many citizens. However, World Bank analysis[24] based on the UNHS surveys (1992-1995/6) where poverty was decomposited indicated that economic growth alone accounted for 96 percent of the observed reduction in poverty (which from 1992 to 1996 was reduced from 56 percent to 46 percent). In other words, the World Bank analysis based on the UNHS surveys (1992-1995/6) indicated the contribution of growth to poverty reduction to be 96 percent as compared to only 4 percent attributed to the distributional effects.

The major explanation was the enhanced farmer income earnings from coffee. Coffee is the major export earner for Uganda, produced by millions of small-scale farmers. Following the liberalization of its marketing structure and a coffee price boom of 1994, farmers increased their farm gate/ coffee factory earnings from an equivalent of US$0.10 per kg in 1986 to US$ 0.60 in 1996. In the World Bank report, the economic growth was explained to be a result of the prudent macro-economic policies of government. This in turn was enough empirical evidence to justify continued implementation of the criticized policies. This is an example of a situation where government really used statistical data to influence policy making resulting in a firm attitude towards critics, their arguments based on statistical information which had gained confidence in most political directions or groups. It also greatly enhanced government's demand for statistical data for other policy decisions, which in turn saw increased commitment for funding to UBOS from government.

Following the design and subsequent implementation of the PEAP, government placed a lot of emphasis on systematic monitoring of poverty to ensure the effective implementation of the poverty reduction strategies. A Poverty Monitoring and Evaluation Strategy (PMES) was designed for this purpose. The

[24] Appleton Simon "Poverty Trends in Uganda, 1992-1996". A report to the World Bank

PMES noted the need to monitor poverty at all levels ranging from inputs, processes, outputs, outcomes and impacts. It was evident that for reliable provision of data on outcomes, an independent, objective and reliable institution was required. This role was given to UBOS which had already gained the trust of many data users.

The use of statistics generated by UBOS, a semi autonomous body, for PEAP monitoring enabled government to accept the important results of the UNHS 2002 survey that showed poverty to be on the increase: up from 35 percent in 2000 to 38 percent in 2002. The survey results were a pointer to government to critically review the existing strategies for poverty reduction as well as the mechanisms by which the poor are supposed to access benefits. Government now demands for more detailed statistics for enhanced policy analysis.

Lesson 10: Meeting data demands of policy makers can result in increased general demand of statistics by the same policy makers if the data is of high relevance. Policy makers appreciate the valuable role of informed decision making. This in turn fosters the professional relationship between government and the statistical agency to that of trust, which in the long run is a prerequisite for increased support in terms of funding.

Conclusion

The lessons from Uganda shows that a poor country can develop statistical capability through a systematic process of technical and financial support that ensures transfer of skills to the local officials. But this entails creation of appropriate linkages between the statistical agency, the data users and other data producers. In addition, partnerships have to be built with recognized research and training institutions. A key message is that *all these processes need to be given adequate time to evolve***.**

Of uttermost importance is the need to generate adequate, timely and relevant policy data**.** In fact the production of survey data has moved from being and end in itself to being a means to an end, which is informed policy making. The trust in statistical data for policy makers is then a strong justification for governments to prioritise funding to the statistical agencies. The statistical agencies, therefore, must keep abreast with the changing data needs of policy makers. Changing worlds needs changing statistics.

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Chapter 5. Development of National Accounts with Supply and Use Tables in Transition Countries

Liv Hobbelstad Simpson

Introduction

In 1990/1991 I worked as a special advisor on international statistical policy for the Director General of Statistics Norway. One of my fields of responsibility was statistical cooperation with the Central and Eastern European countries (CEECs).

The first meetings and contacts with national accountants from the CEECs in the early 1990s, opened a door to a statistical world we did not know much about. We met new and very interesting colleges and made many new friends. From the early meetings, Statistics Norway has had a special contact with the statistical offices in Bulgaria, Hungary, the Czech Republic (at that time part of Czechoslovakia) and Slovenia (at that time part of Yugoslavia). We participated in workshops and seminars in these countries and invited study groups to visit Statistics Norway.

A result of these longstanding contacts and friendships are the current National Accounts projects for developing and improving National accounts with Supply and Use Tables (SUT) and Input-Output Tables (IOT) in Bulgaria, in the Czech Republic and in Slovenia. These projects were initiated by informal request for assistance in 2002 and became feasible by financing from Eurostat to Statistics Norway, as Phare 2000 and Phare 2001 grants, for the years 2003 and 2004.

Background

After the Russian revolution, official national accounts figures for USSR were from the 1920s based on a Marxian concept of production, later developed to the Material Product System (MPS). Since the 1950s, other centrally planned countries also adopted MPS for their national accounts. The version MPS69 was published in Russian in 1970 and became the official statistical standard for measurement of economic performance for the centrally planned countries. From 1971, the United Nations (UN) accepted that these countries used the MPS69 for their reporting to the UN, while the rest of the world used the UN "System of National Accounts" (SNA68).

The major conceptual difference between the MPS69 and the SNA68 is the production boundary, which is confined to "material production" in the MPS69. For example, the services of owner-occupied dwellings and government health care, education and defence were not regarded as production. However, the MPS69 already included concepts as actual consumption ("Total consumption of the population"), first included in the SNA93.

By the end of the 1980s there were efforts in the international community to link or bring a revised SNA and a revised MPS closer together. Onset by the break- up of the Soviet Union, the "Iron curtain" was finally lifted during the years 1989/1990. As a consequence, the system of central planning rapidly gave way to market economy in Central and Eastern Europe. The political transformation had direct implications on the statistical system, which needed to serve the future needs of market economies.

As a result of the drastic political events and the fundamental institutional restructuring in 1989 and 1990 in the CEECs, plans for integration between the two national accounts system, the MPS and the SNA became outdated.

Contact with the countries in Central and Eastern Europe in the early 1990s

Financing to Statistics Norway to enable statistical assistance.
From 1990, the countries in the west offered their assistance to countries in transition to facilitate the transformation in all areas including the transformation of statistics.

In May 1990 the Norwegian Parliament voted to grant NOK100 mill. for assistance and cooperation with the CEECs. Statistics Norway was given a substantial amount making it possible to participate activly in the cooperation with Statistical Offices in some of the Eastern and Central European countries. In the following I only describe workshops, seminars and other contacts which give a background for the projects described below in section 6 and in Hans Kristian Østereng' s article "Development of Foreign Trade Statistics in Eastern Europe".

Conference on transition problems in statistical offices in ECE, Geneva 21 to 23 May 1990
This first, very formal conference, organised by the UN/ECE and the WORLD BANK, identified the most urgent tasks of the transition and need for statistical assistance. The conference revealed a pressing need for statistical assistance in the fields of national accounts, statistics for private enterprises and foreign trade statistics for all the countries in a transition process to market economy. At this first conference I found informal discussions with the high level statisticians from the "countries in transition" difficult since the majority spoke Russian as their second language and very little English.

Seminar on statistics for private enterprises, Prague 28 May to 1 June 1990
The political and social changes, which took place after 17 November 1989 in Czechoslovakia, gradually found their reflection in the economic sphere. A new law, giving the prerequisites for private enterprises, was approved by the Parliament in April 1990, as the first step to a market economy.

I was asked by the UN/ECE to organise and chair a seminar, which should cover the fundamental economic change with thousands of new private enterprises in transition countries. Some weeks before the seminar, I had to go to Prague to evaluate alternative locations. At that time the best alternative was a villa, owned by the Government, outside Prague where all the participants from countries outside Czechoslovakia could stay. The seminar lasted a week and we had nice informal evenings with new friends and admired Laszlo Drechsler playing chess (once a world champion in chess and at that time Hungarian world champion in national accounts with long experience from international organisations).

The seminar was carried through in English and Czech. Mr. Drechser helped the interpreter, since many of the words in English, used by the statistician from the west was unknown in the east. Economists from different Ministries and statisticians from the Czechoslovakia Federal Statistical Office, the Czech Statistical Office, the Slovak Statistical Office and also from statistical offices in Hungary, Romania and Yugoslavia attended the seminar. One of the two high-level statisticians from Romania understood English and translated, whispering to his colleague during the whole seminar. They had been travelling 24 hours with train from Bucharest and had to leave the last night for the train the long way back home.

At that time I found it very easy to get statistical experts from different countries in the west to go for the first time to the east for presenting papers at the seminar. We had very good presentations by statistical experts from FRG, Hungary, UK, the Netherlands and Sweden covering "Business register", "Confidentiality" and "Data collection system for finance institutions and for private enterprises". To emphasize the importance of collection of good statistical data for a new national accounts system, I had asked Mr. Drechsler to present a paper. "The system of national accounts (SNA) as a tool for the coordination of economic statistics". Mr. Drechsler recommended that the countries started reading the draft to a revised SNA(93) instead of the SNA68. Mr. Derek Blades, head of national accounts division in the OECD, participated also as an observer because the OECD should organise a next conference in September.

Conference on Statistics of the CEECs in OECD, Paris , 10 to 12 September 1990.
Around 100 directors and chief statisticians from Statistical Offices from East and West Europe, the USSR, the USA, Canada and Australia met for the first time in Paris, on a conference organised jointly by the OECD and the UN /ECE. All the statistical offices of the CEECs were represented at the highest level.

An important conclusion from the Conference was that the essential tasks in national accounting would be the introduction of SNA/ESA rather than modification of MPS.

At this conference, the chief statisticians of the CEECs declared their intention to introduce UNs SNA or the European Communities version ESA within a short period of time (2-3 years). Experience has showed that the introduction of SNA/ESA has taken much more than 2-3 years.

Statistical seminar for Yugoslavian statistician in September 1990.
EFTA organised this seminar for the directors and senior statisticians from the Federal Statistical office in Belgrade and from the regional offices. Mr. Bader, director general from Austria, chaired the seminar, and I presented the paper: "The national accounts system as a tool for co-ordinating and developing economic statistics".

The seminar was held in a nice seaside hotel, but there were a very hostile communication between the statistical directors. This was only a few months before the war started in the former Yugoslavia. From Slovenia statistical office, the Director General was driving his own car with 4 female statisticians, while all the other Director Generals were driven by chauffeurs. Already from that seminar a special contact with the Slovenian Statistical Office was established.

Workshop on Major Fields of Transition Problems in Budapest, 15 to 19 October 1990.
The most comprehensive workshop held was in Budapest, attended by 124 participants from 22 countries and from UN/ECE, ILO, EFTA, Eurostat, the CMEA and the OECD. National accounts, business registers, price statistics and foreign trade statistics were dealt with in parallel panels. Ms. Carol Carson, USA chaired the National Accounting panel.

An important conclusion after Bent Thage, Denmark had presented his paper, was that Supply and Use tables with detailed Commodity flow was the best approach for starting national accounts compilation according to the SNA.

New national accounts colleagues from the Hungarian statistical office invited me to see how they worked with national accounts in their statistical office. They also asked if it was possible to organise a study trip to Norway. Some Hungarian national accountants had been able to participate on the IARIW conferences and had knowledge about the Norwegian national accounts system with annual Supply and Use tables, which they would like to learn more about. Already in May 1991, we were able to organise cooperation and a study trip to Statistics Norway, see section 3.9.

Workshop for all countries in transition in Washington, 14-17 February 1991
The workshop was organised the week after the UN Statistical Commission meeting in New York. At the UN meeting, only the delegations from China, Cuba and USSR said they would continue with MPS or a modified MPS as their national accounts system.

At the workshop in Washington different researchers from Universities in USA met directors of statistics from all the CEECs. Several delegates from the CEECs were very irritated after having listened to the economic professors from USA, explaining in a very didactic tone how the economies in CEECs were. The statistical directors from USSR and Yugoslavia argued that they had better information than professors, who had never been visiting their countries. The atmosphere become much more relaxed when professor Vassily W. Leontief gave a very interesting lesson about the history of and the experience with input-output tables both in the MPS system and in the SNA system. Professor

Leontief's view on the importance of input-output tables was a topic all the representatives from the countries in transition could agree on.

EFTA workshop on foreign trade statistics in Bratislava 3 to 6 June 1991
In the framework of a declaration for cooperation between EFTA and the CEECs, the EFTA States organised a large workshop on foreign trade statistics in Bratislava in June 1991. I was asked to be the chairperson and also practical organiser together with the EFTA secretariat. Statisticians from Czechoslovakia, Yugoslavia, Hungary and Poland, from the 4 EFTA countries, from Denmark and the UK and also from EFTA, the ECE and Eurostat attended the workshop.

Foreign trade statistics are a major data source for the national accounts statistics. The main topic on the workshop was the relation between national accounts and foreign trade statistics, both concerning data collection in a market economy, classifications and price indices. From Statistics Norway, Svein Lasse Røgeberg presented papers about: "Indices for Foreign Trade: the Norwegian Experience with the Unit Value Approach in Foreign Trade and National Accounts" and "Statistical Classification of Commodities in Norwegian Foreign Trade Statistics".

The proceedings of the workshop were published by EFTA, Economic Affairs Department, as a 250 page book.

Study visits to Norway
The Ministry of Foreign affairs had granted money for study visits to Statistics Norway in 1990/1991 and we were able to give priority to projects where we had good competence.
Two Bulgarian statistical experts were received by Statistics Norway to study tourist statistics and tourist satellite accounts in August 1990. At that time the economic situation in Bulgaria was so difficult so the two women brought back large bags of sugar and lots of candles so their children could do homework when they had power blackouts
Two statisticians from the Czech Federal statistical office and one from the Slovak statistical office visited Statistics Norway in October 1990 to study business register.
A large delegation from the CSO and the Ministry of Finance in Hungary visited Statistics Norway in March 1991. The programme for their visit covered both macroeconometric models and national accounts of Norway. To follow up with a more detailed description of the Norwegian National Accounts System, we visited the Statistical office in Budapest in September 2001. The contact with the Hungarian CSO continued with a second study trip to Statistics Norway. The Hungarian National Accounts Division has later developed National Accounts Supply and Use tables with help from the Dutch statistical office.

The Bulgarians later requested assistance in national accounts, but at that time Statistics Norway was not able to finance that. It has taken more than 10 years before we have been able to follow up with assistance in National Accounts to the Statistical Office in Bulgaria, see section 6.

Technical assistance in national accounts to transition economies.

OECD
Following this first conference in 1990, the OECD organised special meetings and several visits to all the transition countries. At the annual OECD national accounts meetings in Paris, national accounts experts from the CEECs were invited as observers, and special meetings were organised back to back with the ordinary meetings. This gave a good opportunity to have formal and informal discussions with our new national accounts colleagues and friends.

EUROSTAT and CMFB
In the 1990s Eurostat worked to bring the countries of Central Europe up to the statistical standards of the Community, using classifications as the ESA, NACE and PRODCOM. For several years, the Phare funds have financed staff training. Norwegian technical assistance and Norwegian sectoral projects, financed by Phare funds in the field of national accounts, are described in section 6.

The Committee on Monetary, Financial and Balance of Payments Statistics (CMFB) is an important forum for development of economic statistic, national accounts and coordination between Central Banks and Statistical Institutes. In 1995, representatives from the Statistical Institutes and the Central Banks of 10 CEECs. were invited to the first meeting with the CMFBs Executive Body. At that time, it was not found advisable to overload Eurostat's working parties with a great number of new delegates. Already in 1996 it was an urgent need to receive macro-economic statistics for all the areas relevant to the EC negotiations for the 10 CEECs countries, Cyprus and Malta. Priority for the "pre-accession countries " should be national accounts, financial accounts, balance of payments and price statistics.

From 2000, representatives from all Candidate countries were invited to the meetings of the CMFB as observers. At the CMFB meeting in June 2003, eight accession countries, Cyprus and Malta were treated as members of the CMFB, sitting around the table in alphabetic order together with all the EEA countries. The remaining candidate countries Bulgaria, Romania and Turkey were left in the background as observers. From May 2004 the 10 new EU countries will be full members of the CMFB and all Eurostat working groups.

Upon entry into the EU, the acceding countries will be legally obliged to undertake the harmonisation work necessary to bring their statistics in line with legal requirements. The national authorities in the acceding countries have to take the necessary actions outlined in the "Action Plan on economic, monetary and financial statistics" as a matter of the highest priority. Also the remaining three candidate countries are invited to take the same actions.

The informal contact and discussions I had at the CMFB meetings with Directors of national accounts from the statistical offices of Bulgaria, Slovenia and the Czech Republic led to the request for Norwegian SUT/IO projects, financed as Phare sectoral 2000/2001 projects, see section 6.

Norwegian experience with developing efficient methodology and IT solutions for compiling SUT/IO tables integrated with the annual National Accounts

Statistics Norway has for fifty years compiled national accounts with annual input-output tables, both for direct publication as well as using the data for economic forecasting and planning. Already in the 1960s, Norway had built up a high level of expertise using computers for compiling the national accounts and balancing the supply and use of about 1700 commodities. This led to visits for studying the Norwegian national accounts system from countries such as Denmark, Egypt and Israel. When the SNA 1968 was implemented in Norway in 1973, an improved and a more efficient computerised routine for compiling detailed annual SUT in current and constant prices was developed.

Norwegian statisticians have also given technical assistance in national accounts to different developing countries. Statistics Norway had a large economic planning project in Jamaica in the beginning of the 1980s where I was responsible for developing Supply and Use (SUT) and Input-output tables (IOT). The first SUT/IOT for Jamaica was published in 1984 and also updated in 1994 with the SNACZ software. In the years 1984-1990 I also had several short-term visits and one long-term stay in Zimbabwe for developing national accounts. These projects gave valuable experience in transferring technical knowledge to other statistical offices.

As part of these projects, the SNACZ software for compiling SUT and I/O tables for developing countries was developed in the 1980s for Jamaica and adapted later for Zimbabwe. The SNACZ software was developed for running under DOS on PCs.

When SNA93/ESA 95 was implemented in Norway in 1995, the full SNA93 matrix was used as the framework for the Norwegian National Accounts system. The long tradition using computerised routines for compiling SUT, including the experience from developing and using the SNACZ software, was taken advantage of when designing the new SNA-NT application as a flexible system. Based on the SNACZ-software, the expanded SNA-NT compilation approach has been developed, copying and expanding the data structure from the SNACZ system and taking into account changes brought about by the international guidelines of the SNA-93 and the ESA-95.

The SNA-NT application is designed to be easily adaptable for use by both developed and developing countries. The objective has been to construct a precisely defined, documented and efficient set-up with respect to routines for compiling annual National Accounts based on SNA-93/ESA-95.

The SNA-NT software is a Client-Server application, where the "Clients" are Windows-NT PCs and the "Server" is an Oracle relational database. The application was mainly developed between 1994 and 1997, using Microsoft Visual C++ the Oracle Data Base Management System (DBMS). During 1999/2000 the application was updated with an improved user interface for also including Institutional sector accounts and the Monthly Balance of payments.

The "SNA-NT Users guide", accompanying the SNA-NT application, describes the operation of the client software and the use of the dialog boxes. The graphical user interface consists of a number of dialog boxes used for updating and balancing the Institutional sector accounts (IEA), the Supply and Use tables (SUT) and the monthly Balance of Payments (BOP). The calculations that take place are described in detail in the set of the SNA-NT handbooks.

Phare programme financing Norwegian National Accounts projects.

The Phare Statistical Cooperation Programme
The purpose of the Phare Statistical Cooperation Programme is to improve the provision of official statistics relating to Phare Candidate Countries. Beneficiary countries are Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia. During several years, Eurostat has offered opportunities for training and acquiring expertise for the CEECs countries. Different "Phare projects" have contributed to the implementation of ESA95 in these countries.

Statistical assistance activities in the field of national accounts:
From Statistics Norway Erling Fløttum, Knut Ø.Sørensen and myself have participated in Phare statistical assistance activities in the field of national accounts.

Knut Ø. Sørensen participated in the Phare 1997 projects for National Accounts giving assistance in the areas of "Private household consumption". He was the Phare expert for Bulgaria, Hungary, Poland, Romania and the Slovak Republic. This activity introduced a set of analytical tables for estimation purposes, addressing central problems likely to be encountered with the usual data sources for household consumption. In addition, a number of special problems were discussed with the countries. Mr. Sørensen prepared briefing notes on "the Gross recording of package tours" and on " Non-life insurance, claims paid directly by insurance companies to providers of goods and services". A review of the Phare97 projects was published by Eurostat in 2001 "Eurostat projects on non-financial national accounts with the candidate countries 1998-2000".

Under Phare 2000, Knut Ø. Sørensen was contracted as an expert for the project "Dwelling services" for Bulgaria, the Chech Republic, the Slovak Republic, Hungary and Malta. Erling J. Fløttum was contracted as an expert for the projects "Constant prices" and "Private household consumption" for the Czech Republic, Estonia and Lithuania, see the article by Erling J. Fløttum. I was contracted as an expert for the IO/SUT project for Malta, and am contracted under Phare 2001 for Bulgaria.

My participation in the IO/SUT Phare expert meetings and at IO/SUT workshops has been very useful. The workshops have given me the opportunity to present the Norwegian approach for compiling Supply and Use tables in current and constant prices and discuss alternative methodology with IO/SUT experts. At the last IO/SUT workshop in Bratislava in May 2003, IO/SUT experts from all the 13 candidate countries participated. In a tour de table the candidate countries described their software environment for IO/SUT work. Nearly all the countries started with in-house Excel solutions, but many feel that they needed more powerful tools that provide better control and coherence. Bulgaria, the Czech Republic and Slovenia informed us that they had installed and would start working with the Norwegian Oracle based software SNA-NT. Estonia was considering the IAS software from NAMES in the Netherlands.

Clarifications about methodology and also discussions about technical solutions have been very useful for following up the Norwegian IO/SUT sectoral projects Bulgaria, the Czech Republic and Slovenia.

Phare Pilot and Sectoral Projects in the field of National Accounts, SUT/IO.
For the "Phare pilot and sectoral projects", priority is given to actions (Bilateral study visits, consultancies or Multi-national actions such as conferences and workshops which fall within the priority domains) that improve the production, collection and dissemination of statistics comparable with Community methods in key areas. The location should be in one of the Phare Candidate Countries or in the European Union, but when appropriate, activities could also be organised in EFTA countries.

Both for Phare 2000 and for Phare 2001, Statistics Norway, applied for grants under the two following domains:

- Macro-economic statistics
- Trade statistics

Under the domain "Trade statistics", the article by Hans Kristian Østereng covers the project "External trade statistics for Bulgaria"

Under the domain "Macro-economic statistics", Statistics Norway applied for financing to give assistance to Bulgaria, the Czech Republic and Slovenia. Directors of National Accounts from these countries had at several occasions informally requested assistance from Statistics Norway to implement an efficient methodology and IT-solution for compiling Supply and Use tables (SUT) and Input/output tables (SIOT) in current and constant prices.

