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AFRICA FIGURES

**An Evaluation of the SIDA-financed Institutional
Cooperation in Statistics between Sweden/Tanzania and
Sweden/Zimbabwe**



By Bertil Odén, Bertil Egerö, Halvard Lesteberg



The views and interpretations expressed in this report are those of the author and should not be attributed to the Swedish International Development Authority, SIDA.

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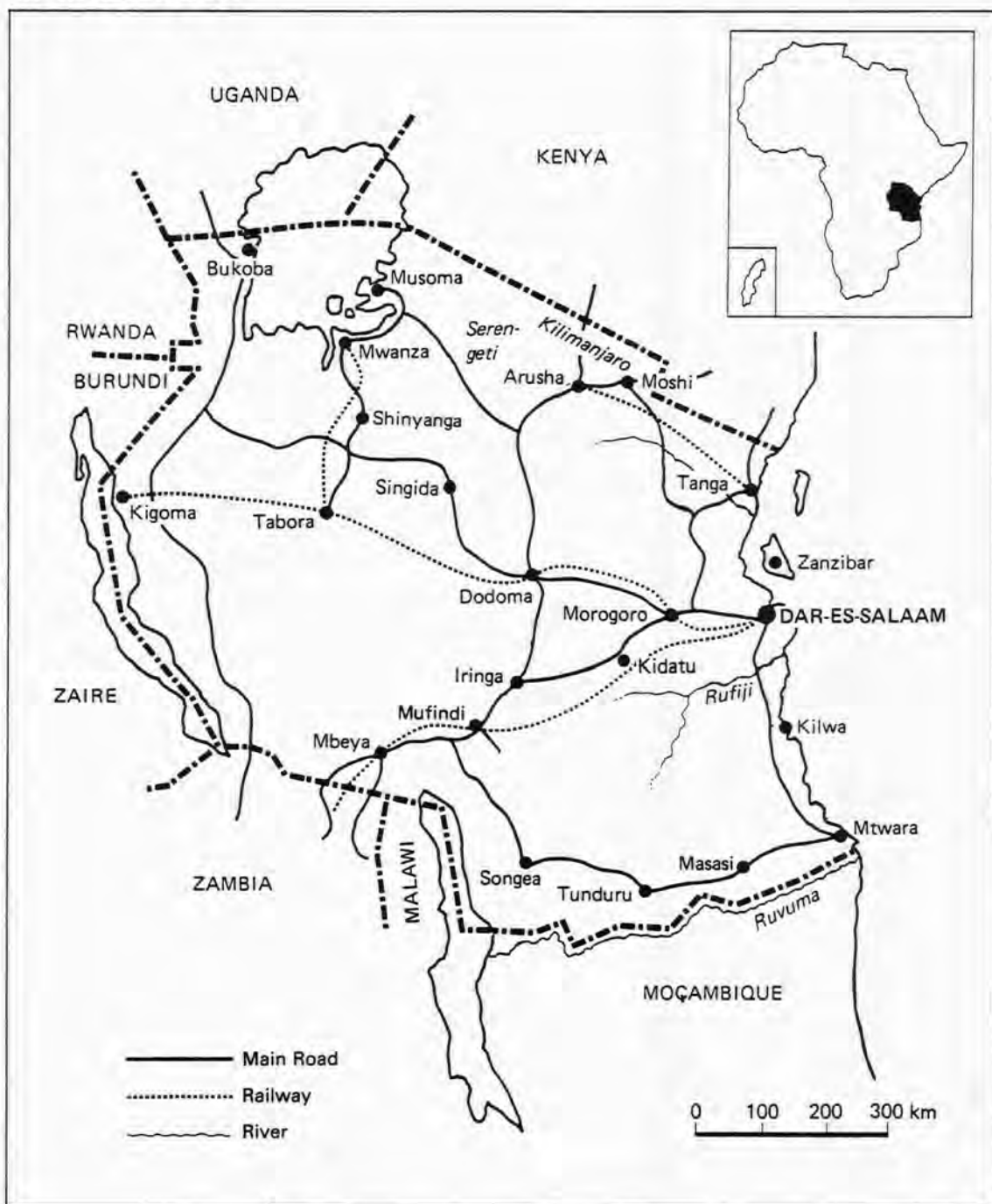
This report is the result of two evaluation missions to Tanzania and Zimbabwe in April/May 1986, consisting of Bertil Odén and Bertil Egerö from SIDA and Halvard Lesteberg from Norconsult

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Cover photo: Bror Karlsson

TANZANIA



ZIMBABWE



AFRICA FIGURES

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SUMMARY OF FINDINGS AND RECOMMENDATIONS

The support to Tanzania and Zimbabwe in the field of statistics is an example of institutional cooperation in Swedish development aid. It implies that an institution in Sweden cooperates with a counterpart in the programme-country in a long-term project without the direct involvement of SIDA. SIDA's contribution in this case is merely financial. This form of support started in 1983 and it is perhaps too early to judge the benefits. However, it is obvious that the brief period of collaborations in Tanzania and Zimbabwe have shown positive results.