Under the ESA 95 Regulation, all Member states and candidate countries are obliged to compile both Supply and Use tables (SUT) and Input-output tables (IOT)

The goals of the Norwegian projects are to improve the quality of the annual national accounts by integrating SUT and IOT in the current national accounts compilation process. The emphasis is to provide technical support to establish an efficient production process and software solution, and also to provide practical training in the use of the Norwegian software SNA-NT.

The PHARE 2000 project
From September 2002 Statistics Norway and the statistical offices of Bulgaria, Slovenia and the Czech Republic have been cooperating to improve the structures, methodologies and ease of production processes for Supply and Use Tables (SUT). I am the responsible coordinator for these projects and expert on methodologies and practices, assisted by Steinar Todsen and other national accounts experts in the Division for National Accounts. Hans Kristian Langva was the main developer of the SNA-NT

software system and has been and will be responsible for the software and computer aspects of the project.

The Phare 2000 project had the following defined Phases: SUT1, SUT2 and SUT3. Eurostat required Terms of reference (TOR) for each action, a detailed report after each action and a final report. For these international projects the reports were very important since Eurostat gave comments or acceptance after each activity.

SUT 1 Primary action
The primary action was to establish contact with the national account representatives and plan a workshop. We sent documentation in preparation for the workshop and also read documents from the participating countries to incorporate their needs into the workshop programme. We also sent a draft programme for comments to be able to comply with their requirements.

SUT 2. Workshop and training in the Norwegian SNA-NT methodology for compiling SUT and I/O tables in current and constant prices in Statistics Norway 4-8 November 2002

Eight high-level statisticians and I/O experts from the national statistical offices of Bulgaria, Slovenia and the Czech Republic participated in the workshop in Oslo. After several years of international cooperation, all eight experts spoke English well, they participated actively during the workshop and have also participated fully during our later visits to the different countries.
Statistics Norway had all expenditure for preparing and participating in the seminar covered by the Phare financing through Eurostat.

The programme for the workshop was:

- Overview of Statistics Norway and the Division of National Accounts, its organisational structure, and its long and strong tradition for compiling national accounts-
- Presentation of the Norwegian Supply and Use Tables' structure (180 industries by 1200 products). The methodology for compiling annual tables in current and constant prices.
- The Norwegian accounting framework for final household consumption of various types and the principles used to define these types.
- The Norwegian practice of defining government consumption and fees as products and a specific product for capital consumption in government.
- The Norwegian methodology for satellite accounts for tourism and for environmental accounts, with particular focus on the use of the Supply and Use tables in these accounts.
- The Norwegian Quarterly National Accounts (QNA) methodologies. The use of annual SUT and short-term statistics as input for the QNA model including seasonally adjusted QNA.

The last two days of the workshop were used for the exploration of the SNA-NT software application and the methodology and data organisation involved in the use of the SNA-NT application. The structure of the system was presented, including a discussion of security; robustness and performance aspects. The SNA-NT system's use of Oracle and the coordination of actions within SNA-NT and Oracle were also included. The SNA-NT system structure and data structures and information necessary for SUT calculations in current and constant prices were the focus of the final presentations. Integration of taxes and subsidies were also included as a session in this part of the workshop.

Results of the action: Participants left well informed about the Norwegian methodologies for building SUT and I/O tables in current and constant prices. In addition, they were provided with ample information on the SNA-NT software system for them to begin the process of deciding the applicability of this software system. They had to determine if the system fits the needs of their national account divisions and if the system is flexible enough to incorporate the types of data they use in their home countries.

Dissemination of gained experiences: Written documentation and presentations from the seminar were sent to the respective national statistics offices. Presentation of material from the workshop has later been presented and discussed at seminars for large groups of statisticians in the Czech statistical office and at the statistical offices of Bulgaria and Slovenia.

SUT 3
The goal of this project is to introduce SUT methodology and the SNA-NT software in the three countries to help the countries with establishing an efficient production process.

During 2003, a one week visit was carried out in each of the three countries. In all countries a test version of the Norwegian software SNA-NT and the configuration database were installed with the active participation of the countries' own IT-experts. During the visits, the use of the Norwegian methodology and the software SNA-NT was explained in detail.

A significant amount of time was dedicated to the explanation and discussion of the requirements concerning metadata and statistical data and the work involved to prepare the data in the format required as input into the SNA-NT software. Before our visits, each of the National Accounts Divisions had prepared a preliminary catalogue with classifications for industries, products and types of final use. The classifications, which were based on the Norwegian methodology and the advice we had given during the workshop in Oslo, were discussed. An important part of the SUT-project involves customising the SNA-NT classifications to meet the needs of the different countries. Significant effort went into establishing the level of classification necessary for analysis of industries, types of final use and products. The requirements of the European Union were also discussed and incorporated into the Supply and Use Table design, namely reporting to Eurostat aggregated SUT comprised of 60 specified industries (aggregated level of NACE) and 60 specified products (aggregated level of the CPA).

Another important topic was to discuss and explain how the experience and the data from the existing Supply and Use table in the three countries could be utilised when establishing the more detailed Supply and Use Table for the selected base year 2000 or 2001, using the SNA-NT software.

In all the three countries the use of the SNA-NT software was demonstrated on portable PCs utilising test data. Demonstrations carried out by the experts in the different countries, showed how quickly a correction of one item or a set of items produce new balanced SUT in current prices. It was also demonstrated that a SUT in constant prices could be produced based on the current price SUT and price indices for each product. Finally, it was shown how the system can be used to compile SIOT in current and constant prices based on the SUT, using the assumption of constant market shares at a detailed product level, was shown.

In the three countries, the SNA-NT software was installed on their own desktop PCs, at the same time as the configuration database was installed and configured on a central ORACLE Database server. The countries' own IT experts actively participated in the configuration of the database. The minimum requirements for the desktop PCs were reviewed and certified.

The PHARE 2001 project
The goal is that by end of the project in September 2004, Bulgaria, Slovenia and the Czech Republic will have SNA-NT, the Norwegian software system for the production of SUT, in current use. A clear understanding of the methodologies and statistical structures necessary to use the system in the production of SUT in current and constant prices will be established.

The Norwegian NA experts and the IT specialist will complete the training in the use of the SNA-NT system for correcting and balancing the SUT and insure that all databases and communication systems function properly.

Training will also be given to cover the methodology and the working routines for updating the SUT in current prices from the base year to the following year using the SNA-NT system. Compiling the SUT in constant prices of the previous year will also be covered.

Additional SNA-NT documentation describing the detailed processes to produce annual compilation of SUT at both current and constant prices will be presented.

The IT specialist will follow up possible problems with the Oracle installation and the SNA-NT software in each of the participating countries.

Concluding remarks

The transition to a common national accounts system according to SNA93/ESA95, based on new statistical data sources; has been a very demanding task for all the countries in transition.

Different Phare projects with Norwegian experts have contributed to implement SNA93/ESA95 and improve the quality of national accounts in several CEECs countries.

A problem for the countries in transition has been that the national account experts from the countries in the west have different views on how to implement SNA93, ESA95 and what to give priority. The views of the experts are very often based on the methodology in their home country. An example is from the OECD meeting for the CEECs in 1990, where Norbert Rainer from Austria presented a paper about the role of input-output tables in the statistical programme. Implementation of harmonised input-output tables among the CEECs countries started in the 1960s; in parallel with the elaboration of MPS. Mr Rainer explained how the long experience compiling detailed IO tables and using IO for analytical purposes would be useful in their future national accounts work with the SNA. Tom Griffin from UK said in the debate that experience with compiling detailed IO tables according to the MPS would be of no use. At that time most of the EU countries had no SUT tables in their current national accounts system.

Language problems were serious in the early 1990s since Russian was the second language of the CEECs representatives, but during the transition period they have all achieved a very good knowledge of English, which has become the common language in European cooperation.

In the beginning of the 1990s the statistical offices I have been visiting in the CEECs had a difficult working situation with low salaries and a lack of efficient computers and office equipment. This situation seems to have improved dramatically during the last years, but some of the CEECs countries still have problems. The IMF report on the Observance of Standards and Codes (ROSC) for Bulgaria from December 2003 points out that the resources for national accounts, balance of payment and price statistics are not sufficient, especially in view of the intention to implement the EU guidelines in these areas.

The Phare 2000 visits to the Czech statistical office and the statistical offices of Bulgaria and Slovenia seemed to be successful. Many details specific for the different countries, which could not be addressed during the seminar in Oslo in November 2002, were addressed during these visits. The three countries we cooperated with have a much clearer view of the national accounts system with the SNA-NT software and were able to see where they needed adaptations and what the details of their future system would be.

All the three countries have decided to implement the software SNA-NT for organisation of data flows in the frame of SUT, balancing and updating the SUT and also for compiling SUT at constant prices of the previous year. They have informed us that the follow- up in 2004 will be well prepared in all the countries.

Chapter 6. Experiences from evaluation and development of National Accounts in a wider European and Mediterranean area

Erling Joar Fløttum

National Accounts, the back bone of economic statistics

National Accounts (NA) is the *backbone of statistical systems*, at least in economic statistics. It provides *statistical infrastructure to society* as framework for analysis and policy. That means a proper means to analyse and evaluate the structure of a total economy, specific parts or aspects of a total economy, the development of a total economy over time, and a total economy in relation to other total economies. Using the metaphor of a road, national accounts can be considered a road system by which statistical infrastructure to society is provided. To stimulate a better comprehension, I have attempted to use this metaphor below to some extent.

In retrospect on the 50 years history of national accounts, the last 10 years in particular have enlightened this kind of statistics by *extensive standards* to be applied uniformly throughout the international community. *SNA93 and ESA95* issued in 1993 and 1995 respectively are the *national accounts references and requirements* set as the international "road system" NA standard to meet for the NSIs as producers of national accounts. In a world of globalization, the NSIs cannot just adopt their national NA systems disregarding international rules. In Europe, ESA95 is brought into legal acts and strongly enforced upon, a commitment far beyond recommendations that were typically used in international obligations earlier. Developing countries and the industrialized countries now both fully face the same new NA standard (SNA93) conceptually. In previous SNA68, that was less emphasized, as a separate chapter suggested ways in which developing countries might adapt the full system.

SNA93/ESA95 - virtually two ways of presenting one and same standard - is a *very comprehensive and demanding international standard*. No country would be able to meet absolutely all rules set there, except probably in a very long-term perspective. Naturally, there should be different priorities to different parts of the system: "main roads", "other roads" and "connecting roads" to come back to our metaphor. The "road standards" - when it comes to practices - should be correspondingly different: a higher degree of standardization for the main roads than for other roads, and connecting roads important, especially when taking into account aspects of quality and diversity.

National NA development may have a long or short history, in Norway definitely a long one. The term national accounts was even invented here, by professor Ragnar Frisch at the University of Oslo 70 years ago. Other countries - particularly developing countries - have had national NA experiences for one or two decades only or even less. By the time international organizations were involved in NA development, *international reporting* became an obvious way to pursue a harmonized approach. The NA questionnaires used were structured to reflect the main aggregates ("main roads"), while opting for further details and tables ("other roads") and links to other systems such as the IMF balance of payments and government finance statistics, or to underlying NA foundations such as supply and use tables / input-output tables ("connecting roads").

With the present NA standards, the international organizations felt guidance was needed to provide *milestones in a reasonable order* for the implementation of the new system. Two versions of this kind of guidance scheme have already been put forward. There are great variations and dissimilarities from region to region, and also within the regions, when it comes to national status of NA viewed from degree of milestone attainment. It is useful to have in mind these factors (national development, international reporting, milestone achievement) as background and reference points when reviewing improvements and making assessments of NA later in this article.

Improving National Accounts

This article focuses on *NA experiences in a wider European and Mediterranean area*. The experiences are basically personal, from my participation as a short-term NA expert for EU agencies involving services from EFTA and Statistics Norway and position as a staff member of Statistics Norway. I shall have to give more specialized background information from these short-term projects before any "success story" or evaluation proves possible for others to judge from reading this. The two sets of projects from which I have gained my qualified experience and thus being able to write this article - *Phare projects for EU acceding countries and MED-NA projects for MED Partner countries* - are therefore described to give a proper basis for the NA assessments made in section 3.

Background and conditions for NA improvement

Improving the national accounts is always on the agenda of the NSIs. On the national level - at least in Europe - improvements are aimed at as part of the countries' revision work. The regular updating revision of NA estimates is left out; what is at stake here is the *issue of* improving national accounts when *increasing the quality and scope of the final estimates*, after provisional NA estimates have developed into NA final figures in the ordinary publication cycle.

In general, how is NA improvement usually coming about? What are the circumstances and environment in which actions and activities are performed? Key words are often *national revision policies and ad hoc international technical assistance and training*, both perhaps associated with the modern expression *benchmarking*. To understand the second group of actions/activities - the main theme of this article - it might help to dwell on the first group as well. *Statistics Norway* has a well-established agenda for the NA revision policy in Norway. The main vehicle for improvements is the *main revisions*, a handful or so carried out during the last 50 years. Most important and comprehensive have been the main revisions *aligned with implementing new international standards*, in particular SNA93/ESA95 in the 1990s and SNA68 in early 1970s. Also important have been main revisions of NA estimates to adjust to *new statistical sources or new methodology* in using existing statistics, such as the recent one carried out in 2002. *Enlarging the scope* is a third kind, for which there are numerous examples over the last two decades in Norway, such as establishing new quarterly national accounts, labor accounts, satellite accounts and more elaborated emphasis on institutional sector accounts.

Back to the second group of actions/activities: international technical assistance and training. From a position of advanced national accounts practices - *Statistics Norway staff has been asked to assist* in helping other countries in improvement work on NA. This also happened in the past, typically involving countries of the third world on ad hoc basis. Technical assistance from Statistic Norway to African countries (through NORAD) is still on the agenda in the field of national accounts, but outside the scope of this article.

Instead, I will address new NA assistance developed since late 1990s in terms of regional programs geographically closer to us: *the acceding countries to EU (mostly in central and eastern Europe) and the Mediterranean countries*. My description is based upon involvement and experience as an expert into the programs of Phare and MEDSTAT respectively.[25]

Eurostat is at the centre of these projects. The "internal" work on improving NA of the EEA countries is held up as target for the acceding countries as they very soon shall be facing challenges and requirements of a similar nature as the EEA countries. For the Mediterranean countries - some of them also EU acceding countries - Eurostat may foresee some sort of long-term political development, but the statistical ambitions set for this group of countries are naturally as yet much more modest than for the acceding countries. *Eurostat work of the EEA countries* in improving and harmonizing NA estimates

[25] It should be mentioned that other staff of Statistics Norway has been involved as well in expert projects of these programs: Liv Hobbelstad Simpson (see separate article) and Knut Ø. Sørensen in the NA projects, and Hans-Kristian Østereng in the field of external trade statistics (see separate article).

has been to look into issues that may create deviations from the ESA95 standard and the adjacent legal acts. This implies and requires the NSIs to provide very comprehensive documentation to Eurostat - so-called *GNI Inventory on ESA95* - on how GDP, GNI and other main NA aggregates are estimated in the respective countries. From these comprehensive inventories (say 400 pages per country) and bilateral country visits to discuss and clarify the information therein, Eurostat makes an assessment on the quality and conformity to the ESA95. The formal mechanism then leads to reservations on designated parts of the NA estimates, with requirements to the NSIs on improving the quality of the given estimates. When this improvement work has been completed satisfactorily, then reservations placed are to be lifted by the EU. In summary, this manifests how Eurostat and the EU highly prioritize ongoing work on increasing quality of and comparability between the European NA estimates.

*Eurosta***t** has a similar procedure in mind for the acceding countries as well, although timetables are not precisely drawn up yet. However, preparatory improvement work has been going on for many years already in the *Phare programs***,** both as multi-beneficiary program for Statistical Co-operation and other programs within the umbrella of Phare. In the *Phare multi-beneficiary programme* there has been a number of projects, among which *non-financial National Accounts* (nfNA) *projects*. Steps were taken by Eurostat back in 1996 to assess and improve the quality of nfNA data in terms of reliability, exhaustiveness and correspondence with ESA95 and related Commission Decisions. From the issues concerned, *11 different NA projects* were listed for the Phare multi-country program for budget years 1997 through 2000 (and to be continued into Phare2001 and 2002). Following countries participated: Bulgaria, Cyprus (funded outside Phare), the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia. Over these recent years, Statistics Norway staff has been involved in providing experts into four of the NA projects: *Private household consumption (A1), Estimation methods at constant prices (A2), Dwelling services (A8) and Input-output tables (A9).*

EU and Eurostat have also the technical supervision in the *MED-National Account Project (MED-NA)* of the MEDSTAT program. After several identification missions in the MED-partner countries (Algeria, Cyprus, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, Palestine Authority, Syria, Tunisia and Turkey) in 1996 and 1997, the MED-NA was added to other projects of the program when approved late 1998. *Specific objectives* were defined to (1) produce and exchange a certain number of comparable macro-economic aggregates between MED Partner and the EU and amongst the MED countries themselves, (2) improve the harmonization of the national accounts figures in the MED countries, and (3) disseminate them on an annual basis to users and exchange them with the EU. The overall objective behind was that use of harmonized macroeconomic data is believed to facilitate the elaboration and monitoring of the national economic policies. MED-NA was not sliced into sub-projects like in Phare, but rather organized in three parts - *assessment of the current situation and the needs, training and technical assistance and self-evaluation of the results* **-** and defining expected results.

Experience in Phare projects

Then, what follow is the contents of my experience as short-term expert in Phare projects. I was contracted for altogether 7 combinations of *project areas, countries* and *periods*:

a. Constant prices and Cyprus (in period 1999-2000)
b. Constant prices and the Czech Republic (in period 2002-2003)
c. Constant prices and Estonia (in period 2002-2003)
d. Constant prices and Lithuania (in period 2002-2003)
e. Private household consumption and the Czech Republic (in period 2002-2003)
f. Private household consumption and Estonia (in period 2002-2003)
g. Private household consumption and Lithuania (in period 2002-2003)

Project item A was work with Cyprus on estimation methods at constant prices (in Phare1997 round), the aim of which was to improve the basis of the Constant Price estimates in Cyprus, thereby improving the provision of GDP data in real terms. I was involved in the Cyprus part of timetabled activities for 11 Candidate Countries (CCs). Interim and final reports for Cyprus were submitted. Two missions to Nicosia were undertaken, apart from expert meetings in Luxembourg and a workshop for all

participating countries held in Warsaw near the closing of the project. During the two missions, a detailed review of the Cypriot practice and plans for improvements was discussed with the counterpart, also providing advises on technical issues that were raised. The contract stated a workload of 20 days (per country).

Project items B, C and D were work with the Czech Republic, Estonia and Lithuania on estimation methods at constant prices (in Phare2000 round), the aim of which was to continue previous work in Phare1997 round on achieving practical results, i.e. more reliable and more comparable set of Constant Price figures in each CC. The project aimed to assist the countries in the implementation of ESA95, the Commission Decision on Constant Prices and of the methodological recommendations in the Handbook on Constant price measurements. This should significantly improve the basis of Constant Price estimates in the CCs. I was involved in analysis, preparations for workshops and various reports to be completed and submitted. One mission to each of the countries (to Prague, Tallinn and Vilnius) was undertaken, apart from expert meetings (in Luxembourg and Vienna) and one early workshop (in Luxembourg). During the three missions, I met with counterparts and other subject matter people in discussing national practices and plans for improvements, usually in a group setting, and also giving responses to technical issues that were raised. The contract stated a workload of 12 days per country, i.e. altogether 36 days.

Project items E, F and G were work with the Czech Republic, Estonia and Lithuania on private household consumption (in Phare2000 round), the aim of which was to continue work in Phare1997 and later rounds on achieving practical results, i.e. to secure a more systematic, reliable, consistent and exhaustive compilation of NA figures in support of the pre-accession activities of the EU institutions, as well as various other national and international needs. Like above, I was involved in analysis, preparations for workshops and various reports to be completed and submitted. One mission to Prague was undertaken, apart from one expert meeting and two workshops held in Luxembourg at the start of the project and in Nicosia near the end. During the mission, I met with counterpart and other NA people, and most of the time was spent on discussing how to deal with issues that were new to CZSO and to help out in drafting their country report. The contract stated a workload of 10 days per country, i.e. altogether 30 days.

Experience in the MED-NA project

What now follows is my experience as short-term expert in the project of MED-NA. I was contracted for altogether 6 combinations of *project areas, countries* and *periods*:

h. Initial assessment and needs in Israel (July 2000)
i. Initial assessment and needs in Turkey (July 2000)
j. Synthesis report of assessment and needs for 8 MED countries (late 2000)
k. Technical assistance mission in Cyprus (2001)
l. Technical assistance in three missions in Turkey (2001-2002)
m. Final synthesis report of MED-NA I for 12 MED countries (early 2003)

Project items H and I contained work on assessing the national accounts in Israel and in Turkey at the start of the MED-NA project, known as "Feasibility study and preliminary choices", i.e. to assess the current situation with a view to reach the specific objectives of the MED-NA project. I made studies of the existing sources and methods, and proposed concrete short-term actions to make it possible for the NSIs to achieve milestones recommended for the implementation of SNA93 and to meet the needs of the NA users. Two missions were undertaken to Jerusalem and Ankara in July 2000, each for one week. During the two missions, a number of meetings were arranged, both in the NSIs and outside (Ministry of Finance, the Central Bank and State Planning Organization in Turkey). Other experts undertook assessment missions to the other MED countries, except Lebanon (not possible) and Cyprus and Malta (already carried out under Phare programme). Country assessment reports were prepared during summer and autumn 2000.

Project item J was concluding work of "Feasibility study and preliminary choices", i.e. working out a *synthesis report of assessment and needs* based on the individual country assessment reports. I was selected to undertake this work - written in English - with some support from another expert providing information on the French-speaking countries. It was presented in a Eurostat meeting with the MED-NA coordinators in December 2000; it contained information for 8 MED-countries, supplemented by a late appendix for Egypt.

Project items K and L were parts of training and technical assistance (TA) work following the preliminary choices agreed with the countries at the December 2000 meeting. Almost 20 training activities and 30 technical assistance (TA) missions were undertaken under the MED-NA project in the period from beginning 2001 to end of 2002 (and more still until end of project - March 2003). I was involved in four TA missions - one in Cyprus and three in Turkey, while the political circumstances in the Middle East prevented me from taking on similar missions to Israel and Palestine Authority at that time. My *TA missions for Cyprus and Turkey* are specified further below:

K1	Cyprus	Institutional units and sector accounts (10-19 September 2001)
L1	Turkey	Defining a Plan for the Phased Introduction of ESA95 and Adapting Government Accounts (18-26 June 2001)
L2	Turkey	Evaluation of sources for expenditure approach to GDP (14-23 January 2002)
L3	Turkey	Choices of methodology on SUT and Input-Output tables (10-18 June 2002)

During the *mission to Cyprus*, working sessions with the counterpart and other NA people were held, also discussing aims and strategy issues for the ISA with directors of CYSTAT including Director-General P. Philippides who also had the opportunity to discuss my draft report - including proposals for ISA - presented at a closing meeting of the mission. During the *three missions to Turkey*, a number of meetings and discussions were held and much time was spent on technical issues that were raised. A follow-up visit to the Ministry of Finance was arranged, and at the third mission a half-day lecture was given in the spirit of training the whole NA staff on main SUT issues, and also presenting the Norwegian SNA-NT software to illustrate how we have handled SUT in practice. Draft mission reports were presented before leaving in all three missions, and in particular this was important in the first mission, when I felt a quick reaction on issues of strategy, ambitions and timetables was needed to my draft master plan for Turkish NA.

Project item M contained work of a similar kind as project item J above, but was more comprehensive to describe in three parts (Introduction - Results - Data availability and assessment of results achieved) the final outcome of the MED-NA project: the *final MED-NA I report*. Eventually, the report was not final but provisional in a sense as a continuation was foreseen into a project of MED-NA II. I used all project documentation available, and again got some support from a French expert. The full report of 200 pages was written during December 2002 and January 2003 and presented at the closing meeting of MED-NA I, held in Valletta, Malta in March 2003.

Assessments on improvement work

General assessment

The reports of most 13 project items listed in section 2 contain elements of *assessments*, directly in four of the MED-NA projects, but also more indirectly in the Phare items. In assessing the country or regional situation in relation to improvement NA work undertaken, I shall also come back to the "road" metaphor, most interestingly whether and how "main roads" have been improved, and whether "connecting roads" have been developed. In dealing with these questions, the *time aspect is utmost important*. Assessments are reflected to as *achievements so far*, i.e. direct evidence. But since significant

improvements in NA most often need much time for implementation to take place, favorable assessment is also linked to *plans for future* and whether *realistic timetables* have been worked out. In this respect, emphasis may be on a *master plan* for national accounts and *plans/measures* distinguished *for the short-term, medium-term and long-term development*.

For a systematic review of the project items from the point of *assessments and personal experience*, here follows a summary description item by item.

Assessing the Phare projects

Constant prices - Cyprus (A)

Constant price estimation in Cyprus in Spring 2000 highlighted the availability of constant price NA data for both the production and expenditure bases, applying double deflation in general, using a fixed 1995 base, and a good range of price data available. Wholesale price index was under examination, base year as well as structure. Work on constructing supply and use tables (SUT) had just started, and annual chaining was likely to become an issue following that work. *Project work undertaken* during Phare1997 enabled a number of improvements to the constant price figures in Cyprus. As an intermediate solution, weighted wage indices to deflate certain services were attempted to replace the practices of using global indices (total CPI, GDP price index) or extrapolating using indices of employment.

The experts *circulated various papers* to the CCs on constant price estimation procedures, the main purpose being to provide interim solutions in advance of the Eurostat recommendations and legal commitment. These papers were very much appreciated by the CCs. Greater emphasis to management issues was felt needed, as work on *major tasks such as SUT and annual chaining* were *not much progressing*. Until SUT framework was to be completed, **the "main road picture"** in Cyprus should be *stepwise improved*, while *far from reaching the foreseen European standard* by end of project. While **diversity** had in fact been *established,* it might be added that *the network of "connecting roads"* suffered considerably *in lack of good balancing procedures*.

Constant prices and the Czech Republic (B), Constant prices and Estonia (C) and Constant prices and Lithuania (D)

Constant price estimation in the Czech Republic (CR), Estonia and Lithuania in 2003 highlights the availability of both production and expenditure NA data, where CZSO, SOE and Statistics Lithuania all satisfy the first two main principles of constant price estimation (on details, formulas of indices). They all use fixed base of 2000, but annual chaining is already under way in CR. Production-based figures of GDP are derived by double deflation in the CR, being tested in Lithuania, while so far mostly derived by single deflation in Estonia. Output deflators are not always adequate (many C-methods), direct volume measures are recently introduced in CR in transport, non-market education, non-life insurance and FISIM, and in mining, electricity, sale of motor vehicles and most of transport in Estonia. In CR, modified 4-digit CPA level is now being followed for deflating, implying proper balancing and consistency treatment with a more detailed approach and SUT, i.e. work on SUT is presently being intensified and would be improved in terms of details and software in near future (technical assistance from Statistics Norway). In Estonia, work on the 2000 benchmark SUT is under way, somewhat behind expectations and SUT at constant prices has not been worked out for any year. In Lithuania, SUT for 2001 in constant prices will be available in 2004, one year after SUT in current prices for the same year, following SUT experimental tests where number of products has same details as the industries (around 90). Annual chaining is problematic until a SUT framework has been established, e.g. in Estonia it may be introduced by end-2005 with a reasonably detailed SUT frame (between 100 and 150 industries and some 400 products).

Project work undertaken during Phare2000 in *the Czech Republic* included general work on more detailed structure and a new SUT, and more specific, new deflators non-life and life insurance, pension funds, FISIM, computers and software, non-market education (output measures), special area of final

households' consumption, exports and imports of services. In *Estonia, project work* was confined to some experimental estimates on revised price indices for exports and imports of services.

CZSO provided a *summary tabular assessment on timetable and methods proposed for improvements* of C-methods, setting up work program, although a specific timetable beyond 2004 was not been attempted apart from indicating 2006 for improving prices of services for foreign trade. CZSO made *proposals for meeting new Commission Decision* in terms of necessary improvements of price collection, moving to less aggregated deflation and from C-methods to B-methods. Explicit plans to obtain new deflators were made for computers and software, construction output and services of various kinds, plus exports and imports of services, also processing (important in Czech Republic). Further work needed is related to time series of SUT in current and constant prices with enough detailed structure, in order to have annual chaining established soon.

SOE *proposals for meeting new Commission Decision* included necessary improvements of price collection, moving to less aggregated deflation and from C-methods to B-methods. Two important improvements - annual chaining and double deflation - are pending. Explicit plans to obtain new deflators are made for construction output and services of various kinds, plus deflation by more detailed PPI in manufacturing (and sometimes quality adjusted). Work on output volume measures for non-market services is planned for 2004 and 2005. The main problems areas are found in market services, in separate deflation for disaggregated construction assets and other GFCF estimates, detailed deflation of market output in general government, volume projection for VAT, information for imputed rent, narcotics and prostitution, and appropriate indices for freight and other transport services.

Statistics Lithuania claimed *new price data were most strongly needed for market services and construction*, but also for exports and imports of goods (actual prices to replace UVIs) and for exports and imports of services. Education will have first priority in moving to output measures for non-market individual services.

Private Household Consumption and the Czech Republic (E), Private Household Consumption and Estonia (F) and Private Household Consumption and Lithuania (D)

Private Household Consumption (PHC) accounts for approximately two-thirds of GDP. Reflecting this importance and aiming at significantly improving the base of the PHC estimates in the CCs, they agreed in Phare to complete a set of tables, subject to their available sources and methods, known as *analytical tables*. Furthermore, more than twenty different problem areas were identified. In the Phare2000 PHC project, the objective was to update and improve the work done in Phare1997/1999 projects, i.e. to improve the quality of the PHC estimates in compliance with ESA95 and specific recommendations for PHC estimates. The outcome of the project included three important points: (i) amended analytical tables, (ii) comprehensive description of sources and methods used for the PHC estimates, and (iii) introduction of a more recent reference year, preferably 2000.

All three countries submitted analytical tables for 2000, CR for the first time. Use is made of COICOP classification at 3-digit or 4-digit (Estonia) level, estimates are obtained using the bottom-up approach and for most items more than one independent estimate based on different data sources is derived. Although main source of estimation is household budget surveys (HBS) in all three countries, many sources are used in an adjustment process - notably retail sales data in Estonia and Lithuania - arriving at best estimate for each COICOP group accordingly. In CR, *other improvements* made referred to re-weighted HBS data, estimates for prostitution and imputed rent being changed. In Estonia, eight points were listed under other improvements (population number, re-weighted HBS data, persons living in institutions, narcotics and prostitution (quite exceptional), tips for taxi drivers, financial services, clothing and footwear, and service charge concept for insurance service). Some significant progress thus has been reached by SOE, in addition finalized work on imputed rent (also the case in Lithuania). Commodity flow method is however not used in Estonia for PHC estimates. Although Estonia has a

record of working out best practice analytical tables, more improvements are expected when SOE has gained some experience from SUT-generated procedures. The latter also applies to Lithuania, where six points of other improvements have been listed (new analytical tables, persons living in institutions, information from large enterprises on water supply, sewerage and electricity, uniforms and meals provided by the army, licenses and fees, and tips).

Assessing the MED-NA I project

MED-NA as a whole (M including H-L)
I shall not include other MED countries than *Cyprus (CYSTAT)* and *Turkey (State Institute of Statistics - SIS)* - where I had my direct experience - in assessing the MED-NA project. Nevertheless, it may be interesting to extract *some data across all* the country practices (early 2003 data) as a start.

Leaving out Lebanon (information not available), *all 11 countries* compile *GDP from the expenditure side*, Israel and Palestinian Authority providing all 10 aggregates to the table. NA figures according to SNA93 were just available in two countries, Israel from 1995 and Palestinian Authority from 1994 (no former NA experience). NA time series for 1990-2001 were available in 8 countries. Practices were weaker for the constant-price table than for the current-price table, e.g. NA time series for 1990-2001 only provided by Cyprus, Israel, Tunisia and Turkey in constant prices. *All countries except Syria* compiled GDP from the *production approach*. Israel, Palestinian Authority and Tunisia provided all 12 aggregates to the table in current prices, and these three countries also had the best performances as regards corresponding table at constant prices.

Based on MED-NA internal evaluation sheets (or indicators) and questionnaire on NA aggregates (providing figures), the end-2002 analysis on SNA93 Accounts or scope gave *high compliance on scope to Israel, Palestinian Authority and Tunisia*, and at the other end, *low compliance on scope to Algeria and Syria*. Furthermore from the analysis of SNA93 Conceptual compliance, *high conceptual compliance* was given to *Israel, Morocco and Tunisia*, while *low conceptual compliance to Algeria, Malta and Turkey*. Finally, from the end-2002 analysis of SNA93 Classifications, *high compliance on classifications* was given to *Egypt, Israel, Malta and Morocco, while low compliance on classifications to Syria.*

TA projects in Cyprus
Throughout the MED-NA project, *several TA missions* were devoted to establishing **q***uarterly national accounts (QNA)* for the first time in Cyprus (Italian expert) and I undertook one mission on *institutional sector accounts (ISA).* A complete QNA estimation from the supply and demand side of GDP was developed, and most QA targets planned for were accomplished. In the ISA, provisional sector account for general government (including government consumption expenditure) was target for short-term work by end of 2002, with full range including balance sheets and financial account by end of 2004. For gross fixed capital formation, changes in inventories, exports and imports, some emphasis has been directed through the TA missions on QNA, while no particular emphasis was directed at *household consumption expenditure* in MED-NA. However, upgrading the use of the household budget surveys has been pursued through the Phare project and in a bilateral project with Statistics Norway. The latter makes it possible to move into a direct estimation and away from heavily reliance on the commodity-flow approach (indirect estimation). The main breakthrough is direct use of the 2002 Household Consumer Survey for NA (with COICOP introduced). The TA missions on QNA and ISA both addressed *government final consumption expenditure* and the new COFOG.

CYSTAT expressed that overall objective and specific objectives of the MED-NA program was in line with those of Cyprus and the efforts of harmonization with EU during the past few years. The choice of QNA and ISA was in fact made in consultation with Eurostat, and these TA missions were considered very useful. Benefits were obtained indirectly also, as all relevant divisions of CYSTAT and main data users (Central Bank, Planning Bureau, Ministry of Finance) were brought together, thus giving a better understanding among all involved parties of the usefulness of the required data etc. Very good

organization of the project was another comment made. Significant lack of resources in CYSTAT seriously undermined the implementation efforts, however, filling gaps with temporary staff to considerable extent.

From the cross MED-NA analysis carried out on basis of the SNA-related information available - helped by a numerical evaluation scheme in terms of scores which I created for better undertaking this kind of assessment including all MED countries - I found for Cyprus *fair compliance on scope* (overall score of 2.4 on a scale to 3), *fair conceptual compliance* (2.0), and *fair compliance on classifications* (2.4). That gave a grand overall score of 2.3, which suggests Cyprus has a *fair overall compliance to SNA93* so far. Compared to other MED countries, the position of Cyprus was *positive on data* and basically *on average in terms of methodology*. It was somewhat less elaborated when compared with the EU reporting program (methodology, lack of COFOG data). *Major challenges* for further improvement *in the near future* should lie in developing a *more detailed approach, involving SUT* framework and moving away from indirect compilation of household consumption expenditure by *using household budget survey data*. More detailed approach would also make *annual chaining* possible**.** COFOG should also be implemented.

TA projects in Turkey

My first knowledge of Turkish NA I acquired during the assessment mission back in 2000. Industrial surveys dominated, while surveys for services had improved during the 1990s. Still, indirect methods played a relatively strong role and new basic statistics needed for the SNA93 implementation and new concepts had so far not been dealt with. There was also a general need for more product data directed for SUT. *The master plan* I had established in *the first TA mission* involved a long list of issues for the production as well as income and expenditure approaches to GDP, constituting also a timetable for the short term, medium term and for the long term. In MED-NA project also a timetable and recommendations for long term SUT work was elaborated. I undertook two more TA missions - one on *the expenditure approach* and one on *SUT*. Compensating for lack of independent sources for private final consumption expenditure was one important target, by anticipating that annual HBS would allow for an item-by-item evaluation combining HBS data with other main sources to be made instead. And COICOP could be implemented in due time. On government final consumption expenditure, adapting government accounts in NA was also taken up. Gross fixed capital formation was also in need for more direct estimation, i.e. annual surveys by industries to be utilized, and construction statistics to be further developed to meet requirements as a direct source for private construction in the longer run. Furthermore, short-term indicators were suggested - quarterly investment data designed for manufacturing industries and retail sales index for household consumption. The SUT mission also conveyed to SIS valuable information on the long-established experience in Norway in this field.

SIS expressed that overall objective and specific objectives of the MED-NA program were very good for starting the project. The assessment mission in 2000 was very important and useful. The master plan prepared in 2001 was very detailed and very logical for implementation of the new system step by step. Other missions on specific areas (government accounts, expenditure accounts and SUT) were useful as well. Training courses were very beneficial for SIS staff, while uncertainty about NA software was a concern to SIS. Benefits were obtained indirectly also, as it improved the dialogue within SIS and especially between Ministry of Finance and SIS, also with Central Bank and State Planning Organization. Very good organization of the project was another comment made, activities carried out very useful, good in order and steps taken very logical. No human resource constraint was expressed, though more experienced people would be needed in NA. Financial constraint sometimes could however be a problem.

From the cross MED-NA analysis carried out on basis of the SNA-related information available, I found *fair compliance on scope* (overall score of 2.1), *low conceptual compliance* (1.4), and *fair compliance on classifications* (1.8). That gave a grand overall score of 1.8, which suggests Turkey at present has a *fair overall compliance to SNA93* so far. Compared to other MED countries, the position of Turkey was *positive on data but somewhat blurred on methodology*. It was also less elaborated when compared with

the EU reporting program (lack of COFOG and COICOP data). *Implementing the established master plan* in the years ahead should have main focus and would significantly improve the current SNA93 compliance. Major challenges should lie in developing a *detailed approach, involving SUT framework* - also make annual chaining possible - and *moving away from indirect compilation in the expenditure approach***,** in particular for household consumption expenditure by using household budget survey data. COFOG - with revisiting the government accounts - and COICOP should also be implemented.

Concluding remarks

TA useful for harmonization
I have emphasized in this article the *long-term aim and efforts for a common NA standard* for all countries, to make conditions work for *harmonized and comparable NA data* between countries, and the NA to provide good *statistical infrastructure to society. Statistics Norway* has played an important role in international NA work, on the NA international standards as such, on making them work both at home, and abroad by providing technical assistance to other countries. The article brings to attention that technical assistance is definitely also at stake *in a wider European and Mediterranean area*, not just for the typical third world countries as often being focused upon. It is with some pride I have suggested that Norway has obtained an advanced position in the developed world as regards NA, and therefore has valuable experience and know-how to offer other countries.

Today's efforts on right track
In the article, I have shown that the *"middle distance countries"* has benefited from the organized technical assistance provided by Statistics Norway experts in a cooperative European effort that some day could develop into a true common NA standard practice in a larger area in future. The increased qualitative aspects of today - laid down in legal context in Europe, use of comprehensive data systems and best practice framework such as SUT - tell us that *strong efforts and good investment are being made at this point of time* to have an NA infrastructure for future, not just for the main roads, but other roads and connecting roads as well.

EU enlargement makes harmonization easier
Sometimes and in some areas, a leap forward is easily detected, given the push and motivation for catching up in the new EU countries at this point of development. That is most encouraging, and given the fact that the EU legal framework and the EEA model practice would apply from now on. On the other hand, the *heterogeneity of the Mediterranean countries* in terms of SNA93 compliance of today - and the lack of abovementioned framework and model practice - makes it *difficult to foresee a similar harmonized progress in that area as seen in the EU acceding countries* in the years to come. This may apply to European non-EU countries on Balkan as well.

Chapter 7. Foreign Trade Statistics in Central and Eastern Europe moving ahead

Hans Kristian Østereng

Introduction

Foreign trade statistics (FTS) are extremely important for all countries in monitoring the economy, but especially for developing countries and those in transition in the early phases of stabilizing and improving communication and trade with the rest of the world. Balance of Payment statistics and FTS are the main statistics for economic transactions between the countries and therefore faced the need for international standardization at an early time. FTS are now well harmonized. Almost all data come from administrative records, Customs declarations, which are recorded by internationally harmonized declarations and standards. The direct uses by national statistical institutes (NSI) are for compiling import/export statistics. But data from trade statistics are also essential indirect information for other components of national accounts such as for various price indices.

During the last years, both the general globalisation and especially the economic policy of the European Community and the European Economic Area require an even more harmonized and accurate foreign trade statistics. Eurostat has been actively involved in this process both by developing and distributing a general software Eurotrace and by providing financial and technical support to developing countries and countries in transition. Statistics Norway has been an active participant in this technical support to countries in transition with special emphasis on assisting not only the NSIs but the broader statistical system including the custom authorities. At the same time we have also cooperated with developing countries in strengthening the statistical systems for FTS, but this article focuses on land in transition in Central and Eastern Europe.

The cooperation approach for this work has been a series of short-term missions, what we now call long- term commitment based upon short- term visits. The article may give the reader a chance to judge how successful this cooperation has been, but we find this approach where we use our own long- term commitment with short- term visits in a statistical subject with high policy pressure and within properly staffed and educated NSIs quite interesting, definitely for FTS in other countries, but potentially also for other statistical subjects.

FTS users, harmonization, sources and quality measures

FTS users

Governments and state administrations together with private businesses need data on imports and exports and appreciate in particular the very detailed *commodity by country* information. Monthly updates with high timeliness make FTS very useful. The statistics are not based on data collection through surveys, but a total count of every single shipment as registered by Customs declarations. FTS are indispensable for trade policy and trade agreement authorities. Especially in countries in economic transition, the IMF and the World Bank demand quality improvements of the FTS data rapidly, since trade in goods is a main input to the Balance of Payments and the National Accounts. For these institutions, macro statistics are of utmost value for deciding on loans to developing and transition countries. If the Customs declarations' quality is good enough, the data may in addition be used to measure prices of imported/exported goods, enabling computing of unit values in current and constant prices for use in the National Accounts.

FTS harmonization
Since 1988 Customs' declarations have served as a Single Administrative Document (SAD), based on an international convention signed by most countries. The commodity classification used in the Customs Tariff is based on a widely spread standard named HS (Harmonized system). The FTS commodity nomenclature is identical to the Customs tariff's in all countries. The WCO (World Customs Organisation) has also agreed on standardization of common codes for many of the SAD boxes.

Various FTS statistical sources
National FTS information is published via the Internet by most NSIs in the world. The EU's common FTS are available via the COMEXT database maintained by Eurostat, showing figures based on a Special Trade[26] definition. Each Member State is free to publish its own, national FTS, and some of them use a definition (like the General Trade[27] definition in Denmark) where the FTS figures differ from the COMEXT data. In addition, the UN's Statistical Division is responsible for the COMTRADE database. These figures are normally similar to the nationally published figures[28]. The IMF collects and publishes international FTS (Direction of Trade Statistics) quarterly and annual figures by country in US$.

FTS Mirror statistics
Although declarations are internationally harmonized, the 'corresponding' export and import declarations are not *reconciled* i.e. not matched and compared. This means that in reality, there are often significant discrepancies in export - import figures between two trading countries, despite the fact that many users expect them to match. Such export - import comparisons are often referred to as *mirror investigations / statistics*, and users frequently interpret the discrepancies as errors in the data.

Four projects in Central and Eastern Europe

The main issue in this article is to present experiences from four of the FTS support projects. All work referred to in the article is based on short/medium- term contracts (6-18 months) with no mission longer than two weeks. The advantage with this kind of assistance is flexibility of the different action types; as study visits, consultancies, seminars, working groups and hosting trainees. However, the daily contact of a permanent long-term consultant might increase the chance for a stronger impact on organisational and administrative matters in receiving institutions.

Project 1: FTS in the Baltic region - the PHARE program
The first project focused on the Baltic States[29], starting in September 1992 and ending in June 1999. The contractor was Statistics Norway and the financial source the *EFTA Statistical Adviser* in Luxembourg. A third, independent body was responsible for the final budgets and daily accounting, the *CESD-Communautaire a.s.b.l.* in Luxembourg. This institution was responsible for signing the contracts on behalf of the EFTA Adviser and/or Eurostat. Planning and implementation was the responsibility of the contractor. The activities proposed, like consultancies, seminars, working group meetings, study visits etc. were agreed upon in an annual action plan.