In Tanzania, the training programme for statisticians has been a major step. This has included workshops, seminars, study trips and computer training in combination with the acquisition of micro computers. The impact has been felt particularly in regard to the improved data processing and expanded publishing capacity. The impact of the latter has been an increased production of readable up-to-date publications in statistics.

Some of the external factors which have had a negative effect on the programme in Tanzania are the poor condition of the infrastructure, the lack of foreign currency for spare parts, equipment and office material and the scarcity of goods in general.

The capacity and image of CSO (the Central Statistical Office in Zimbabwe) has improved during the last 3-4 years. The staff is getting increasingly familiar with the use of micro computers. Missing social and individual statistical data on groups earlier discriminated against are being collected and a ground has been laid for the establishment of a new socio-economic data base.

The programme has encountered difficulties due to external factors such as the Zimbabwe government policy to limit the number of civil servants and also the Scientific Computer Centre delaying the processing of collected

data. The most serious bottleneck has been the insufficient data processing capacity within the CSO through vacancies caused by higher salaries and better career opportunities in the private sector.

Recommendations

In Tanzania, the potential gains from visits to neighbouring countries should be further explored, as should the domestic consultant capacity for short-term tasks in the project. Plans for the future computer development at TAKWIMU should take into account the importance of standardisation and compatibility between different hardware and software systems. TAKWIMUs capacity for analysis and interpretation needs to be reinforced.

In Zimbabwe, no additional micro computers should be included in the programme as hardware will not be a problem during the next couple of years, taking the scarcity of competent staff into consideration. CSO should reduce the number of new surveys as long as the backlog of non-processed surveys is significant. More emphasis should be given to social and individual statistics. CSO should also develop a framework for the planning of future activities. The most serious problem is the insufficient data processing capacity at CSO. Further efforts must therefore be made to train and keep programmers and system-analysts on the job.

The main part of the technical assistance in these collaborations is short-term consultancies. This is demanding on the recipient organizations and especially TAKWIMUs absorption capacity has occasionally been stretched to its limits. This apart, the general assessment is that this form of support - institutional cooperation - has been successful and thus shall continue.

GENERAL BACKGROUND

To help increase the efficiency of existing statistical operations in Tanzania and Zimbabwe and to develop the field further, SIDA has supported a programme of institutional cooperation between Statistics Sweden (the National Bureau of Statistics in Sweden) and its counterparts in the two countries since 1983. Training, equipment and technical assistance have been provided, priorities set, bottlenecks and backlogs exposed and acted upon. In this way, the capacity and image of both TAKWIMU of Tanzania and CSO in Zimbabwe has greatly improved over the years of cooperation.

The institutionalization of a central economy and the decentralization of government in Tanzania has increased the demand for macro-level data for national planning as well as detailed district-based information on a number of issues. Swedish support in this field began in 1966 with the provision of Swedish experts in statistics and data processing to Tanzania. Statistical production from TAKWIMU has however fallen since the early 1970's. Around 1980, the Tanzanian government took a number of measures to remedy the situation, among other things, TAKWIMU was reorganized in 1981 and a new Government Statistician was appointed.

Before independence in Zimbabwe, its statistical office worked mainly in the interest of the white minority and information on the vast rural majority was virtually non-existent. Today, the demand for data to assist in rural development has increased rapidly in the country. A project identification mission seeking possible areas of cooperation between Zimbabwe and Sweden in the field of statistics and the development of a socio-economic data base was carried out in the beginning of 1983. The proposals of the mission constituted the base for an Agreement on Cooperation between CSO and Statistics Sweden covering the period of July, 1983 - June, 1985.

The agreement now in force expires in June 1987. In order to provide a basis for a SIDA-decision on possible Swedish support to the countries in the field of statistics beyond 1987, it was decided to make an evaluation of the current programmes of statistical cooperation. The evaluation missions were carried out in April/May 1986 by a team from SIDA and Norconsult.