The main objectives of the project were in statistical work like international (EU) harmonisation and short- and long- term quality improvements in a broad perspective. Another objective was management improvements and educating leaders within the institutions. The monitoring was done by reporting activities to the EFTA Adviser, to the top leaders in all concerned institutions and to the *Phare Multi-country statistical Cooperation Unit* (the PCU, located in Vilnius, Lithuania).

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[26] *Special trade* means that warehousing and free zone activities are excluded. Only goods taken into free circulation are imports, and nationalized goods entering warehouses/free zones are exports.
[27] *General trade* means that warehousing and free zone activities are included in the FTS figures
[28] For EU/EFTA countries, identical to the COMEXT data.
[29] Estonia, Latvia and Lithuania

Project 2 Tariff Information from Eastern Europe
The second project was launched by the EU Commission, and is named Tariff Information, starting in May 1999 and ending in June 2003. EUROSTAT Unit C-4/C-0 External Trade[30] was responsible for the professional content of the programme. The financial source and contractor were the same, the EFTA Statistical Adviser and Statistics Norway. As contractor Statistics Norway drafted plans and was responsible for the implementation. The project included consultancies in all 12 candidate countries plus Macedonia and Albania during December 1999 and 2000. The main objectives were to harmonize the FTS and Tariff Information to the EU Regulations. The monitoring was carried out by EUROSTAT, Unit C-0.

Project 3 Phare Transforming Bulgaria
The third project presented is focusing on cooperation with the National Statistical Institute in Bulgaria. Work started in the beginning of 2000 and is still going on. EUROSTAT Unit A-5 Technical cooperation with PHARE and TACIS countries[31] is responsible for monitoring the projects and for the professional outcome. The foundation source is the PHARE funds. Statistics Norway applies directly to Eurostat, and grants for financial support given directly to the contractor (Statistics Norway) will be singed under contracts for no longer period than a maximum of one year. The contracts may be prolonged after a new application.

The objectives were to build a new unit value index system for import and export values in current and fixed prices, and to develop new methods for converting CIF import values into FOB values. The index calculation system should be developed along with a new Supply and Use table system for the National Accounts. The contractor had to define all project plans and goals in agreement with the beneficiary (the NSI in Bulgaria). There were no problems making agreement with the NSI as we had a common understanding of the goals from the very beginning.

Project 4Preparations for CARDS programme on the Balkan
The fourth project presented is the preparatory assessment for the CARDS programme for the Balkan countries Croatia, Yugoslavia, Bosnia and Herzegovina, Macedonia, Albania and Kosovo. The EUROSTAT Unit A-5 launched the tender and has been responsible for the output. The financial source was the EFTA Statistical Adviser and the contractor was Statistics Norway.

The CARDS programme is in a way similar to the PHARE programme, but limited to the Balkan countries. Because of the well-known tragedies that hit the people in this region, the statistical development efforts were not able to start much earlier. The basis for this programme is an EU Regulation[32]. The objective for the FTS was to establish a basis for future support and to discuss what strategy to chose from the EU side. During 2002, consultancies were carried out to all six countries for fact-finding assessments and to report current situation and propose future cooperation objectives. The preparatory work was concluded in a final seminar in Luxembourg in June 2003.

Background: the changes in Central and Eastern Europe

The fall of the Iron Curtain changed the life for millions of Central and Eastern Europeans. Transformation started in government institutions in direction of Western European standards, including national statistical institutes. Central and Eastern European states and the former Soviet Union had much in common. The NSIs were all under strongly centralized administration from Moscow. The FTS data source was questionnaires collected quarterly directly from state-owned companies involved in exports and imports. After the fall of the Iron Curtain, the newly independent states had to establish their own custom system, and the basis for future FTS data collection changed. The former Soviet-

[30] After 1Nov , 2003 named Unit F2
[31] After 1 Nov 2003, Unit F3
[32] COUNCIL REGULATION (EC) No 2666/2000 of 5 December 2000

designed declarations were replaced by the international declaration named SAD and Western European standards to serve as the new FTS data source.

For Statistics Norway as for other Western European NSIs, 1992 became quite a significant year. This year the work with the new Central and Eastern European states started under the comprehensive EU/EFTA PHARE programme to rebuild the statistical systems. EU membership was at an early stage a main objective for the governments in question, and thus an important prerequisite for the FTS transition. During the next years, all twelve countries had sent their application and then became so-called c*andidate countries* to the EU.

Despite the huge differences in society infrastructure and economic structure, EU membership has proven to be a realistic goal. At The European Council meeting in Agora in Athens 16 April 2003, 10 of the candidate countries were accepted to enter the EU as members from 1 April 2004, changing their status to a*cceding countries*. Only Bulgaria and Romania were left behind, with a prospect to be included in 2007.

In January 1995, Sweden, Finland and Austria left the EFTA and became EU members, leaving only Iceland, Norway, Switzerland and Liechtenstein as EFTA members. Despite this, the EFTA countries remained members of Eurostat and EFTA statistical experts are accepted equal to the member states' experts and continued to cooperate closely with EFTA Statistics Advisers. The contribution from EFTA funding after 1995 has been significant for many EU projects and a very valuable support. These funds have allowed Eurostat to keep up the pace and progress in several development projects.

Project 1 FTS in the Baltic region - the PHARE programme

The PHARE programme started in 1992. FTS statisticians in Statistics Norway and Statistics Sweden prepared for a first event with a one-week seminar in Vilnius for the three Baltic States, with both Customs and NSI representatives present. A wide spectrum of FTS topics was presented, with focus on harmonization and international standards. The work done during five long, exciting days were very well received, and the seminar became a good start for 5-6 years of cooperation between Statistics Norway and the NSIs in the three Baltic countries.

The Baltic people in general including the NSIs were very motivated to learn from Western Europe. During 1993-1998 a series of study visits were arranged to Norway, Sweden and Denmark in order to learn by studying these countries' systems, and how they were functioning. These visits usually lasted up to one week and included lectures and discussions. A main objective was to show the participants examples on how to construct and implement statistical systems. Another objective was to give the participants new experiences and improve their skills as leaders. These visits gave the Baltic statisticians inside knowledge about both Scandinavian customs and statistical systems.

Technology
In 1992-93, Soviet-produced mainframes were still working in Tallinn, Riga and Vilnius, but personal computers and network solutions were about to take over. The Customs in all these states started from scratch, after models from Western European Customs. This took place simultaneously with the strong development in the field of computer technology. New systems were in place impressively fast. During the first years, paper declarations were mostly in use. In Latvia, the conversion to electronic data transfer of Customs declarations took longer time than in the two other states. Busy clerks typing in a narrow room produced the FTS data origin.

The Customs
A top priority of the project was having Baltic Customs representatives taking an active part in all meetings, consultations and study visits bringing Scandinavian and Baltic Customs together, showing the value of good cooperation between institutions. The main topic at the FTS Baltic seminar in

Lohusalu outside Tallinn in 1994 was to discuss variants of price controls in both the Customs declaration systems and the statistical system as well. Price controls are used to check the reliability between the value, weight/quantity and commodity number (classification of the goods) for each line in the Customs declarations. This check is important for quality of trade data and especially for the unit value index calculations. At a seminar in Bodø in Northern Norway in 1997, the unique Customs cooperation between Norwegian and Swedish Customs was demonstrated in Junkerdalen Customs House. Here, Norwegian Customs officers do the job for both Norwegian and Swedish Customs in one joint operation. These learning lessons proved valuable for the cooperation to illustrate that it is possible for government institutions to cooperate and benefit from a common involvement. At Bodø Customs it was illustrated how the qualiy of statistics can improve by Customs control on traders trying to avoid paying duties/taxes or any other kind of irregular action by the trader.During the FTS seminar in Riga in October 1995, it was decided to establish a permanent inter-Baltic Working Group for FTS where both Customs and the NSIs were represented. Ambitions were to develop further daily and long-term cooperation, and the agreement was supported from all managers. The group has produced a joint annual FTS publication for the Baltic region, consisting of annual figures and illustrations based on data collocated for all three countries, and starting with 1995 data. The bulletin has been appreciated despite its limited number of users and buyers, and is still produced.

Long-term output from the project
Long-terms output from the project was as follows:

- The Baltic Customs were gradually getting used to take part in the FTS production and quality investigations, thanks to the long time-span of this project.
- International standards and EU regulations were implemented at quite an early stage of the new era, and the Baltic statisticians became quite familiar with them.
- The value of and need for inter-institutional cooperation became clear to all parties involved. Shortcomings in the project's achievements in trying to create such cooperation are may be caused by the complexity that different administrations and managers have to deal with, not from unwillingness to encourage good cooperation.

Examples of short- term output
Throughout the project specific technical improvements of the FTS sub-systems were constantly on the agenda. Two FTS specialists from Estonia on study visit to Norway spent days programming a new unit value index calculation system, partly based on Norwegian experiences. These persons, one professional programmer and one FTS expert, did this job together.

Using Lithuanian and Norwegian FTS data, a mirror exercise[33] was carried out, also serving as the project's data quality investigation. We managed to combine the exercise with an externally defined need for data analysing trade patterns of specific goods, for the purpose of explaining trade discrepancies between Norway and the Baltics/Russia. When an external Norwegian institution was willing to pay for the work, the statistical institute in Vilnius understood that this work had potentials for more than just an internal project exercise. In fact, the data were so useful that a regular subscription was signed. FTS can be important as part of the income-generating activities of an NSI.

Project 2 Tariff Information from Central and Eastern Europe

With the EU applications, Eurostat had to establish projects to assist the candidate countries in the field of FTS and to establish routines for receiving and integrating their data into the EU COMEXT database. This prepared for full harmonization with all EU Regulations.

Questions about how to prepare for the enlargement of the EU Customs union and the obligatory trade negotiations came up as well. This work is the responsibility of the Directorate-General for Trade in

[33] Norwegian exports are compared with the Lithuanian imports (and re-exports) for the same period of time

Brussels (DG Trade[34]). The WTO General Agreements on Tariffs and Trade (GATT) rules requires Tariff information for the three last years to be merged with corresponding data on trade, to produce *'correlation tables'* between the EU and the acceding country. The negotiators need to decide if the EU as a Customs Union would have to pay a compensation to a third party (a third country) or not, as a result of the enlargement of the Customs union. This compensation claim arises when a candidate country applies a lower duty rate with a third country than with EU.

In 1998, a '*Pilot Project for External Trade Statistics*' was launched with the main objective to harmonize the FTS and Tariff Information to the EU Regulations. The project included consultancies in all 12 candidate countries plus Macedonia and Albania during December 1999 and 2000. Regular meetings were organized in Luxembourg for the candidate countries, in combination with the Committee meetings held three times a year.

Tariff Information

Tariff Information means a collection of data showing the valid Customs Tariff lines (commodity numbers) for one year together with GATT-relevant information such as e.g. the applied duty rates and the WTO current stage bound rates. This information is normally not easily available as data files, but rather as printed tariffs and handbooks. The project team had to experiment with data format and contents before a final version was agreed upon with the DG Trade. To reorganize this information to be suitable for computer use was a big job, even for one country only. Now the EU Commission offered to take care of this task for all 12 countries at the same time and for a minimum period of three years.

As a second main part of the pilot project, Eurostat made an agreement with the DG Trade to assist them in preparing, collecting and forwarding Tariff Information for all 12 countries. Statistics Norway signed contracts to take care of the work with Tariff Information. This job included technical descriptions on how to organize tariff data, supporting candidate countries how to prepare data files, investigating quality of data delivered, and keeping supervision of progress in data deliveries for all countries.

A set of missions to all candidate countries was conducted in order to establish a network of tariff data executive experts and to harmonize the data variables. These missions were primarily directed towards representatives from the customs or ministries in charge of trade and duty policies. The appointed contact persons were responsible for data preparation and for sending files to the consultant.

The Tariff Information sub-project started in September 1999 and finished by June 2003, with the last data files containing data for 2003. Negotiations are now in the hands of the DG Trade. High quality data will prove to be a valuable source for the EU Commission, and as such, the project is of great importance for the extension process.

Main output

The pilot project, and subsequently the ENLARGEMENT Project achieved both production and process goals. FTS systems of Western European standards were established and institutional capacity built. The projects succeeded in supporting candidate countries with FTS data deliveries and Tariff information. Eurostat demands were met. Evaluations by independent consultants have concluded that the project succeeded very well in strengthening both technical and general statistical knowledge and offering significant assistance to the candidate countries in an important phase.

Other outputs

Both regular trade data and tailored Tariff information data were supposed to be handed over to Eurostat via the NSI in each candidate country. For the Tariff missions, the partner NSI was the organizer and planned all meetings, also those with other external institutions. Statistics Norway offered lectures with several other FTS topics than tariff matters, such as confidentiality rules, cooperation between Customs

[34] Directorate G handles such as WTO, OECD, and commercial questions with respect to agriculture and fisheries; export credit policy.

and the NSI, data control systems, index calculations, mirror statistics analysis, the EU Customs Tariff system, also called the TARIC, etc. These lectures were highly appreciated and contributed to discussions and more generally to a good working atmosphere in the project.

Project 3 PHARE Transforming Bulgarian FTS and national accounts

The National Statistical Institute in Sofia in 1999 started a project named *Institution building* supported by EUROSTAT. The project aimed at developing many different statistical areas, including PRODCOM and foreign trade statistics.

Statistics Norway signed a contract for carrying out the PRODCOM work. When the consultant originally engaged for FTS left for other work in spring 2000, a contract for this work was signed with Statistics Norway. Two main objectives were on the project agenda; a new system for price controls concerning both the Customs and the Bulgarian National Statistical Institute and the establishment of a new system for price, value and volume indices.

A pilot

The work started in August 2000. After discussions about a new price control system and the FTS system it was agreed to focus on a FTS index calculation system for a pilot project. It was proposed to purchase and install the SAS software[35], since this tool is very well suited for statistical analysis and programming as well. Programs for a pilot system were tested and training of the FTS staff started. At this stage it was difficult to organize and finance ordinary SAS licenses, and the project used a temporary test-license.

During consultant missions to Sofia and two study visits to Statistics Norway the project members were given both theoretical and practical training in calculation methods and computing technique. One limitation was that the output from the index system was used only for volume, value and price indices for FTS publishing. The system was not able to deliver import and export values for the National Accounts with price information at commodity (product) level. This situation was still the status when the pilot project ended in summer 2001. In the final conclusions, it was recommended to continue further work with modifications, to enable tailor-made deliveries of import/export values in current and constant prices to the National Accounts.

National Accounts and FTS

However, there were no ongoing projects under which to continue this work. The only solution was to start a new one. The Norwegian consultants and the National Accounts leader at the NSI Bulgaria took the initiative to prepare terms of references for further work. Both the EFTA adviser and Eurostat saw the possibilities and challenges and agreed to financial support. In early 2002, the involved managers agreed to combine a new plan with the establishment of a new *Supply and Use Table* (SUT) system based on models from Statistics Norway, with a new system for calculating import and export values in current and constant prices. A contract signed in August 2002 secured the work to continue until August 2003. This has, so far, shown to be a fruitful combination. This project has resulted in the installation of a database (Oracle) for a complete SUT system, fully integrated in the National Accounts system of Bulgaria. A new index calculation system is developed in SAS, based on representative prices at *commodity by country* data level and further price calculations for product groups, using the *unit value principle*.

In addition, a separate project objective was to develop methods for adjusting CIF import values into FOB import. CIF import means to measure the goods value at the importing country's border, while FOB import is the price at the exporting country's border. The difference is the freight and insurance costs for the transport between exporting and importing country. In addition, we want to measure how

[35] Produced by SAS Institute Inc., Cary, NC, USA

much of the goods that are imported by national (resident) transporters and what the foreign (non-resident) transporters carry. It has shown possible to find data in the customs declaration system that may result in such calculations being quite good.. The preliminary project results have been promising.

Continuation for institutional building
The work in Bulgaria still continues. A new contract was signed with EUROSTAT for a period ending in August 2004. The main objective is to create stable production routines for an index calculation system that makes it possible to deliver import/export data to the National Accounts on a permanent basis. The cooperation with the Customs has developed in a positive direction, and the CIF/FOB adjustments are making progress. Significant results will have a clear influence on improved management in the sense of i*nstitutional building*. Another objective is to help the NSI to improve the way managers communicate, and the ability to conduct and implement large development projects.

The concept '*Institutional building*' is in use by EUROSTAT as one of the goals in their projects. For any NSI, better personal and administrative management is a permanent goal. For partner countries, institutional building might also target:

- Improving professional leadership at all levels by making projects work open and transparent, secure progress of local key experts and make quality improvements visible and documented;
- Integrating external support project results into the institutions short- and long- term production systems;
- Securing funds and relevant resources for a NSI with low job attraction and status; and

Improving the NSIs general reputation by increasing users confidence in statistics, by protecting the suppliers of information, and giving trustable explanations to changes occurring in statistics figures.

The project focuses on practical computer work with data analysis, programming and on-the-job training. However, in this case the project goals have turned out being quite ambitious given the initial capacity of the staff and the institution itself. The resources allocated for this project are therefore stretched pretty far. The experts are left with too short time and the staff in the partner institution with too many challenges given their training, experience, and project resources available. A low salary combined with bureaucratic management and no incentives promoting individual initiatives, has made it difficult to keep up high spirits for key personnel in the partner institution. The need for incentives is overlooked by local managers, and there is a permanent risk of loosing trained project staff. The project has questioned such obstacles openly, but in this area there is still a way to go. Our impression is a need for modernization and strengthening of the overall management system comprised of project management, mid-level management and top-level management.

Project 4 Preparations for the CARDS program in Balkan countries

Still under the PHARE programme, Statistics Norway was invited to arrange a seminar in Bosnia & Herzegovina in October 2001 concerning foreign trade statistics. The country struggles on its way to unify the entities; the Federation, the Republika Srpska and the smaller District Brčko. With the Federal Institute for Statistics as hosting part, the six days FTS seminar in Sarajevo was met with enthusiasm. FTS experts and users of FTS from both entities came together to hear about methods, international standards and EU regulations, and to discuss what to do in future. Shortly after this event, the CARDS preparatory assessment project started.

CARDS assessment mission.
Behind the CARDS Regulation is a significant assistance programme, supporting the economic and political stability in the Balkan countries. Of the granted money, an amount of 2.5 billion EURO is targeted for the development of three statistical projects, DOSME (Demography of Small and Medium Enterprises), PPP (Purchasing Power Parities, contractor is OECD) and FTS. To pave the way for the CARDS' FTS program, a set of assessment missions was carried out, starting with a consultancy to Macedonia in June 2002 and with the last one to Kosovo in November 2002.

During the CARDS assessment missions to the Balkan countries the NSIs were responsible for arranging meetings and discussions based on a pre-agreed agenda. From the start, the most urgent need was to meet Customs and get them more involved in the programme, since they are already playing a major role in the collection of Customs declarations, and herefore with daily impact on the FTS data quality.

Among the Balkan countries, the development stages vary a lot. They all struggle with unregistered or illegal trade, and are also fighting bribes. Rapid improvement of the FTS data quality is unthinkable without direct and active contribution from Customs.

In order to make the documentation comparable, a questionnaire called *fact-findings* was designed and sent the countries in advance. The agenda always included obligatory meetings with the Customs as well as the central banks, which are responsible for Balance of Payments in all the Balkan countries, and an important user and co-partner for the NSI. The documentation focused on technical aspects but also gave descriptions of institutional and administrative matters related to FTS production and users. The mission reports concluded with a draft proposal for future *action plans*.
Output from the project
In a final seminar in Luxembourg in May 2003, the Balkan NSIs and Customs representatives discussed the results from the assessment mission and the subsequent FTS national actions plans. It seems that for all the Balkan countries, Customs will participate actively. This is a promising result so far. All in all, the Balkan countries have a long way to go when it comes to FTS statistics. To create confidentiality in statistics is one of the big challenges for the Balkan countries, the meeting concluded. The NSIs suffer from a bad reputation among data suppliers, and their protection after data publishing is not always as good as it ought to be.

The project has initiated and accelerated the data deliveries to the EU COMEXT database, which is obligatory for the member states and all candidate countries to the EU. Test data are already being prepared.. Thanks to the fact-finding and documentation, and the *national action plans,* Eurostat has a solid base for a next round with further implementation and EU harmonization. There have been serious delays in the continuation, partly due to the corruption scandal hitting Eurostat from May 2003. Troubles to implement tender procedures by Eurostat and delays caused from re-organizations during 2003 have seriously delayed the continuation of the main CARDS programme, so much that the national action plans may become history before the support reaches the receivers.

Some general experiences

One great advantage with Central and Eastern European statisticians is their relatively high level of education. Good technical skills and computer knowledge are common. A strong desire for new knowledge and to learn facts about Western Europe have strengthened the projects' functioning at the individual level.

The involved statisticians also had high expectations about the consultants' capabilities, and he/she is judged on his ability to communicate and the ability to deliver a service of high quality.

From the very beginning it was clear that international standards and EU regulations had to be implemented. This has had top priority, and made work on reformation of standards and data structures easier. This joint objective has generally been one of a vital force in the cooperation between the Customs and the NSI. In all countries, the Customs has contributed to this standardization in a very positive manner.

One serious drawback has been lack of money in the administration structures of the new governments. Privatisation of business life has made government employees less able to compete and has drained the NSIs for key persons. The wages for experienced national experts could be 5-15 times less than for the

consultants from Western Europe. Taken into consideration that these countries are applying for EU membership, the difference must be regarded as substantial. Besides from low salaries, little freedom of decision has made good experts move on to better jobs.

When official laws and regulations are missing or inadequate, the statisticians meet problems in data collection, and the quality of statistics suffers. In many countries, the statistics legislation needs to be improved. In addition, the right for the NSI to use and influence administrative registers is of high importance. Foreign trade statistics, which base data capture on the customs systems, are dependent on a legislation encouraging good cooperation between national institutions. Support projects must seek to stimulate a win-win situation between involved institutions. This requires both some extra resources but more importantly a broader mandate for the future development cooperation.

Chapter 8. Experiences with the twinning model of cooperation: Statistics Norway - Palestinian Central Bureau of Statistics 1996-2000

Yousef Falah and Elisabeth Gulløy

Introduction

Statistics Norway (SN) and Palestinian Central Bureau of Statistics (PCBS) in 2001 finalized a twinning arrangement, dating back to 1996. The arrangement went quite far in terms of placing the ownership of the arrangement by the institutional partner in the South. In many respects the arrangement can be seen as an obvious success, in other respects the picture is more complicated.