TASKS AND IMPLEMENTATION OF THE EVALUATION

The terms of reference of the evaluation state that the evaluation - besides a follow-up of the results of individual subprojects towards their targets - should focus on a number of questions, among them:

- The role of statistics in the administration, the demand for, and use of statistics and steps taken to adapt production to the demand.
- The technical and organizational level of the programme, compared to the conditions and possibilities to continue the activities without Swedish support.
- The level of training activities compared to the general level of education and environment in which the statistical work is carried out.
- The adaptation of equipment, especially the computers, to the environment in which it will be used.
- The pros and cons of institutional cooperation compared to other forms of development assistance.
- Factors outside the institutions that have affected the implementation of the programme.

The evaluation was undertaken by a team consisting of Mr Bertil Odén and Mr Bertil Egerö, SIDA, Mr Halvard Lesteborg, Norconsult. After preparatory work in Stockholm, the team visited Tanzania and Zimbabwe during April and May 1986 (with the exception of Mr Egerö who did not participate in the Zimbabwe evaluation).

The work was mainly carried out by a series of meetings and interviews between the team and representatives of Statistics Sweden, TAKWIMU and MFPEA (Ministry of Finance, Planning and Economic Affairs) in Tanzania, CSO

and MFEPD (Ministry of Finance, Economic Planning and Development) in Zimbabwe. Annex II lists institutions and regional statistical offices visited and persons met during the assignment.

The cooperation with Tanzanian and Zimbabwean authorities as well as with Statistics Sweden has been excellent and the members of the evaluation team wish to thank all those who have so generously provided time and experience during the evaluation.

PART I - TANZANIA

CHAPTER 1 BRIEF PRESENTATION OF TAKWIMU - THE BUREAU OF STATISTICS

The statistical service in Tanzania consists of TAKWIMU - the Bureau of Statistics and several statistics units attached to ministries and other public institutions. Among these, all of which deal with sectoral statistics, are: The Research and Statistics Department of the Bank of Tanzania, the statistics units in the Ministries of Agriculture and Cattle Development, and Health and Education, and the statistics unit of the Department of Customs and Excise. Statistical data are collected by institutions other than those mentioned above as part of their general administrative functions, but such data are normally not tabulated and published.

The main duty of TAKWIMU is to collect, compile and publish statistical and other information related to population processes and to economic, social and cultural activities and conditions of the people. It is also expected to collaborate with and to supervise other public institutions in the collecting, compiling and publishing of statistical information.

TAKWIMU was established after Independence. It remained a small organization until the mid-1960's, when a Government Statistician and a Population Census adviser were appointed under a UN support programme. The 1967 population census marked the beginning of a period of expanded statistical production, made possible in part through bilateral Swedish assistance. The 1970's were characterized by relative stagnation, interrupted by the mobilization for the 1978 population census. Following a reorganization of TAKWIMU in 1981 and intensified cooperation with Statistics Sweden under a new SIDA-financed agreement, TAKWIMU is showing distinct signs of expansion.



TAKWIMU was established after independence in Tanzania. It remained small until 1967 when the population census marked the beginning of an expanded statistical production.

Photo: Ewa Westman SIDA's Photolibrary

The 1970's was a period of fairly high turnover of both national and expatriate staff. The number of vacancies increased; in 1982 out of 71 statisticians' posts, 52 were vacant. The same weakness marked other levels of staff. Statistical production had decreased, and there were serious backlogs in publication. The relative importance of TAKWIMU for planning and monitoring needs declined, which also affected the resources allocated to TAKWIMU by the Government. TAKWIMU lost its attraction as a career institution for graduate statisticians, who rarely opted for employment there.

A main feature of the 1981 reorganization of TAKWIMU was the appointment of a new Government Statistician. A core group of statisticians and statistical officers with experience from large-scale surveys and regular statisti-

cal production remained and worked in cooperation with international, mainly Swedish, expatriate staff. New staff recruitment, revision of the staff system and an assessment of each sector of statistical production initiated the present period of recovery and strengthening of the institution. A substantial part of the staff is new and with limited experience. The dominating perspective is still to bring all sectors up to a reasonable level of quality and productivity in output.

TAKWIMU today, is one of eight divisions of the MFPEA. It is divided into eight sections headed by an assistant government statistician (see organization chart).

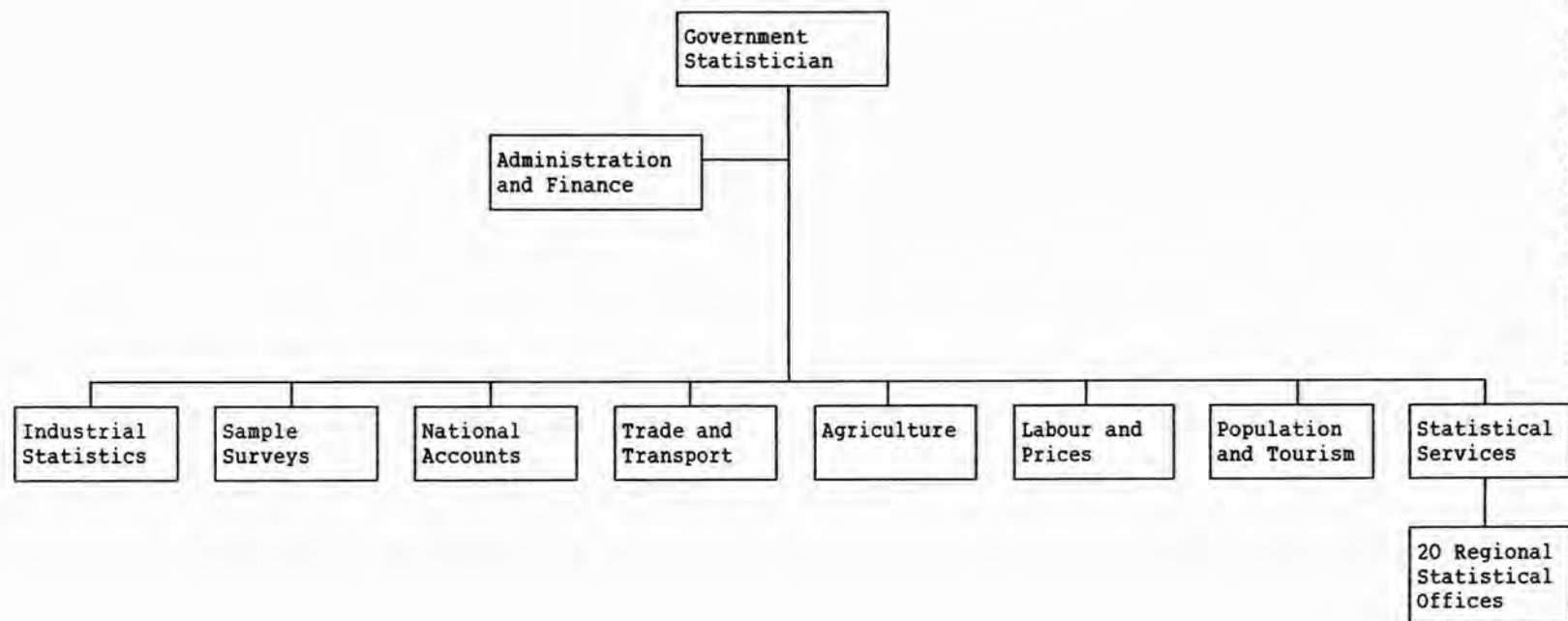
TAKWIMU has a regional office in each of the twenty regions including Dar-es-Salaam city. The offices are headed by a Regional Statistical Officer, and have a varying number of additional staff. TAKWIMU is not represented below the regional level.

As can be seen from the table, the TAKWIMU recurrent budget expenditures have doubled between 1982/83 and 1985/86 and the development expenditures have more than trebled during the same period. Local currency financing is not regarded as a bottleneck in TAKWIMU and the rapid increase of the budget expenditures - albeit in current prices - could be interpreted as a sign of high government priority.

TAKWIMU budget development 1982/83 - 1985/86 (million Tshs)

Budget year	Recurrent	Development	Total
1982/83	7.3	6.7	14.0
1983/84	11.1	11.8	22.8
1984/85	13.2	11.9	25.1
1985/86	15.5	21.7	37.2

Source: TAKWIMU



The legal status of TAKWIMU has remained unchanged since 1961. Its position in the government structure, a division within MFPEA, not only carries definite limits to its internal planning and resource spending, but has tended to influence statistical production in favour of macroeconomic planning needs. The authority of TAKWIMU in relation to sector ministries and other producers of statistical information remains formally unsettled. At present, de facto collaboration with other institutions is increasing, a reflexion of the government statistician's interpretation of his mandate and reinforced by the growing capacity of TAKWIMU to give professional support and information to interested parties.