In this article we wish to sum up our experiences with the arrangement by trying to identify what were the success factors in terms of institutional development and statistical capacity building for both partners. By this, we hope to conclude on a number of important issues and elements to be included in international co-operation if it is to be a capacity building experience at both institutional and individual level.

Our main focus is on the cooperation sides of the project. But we will also illustrate the success by highlighting the actual statistical development and possible capacity building in two selected statistical areas within the twinning project, instead of making a chronological record of all the different elements.

Background and prior experience in technical co-operation

In 1996, PCBS had existed for 3 years. As Palestinian Bureau of Statistics (PBS)[36], the institution produced and disseminated a considerable amount of statistical information, but it was to a large degree an ad hoc survey organisation. It was rapidly expanding as a result of the political development and extensive donor support. In the mid-1990's, the Palestinian Authorities and thereby PCBS received substantial resources from various donor communities. PCBS hosted many experts from abroad on short- and long term commitments, and surveys to map the situation for Palestinians on the West Bank and Gaza were conducted with high speed. However, the statistical production was fragmented, depending on many different players on the field, maybe giving advice in different directions. There was a political and administrative wish to establish a national full-scale statistical institute to provide regular and systematic information for policy planning and general use. Technical support from sister organisations abroad were sought for this purpose.

The Norwegian government was the most important donor to PCBS via UNDP support, but still wanted to increase the level. PCBS and NORAD took the initiative to ask SN to assist in the process of elaborating a project document for extensive support to PCBS. In 1996, the Norwegian Government signed the agreement to provide financial assistance at the amount of NOK 37 mill over five years from 1996-2000. The funds were to be spent on both technical support and local PCBS costs. The project objective was to further build and consolidate the institutional capacity of PCBS in both subject matter areas and cross cutting areas:

- population statistics, social statistics, area statistics and
- overall institutional capacity.

The main approach included four objectives:

- Regular production of quality statistics: Establishing routines for regular production, analysis, presentation and dissemination of certain population, social and area statistics.

[36] Later "Central" was added in the name, to underline the institution's role in the national building process.

- Statistical methods and standards: Establishing routines for regular reviews and updates of statistical methods and standards to reflect the situation and needs of Palestinian society.
- Institutional cooperation: Building and strengthening the capacity to listen, interact and respond to official, private and public needs for, and use of, statistical information.
- Management: Building and strengthening the capacity of the system to manage and conduct the work of PCBS as an institution.

To achieve these objectives and build a sound professional base for the institution, contact with sister organisations was sought. Since PCBS also was supposed to produce statistics based on data from registers and administrative systems, it was a prerequisite to identify at least one partner with extensive experience from national register use and development. A twinning partnership arrangement between PCBS and Statistics Norway was agreed upon, where Statistics Norway was to provide technical support to PCBS through short and long-term missions and other elements of capacity building.

Since the early 1990's, Statistics Norway had joined technical support projects with several NSIs in the third world, particularly in Africa, but none of them were entered as institutional agreements. Instead, individuals or teams of individuals from SN entered private contracts with international donor agencies to work in a NSI. The arrangement with PCBS was the first cooperation project at institutional level, and the first twinning experience for SN as for PCBS. By having both institutions involved in the implementation and results, and by giving possibilities to develop relationships between professionals over a longer time span, it was hoped to avoid many of the weaknesses in traditional technical support at individual level. We think this made it a unique experience worth writing about, for the benefit of other sister statistical organizations in the world, and also as a typical example for implementing the PARIS 21 initiative objectives of strengthening the understanding and coordination between statistical producers as well as users.

PCBS-SN twinning arrangement 1996-2001: experiences and results

In this section we will try to present the experiences and results of the twinning arrangement as it went from the early stages, by highlighting the most important modalities, issues, changes and milestones throughout the project period.

Twinning modalities

The co-operation comprised a series of modalities to ensure the twinning approach, followed by a relatively generous budget:

- A steering committee comprising the two heads
- PCBS Project-coordinator
- Statistics Norway Team Leader resident in Palestine
- Norwegian Project-Coordinator resident in Norway.
- A project (coordination) committee comprising the PCBS Project coordinator, the Statistics Norway Team Leader resident in Palestine, and the Norwegian project coordinator resident in Norway
- Regular telephone conferences
- Semi-annual / annual meetings
- Short term consultants
- Work-shops (including user-producer relations)
- Study visits to Statistics Norway or other NSIs
- Cooperation by e-mail (pre-agreed, regular electronic contact, here called e-mail support)
- Conferences
- Mid-term review

It was viewed as necessary always to have one long term team-leader / advisor with multiple roles, a strong follow up from Norway and a series of short term advisors. The PCBS project-coordinator and the SN Team Leader arranged for all technical assistance and study visits, prepared the semi-annual meetings and communicated with the project coordinator in SN. This was put in place and worked increasingly well as a specific cooperation committee throughout the project. There were difficulties in a few areas that we will discuss more in detail below.

The short-term consultancies typically were of two-three weeks' duration, many of the consultancies were conducted by the same person repeatedly coming back. It was regular procedure to include in the Terms of Reference at least one presentation or seminar directed towards the whole PCBS. For two short periods in 1999, the team leader position was not filled. Although this was met with increased activities from the SN coordinating unit in Oslo, it was obviously not a good situation. The vacant position did not however affect the activities: they carried on as planned in 1999.

In the project document, there was a detailed plan for the work in each subject matter area and cross-cutting areas (including specific budget with separate lines for technical assistance, project activities and ordinary PCBS program activities) prepared in a joint effort by PCBS and a team from SN. The plan was designed with the understanding that changes would occur. The detailed plan was used by PCBS for a continuous review of the needs for technical co-operation, thus motivating the divisions to plan well ahead. This was stimulated by inviting divisions and directorates to draft Terms of References for short-term missions and bring them forward to the management.

A master plan for statistical development in Palestine was elaborated with assistance from the project very early in the implementation phase. The project plan together with the master plan served as a strong base for discussions on priorities and the relationship between short-term needs and long term development.

Regular telephone conferences were arranged every two weeks between the project coordination committee in Ramallah and Oslo. In these conferences, an agenda for discussions was prepared 2-3 days a head of the conference on different issues related to the project. Normally the conference was focusing on the progress of the project, the planned technical support missions, preparations for the semi-annual meetings etc. After the conference, the project coordinator in Ramallah and the team leader drafted minutes of the discussions. These conferences proved to be very efficient in managing the project on a daily basis.

The diverse means through which the cooperation were allowed to develop resulted in a series of *meetings points* between the two institutions. Gradually the two groups of directors and the two subject matter staffs familiarized, resulting in a relatively broad contact base on both sides. At the same time, the day to day project implementation were well founded within a project coordination committee of three persons which had resources to plan and follow up tightly on the various activities, and also prepare documentation and reporting.

Day-to-day methodology

The main approach in the collaboration was *on-the-job training*: SN consultants in PCBS would demonstrate for the PCBS staff how to conduct the work. PCBS staff would then get a chance to see how this was applied in Norway and/or other places, and then PCBS staff should conduct the work under supervision or review from SN. Finally, PCBS would carry on the work and ask for special support and advises as need be.

This can be illustrated by how the project reporting procedures developed throughout the project. In preparation for the first semi-annual meeting, SN suggested a structure and helped to prepare the reports and financial accounts. In the following, the long term advisors assisted in this work, while towards the end of the project, the PCBS coordinator did all the work himself, only collecting comments from SN.

During the study visits, PCBS were supposed to be introduced to SN organization, production, methodology and dissemination, and/or Norwegian systems and institutional cooperation with a particular emphasis on registers. Ministries and other governmental bodies were also to be included with delegates in the study visits, to be introduced to similar institutions in a Norwegian setting. For instance, one study visit on population registers included representatives from the Ministry of Interior as well as the Ministry of Health. The study visit team visited a parallel set of institutions in Norway i.e. Ministry of Health, the Central Population Register in the Tax Directorate and Statistics Norway.

The project had allocated funds specifically to be used for activities towards national institutional cooperation and dissemination. Many user-producer workshops were conducted, and throughout the project period, other ministries, universities, research centres and other non-governmental institutions had invitations to take part in workshops, launchings, and other happenings to raise the awareness of the various statistics produced. This was particularly the case on basic register development and the use of administrative sources for administrative and statistical purposes.

Semi-annual meetings
The semi-annual meetings alternated between Ramallah and Oslo. The structure and report portfolio of the meetings were agreed upon from the beginning of the project, and timing for each meeting was set very early, at the end of the previous meeting. To change the date after that time was a very demanding exercise, and did not happen frequently. Actually there were two meetings organized each time: one PCBS-SN meeting the first day, and then the PCBS-NORAD meeting the day after. At the meetings, the project coordination group's three members, one or two high level representatives from SN, and the president as well as representatives of the management in PCBS, met.

The following paragraph describes the semiannual meeting modalities. The project coordination group first prepared the documentation, reviewed and amended it and finally forwarded it to NORAD. The documents consisted of a progress report containing information on the outputs compared to targets, work plan and time schedule, use of inputs, problems encountered, and other information on project implementation. Besides, project accounts related to the agreed budget, an amended work plan with planned outputs and time schedule for the following 6-months period, and an amended budget for the following 6-month period was presented. Then the meetings were organized in two successive days as follows:

1. The first day in the early morning there was a short initial meeting between the president of PCBS and the head of the SN delegation to the meeting - usually the Director General. Here, strategic issues raised by the project coordination committee members were sorted out. Each party prepared a list of issues that needed to be sorted out by the high-level decision makers. Usually all the issues smoothly found a solution in these meeting.
2. Then, in the first day also, the general meeting between the PCBS and SN took place, with the presence of the whole delegations from both sides and NORAD delegation as observers .In this meeting, the project coordination team from PCBS and SN did the presentations including the outputs, work plans, budgets, and proposed amendments on the project document. After the presentation, the floor was open for discussions. Usually these went smooth, since the main issues already were sorted during out the preliminary meeting. Meeting minutes were drafted, approved and signed by both parties. The minutes were also posted to NORAD for their information. The presence of NORAD was according to protocol rather than as active participants, while they were leaving to PCBS and SN to discuss and find the solutions to satisfy their requirements.
3. In the second day, the PCBS - NORAD meeting with the presence of SN as observers took place. In this meeting, the project coordinators from PCBS and SN did the same presentation as the first day, but this time oriented towards NORAD. SN's role would be to support PCBS in their reporting to NORAD, but any remaining disagreements would be clearly communicated.

For the twinning relationship, the initial meetings and the semi-annual meetings between PCBS and SN served to clear up important disagreements and discussions between the two partners *before* facing the donor in a formal setting. NORAD's presence was a guarantee for joint efforts in trying to find tolerable solutions. Thus, the meetings worked as regular face-to-face discussions on all the important and difficult subjects: funds spent and funds not spent, plans and discussions on best methods. This worked very well and became a strengthening exercise in itself.

The donor's role
NORAD played an active role in the project, both in terms of general monitoring, with regular meetings with PCBS coordinator, but specifically in the setting of the semi-annual meetings, as we have shown above. Representatives from NORAD were quite active in the discussions on reallocations of the budget, on annual plans, delays etc. There was a general sense of trust between donor and recipient institution, very clearly leaving the management of the project to PCBS. Still NORAD in some specific situations took a clear stand against the suggestions of PCBS. NORADs active participation in the discussions stimulated both partners in the twinning arrangement, and also created a learning environment with willingness to endeavour for project improvements.

The approach to other donors and consultants
Many other donors and consultancy agents (NSIs and internationals) were working in PCBS at the time of the project. In some areas, for instance in Economic Statistics including National Accounts and in Managements systems, the twinning project provided funds to pay for local costs, while other agencies, like the German GTZ, provided funds for technical support. Hence in some cases, GTZ hired and paid for consultants from Statistics Norway. PCBS had the full responsibility for the coordination between different support programs, and thus had the possibility to maximize the different funds. The other agents were not taking part in the semi-annual meetings, although their programs for support and PCBS' ways of dealing with them were discussed in the meetings.

Recruitment procedures for consultants
The project started off with a system that demanded several possible short-term candidates to be presented for PCBS for each mission, so that PCBS could choose the most suitable according to their needs. This proved to be very difficult in practice, and very unpopular among SN staff. The timing of the visits often changed, or even did not fix. The candidates did not know who would travel, or if anyone really would travel at all. This made the work plan so uncertain that some of the experts lost motivation. SN raised a discussion about this principle and PCBS accepted a change. From then on, one candidate at the time was proposed, but PCBS were free to reject the proposal, on which SN had to identify another candidate.

One can say that PCBS generally wanted more influence on the supply of consultants from SN. PCBS complained about time lags before consultants were identified, and also about SN having real problems finding anyone suitable. On the other hand, SN claimed this was a problem mostly because plans were changed and delayed, and then the most experienced people in SN got tired of waiting and turned to other engagements. Besides, SN hired consultants from other countries instead of SN staff if they fell short of providing anyone themselves. After some time with regular discussions on these matters, it was accepted on both sides that early agreements on missions and a general familiarization between PCBS and possible SN consultants would help smooth the procedures for the best of all, and PCBS maintained a certain flexibility in seeking expertise, but *through their partner* instead of excluding the partner. At the study visits, SN tried to introduce the different subject matters staff in PCBS to possible consultants by giving the latter a chance to present themselves and their work, and this functioned well.

Changes in modalities
Apart from the modality list presented above, other modalities were also discussed later in the project after being offered by SN:

- to introduce *one additional long term consultant* in one of the statistical areas needing support (notably population registers),

- the possible use of a "package" of *one or two senior advisors* from SN with long term commitments and short term visits to PCBS,
- the use of *junior experts* from SN to be involved in the project under the mentoring of seniors
- the extension of the last team leader engagement with 8 more months, funded from saved project funds.

The senior advisors were supposed to serve both as partners to the department director generals in PCBS, as senior advisors on technical issues directly to PCBS and finally to the specialists from Statistics Norway with a more narrow expertise. The idea of having an additional one-year long-term consultant (aside from the SN team leader) came as a result of reallocations of funds: from a row of short term missions on register development to a one-year long term advisory instead.

PCBS and SN agreed on the reallocation for an additional long term advisor in population statistics, but it is interesting to notice that PCBS were holding back support towards the two other advisory activities suggested. One interpretation of this can be that SN wanted to increase the influence on strategic decisions in PCBS, while the latter wanted to keep its control of own development. Another interpretation can simply be that of saving funds to allow for increased funding of local costs to perform core activities. In one case, PCBS also refused to accept a team leader for a period of less than 6 months. It was argued that the TL needs 2-3 months to become well familiar with the project procedures and to start dealing with this position perfectly. If he leaves PCBS early, the experience he gained will not be efficiently used. Therefore, longer periods (more than 6 months or even a year) were more preferable. In addition, the TL would not be able to provide technical assistance to subject matter departments in addition to his position as a TL within a short span of time.

PCBS took the initiative to extend the period of stay for the Team Leader. After September 2000, the *Intifada* made it more or less impossible for PCBS to receive short-term experts. As a result, project funds were saved. The long tern team leader in PCBS at that time was familiar with the difficult situation, PCBS was very pleased with his service, and he wanted to stay. PCBS suggested to prolong his mission for one more year, while the remaining funds were enough for 8 months only. The negotiations between PCBS and SN on this matter took a long time. SN argued that they were not allowed to subsidize the consultant's stay with four additional months, since the international support projects are not recognized as a core activity from the Ministry of Finance. In the end, the question was brought up to the highest decision level in the two institutions, and there it was finally settled. The mission was prolonged with 8 months. One can say that this was an example both of the flexibility in the project, and PCBS' perceived as well as real ownership of the project - and its funds.

Training
We have already mentioned that on-the-job training was the main methodology approach in the project, as SN consultants visiting PCBS were supposed to show, and later assist, PCBS staff in performing statistical or other tasks. Aside from this basic idea of "practical" training at the spot, the project document also highlighted the need in PCBS for supplying its staff with formal training, both study visits and courses in statistics, methodology or other subjects, and as university degrees. Not only did PCBS have the responsibility to provide their own staff with training. Even users and producers of statistics elsewhere in Palestine were included in this sphere. The users needed training on interpretation and utilization of statistics, while producers needed training in applied demography, and applied social and economic statistics. Therefore, it was outlined to establish a training center in PCBS.

Two selected statistical areas

From the start of the project, the following areas were planned to receive technical support from the NORAD project:

- Population and Housing Census
- Establishment of initial register files (population, building, establishments, farms)

- Demographic Statistics incl. Population register
- Health Statistics
- Gender and Time-Use Statistics
- Crime Statistics
- Environmental and Natural Resource statistics
- Energy Statistics
- Housing Statistics incl. Building and Dwelling Register
- Administrative Records
- Management System
- Statistical Methods and Standards

We will focus on two of these to illustrate the more successful sides of the projects. The very skewed and very small sample is based on two prerequisites only: there was an obvious capacity building process taking place during the project phase, and we think that the capacity building was closely linked to *the technical support* in the project. This does not mean that we think the success depended on the support from SN only, or that no other consultant could have achieved the same results. Instead, it means we think the support was well designed according to the objectives and actual tasks to be performed, and that the support was well received and well utilized in PCBS.

Gender and Time Use Statistics
According to the project plan, to develop gender statistics and conduct a time use study, the first ever in Palestine, was an important objective, funded by NORAD and UNDP. Time use studies are usually regarded as an important building stone for gender statistics because it illuminates the differences in daily life for women and men. It is therefore also a relatively popular type of statistics for donors to fund. By the end of the project, gender statistics in fact had been established as a separate department in PCBS, and a full-scale time use study 1999-2000 based on diaries was conducted with success. According to evaluations and reviews, gender perspectives had been integrated in most statistical products from PCBS. A separate document "Women and Men in Palestine" had been successfully launched (not financed by NORAD). External workshops were arranged, and PCBS was in the forefront of the Arab region in gender statistics, offering training in the same subjects for other NSI in the region.

The support consisted of several elements. First, formalised e-mail contact was established with a time use experts in SN at an early stage, and PCBS received comments on draft survey instruments, survey plans etc. Then a consultant from SN came down on a two-weeks' mission, followed by a study visit to Norway. Finally, a new mission was conducted by the same consultant. After that, e-mail contact continued for several years, but not in a formalised manner.

The first mission took place only very short time before the fieldwork was about to start, and after the diary had been drafted. But after having reviewed the survey instruments, the SN consultant advised PCBS to postpone the fieldwork (which would continue for one calendar year). This advice was followed, and a revised diary was introduced, including more background information about the respondents. The diary ended up not as a copy of the Norwegian model, but as a simplified type of diary, well adjusted to Palestinian daily life. After the study visit to Norway, where PCBS staff met SN staff as well as Norwegian experts in gender studies and gender equality from the ministries, universities and research community, the SN consultant came back on one last short term mission. The fieldwork had been going on for a while, and it was now possible to review raw data files. A tabulation plan was drawn, and the consultant trained PCBS in how to handle the different perspectives for analyses of time use data. Tables were drafted and a plan for the finalisation of the work was made. After this mission, PCBS and SN staff quite regularly had e-mail contact, and SN answered questions whenever asked for.

Seen in retrospect, the technical support for the time use study was a unique experience. SN consultants managed to create a deep confidence for their advice. PCBS was willing to change their plans to increase the quality of the study, and had an eagerness to learn from Norwegian experience in this area.

At the same time, the missions and study visit had a very good timing: the support was included in the time use survey plan in an optimal way. Here the e-mail support both before and after the missions added up to the good results.

The Development of the sub master plan for Area Statistics

The project plan for area statistics started with an ambitious long-term objective: to build up from the ground a regular and systematic, nationwide information on environmental issues, natural resources and land use. The Palestinian areas have a very high population density, ridden with resource conflicts, and it was regarded as of uttermost importance first to create a joint information base, and then to ensure that this information is of high quality. PCBS had the ambitions to be the central producer in Palestine for this type of information, as well as being a coordinating body towards the national setting.

The sub-master plan was supposed to build on current status reports for all the related statistical areas: environmental, natural resources, energy, land use, and agricultural statistics, housing and transport, to secure sufficient coordination of a survey program and other activities with the purpose to build regular production of area statistics. The sub-master plan was finalised in 1998, and then gave an outline of plans for 10 statistical programs to be in regular production by 2000.

The technical support to PCBS in this area can be split in three phases: one, to make the different current status reports, two, to make the sub-master plan itself, and three, to fulfil its objectives in terms of designing the surveys and data collections. Quite many resources were spent on short-term missions, all in all a number of approximately 20 man weeks. In the beginning, the same consultants came several times up to the finalization of the sub-master plan, while later, different specialists came in energy, land use, transport, emissions to air, and agriculture. Besides, the long-term team leaders from 1996 to 1999 all joined in with advise on land use and environment statistics.

The cooperation methods changed as the project phases developed. From the beginning with the status reports, the consultants "dug" for data, while at the same time worked to educate staff in methods and environmental subjects. The current status reports were difficult to make. The purpose was to map current available data and its possible use. Besides, language problems were apparent at this stage, since most data sources were in Arabic only, and translations were needed for most functions or tasks. But the sub-master plan evolved after repeated missions and many reviews. E-mail support was increasingly used to comment on drafts and give other types of input, and this turned out to be a fruitful method after basic trust had been achieved. In the last phase, SN staff assisted in designing survey components and organising other data collection. At that time, the awareness of environmental subjects had increased, as well as the institutional capacity to plan and perform data collection.

The very ambitious objectives were only partially achieved by the end of the project. There were mainly two reasons for this. One, this type of statistics grossly depended on data input from other units in PCBS, as well as from administrative or other sources in Palestine. In PCBS, the problem of delays in other productions, especially economic statistics, spilled over to area statistics. As for other data sources outside PCBS, they hardly existed in terms of computerized and standardized information at the beginning of the project. Second, high turnover and a rather un-experienced staff weakened the position. Environmental statistics is a relatively "young" subject matter area within the statistical tradition, and the general understanding of its basic principles, methods and use was not very extensive. Thus, it was necessary also to build confidence in PCBS and towards external institutions, while basic knowledge had to be built within the units themselves.

According to the final report, the directorate managed to build a sustainable program for annual statistics based on administrative records and small survey modules attached to other surveys. Some statistics based on self-standing surveys were also produced, for instance a pilot traffic volume survey. Reports giving information on resource and environment issues were produced for the first time in many areas. In terms of national institutional building, the sub-master plan supported and gave directions to PCBS' efforts to map the national situation and give increased understanding for the use of

administrative records to produce statistics, to develop joint definitions and instruments, and to cooperate for a better quality of the data.

For PCBS, the sub-master plan, with detailed, structured and logical plans, was a valuable document in itself, because objectives were formulated, direction was given and priorities sat for the future, even though the plans were delayed or disturbed and only partially achieved.

Why, or how, was it a success in terms of capacity building? Because the process itself gave PCBS very important and valuable experience in a new statistical area, concerning both the management and the younger regular staff. Besides, the sub-master plan, when finished, put PCBS and Palestine in the forefront, having a definite policy towards how to establish and develop a system for production of environmental and resource-related statistics. This is a relatively new statistically area even in Europe or other regions with extensive statistical systems. The sub-master plan signalled that this NSI managed to give its society information useful for political and environmental purposes, and it was an important step stone for future development of this statistical area.

Discussions and discrepancy between partners

In this chapter we will try to explain some of the difficult discussions experienced throughout the project, in one or both partner institutions. This is not easy, since the conflicts more or less were perceived very different from the two sides. But the issue of discrepancy on statistical, managerial or strategic matters deserves special attention. It is the most difficult and challenging element in the twinning methodology.

PCBS ownership and real influence

PCBS was definitely in charge of the project and had the coordinating role towards other donors as well as other NSIs or international consultancy agents. Typically, PCBS would draft all important project reports, documents, plans etc and send them to SN for comments in the last phase of the project. Even though the Norwegian members of the coordinating group were involved in preparing these documents, PCBS had the last say in the process.

The PCBS project coordinator had a key role in the coordination committee, and this position was recognised as pivotal on both sides, not the least expressed by the delegation and trust received from the top level of the organizations. In fact, the project coordinator worked as a kind of door opener for the project: opening up in both directions. Towards PCBS, the project-coordinator familiarized with NORAD, SN and their representatives (especially the SN team leader) in a way that none of the other PCBS staff had a chance to do. He also had an important role towards SN, to meet its need for information and as an informal discussing partner. Thus, he could "translate" both ways.

The PCBS ownership was apparent also in other terms. Many of the suggestions coming from short-term consultants seemed to "vanish in the air": they were printed in a mission report, but never seemed to materialize thereafter. Especially in the beginning of the project, this caused frustration among SN staff. They returned from Palestine without knowing whether the suggestions were applauded by PCBS or not. For a long time, it did not seem to result in any particular action or policy. But after some time, i.e. 6 months or even longer, the news came that the same suggestions now were being raised by PCBS. In general, one could say that advice had to be digested for a certain time before put into action.

The semi-annual meetings were thoroughly prepared, with heavy discussions forehand between SN and PCBS. Very often the discussions were about technical issues, in short: how to run the statistical data collections as best as possible with the resources given. Discussions on suggested reallocations of project funds seldom took place. PCBS showed a clear interest in maximising the resource flow, for instance towards covering local costs for productions where funds were always scarce, or towards getting technical support in other statistical areas or support of other types than originally planned for.

For SN it was important to highlight the tasks in the project plan or the master plan, but in general, SN supported PCBS on their suggestions for reallocations.

Statistic Norway' staff and their involvement: development over time
The project was definitely a large one, with more than 40 ST technical support missions from SN and 7 study visits to SN over the five years. Thus, many people were involved over a long time span. Separate budget lines for coordination and e-mail support were adding up to this. Inside SN, an environment for PCBS related discussions were created. This strengthened the project, also through the personal relationships that developed. High-level management were involved already from the beginning, and this proved to be very important as the discussions went on.

The SN short-term consultants were challenged in their methods, or ways, of giving advice. Especially in the beginning of the project, their opinions and suggestions were discussed in the receiving subject matter unit in PCBS, but without final decisions taken, as mentioned above. At the individual level, this was often perceived as a token of disrespect for the quality of the advice. But this changed gradually, as SN had a better understanding of the staff situation where they visited. Many of the counterparts had been in their positions for a relatively short time, and they were generally un-experienced, not only in their own subject matter statistical areas, but also in the role of being a counterpart. Even this has to be learned, if the profit is to be maximised for each visit.

The relatively young age of international consultants in Statistics Norway sometimes gave frustrations in PCBS. It was argued that a short-term consultant in PCBS is expected to present and represent the institution towards other national institutions - and usually these types of tasks were included in the Terms of Reference in various ways. Age and experience is important in itself, but even more so, self-confidence. The consultant must express a basic trust in his or her own professional base as well as personal abilities to fulfil the engagement. PCBS argued that some of the young consultants were expressing too much insecurity. For instance, they had to do "quality checks" on their own advice by asking their bosses before answering counterparts on issues raised during the mission, or they were visibly very nervous and insecure in seminars, presentations etc. Such behaviour is not a good point of departure for giving advice in Palestine, or anywhere else, and probably created certain communication problems between the consultants and the counterparts or hosting unit. Besides, PCBS were afraid to face problems reaching out with their arguments outside the institution if the consultant was too young, too insecure, and thus lacking personal and subject matter authority.

On the Norwegian side, these critics caused frustrations. It was argued that specialist knowledge and subject matter capacity is (more or less) disconnected to age, especially in newly developed subject matter areas like environmental statistics. But as the project went on, SN gradually adjusted to this by generally trying to identify seniors, and also by arguing more specifically when particularly qualified staff was in the spotlight despite their relatively young age.

On the other hand, these experiences added up to a general understanding in SN for the value of preparing the consultants in social and psychological dimensions of being an international advisor in development projects. The self-reflective critics so common in certain parts of Norwegian academic life are probably not a good foundation for filling the role as an international expert in building statistics.

Discussions as capacity building
As one can see from above, from time to time - not very often - there were heavy discussions between PCBS and SN on what professional choice to be the best. There is nothing unusual about that. Statisticians, like in any other profession, have their discussions. Discussions are ordinary procedure whenever engaged people meet in all types of specialized settings, nationally and internationally.

But basically there is a difference between discussions and advice, and the twinning arrangement puts a heavier weight on the discussion side of the coin compared to the more conventional types of technical support projects, leaving the recipient part the responsibility finally to decide what is best. The advice

and following discussion is supposed to raise the general level of competence (on both sides!), and then give a direction, a pinpoint, towards the best possible solution in a particular situation.

Following this logic, the advisory part only has the responsibility to give the best ever advice, all circumstances known. What if the recipient part refuses to listen to your arguments? Well, it is up to them to have the final say. In the twinning arrangement between SN and PCBS, SN did not always applaud when PCBS decided to go in another direction. On the other hand, there was a strong support for the principle that PCBS was in fact running the project and in charge of priorities and professional choices. But SN staff was very concerned and felt (partly) responsible for the final decisions and solutions, even though they did not agree in the first place. Sometimes special policy priorities might lie behind PCBS' strategic decisions, and generally this was accepted in SN. But if it was solely a professional judgment behind the decision, the Norwegians often were accompanied by a feeling of personal failure - since their arguments had not been accepted.

This is perhaps a human reaction everywhere, but it also illustrates the particular social situation that technical advisory funded by government development agencies create. There is a structural inequality in the relationship, due to two flows, or "arrows": the flow of resources from the North to the South, and the perceived flow of capacity, or learning, following the resources, basically in the same direction. The consultant perceives him/herself as the one with most capacity in the first place, even though there is a general understanding of the complexity in transferring models and methods to other realities.

The reactions also illustrate how deep the concern for this project was in SN at the time. The institutional co-operation between the two institutions became well internalised on both sides and a highly considered part of the SN work - also in its international profile. Thus, one can say that the frustration following discrepancies between the partners was part of the capacity building process.

In what terms is the PCBS-SN twinning experience an example of a success story?

Institutional capacity building: what were gained and what could have been better?
The capacity building and strengthening was supposed to spread on four elements mentioned in the introduction: to establish routines for regular production of quality statistics, to establish routines for regular review and updating of statistical methods and standards, to strengthen the capacity to interact with users and other producers of statistics in Palestine, and finally to strengthen the ability to manage PCBS itself. The two last objectives will be dealt with in this chapter, while the two first will be dealt with in the next.

PCBS had a tremendous increase in institutional capacity after the 4,5 years of operation of the twinning project. According to the Mid Term Review from NORAD, all the four approaches for the project were more or less achieved, namely to

- establish routines for a regular production, analysis, presentation and dissemination of statistics
- establish routines for regular reviews and updates of statistical methods and standards
- build and strengthen the capacity to listen, interact and respond to needs for statistics
- build and strengthen the capacity to manage, plan and work in PCBS as an institution

Thus, one can conclude that the project added up to the institutional development of PCBS in the given period. However by the end of the project, it was recommended for any future support that it ought to be less donor driven and less project oriented, to keep a margin for the recipient towards regular production.

Taken the other way round, it is of course not possible to conclude that the institutional capacity increase solely was a result of the twinning project. Many other donors and consultancies took their

place in PCBS within the same period, or even before it started, giving a good base for further development.

But the project ensured a flexible, but still predictable, resource flow. The approach with a detailed budget to be put forward for discussion at the semi-annual meetings after a thorough discussion between PCBS and SN proved demanding, but very useful. The discussions on reallocations reflected the flexible structure of the project, and also PCBS' ownership and maximizing resource management to adjust to the changing statistical needs.

The twinning arrangement with SN probably enhanced the understanding in PCBS for certain cross-institutional subjects, especially dissemination and IT. These issues often are somewhat problematic to focus when many different projects, financed by many different donors, meet in one receiving institution. Good, viable solutions for the IT structure in a relatively young NSI is easier to define within a stable, institutional project framework. Donors have different agendas, and all consultants have their special favorites in terms of software.

The project supported the development in inter-governmental structures in Palestine. We regard it to be a success in terms of strengthening overall institutional development and capacity building in Palestine. This worked in several ways, for several reasons. First, by having funds to spend on user-producer contacts, workshops, working groups etc, PCBS were able to assist other institutions in their efforts to collect and produce data with a given quality, and to coordinate the production. This active role was taken very seriously by PCBS. Second, the consolidated and newly developed statistical production in PCBS itself added up to the overall amount of information useful for planning or policy purposes in other places. Third, in some cases PCBS and other government bodies joined hands in data collection, and thereby it became more efficient, for instance in the education statistics. Four, the various working groups, workshops etc made both the ministries, universities, research centres etc more experienced in general cooperation and raised the statistical capacity in external institutions. To include representatives from the ministries in the study visits to Europe also helped serve this objective.

However, the institutional coordination between PCBS and other Palestinian government bodies did not reach as far as expected in terms of register development, except for the population register, not the least as a result of the occupational history of Palestine. As for the population register, PCBS reached a degree of integration with the Ministry of Interior that was satisfactory and in line with the project objectives. As for the business register, the farm register and the building and housing register, the basic problems with non-unified structures, non-unified definitions and old (and new) administrative borders were perhaps underestimated.

In SN, the project strengthened the capabilities to engage in far-going institutional arrangements, and also built an increased awareness on the value of discussions and responsibility for own development. This was sometimes hard to accept, but nevertheless a useful experience.

Statistical capacity building: what were gained and what could have been better?
At the individual level, the project offered on-the-job training to a large number of staff, due to the size and broadness of its focus. Most statistical areas were included in one way or another. This particularly was the case for the high and mid level management group, who also were mostly in line for the study visits to Norway. Thereby, they received a possibility to learn about international trends as well as statistical production and register models and development in the Scandinavian countries. They also had the chance of expanding their personal networks and general scope.

The on-the-job training approach in general worked very well. PCBS staff had a relatively good basic education, and with extremely high motivation. There was an eagerness to pick up new things and learn about international standards and common approaches. But the length and time of the project never gave time to consolidate the production for the second, third or fourth time. Therefore, many of the production phases were a "first time experience", and the increased understanding and overview that

come with repetitions never materialized. However in general, statistical capacity was built and regular production ensured in each of the subject matter areas within the project.

The training centre was established not the least to offer statistical training towards other institutions in Palestine, but mainly provided in-house training to PCBS staff, both in statistical courses and lectures and software subjects. By the end of the project, it still had not reached the central position as national supplier of courses in applied statistics for other producers and users of statistics. Besides, it was argued to give relevant but too general training courses for the individual students.

But training is not learning, as it is stated in a SIDA report on twinning experiences. Training is focused in all projects aiming to develop statistical or (whatever) institutional capacity. It is more difficult to evaluate whether training really develops into learning.

We will argue that the twinning arrangement, offering funding of local costs as well as so many meeting points between Norwegian and Palestinian statisticians, strongly added up to statistical capacity building. Discussions taking place in the semi annual meetings, under and after the short term consultancies, in connection to the back up support from SN headquarter etc were centred around which decisions being the best to secure whatever statistical or methodological rationales, or crosscutting issues of vital importance to the system. The type and structure of the meetings added up to the capacity building. Personal meetings throughout the study visits and open lectures given by short term consultants in PCBS added up to the lot. We believe that this exchange of ideas and methods within a longer time frame helped turning the various types of training into learning statistics - for individuals as well as PCBS as institution.

Conclusion and recommendations

The conclusion must be that the twinning arrangement turned out to be fruitful both in terms of institutional and individual capacity development, and both for PCBS and SN. In PCBS, institutional capacity to run data collection and dissemination were immensely increased from 1996 - 2000. In SN, the capacity to fulfil the purpose of the twinning arrangement increased from year to year, as the institutional experiences materialized in new, or reviewed, practices. Individual capacity building took place in PCBS, both from the daily experience in trying to produce regular quality statistics, from the various meetings and discussions with the Norwegian colleagues, and from the different training elements of the projects. For the SN statisticians involved in the project, the twinning experience gave a statistical capacity building in the challenge of trying to give the best advice for data collection in a territory ridden by occupations and unclear borders.

In the introduction we promised to try to identify a number of important issues and elements to be included in international co-operation if it is to be *a capacity building experience at both institutional and individual level,* based on the experiences from the twinning arrangement between PCBS and SN.

- *Detailed plans with priorities*: a detailed project plan with descriptions of the initial situation, plans, challenges and priorities in each subject matter area is very important, both for defining clear objectives (onto which the results can be reviewed later), for giving the many consultants a picture of how it was from the start, and for giving a good base for discussions on change of plans. It is a prerequisite that the plans are made in a joint effort involving technical specialists as well as representatives from the receiving institution.
- The project budget ought to have *flexible budget lines*. If the project structure opens up for reallocations between different types of technical support and/or between international and local costs, this stimulates the receiving institution's ownership of the project, it is demanding for its management, and it stimulates the consultant to give value for money in terms of technical support. On the other hand, the reallocations ought to be quite difficult to obtain: only after

thorough technical arguments, extensive financial documentation and proper procedures will it be possible (preferably in the annual meetings).

- It is important to have *a clear project structure*: where, when, how and with whom is the cooperation going to take place? One example and a good starting point is to agree on formats for key reports, mission documents, final reports, meeting agendas, meeting procedures, meeting minutes etc as soon as possible. This strengthens not only the coordination units, but also gives individuals in each institution good methods and increased administrative capacity.
- *A capacity and capability analysis* for both partners before signing the agreement will help the partners in their handling of the project from the start. Both will then know more about what to expect of the other partner, and also about the best methods available or preferable for cooperation.
- The project plans must take into account *the absorbance capacity* on the recipient side when timing the technical support. Too many short-term missions have reduced effect due to counterparts being too busy, too pushed or too tired with new ideas. This means that annual or semi-annual plans must be well coordinated and early settled.
- *The project coordination team should be given enough resources and a substantial degree of authority* to arrange the work effectively. This will make the daily work smoother and reduce delays.
- *To develop a partnership is a process*. The partnership needs time to become a reality. Lack of experience with each other might very well be an obstacle in the early stages of the process, and one must expect to be surprised and even disappointed, and then take the trouble of discussing the problem.
- *Personal relationships must have a possibility to develop* because this stimulates actual learning. The only starting point of a personal relationship is to meet, face to face. Study visits are important here, giving the receiving institution an ability to familiarise with consultants in their home surroundings. Besides, early settlements of plans (for instance in annual meetings) for short terms missions will increase the general trust and reduce insecurity. First, people must get to know each other, then it is possible to enter steady relationships crossing geographical distances, for instance by e-mail support programs and telephone meetings etc.
- The *high-level decision makers from both sides should meet face to face and be personally involved in the project.* This will be a very strong fundament if/when situations occur where the project coordination team or other key persons are not able to find solutions. It is both practical and a learning experience to let the high-level meetings take place at the semi-annual meetings.
- *Semi-annual or annual meetings ought to have real influence* on the project by opening up for reallocations, discussions on technical development and solutions etc. Then it can be a learning environment in terms of both strategic management and financial sustainability.
- *Discussions with an active donor stimulate a learning environment* - for both partners. An active donor is a donor with opinions on both technical and financial matters, having both power and spirits to present them.
- The donors should have a *long term focus* to stimulate the *program orientation* towards regular production
- *The twinning concept and the understanding of this ought to be thoroughly discussed* and developed before the actual arrangement starts. What does it mean for both sides to engage in such a relationship?

Unfortunately, the political development in the region efficiently hindered an immediate continuation of the project for PCBS and SN after 2001. The further discussions on the twinning concept died with the increased tensions in the Middle East. But we both hope and expect that the twinning concept may arise and start a new active period within a reasonable time. As we see it in retrospective, maybe the most basic understanding one can reach of a twinning relationship is to see it as a two-way dialogue, not free from conflicts, but with a perspective and framework for problem solving instead of unifying agreements.

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Chapter 9. Revision of the CPI in Mozambique

Randi Johannessen

Introduction and background

One of the high profile tasks of any NSI is to produce and present regular information on inflation in a country. The main price index is a monthly national consumer price index, a CPI or in Portuguese IPC. In order to ensure and convince all stakeholders that the CPI is produced by an independent authority with no wasted interest, the NSI will not only produce the CPI, but also collect information on the consumption pattern in the country and up date the methodology as required by the situation in the country. Technical cooperation to review and improve the CPI system is therefore a standard requirement in most institutional cooperation programmes. This has also been the case in our cooperation with Instituto Nacional de Estatística - INE in Mozambique. Our cooperation started within the framework of the Twinning Project[37] and continued with the Scandinavian programme to strengthen the Institutional Capacity of the INE 2002-2007[38]. The INE gave priority to the needs for a review of the methodology used to produce the consumer price index of Mozambique - Indica Precos de Consuma - IPC. Previously the INE received technical support in this statistical area mainly by the UNDP, covering different methodological aspects and IT-development as well as capacity building. An Italian project that closed down during 1997 focused on improving publishing routines and validation of the national IPC.

The work of Statistics Norway started in 1998 with an evaluation of the IPC. The INE is computing the IPC monthly based on actual prices of a variety of goods and services from different types of outlets (markets, shops, etc.). The price collection takes place in three different urban areas (regions) of Mozambique: Maputo and surroundings in the south, Beira and surroundings in the middle and Nampula and surroundings in the north. The INE has provincial offices in both Beira and Nampula. An all-item index and sub-indices are computed for each region. Finally the three all-item indices are weighted together to a national urban IPC representing the overall change in consumer prices of Mozambique.

The main focus of the overall project has been to analyze the IPC and suggest new and improved methods, as well as to follow up the achievements in implementing the new recommended methodology. Statistics Norway has conducted four short-term missions within the framework of the two different cooperation projects, from 1998 to 2003. The two first missions took place in 1998[39]. A third mission took place in early 2000[40], while the last one was arranged within the framework of the new Scandinavian project in 2002[41]. The aim has been to follow up the evaluation conducted at the first mission as well as to assist in the activities laid down in the plan agreed upon in the beginning. The last two visits were not planned from the very start, but a result of the all-time priority given to the IPC area by the INE.

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[37] The Twinning agreement from 1998 - 2001 was a World Bank project with funding partially from the World Bank Group and partially by Swedish funding (SIDA) through the World Bank project. We joined Statistics Sweden - SCB as a junior partner and when SCB got the contract with the World Bank, and we signed up as a sub-contractor providing two long- term advisors and weres assigned to specific subjects including CPI work.

[38] Scandinavian Assistance to Strengthen the Institutional Capacity of the National Statistical Institute (INE) 2002-2007 is funded by DANIDA, SIDA and NORAD in a joint programme. For 2002-2003, it was arranged as a bridging program to secure the link back to the twinning project with the SCB. A Scandinavian consortium consisting of Statistics Denmark, Statistics Sweden and Statistics Norway is the consultant for the project, with Statistics Denmark and DANIDA as the respective lead agent and lead donor.

[39] See reports MOZINE 1998:03 and MOZINE 1998:09.

[40] See report MOZINE 2000:05.

[41] See report MOZINE 2002:09.

Activities during the missions have focused on building capacity in the INE by working together with the central IPC staff and the price collectors in the INE to identify main problems with the old methodology and thus also the production system for the IPC in Mozambique. This includes the main areas of IPC work, a commodity basket, a price collection system, index methodology and calculation system with focus on the following elements:

The commodity basket:

- the range of goods and services covered
- the need forupdating the basket of goods and services
- the use of old weights

The price collection system:

- how to solve difficult situations during the price collection

Index methodology and calculation system:

- the IT-system used in validiation and calculation
- the extent of the geographical territory covered in relation to a national index

During the missions, meetings with main users of the IPC inside and outside the INE have been arranged. In addition to working in the INE in Maputo, the two first missions also included a visit to the provincial offices in Beira and Nampula. The two last missions entirely concentrated on the regional Maputo-index assuming that problems faced in Beira and Nampula are similar to those faced in Maputo. The output of each short-term mission has been a report of quite practical rather than theoretical content. The reports consist of a lot of practical examples based on relevant data from the IPC to illustrate the use of new methods. *The reports have focused on short-, medium- and long-term implementation of recommended methods due to the resources available at the INE, as well as a review of the implementation of the recommended methods.*

The main focus of the first mission was to analyse the state of the IPC as it was produced in 1998 as well as to make a proposal for a new methodology. First of all, it was then an urgent need for updating the weights and basket of goods and services. There was also a need for a new IT-system for improved efficiency and data validation. The staff involved with the IPC seemed to focus too much on measuring the level of prices, while the aim of the IPC is to measure the *change* in prices. This attitude influenced the choice of methodology used, and amendments were recommended in several areas of the IPC. The consultants proposed changes in methodology within the framework of a three year-plan. The programme had the following main target areas:

- 1998: Focus on central routines and the basics in the revised index
- 1999: Improve efficiency - implementation of new methods to all cities
- 2000: Tests and further improvements - preparing for national coverage

In later missions, terms of reference ToR has mainly pointed at evaluating the achievements in implementing the new methodology recommended by the first mission, as well as to suggest actual procedures for one or several of the activities laid down in the 3 year step-by-step programme.