The regional branch structure of TAKWIMU was originally created to serve the needs of TAKWIMU in sectors such as industrial and employment statistics. It has not been adapted to the new demands of the regional planning decentralization of the 1970's or the re-establishment of local (district) government in the 1980's.

TAKWIMU thus lacks sufficient capacity to meet the demand for statistics at regional and district level. The RSOs channel the data they collect to TAKWIMU in Dar-es-Salaam. There is no TAKWIMU organization at district level. District statistics are compiled by sectoral district officers (district agricultural officer, district education officer, etc) and sent to the regional offices.

The population census is the main exception to the rule that TAKWIMU does not publish statistics on data on regional and district levels.

Since 1983 TAKWIMU has received limited support from other aid organizations besides SIDA. UNICEF has supported the establishment of village registers on a pilot basis and the production of a National Socio-Economic Profile 1984. UN has provided technical assistance in the field of national accounts. ECA and UNFPA are prepared to support the Population Census in 1988. Discussions have been held with EEC on support in the fields of national accounts and agriculture surveys. In May 1986, there is no expatriate on a long-term contract in TAKWIMU apart from the Statistics Sweden coordinator.

CHAPTER 2 OBJECTIVES OF THE PROJECT

Cooperation between TAKWIMU and Statistics Sweden falls into the category of institution building/capability development. This is normally a process, where the overall objectives can seldom be expressed in an operational way which is possible to evaluate with quantitative methods.

Even in the present case, the overall objective is stated in a very general way. The same applies to the Joint Mission report from 1982 as well as the terms of reference included as an appendix in the agreement between SIDA and Statistics Sweden for the periods 1983/84 - 1984/85 and 1985/86 - 1986/87.

In the SIDA project memo of the first period, no overall objective or project goal is presented, and for the second period only a very general point is made on the purpose of the project. Cooperation between TAKWIMU and Statistics Sweden forms one of several components in the Swedish support to strengthen public administration in Tanzania. Therefore, cooperation in the field of statistics is presented in an extremely brief way, as are the other projects under the public administration support programme.

The SIDA project memo covers the four-year period 1985/86 - 1988/89, while the agreement between SIDA and Statistics Sweden covers the two-year period 1985/86 - 1986/87.

The first level under the overall objective in a "normal" goal hierarchy consists of the production/output targets. In the case under review, a number of fields for cooperation are identified, but they are not expressed in an operative way, i.e. they can not be evaluated by quantitative methods.

At the level of inputs and activities, the targets are more clearly stated. In the first agreement between SIDA and Statistics Sweden, the estimated inputs are quantified both in physical terms, e.g. number of months

for consultancies and number of visits by short-term consultants etc, and in expenditure terms. In the second agreement (1985/86 - 1986/87), they are only expressed in expenditure terms.

Overall objective

In the terms of reference, appendix to the first agreement between SIDA and Statistics Sweden (1983/84 - 1984/85), the overall goal for the agreement period is stated as "to establish a general platform for continuous cooperation between Sweden and Tanzania in the field of statistics". In the corresponding document for 1985/86 - 1986/87, the overall objective is expressed in the following way: "The purpose of the consultative service (of Statistics Sweden) shall be to provide technical know-how for the development of the statistical infrastructure in Tanzania. The co-operation shall be specially devoted to the creation and maintenance of adequate basic capabilities for the production, analysis and dissemination of statistical data in the Tanzanian society."

Objectives formulated in such a general way, can only be evaluated by assessing the development of capacity and output of TAKWIMU and other supported statistical producers since the beginning of the period of cooperation, and by obtaining qualitative statements from the users of statistics.

Project goal or production/output targets

Although few quantitative goals on this level are stated, it is pertinent to include some other information from the project documents in this category.

In the terms of reference, annex to the agreement between SIDA and Statistics Sweden for 1983/84 - 1984/85, it is stated: "Special attention shall be given to the question of basic and continuing training of statisticians, staff development of computing facilities, deve-

lopment of other parts of the production system, including also survey organization, development of complementary data-gathering channels, including the utilization of 'administrative channels'."

The following identified subprojects are mentioned in the document:

- Implementation of two training programmes, each for 15 Tanzanian statisticians.
- In-depth studies concerning the development of a master sample for various surveys.
- Further studies concerning the design and development of efficient computing support for TAKWIMU, with special emphasis on the use of micro computers.
- Pilot studies on the use of administrative channels for data creation.

In the terms of reference, annex to the agreement between SIDA and Statistics Sweden for 1985/86 - 1986/87, the following areas of cooperation are explicitly mentioned:

- Follow-up of the training of 30 regional statistical officers who have undergone training courses during the previous agreement period, e.g. organizational improvement, better office equipment and transport facilities, improvement of cooperation with the Regional Development Director's office.
- Follow-up of the training of main-frame programmers and consolidation of the micro computer program.
- Implementation of a National Master Sample Programme.
- Development of a library at TAKWIMU.

- Equipment to the printing office of TAKWIMU and training of its staff.
- Planning and implementation of an agricultural survey in Zanzibar.
- Cooperation with ministries outside TAKWIMU.
- Cooperation with the Department of Statistics at the University of Dar-es-Salaam.

At this level of the goal hierarchy, a basic part of the evaluation will be to find out if the employed subprojects are carried out, and combine this with qualitative assessments from different sources, and conclusions from the follow-up of the individual subprojects.

Inputs and activities

For 1983/84 - 1984/85, the input from Statistics Sweden was estimated at three man-years of long-term personnel, including the coordinator, 52 months of short-term consultancies, 2.100 hours of training and visits at Statistics Sweden, two courses at the University of Uppsala and 450 hours of back-up support from Statistics Sweden. The number of visits to Tanzania by Swedish short-term consultants was estimated at 45 of an average length of one month. Procurement and delivery of equipment were also included as an input from Statistics Sweden, as were the organization and implementation of study trips and training for Tanzanian statisticians in Sweden.

In the agreement covering 1985/86 - 1986/87, the same types of input are envisaged. It should be noted that the agreement foresees a medium-term consultant for the development of a National Master Sample for a period of eight months during this period.

CHAPTER 3 ACHIEVEMENT OF OBJECTIVES

It is evident from the analysis in chapters 4 and 5, that the overall objective of the cooperation, as it has been formulated in the project document, has been reached.

In principle, any improvement in TAKWIMU capacity as well as any provision from Statistics Sweden "towards the creation and maintenance of adequate basic capabilities for the production, analysis and dissemination of statistical data in Tanzania society" would have been sufficient.

As expressed in chapters 4 and 5, we find that an improvement in TAKWIMU capacity has taken place in a number of fields. This is confirmed by many sources. It has also contributed to improve the earlier tarnished image of TAKWIMU.

As can also be concluded from chapters 4 and 5, most activities originally planned have been carried out or are at an implementation stage. The main exceptions are the planned improvement of foreign trade statistics and the establishment of a statistical library.

At the same time, a number of activities not included in the project documents are under way or under consideration, for instance in the field of aerodrome statistics and parallel cooperation between Statistics Sweden and the Prime Minister's Office regarding statistics on district and regional level.

This leads to the question of the policy of Statistics Sweden towards demand from different sources. Our impression is that Statistics Sweden has taken a generous position in relation to such demands and that guiding priorities have not been established. This in part is the result of the lack of incentives in the form of financial restrictions in the budget.

Assessments of the separate subprojects are presented in chapter 5.

CHAPTER 4 ASSESSMENT OF THE COOPERATION AND RELATED ACTIVITIES

The role of statistics in the administration

General

Since the Arusha Declaration 1967, a state-controlled economy has been instituted in Tanzania. Market processes have been largely replaced by administrative processes, the efficiency of which do not depend on responding to a market and its signals but on central economic planning and management. To discuss the feasibility of such a system in Tanzania falls outside the scope of this report. The Structural Adjustment Programme launched in 1983 to meet the acute economic crisis, included some measures to give market forces more influence.

The present system is highly dependent for its functioning on regular and accurate flows of information, including plan assessments.

Beginning in the early 1970's, government structure has been changed in favour of decentralization. Regional planning is based in the region itself, whose authority extends to the supervision and control of sector ministerial activities. This trend is now being taken one step further with planning and budgeting functions referred to district authorities. In all, this means that central needs of macro-level data for national sector programming are increasingly supplemented by needs for detailed and up-to-date information on lower levels of government.