Two long-term advisors, both from Statistics Norway, whom has been working in the INE for the period, have also followed the IPC-area in cooperation with other economic statistics. Between the short-term missions, some follow-up by e-mail has been conducted. However, this has been ad-hoc follow-up rather than e-mails on a regular basis. Staff from the INE did a one-week study visit in Statistics Norway in 1999, studying various Norwegian short- terms statistics, among others the Consumer Price Index.

Long- term and short- term objectives

Time and resources are required when making amendments in statistical methodology in parallel with building national competence and capacity for maintenance of new productions methods. The IPC staff was ambitious on behalf of the INE before entering into this process. The need for systematic planning before introducing new activities was therefore stressed by Statistics Norway throughout the support period. For instance, some of the suggested activities would require increased resources. In addition, more analyses might be fruitful before introducing all the suggested activities. To give an example, the INE suggested expanding the price collection to cover more provinces. This required analysis of which provinces to include, how to deal with the urban - rural dimension[42], the availability of necessary resources, and the possibility of transferring data from the province offices to the Maputo office.

Therefore, the result of the very first short-term mission was a recommendation for revised methodology for the IPC. The recommendations were laid down in a step-by-step three years programme. The following main objectives formed the basic plan:

- Building competence and capacity for statistical analysis and methodology both in the IPC and generally in the INE
- Technical documentation of the revised IPC
- To update the weights and the basket of goods and services
- Improving measurements but reducing frequency in collection of prices
- Special survey tasks for testing and further analysis
- Planning and developing a new IT-system for the production of the IPC
- Introducing a new international consumption classification (e.g. COICOP)
- Extensions of the national coverage of the IPC

Converting the IPC into an international consumption classification has not been given priority in the INE until conducting a new household budget survey (HBS) in 2002/2003. The HBS will be based on the recommended international consumption classification COICOP[43]. Therefore, this classification will be introduced in the IPC in 2004.

Competence in economics at a graduate level seemed to be the most urgent need in the short run to fulfill the objectives of the project. To build competence in the INE, it was recommended to increase the number of staff by 3 persons. For instance, a highly competent IT-person was needed for planning and developing a new IT-system.

Throughout the first project year, the focus was mainly on improving the index of the Maputo region. Much effort was put into improving existing routines, building competence and capacity among the INE staff and the field staff (price collectors). There were urgent short-term needs for implementing new weights, updating and extending the basket of goods and services and making necessary adjustments in the unit sample to be followed during the collection of prices. One overall objective of the first project year was to publish a national index based on high quality data from all three regions (Maputo, Beira and Nampula) covered by price collectors. The consultant recommended to the INE to abandon weekly price collection of food from the markets, due to the fact that measuring price changes over time based on data for one week serves the same functions as a four weeks average. By introducing a monthly programme for price collection, more efforts could be put into extensions of the goods and services in the basket.

[42] Experiences from other African countries show that the rural population buys most of their non-food items in the nearby district centers. This may well be the situation in Mozambique as well, and thus an argument to exclude rural areas in the geographical coverage of the IPC.

[43] "Classification of Individual Consumption by Purpose"

Another overall objective of the first project year was to start planning and developing a new IT-system for data entry and data validation on a new platform. The software used in the monthly production of the IPC at the time was dBase and Clipper, with Excel used in the final stage of preparing the index for publication. The first mission recommended a more user-friendly system based on Windows applications.

Plans for the second project year focused on activities with the purpose of ensuring a more efficient operation of the new system for producing the IPC. Another important task was to increase the number of outlets (markets, shops, etc.) to improve the quality of measurements.

The last year of the initial step-by-step project had one main activity; preparing an extension of the geographical coverage in the national IPC by including more provinces. Until 2001, no price collection was done in rural areas, although approximately 75 per cent of the population of Mozambique lives in rural areas. If price movements in different provinces are known to be very highly correlated, a statistical office may be able to produce a good national index without a wide geographical spread of price collection. Still, expanding the price collection may be unavoidably, partly to make it clear to the users that it is a national index and partly in case price movements in different provinces cease to be parallel. If the IPC is supposed to cover the whole population of Mozambique (including population outside the cities), one should therefore consider including more provinces. Increased geographical coverage would require more resources from the INE. Before expanding the price collection, the consultants therefore recommended to clarify several issues. First of all, there was obviously a need to acquire further knowledge of variation in market conditions and consumption patterns before deciding the geographical coverage of a national index.

Results from the short-term missions

During the second mission in December 1998, some of the activities suggested in the first mission had been started, and some of them were already close to finishing. Two basic activities that were in urgent need of short- term support, implementing new weights and updating the basket of goods and services, had been given high priority by the IPC staff.

At this stage we also realized that, there seemed to be a different basic understanding of the purpose of the IPC among price collectors from the various regions and how to handle different situations that occur during data collection. Development of a manual with general instructions for price collection as well as for training the price collectors was added to the activity program as an urgent task. A draft manual for the price collection was therefore written as part of the second mission report.

By December 1998 the number of staff within the IPC organization had in practice not changed from the first mission. The INE staff in the IPC was very competent but overloaded with various tasks and projects given higher priority.

But when conducting the third mission in March 2000 the process of change and improvements had really taken off. There was clear proof of a considerably improved data collection process, even though there still was a lack of routines to handle different situations facing the price collection. This illustrates that the training of the price collectors as well as a introducing a written instruction for price collection worked out in a positive way. The allocated period for price collection of foodstuff from the markets was reduced to 2 weeks every month.

When returning for the fourth mission, in October 2002, the whole programme of revising the IPC during the last 4,5 years really seemed to have been a fruitful exercise. The IPC staff membersin the INE headquarter in Maputo were now more competent on methodological and organizational challenges of performing price collection for the purpose of an IPC. Besides, the staff generally had higher qualifications in terms of formal training than before. The situation for the IPC staff in the two other

regions (Beira and Nampula) seemed to be stable, but since no analysing of the provincial data has been done since 1998, it is difficult to verify the quality of the price data and the processes as such.

As mentioned above, one crucial objective was to develop a new IT-system within the INE for this specific purpose. The objective was not given priority until 2001, probably due to the lack of qualified IT-personnel. In 2001, one of the long-term advisors working with IT matters did assist in the development of a new IT-system. By October 2002, a system based on the software Access was almost finished, but unfortunately not yet implemented in the monthly production of the IPC. The long- term resident advisor who developed the system ended his assignment in the INE by the end of 2002. Our impression is that the IPC staff somehow hesitated to start using the new system, while lack of detailed documentation to show how the new system is designed also added to the implementation problems There is a permanent need of qualified IT personnel – to maintain the new system.

The programme for development of the IPC is planned to continue within the new Scandinavian support program, both with short- term missions in 2004 and onwards as well as part of the Terms of Reference for the long- term resident advisors in the economic statistics area. When conducting the so far last mission in October 2002, no expanding of the national coverage had been done. Although the coverage of the national index had not yet increased, still some of the activities that were supposed to take place in 2000 had been conducted. Among others, the rural - urban dimension had been clarified and preliminary price collection had started in seven new provinces of Mozambique. The aim of the preliminary price collection is to analyse whether the provinces will influence the index in a significant way, and then decide whether all or just some of them are to be included in the computation of a national IPC. The plan is to include more provinces from 2004.

Producers and users of the IPC

During the first mission in 1998, meetings took place with representatives of some of the users such as the World Bank, the National Bank of Mozambique, the Ministry of Finance, the International Monetary Fund, the Norwegian Embassy and the INE's own National Accounts section. Some of the representatives gave interesting views on methodological issues as well as needs for a revised IPC. Interesting as well as relevant opinions and perspectives on the INEs general production were also expressed during these meetings.

Regular meetings between main users,the INE and the consultant have not been arranged during the last short-term missions, but some ad hoc meetings have taken place. The general impression of these meetings is a very positive one. The users now find the IPC reliable, although they have strong opinions on the geographical coverage of the national IPC: roughly speaking, they argue that the coverage should be expanded by including more provinces. Systematic and regular discussion between the producers and the main internal and external users of the IPC has been recommended in all the mission reports.

Meetings with main users where they express their viewpoints and specific needs point to the importance of establishing an Advisory Committee on the IPC. The members of such a committee might consist of representatives from the most important user groups of the IPC, as well as economists and statisticians from the university and other research institutions. The aim of an Advisory Committee could be to add up to the ongoing effort to improve the methodology of the IPC by ideas and opinions from important users. Regular meetings (e.g. once a year) with such a committee would also be convenient for information on methodological changes that are about to take place. The Committee might have a wider focus, not only to cover the IPC, but also other economic statistics. However, no attempt in the INE has been done so far to establish such a committee on price indices.

Organizational and individual aspects of the missions

Usually a short-term mission is restricted to 2-3 weeks. For the mission to be fruitful, it is absolutely necessary that the consultant receives a Terms of reference (ToR) in advance. The statistical agency must also provide requested information by the consultant during the visit. The INE did prepare ToR in time for these missions, and nearly all requested information was provided. The lack of written documentation of some of the procedures used in combination with language obstacles is one reason why not all necessary information has been available. The preparations were adding up to the success of this particular development programme.

As for the first three missions, the opening week often faced certain problems, mostly due to language obstacles. The consultant does not speak Portuguese , and despite good knowledge of English, not all of the IPC staff feel comfortable using English when it comes to technical aspects of the statistics. If a short-term mission shall work well in such situations, it is necessary to provide an interpreter (either one of the staff or a long-term advisor if possible). But one problem has been that the long-term advisor was occupied with other tasks and thus unavailable to assist in the interpreting. The result of this language problem is a certain lack of information provided by the IPC staff as well as information provided by the expert.

The last of the four missions was more fruitful in this respect, due to a well-prepared staff as well as the possibility of having interpretations both from the long- term resident advisor and members of the IPC-staff themselves. Another reason for the general improvement may be the actual competence building in the INE on the IPC area towards the end of the project period, resulting in more experienced staff with a better background both for adopting information and communicating with the consultant. Besides, maybe even the consultant had acquired more experience in how to perform such missions for an optimal result.

Another aspect of the language problems is that the mission report always ought to be interpreted into Portuguese and spread in the INE as soon as possible after the mission. This is to secure the actual input to INE staff in terms of statistical advise, due to the reduced capacity to discuss technical aspects in English. This has usually been the policy in the INE.

When performing the short-term missions, much effort has been put into “learning by doing” in front of a computer or by accompanying the price collectors to identify and solve different situation they face out in the field. This seems to have been a fruitful way of transferring knowledge from the consultant to the staff in different parts of the IPC area. As mentioned earlier, our impression during the two first missions was that the IPC staff - both the central unit as well as the price collectors - had their focus too much on measuring a precise level of prices, while the aim of the IPC is to measure the correct change in prices. Our impression during the last mission is that this attitude has changed radically. The manual designed by the consultant during the second mission also seemed to have influenced the price collection in a positive way.

Although much can be achieved by training, it was also recommended to increase the total number of staff – especially in the central unit of Maputo. As far as we can see, this has not been given priority so far, but staff involved with the IPC is more competent than in earlier years.

An extremely important part of the long- term capacity building was documenting routines used when producing the monthly IPC. Due to language problems it has been somehow difficult for the consultant to figure out whether this really is completed or not. Although some documentation exists, we still do suspect that this task has not been given priority. Documentation of routines is always time consuming, and since no documentation of the newly developed IT system existed by October 2002, we probably can conclude that documentation of routines for the IPC is a general problem still remaining. The missions have resulted in implementation of one or several recommended methods (either new or improved ones) as well as a time schedule for when to introduce the new methods into the existing

production system. Our experience suggests that unless the long-term advisor has specific professional knowledge about the specific statistical product and available methods, it is an advantage to let a consultant in a particular field conduct short-term missions, both for evaluation of the methods used as well as for implementation of recommended methods.

Summary and lessons learned

Most of the activities recommended in the initial step-by-step program from 1998 have been completed or will be completed by the end of 2003 or beginning of 2004. Despite the fact that most of the revised methodology was supposed to be implemented by the end of 2000, the project still must be considered a success. The high priority the INE has given the IPC area by requiring several short-term missions in combination with the follow-up from a long-term advisor is one reason why this project should be considered a success.

The main reason why some of the activities have been postponed is lack of resources and well-qualified staff. Most INE staff are highly competent, but too few and too busy. Implementation of some of the recommended methods typically requires time as well as qualified staff to do analyses beforehand. Generally, this kind of work is not given priority in a situation dominated by lack of resources.

Other recommendations not yet implemented, like geographical extension of the price collection to cover more provinces, is very costly. Thus, one cannot be very surprised to see the fulfillment of this objective delayed. However, by stressing the importance of such an extension of national coverage in every short-term mission of the project, the IPC-staff, and hopefully, even the management of the INE, get a better understanding of the importance of such an extension. The activities for expanding geographical coverage of the national IPC are now being conducted with the aim to include more provinces from 2004. Thus, towards the end of the project this objective is given a higher priority than what was observed at an early stage.

We can conclude that both competence and a general understanding of where to focus in the IPC area has increased dramatically since 1998. However, one of the crucial elements for further success is a remaining lack of competent staff. Presently the IPC staff is involved in the new household budget survey 2002/2003, which will serve as a source of weights of the IPC. The result is lack of time to do the necessary analyses needed for implementing the last recommendations of the initial plan from 1998.

In my opinion, there are activities that could have been performed at an earlier stage in the programme, such as testing and implementing a new IT-system. This was almost completed in late 2001, but lack of operative IT-staff and a written documentation can of course explain the delay. Another reason could be that the IPC-staff for different reasons has refused to starting to use the new system.

Based on experience from several short-term missions, my clear opinion is that as long as there is a low acceptance for new methods recommended by the consultant, a revised methodology will never be implemented. Therefore, more effort should be put into reaching such acceptance. The use of international literature or standards in various activities arranged during the mission (like training, workshops, small project groups etc) might stimulate the confidence between the consultant and the local staff in such matters, and it will be important to stimulate discussions on various types of institutional costs (financial, human, technical) following the methods chosen as well as alternative solutions.

Careful coordination between the different short-term missions within the IPC area is also needed, securing that a follow-up from one mission to the next is carried out the best possible way. For instance, the consultant should assist both when evaluating the old methodology as well as when the revised methodology is introduced.

Finally, due to language problems, interpreting between English and Portuguese by either some of the IPC staff, the long-term advisor or other qualified personnel must be given priority during the whole short-term missions. This may require some reorganization of the long term resident advisor's or the hosting unit's work during the visit, but it is still worth the efforts to try to maximize the communication and understanding between the involved people. It is also extremely important to translate the mission reports as soon as possible to prepare for daily use in the INE.

Chapter 10. Support to strengthen the agricultural statistical system in Uganda

J. Magezi-Apuuli, E.S.K. Muwanga-Zake, and P. Schøning

Background

The agricultural sector in Uganda contributes to about 40 percent to GDP and 90 percent of total exports. The sector provides 70 percent of employment in Uganda. 95 percent of the population live in the rural areas and derive their livelihood from this sector.

Through the Poverty Eradication Action Plan (PEAP) and the Plan for Modernization of Agriculture 1998 (PMA), the Uganda Government has taken strategic decisions to make poverty eradication the over-riding objective of agricultural development. The objectives of the PEAP are as follows:

- Make poverty eradication the over-riding objective of agricultural development
- Transform small-holder farmers from subsistence to producing for the market
- Support the spread of profound technological change throughout the agricultural sector
- Address food security issues through trade, rather than an autarchic self-sufficiency
- Give priority to agriculture as the engine for economic growth and poverty eradication
- Improve access for women and the youth to productive assets and empower them to undertake income generating economic activities

As a part of the PEAP and PMA policy, the objective is amongst others to give priority to agriculture as the engine for economic growth and poverty eradication as well as to transform small holding farmers from subsistence to production for the market. Objective, accurate and timely information about agricultural activity in Uganda is however unfortunately to a large degree missing. The policy adapted raises need for reliable, consistent, accurate and timely statistical data. Need for baseline statistics with possibilities for continuous monitoring and evaluation of the implementation of PMA and PEAP is clearly present. Agricultural statistics is also urgently needed for planning purposes at different administrative levels. Hence an improvement of the Uganda Agricultural Statistical system is a priority.

Introduction

Within the framework of FAO/World Bank agricultural assistance to Uganda, a Data Needs Assessment Study was conducted 1999. It revealed that the National Agricultural Statistical System was weak, vulnerable and unsustainable. Basically it falls short of meeting user needs. As a result of these findings, the Uganda Government developed and adopted an Integrated Framework for Developing Agricultural Statistics in Uganda in March 2000.

The Framework provides both a long-term development plan towards a sustainable statistical system and a master plan for implementation of the data collection activities on agriculture. The Framework has eight inter-linked components as follows:

n. Data management
o. Institutional capacity building
p. Census Programme
q. Household based Surveys
r. Village Registration System/Agricultural reporting Service
s. Early Warning System
t. Development of Fisheries Statistics
u. Forestry Management Statistics

UBOS, in close cooperation with the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) has embarked on rebuilding the statistical system through the operationalisation of the Integrated Framework.

Systems for Strengthening Agricultural Statistics Project (SSASP)

SSASP Framework and objectives
After reviewing ongoing work for improvement of the agricultural statistics information of Uganda, a 3 years project with an economic frame of USD 1.8 mill. funded by the Government of Norway was initiated. The Cooperating Agency in Uganda is MAAIF, while UBOS is appointed as the Uganda Government Implementing Agency. Cooperation with Norway was formalised as a twinning arrangement with Statistics Norway (SN).

The project agreement SSASP, was signed by representatives of the Government of the Kingdom of Norway and the Government of the Republic of Uganda, 30th November 2001. It was agreed that the SSASP would focus on components 1, 2, 3, 5, and 8. The objectives of the project are as follows:

- Develop an Agricultural Statistical System
- Develop further the Agricultural Reporting System and Village Registration System
- Develop a System of Annual Agricultural Surveys
- Develop a Comprehensive National Agricultural Statistics Bank

It was envisaged that the project would include conducting a Pilot Census of Agriculture, while the World Bank credit supported PMA would include the main Census of Agriculture. The objectives include both elements of technical development of sustainable systems and elements of capacity building through exchange of experience, through external experts and training. SSASP implementation formally started January 2002, but serious work started only in October/November 2002.

Organization
The project is currently supervised by NORAD through quarterly progress reports. Work plans and reports are then reviewed at Annual Meetings between the UBOS, NORAD and the Uganda Ministry of Finance.

According to the agreement between SN and UBOS, the latter is formally in charge of the project which includes adherence and implementation of the decisions taken. Budget allocations should be approved at the Annual Meeting.

Initially a National Agricultural Statistical Coordination Committee (NASCC) was planned to hold the function of being the steering committee for SASSP with the National Agricultural Statistics Technical Committee (NASTC) having technical advisory responsibility. The focus was from the very beginning at NASTC and the NASCC was not inaugurated. NATSC is chaired by the Commissioner for Agricultural Planning. Thereby the formal link to MAAIF is ensured. All the main stakeholder representatives are members of the NASTC.

The SSASP project team in UBOS were built up step by step during 2002. It is organized as a separate office under the Directorate of Business, Industry, Agriculture and Energy Statistics (BIAES). It is headed by a UBOS Senior Statistician, flanked by a fulltime employed Statistician, both with long experience in agricultural statistics. The two permanent UBOS officers are supported by a project secretary. The project team is furthermore strengthened by employing a Long Term Advisor (LTA) from Statistics Norway and a Uganda National Long Term Consultant (NLTC). Both consultants were contracted for a period of 12 and 14 months respectively who started in the fourth quarter of 2002.

Project Cooperation Model
The technical cooperation between UBoS and Statistics Norway comprises several other modes than the Long Term Advisor from SN. Technical back stopping to SSASP has been given from the Division for

International Consulting in Statistics Norway. SN is also responsible for making short term technical support from external consultants available for the project. A total of 11 short or medium term technical support and backstopping activities were conducted in the period from January 2002 to December 2003. Most of the technical assistance was done as 2 weeks missions of specialists from SN, working according to agreed terms of references and in close cooperation with Uganda counterparts.

A specially designed mission in order to kick-off the cooperation was conducted by a SN consultant staying with UBOS on a medium term basis from May 2002 up to August 2002. This consultant mainly concentrated on assisting in the planning process and developing and pre-testing a first generation of questionnaires.

Even the national technical support includes other modes than the Long Term National Expert. A researcher from the Faculty of Agriculture at the Makerere University was contracted on part time basis in January 2003 to support the experimental design on yield and crop production as well as to further strengthen the team's analytical capacity of the PCA.

In order to ensure an increased institutional capacity it was planned to increase the staff of BIAES with two to four staff members. They would all participate in the pilot work and later the main agricultural census before embarking upon the annual agricultural statistical system. However the Ministry of Finance did not make an allocation for these new positions and it is now discusses that the project would fund at least two of these positions for two years, when the government will take over the responsibility.

Pilot Census of Agriculture (PCA)

Background
National baseline agricultural statistics for Uganda can be found from censuses conducted in 1963/64 and 1990/91. However, these data are out-dated, and in addition, the 1990/91 Census results were for several reasons not accepted by the Government of Uganda.

During the last 10 years, UBOS has been collecting agricultural statistics from primary sources through modules attached to household surveys (UNHS 1995/96 and 1999/2000) in order to have a statistical base for obtaining reliable estimates of production of major food crops. More recently, an Agricultural Module was piggy-backed onto the Uganda Population and Housing Census 2002 (PHC 2002) with the objective to construct appropriate sampling frames for a proposed Uganda Census of Agriculture and Livestock slated for 2005.

Normally a Pilot Census preceedes a fully-fledged census. A pilot is supposed to be a replica of the main census and enables organizers to prepare well for the main Census. The first task on which the SSASP project embarked was therefore to conduct a Pilot Census of Agriculture (PCA).

In addition to preparing for the main census, the PCA gave the opportunity to collect information and gain a wide range of experience. Such planning experience is of great value when building up a comprehensive agricultural statistical system, including censuses, surveys, and possibly also collection of administrative data. Elements of experimental designs were included in order to advise on sustainable methods and equipment for calculation of area and crop production.

Planning and preparatory work
The SASSP team was fully established during the last quarter of 2002. The work in this period was for practical reasons concentrated mostly on preparatory work for the PCA. However, the work was done having the overall objectives of the project in mind. Thus in parallel with PCA relevant information, also input and planning for the other components of the SASSP were compiled.