The articulation of this need for information depends on the information absorption capacity of different sectors of Government. For the government as a whole, this capacity is still far below what would be required to substitute efficiently for market functions. Lack of staff, equipment and means for processing and diffusion are among the bottlenecks. Equally important, the capacity to select, handle and interpret information is

still to be sufficiently reinforced. Rapid investments in information flow systems may, therefore, lead to an at least temporary excess flow of data in relation to the demands from the user side.

Legal framework for statistical production

Statistical work is governed by a Statistics Ordinance from 1961, with later amendments. The provisions of the Ordinance relate to the mandate of and legal support for the Government Statistician, i.e. TAKWIMU. No guidelines are included on the relation of TAKWIMU to other statistical producers in government or elsewhere. In recent years, revisions of the Ordinance have been discussed. The forthcoming adaptation of a new union constitution is expected to include the integration of the currently autonomous Department of Statistics in Zanzibar as a branch of TAKWIMU.

The development of statistical production

The relative decline in TAKWIMU operations during the 1970's has undoubtedly contributed to a trend towards "self-reliance" in a number of institutions. This is a natural and often commendable process in institutions which can rely on internal administrative procedures for the collection of data. It is, however, also observed in sectors such as agriculture or manpower, where data collection is more complex and, in part, is carried out through intermittent surveys.

The decentralization of government from the early 1970's failed to have an impact on TAKWIMU. Regional authorities resorted to local solutions through their own planning departments. This trend was carried up to the central regional authority, the Prime Minister's Office (PMO), whose statistical section has supported the development of a structure of data collection from district offices.

The villagization campaign of the early 1970's has been followed by increased efforts to establish links to the village level, for instructional as well as information gathering purposes. Among the participants are the Ministry of Agriculture and Cattle Development, the Ministry of Health and the Ministry of Labour and Manpower Development, which have conducted different surveys, especially during the 1980's. In many cases, the results have been poorly reported. TAKWIMU has participated in a few surveys with, amongst other things, the purpose of gaining experience for the creation of a village-based national master sample.

Sector ministerial work on statistical surveys have above all displayed the weakness of the sections responsible for handling such operations. Processing, analysis and publication have proved to be major obstacles. Where data have been released, the quality has been poor. In some cases, steps have been taken to increase coordination with TAKWIMU on a personal professional or an institutional level. The Ministry of Agriculture and Cattle Development remains the outstanding exception to these approaches. TAKWIMU is, in principle, positive in taking a more active coordinating and advising role, but the de facto resources are still very limited both on central and regional levels.

We have the impression that fairly large amounts of data are being collected by government administration and parastatals. Reinforcements in the form of processing and printing equipment and staff training are likely to give rapid returns in the form of raw statistical data.

Areas which are more difficult to tackle are data processing, quality analysis, and interpretations of the data, not least in their implications for planning and implementation. The shortage in analytical capacity is a problem in both sector ministries and TAKWIMU as well as in MFPEA. Among the steps taken to improve the use of data are to conduct workshops and seminar. University staff are increasingly called upon to participate in this part of government work.

Organizational level of the cooperation

A central feature of the institutional cooperation established between Statistics Sweden and TAKWIMU is the low level of Statistics Sweden staff presence within TAKWIMU. The project is built around a project coordinator, a "statistical generalist", whose office is located within the premises of TAKWIMU and who collaborates directly with the Government Statistician. The coordinator's work is guided by the recommendations of the 1982 Joint Mission. Special needs identification emerges through his contacts with the divisions of TAKWIMU as well as his interaction with government bodies and other institutions outside TAKWIMU.

In Sweden, the backstopping organization has to be both flexible and capable of responding to a wide range of requests. One important part of these is the recruitment of specialists for short-term assignments in Tanzania. To give result, the system of short-term missions has to be based on a correct assessment of TAKWIMU's preparedness to receive the specialists at a given time and to absorb the advice and experience he/she has come to share. Further, TAKWIMU should be capable of transforming the results of the mission into its own work programme or organization by itself.

We consider this project organization to have been successful on the whole, and adapted to the conditions determining statistical development at present in Tanzania.

The many years of Swedish and international technical assistance to TAKWIMU before the present programme of cooperation has - if nothing else - left TAKWIMU with a store of experience of technical cooperation, and likewise has contributed to the creation of a resource base in Sweden from which useful short-term specialists can be recruited.

Given these conditions, the outcome of such cooperation is highly dependent on the ability of the field coordinator. His tasks range from pure administration to

problem identification and capacity assessments in all fields of statistics. He requires an openness towards cooperation with a wide range of institutions and persons and a sensitivity towards all the different internal conditions in TAKWIMU which govern its absorption capacity in relation to proposed subprojects or inputs.