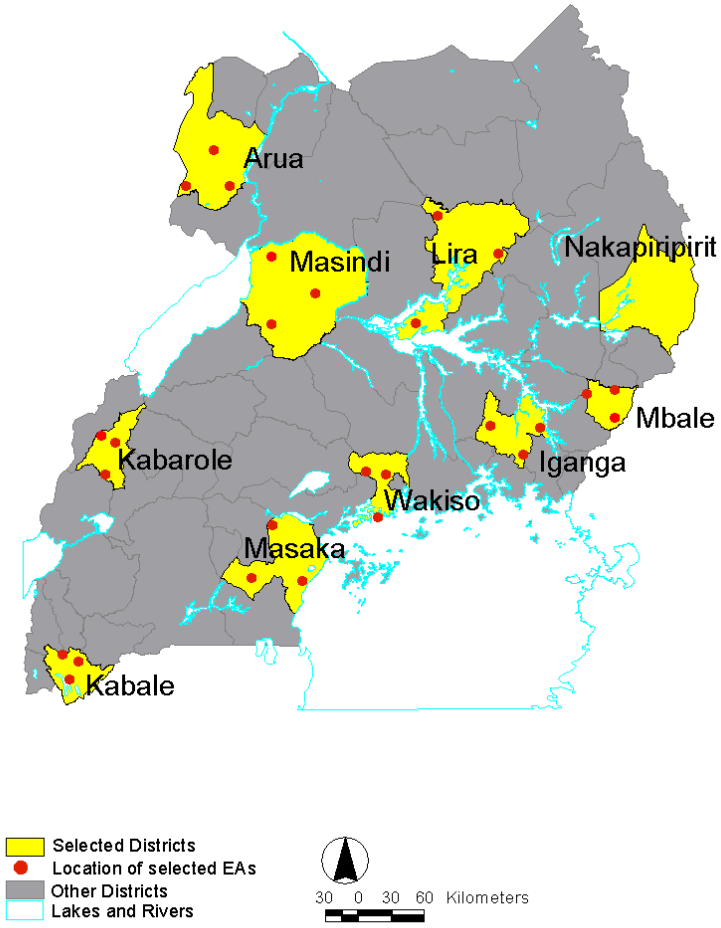
A pre-test of instruments was conducted over a period of 2 weeks in five villages in Masaka District in June/July 2002. Enumerators were temporarily engaged for the field work, and cooperation with the District Administration Officials as well as with MAAIF staff was ensured. The interview of holders and the practical area measurement methods were tested in the field. Main findings from the pre-test were as expected mostly of technical nature for instance giving input on how to improve the questionnaires. In addition, the introduction of a small and relatively cheap GPS equipment for direct area measurement gave promising results for further testing.

After the pre-test of instruments in Masaka, they were improved and expanded through a thorough process. Comments from Stakeholders were requested and received. The instruments were also commented upon by the backstopping team in SN. Further improvement was made by including prices and income statistics, farm gate prices and total household income during first agricultural season.

Draft plans for the progress and organisation of the PCA was finalized in January 2003 and thereafter approved by the NASTC and at the Annual Meeting.

The six questionnaires and manuals (Enumerator's and Supervisor's) developed, covered socio-economic variables, area, livestock and other animals, inputs and income as well as yield and crop production aspects. The unit in PCA is the household based small and medium scale Uganda agricultural holding. An additional questionnaire and a corresponding interviewers manual for Large Scale Private and Institutional Farms was developed and distributed separately.

Figure 1. Selected districts and Enumeration areas. PCA 2003



Sampling for PCA was done in consultancy with an expert from SN. Since data from the Population and Housing Census (PHC) 2002, Agricultural Module was not yet processed when sampling for PCA took place. Due to this delay, the sources on which the sampling was based was census data from 1990/91 and digital maps over resources and agri-ecological zones (MAAIF). This was combined with digital and hardcopy maps of administrative boundaries and geo-referenced preliminary information about population size from PHC 2002.

A total of 60 Enumeration Areas (EA) distributed pair-wise in 10 districts were selected. Hard copy topographical maps with EA boundaries was made available for the field work.
During the PCA fieldwork, all households in the selected EAs were listed, and a total of 900 households with agricultural activities were selected for the PCA. The final sample of holdings for enumeration was done by the Enumerators assisted by the District Supervisors and based on the use of pre-programmed routines on a scientific calculator.

Finally 60 Private Large Scale and Institutional Farms (PLS&IFs) were randomly selected based on listings received from the district administrations. The idea was also to compile statistics for the PLS&Ifs on a complete enumeration basis for the future agricultural statistical system/census.

The logistical/organizational approach was to engage Enumerators living within or near to the 60 EAs in order to perform a series of visits for enumeration activities to the selected holdings during the first agricultural season 2003.

Training and launching
A total of 30 Enumerators and 10 Supervisors for the ten PCA were selected, appointed and trained for the fieldwork. The Enumerators were engaged on full time basis, initially for 5 months effective from March 2003, while the Supervisors (already employed as Extension Workers at the District Agricultural Offices) were expected to allocate 10 workdays per month to the local supervision.

The training was done at Mukono Research Center March 1-13, 2003 as a combination of practical exercises and theory. After the training course, the Enumerators received questionnaires, measuring tapes, compasses, weighing scales, pre-programmed calculators (for decentralized sampling and for area calculations), maps and other necessary instruments for the field work. Each Supervisor received 2 GPS equipment to be shared among the three Enumerators in their respective districts.

A combined Stakeholders' Workshop and official launching of the PCA was held at Hotel Africana in Kampala on March 14, 2003.

Field work
The first agricultural season normally starts early February in most parts of Uganda. In recent years, weather conditions have however been unstable, and for 2003 the first season was seriously delayed. Several districts had some rain early March, and many farmers did plant at that time. Unfortunately this rain was followed by some weeks of drought, long enough to destroy much of the planted crops. In many districts, planting started first after mid April. Not until the end of April, the fieldwork had started in all districts.

The data collection process involved area measurement, yield estimation and physical weighing of produce. Several methods for area measurement data collections were employed to ensure consistency and accuracy of tools for data collection. This includes using the Global Positioning System (GPS), Compass measuring/traversing as well as Enumerator and Holder eye estimates. Information about crop production was collected in parallel by interviewing holders, by weighing of continuously harvested crops on selected plots and by crop-cutting of temporary crops on scientifically selected sample-plots of 3x 3 meters.

Information on livestock as well as fish-farming activities was solely based on interviews with the holder.

A total of 6 field trips were conducted by UBOS staff to all the 10 districts during the field work period. The objective of the fieldtrips was to follow up on the 30 Enumerators and their 10 District Supervisors as well as to collect questionnaires and bring them back for data entry in UBOS. Another important issue for the field trips was to ensure continuous good relations with the district administration through repeated visits and orientation about status and progress of the fieldwork ongoing in their areas.

Most respondents reacted positively to the inquiry. However, sensitisation of the respondents and the surrounding rural community turned out to be crucial for success. The Local Council (LC) Officials were informed, engaged and were also paid a small token for their contribution to sensitisation. The district and sub-county leadership were informed about the PCA fieldwork exercise well ahead of the actual fieldwork. They also had participated in the selection of Enumerators and Supervisors. In most villages, all the holders were informed about the PCA in a series of local meetings and by an info-brochure.

In areas where information was not given enough attention in the starting phase of the project, the rural population reacted with suspicion and were reluctant to cooperate. Extra information was then needed to get the work back on track. According to the instructions, a total of 3 call-backs to non-respondents were to be done by the numerator. Thereafter the District Supervisor was called for assistance. Reasons for final non-response were to be properly recorded on the questionnaire concerned.

Towards the end of the exercise with collection of information on small and medium scale household based holdings, the PCA Form 7 for the PLS&IFs was introduced. This exercise revealed that the data collection was far more time consuming than initially expected, attributed to more bureaucratic organization of these farms. Also for some reasons the PLS&IFs were reluctant to give information, probably for fear of using the information for taxation assessment purposes. On the more positive side, experience was that many interviewers were delayed because respondent took special interest in the design of the questionnaires and thus contributed substantially to improvement for the future census and other surveys.

Use of GPS for geo-referencing and area calculation
During the pretest in Masaka in June 2002, a handheld GPS equipment was used on experimental basis in order obtain area of crop-plots and parcels as well as for geo-referencing of the holdings. For this exercise, an application for automatic calculation of areas based on recording the start position and the track-log of perimeters of the parcels and plots was downloaded to a handheld GPS equipment.

Thorough testing of the GPS equipment during the fieldwork of the PCA revealed that compared to the accurate but time consuming traversing of the same areas using compass and measuring tape, the GPS areas seemed to be of acceptable accuracy.

Data entry and processing

An important objective of the PCA was to develop a cost efficient data entry system for receiving, checking, and storing of agricultural statistics data. The system should have both a technical and an organizational component. To kick off this part of the pilot, a short term mission by an SN consultant assisted the permanent UBOS staff during a mission towards the end of May, 2003.

The data entry system was developed and tested for PCA Form 1. The software used was CSPro version 2.3, as UBOS staff already had competence and access to this software. The development of data capture screens for PCA Form 2-7 have since the mission ended been done by permanent UBOS staff with sporadic supervision from the SSASP project team.

Routines for post data entry checking were unfortunately not designed. This was partially due to lack of capacity and also because there was no knowledge on how to establish such routines by the UBOS staff responsible for programming. As a direct result of this, ad-hoc extensive post entry data cleaning had to be done by the already very occupied SSASP staff.

A total of 7 Data Entry Operators were hired for PCA work initially from 1st June to end of July 2003. This is staff trained for data entry from other UBOS statistics projects. A one day training of the data entry operators, with emphasis on the understanding of the structures and contents of the questionnaires, was conducted as the work started.

The main bulk of PCA Forms was received for data entry in June/July followed by a new bulk of returns at the end of August. However, the most complicated forms concerning area measurements and crop weighing remained in the field up to mid September.

Already from the beginning of the data entry work, the number of computers available for data entry was for some reasons only three. Both as a result of low technical capacity and delays in return of questionnaires due to late season start, the period for data entry had to be extended up to October 2003.

As a part of the routine of the Data Entry Operators, a check on completeness and quality of geo-reference as well as systematic numbering of the questionnaires was conducted before the first data entry. A second copy data entry was conducted and the results were cross-checked with the first entry in order to eliminate data entry errors. Finally, a complete data file was distributed back to the SSASP team for data cleaning and storing of the master copy. Software used for this simple data cleaning was mainly SPSS version 10.1.

According to the planned resource allocation, it can be concluded that the data entry staff was not efficiently used during the PCA. This will have to be looked more closely into, in future censuses/surveys.

Dissemination
The first results from the PCA were presented to the public during the African Statistics Week 14-18 November 2003. The presentation was focused on the lessons learned about organization, methods and logistics. The overall objective with this presentation was to use the PCA results in order to promote a planned Uganda Census of Agriculture and Livestock slated for 2005.

The detailed findings from the PCA is documented in a series of internal thematic sub-reports compiled. An official summary PCA report will be prepared and made available by the end of 2003. More findings from the EAs included in the PCA will be used as illustrations for possible future outputs and to explain problems encountered during the exercise. Accordingly a paper on the use of GPS for area measurement was presented by UBOS at the African Commission on Agricultural Statistics (AFCAS) meeting in Yaounde, Cameroon mid October 2003.

A short term technical assistance mission from SN in November 2003, had as its main objective to look into the quality of the PCA data, and also on the methodological possibilities of linking PCA agricultural information with results from the Uganda PHC 2002 Agricultural Module. Promising findings were presented to UBOS and MAAIF staff and further work on this complicated task is planned for a new short-term mission in early February 2004. This combination of statistical sources is expected to give relevant information on number of livestock and distribution of crop-plots. Preliminary findings indicate that although the coverage and sample size of the pilot is too small for conclusive analyses, it may be a good base for inductive analyses.

Other building blocks of SSASP

Permanent Agricultural Statistics System (PASS)
During the PCA, comprehensive documentation of existing administrative reports were collected from districts. Information about the Uganda history of reporting systems for agricultural statistics has also been collected. Discussions between the project and MAAIF on how to implement a reviewed administrative reporting system with a possible statistical module are ongoing. Planning, testing and implementation of such a system will be the main task in the continuation of the SSASP project during 2004.

The structure of the Uganda Agriculture Extension is in transition from public service to privatisation. This represents an important challenge in the development of a sustainable statistical system and the impact of this process on the possibilities for collecting information at district and sub-.county level is not yet clear.

National Early Warning System (NEWS)
The development of an agricultural information system should also give information relevant for activities not directly linked to statistics. A short term technical support mission has also been provided on the structures of a National Early Warning System (NEWS). The mission and a workshop on this subject took place June/July 2003. However, according to the contract and as confirmed by the Annual Meeting, further work on the NEWS should mainly be kept outside the SSASP, and be an activity in MAAIF.

Data Management
The structures of a possible "one-stop" centre for agricultural statistics, and better technical solutions for storing of agricultural data in UBOS is currently being discussed. The data received both from the PCA and from the Agricultural Module of the PHC 2002 will provide substantial practical experience with data handling for the SSASP staff.

Lessons learned and way forward

Dedicated staff and positive attitude amongst respondents

The PCA exercise was more complicated than an ordinary census or survey is likely to be. The PCA comprised elements of experimental design both for comparison of methods on data collection on yield and area. Both these experiments have been a success when it comes to identifying methods for these purposes.

The overall experience with the PCA exercise is that both central staff and field workers were well motivated for the task. Good work was delivered even when conditions were not optimal. To conduct the PCA required full commitment and also a lot of flexibility and willingness to improvise from all the involved staff.

The sample of small and medium scale holdings for the PCA was stratified to cover mainly rural areas, but also a few urban areas were deliberately selected and surveyed. As foreseen, the respondents selected from the urban areas were somehow more reluctant to answer and also more difficult to find at home than the their colleagues in the rural areas.

The majority of the respondents reacted positively when visited by the Enumerators. Thorough sensitization and close cooperation with the Local Council Officials is crucial to secure a positive attitude from the respondents, and as such the PCA should be regarded as a success. However, the reluctance from some of the large-scale farmers ought to give special treatment in future.

Delays due to changing weather conditions
The weather in it self is an important element in implementation of agricultural censuses and surveys. Uganda has in most of its regions traditionally been blessed with stable and sufficient rain and reasonably predictable climate with two rainy seasons annually. However, based on experience, this situation has changed.

The first agricultural season started much later than originally expected in 2003. Thus, the final harvest was not done until August/September in some EAs. Consequently this delayed the final report from the PCA. Also the planned start of more SSASP activities such as piloting a system for collection of administrative data and the establishing of a "one stop" center/database solution for agricultural statistics in UBOS was delayed.

Leaves due to illness
In a project that involves so many people at different organizatorial and geographical levels the element of people getting ill, or close family getting ill, for shorter or longer periods should be considered when planning future censuses/surveys. Two out of ten Supervisors unfortunately fell ill and died during the project period. Many of the Enumerators had long time leave due to illness. Possibly in future, a provision for reserve Enumerators and Supervisors should be considered.

Civil unrest
The PCA was conducted in 10 districts distributed over Uganda. Initially the security situation in all the selected districts was considered as fairly good. However, during the exercise, this situation changed both in the North eastern Nakapiripirit District and in the northern Lira District, due to civil unrest.

In Nakapiripirit cattle rustling and armed robbery made supervision to some extent unsafe. Fortunately, by this time most work had been done and there were no accidents. It is worth noting that the Supervisors had to move in company of armed escort.

Following cattle rustling the population (including respondents in one EA) abandoned the area which led to the three Enumerators stopping the enumeration work as early as April. Towards the end of the fieldwork, a second Enumerator in Lira experienced raids from tribesmen, and his home was burnt down. The project lost questionnaires and all equipment which were still in the field in this EA.

The northern part of Lira was attacked by the Lord's Resistant Army (LRA) rebels several times from August to October 2003. The northernmost Enumerator had to give up the work as his area was raided and the population including the respondents were displaced. Also the supervision team visiting the area had to take extra security precautions restricting traveling in the area to a minimum.

Slow procurement procedures
During the project period the daily work was to a certain extent slowed down due to delayed procurement of technical equipment and stationery. The procurement process appears to be slow.
As a result, the team was fully equipped with PCs only after several months without access. As the PCA work is coming to an end, the project is still equipped with temporary second hand desk-jet printers. A photo-copier was received after half a year of waiting, and finally the request for 10 motor bikes to be used for PCA fieldwork supervision had to be cancelled because fieldwork came to an end before they were procured.

The monthly payments to the field staff were delayed. In mid October, still the August payment to the field staff had yet not been released by UBOS. These delays may not have been good for the future relations to the districts and UBOS. There is a strong need to improve on the procurement process so that it can efficiently respond to orders.

Short term technical achievements versus long term capacity building
Lessons learned during the PCA field work about district and sub-county civil administration concerning agriculture, existing administrative reporting systems, compiled conversion factors for local measuring units and sustainability of different data collection methods gives a good basis for the planned Uganda Census of Agriculture and Livestock 2005. The lessons learned from the PCA are also considered crucial for achieving the objectives of reestablishing/further developing a sustainable system of agricultural statistics comprising censuses, surveys and collection of administrative data, storing and dissemination procedures.

However, heavy workloads during the PCA work 2003 hampered the process of capacity building for permanent staff in the Agricultural Statistical Section in UBOS. Unfortunately most of the work in this period concentrated on PCA. The result is that the UBOS staff to a large extent had little or no time to benefit from the components of Institutional and Capacity Building. Therefore, this component should be better addressed in the continuation of the project. This is both in order to exchange technical subject matter experience between the cooperating institutions and to build up and expand the statistical section of UBOS to be able to run a fully-fledged agricultural statistical system including censuses/surveys. A proposal to hire at least 2 permanent UBoS staff members for agricultural statistics is presented at the annual meeting in 2004. The plan is for the project to pay their salary etc for 1-2 years, while the Government commits themselves to include them on the pay list upon termination of the project support. It is anticipated that this will allow for a substantial strengthening of the capacity in agricultural statistics in UBoS.

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Abbreviations

AFCAS	African Commission on Agricultural Statistics
BIAES	Directorate of Business, Industry, Agriculture and Energy Statistics
CARDS	The EU aid program for economic and social development of the Balkan countries
CCs	Candidate Countries
CEE	Central and Eastern Europe
CEECs	Central and Eastern European countries
CMFB	Committee on Monetary, Financial and Balance of Payments Statistics
COFOG	Classification Of the Functions Of Government
COICOP	Classification Of Individual COnsumption by Purpose
COMEXT	Commodity External Trade
CPI	Consumer Price Index
CR	Czech Republic
CSO	Central Statistical Office, Zambia
CTA	Chief Technical Advisor
CYSTAT	CYPriot STATistical office
CZSO	CZech Statistical Office
DANIDA	Danish International Development Assistance
DFID	Department for International Developmenty
DPU	Data processing unit
EA	Enumeration Areas
ECE	Economic Commission of Europe
EEA	European Economic Area
EFTA	European Free Trade Association
ESA	European System of Accounts
EU	European Union
FAFO	Fagbevegelsens forskningssenter
FAO	Food and Agriculture Organization
FISIM	Financial Intermediation Services Indirectly Measured
FMS	First Monitoring Survey
FTS	Foreign trade statistics
FOU	Field Operations Unit
GATT	General Agreements on Tariffs and Trade
GDDS	General Data Dissemination Standard
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GNI	Gross National Income
GPS	Global Positioning System
GTZ	Agency for Technical Cooperation, German
HS	Harmonized system
HBS	Household Budget Surveys
HIPC	Heavily Indebted Poor Countries
IHS	Integrated Household and Community Survey
ILO	International Labour Organization
IMF	International Monetary Fund
INE	Instituto Nacional de Estatística, INE/ Angola and INE/ Mozambique
IOT	Input-Output Tables
IPC	Indicador dos Preços de Consumo
ISA	Institutional Sector Accounts

LC	Local Council
LCMU	Living Conditions Monitoring Unit
LCMS	Living Conditions Monitoring Survey
LRA	Lord's Resistance Army
LSMS	Living Condition Monitoring Study
LTA	Long Term Advisor
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MDGs	Millennium Development Goals
MED-NA	MEDiterranean countries project on National Accounts
MEDSTAT	MEDiterranean STATistical program
MPS	Material Product System
NA	National Accounts
NASTC	National Agricultural Statistical Technical Committee
NEWS	National Early Warning System
nfNA	non-financial National Accounts
NGOs	Non-Government Organisations
NLTC	Uganda National Long Term Consultant
NORAD	Norwegian Agency for Development Cooperation
NSIs	National Statistical Institutes
OECD	Organization for Economic Cooperation and Development
OECD/ DAC	OECD Development Assistance Committee
PAPSCA	Program to Alleviate Poverty and the Social Costs of Adjustment
PARIS21	PARtnership In Statistics in the 21st century
PASS	Permanent Agricultural Statistics System
PBS	Palestinian Bureau of Statistics
PCA	Pilot Census of Agriculture
PCBS	Palestinian Central Bureau of Statistics
PEAP	Poverty Eradication Action Plan
PHARE	The EU aid program for economic and social development of the Baltic and Central European
PHC	Private Household Consumption
PHC	Uganda Population and Housing Census
PLS&IFs	Private Large Scale and Institutional Farms
PMA	Plan for Modernization of Agriculture
PPI	Producer Price Index
PPP	Purchasing Power Parities
PRSP	Poverty Reduction Strategy Papers
PS	Priority Survey
PS	Principal Statistician
QNA	Quarterly National Accounts
ROSC	Report on the Observance of Standards and Codes
SAS	Statistical Analysis System
SAD	Single Administrative Document
SDA	Social Dimensions of Adjustment
SDDS	Special Data Dissemination Standard
SDU	Survey Design and manual scrutiny Unit
SIDA	Swedish International Development Agency
SIS	State Institute of Statistics
SMS	Second Monitoring Survey
SN	Statistics Norway
SNA	System of National Accounts
SNACZ	SNA Computersystem for Zimbabwe
SNA-NT	SNA New Technology system
SOE	Statistical Office of Estonia

SRP	Social Recovery Project
SSASP	Systems for Strengthening Agricultural Statistics Project
ST	Short Term
SUT	Supply and Use Tables
TA	Technical Assistance
TACIS	The EU aid program for economic and social development of the former USSR republics
TL	Team Leader
TMS	Third Monitoring Survey
ToR	Terms of reference
UVI	Unit Value Index
VAT	Value Added Tax
UBoS	Uganda Bureau of Statistics
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNHS	Uganda National Household Survey
UNICEF	United Nations Children's Fund
WCO	World Customs Organisation
WTO	World Trade Organization
ZAMSIF	Zambia Social Initiative Fund

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