The record of short-term consultancies shows a high, sometimes too high, frequency of visits. There are indications that, in a few cases, TAKWIMU has been unable to implement agreed activities between two consecutive consultancies in the same sector.

Of the 29 short-term consultants recruited by Statistics Sweden up to April 1986, 18 people had no earlier third world experience. 14 short-term consultants have so far been recruited for only one visit in Tanzania, of whom 11 had no earlier such experience. Thus the share of short-term consultants without earlier third world experience is high. In a few cases, the recruitment has turned out less satisfactory.

The organizational form of the cooperation is likely to enhance the difficulties to maintain the project within generally agreed - and perhaps manageable - limits. TAKWIMU has, during the 1980's, improved its statistical competence. This is seen, not least, from the increasing frequency of inquiries and requests for participation or support. These are to a large extent shared with the Statistics Sweden coordinator, whose virtual integration with the TAKWIMU structure means that there are no institutional barriers or filters through which to select among the variety of non-anticipated requests, should he so wish.

Level of training activities

Different types of training activities have been carried out during the programme of cooperation with TAKWIMU. These include the arranging of, or participation in, workshops and seminars; study trips with elements of training; minor courses linked to TAKWIMU work and activities, and regular courses on a fulltime basis.

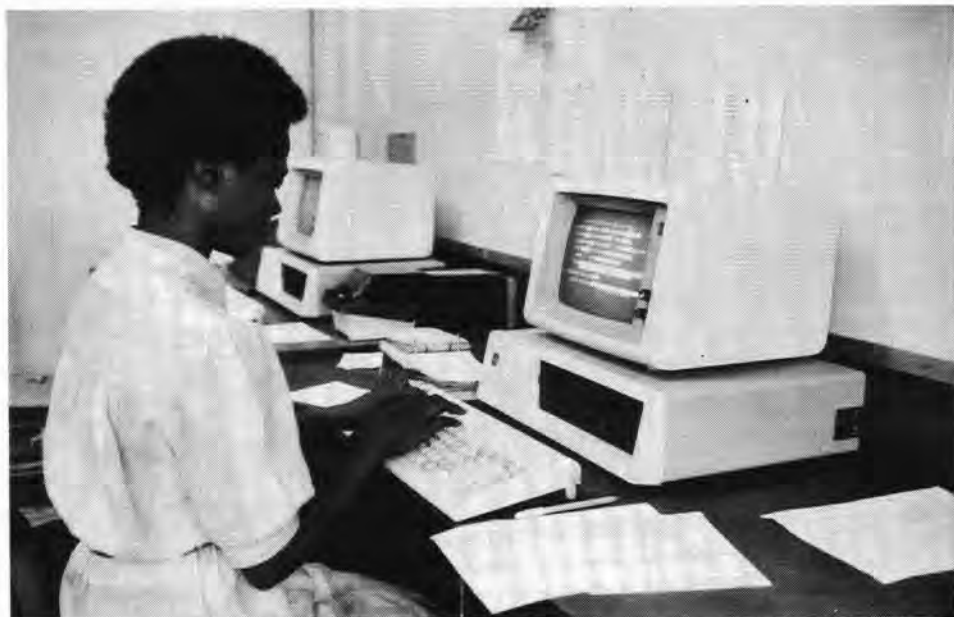
In Tanzania, workshops and seminars are a common form of problem-solving and professional "upgrading", and the seminars conducted fit well into this pattern. They have been run under the auspices of, or jointly with, Tanzanian government departments, bringing together, in particular, planners and statisticians. Programmes and pedagogical methods appear to have been concrete and adapted to the participants and problems at hand.

A variety of study visits to Sweden have been arranged over the period. One part of these is to be considered an introductory way to establish institutional contact and communication. Another has been designed to acquaint those responsible for different sectors in TAKWIMU with Swedish statistical organization in each respective field. The main effects of such visits may be to bring the TAKWIMU statistical staff closer to the frame of mind of the Statistics Sweden consultants and thus facilitate communication. Interviews confirm our impression that the practical applicability of knowledge, gained during the visits, is sometimes marginal at the present state of Tanzanian development.

Study visits on a smaller scale have been arranged in Zimbabwe, where the Statistics Sweden/CSO collaboration has facilitated direct comparative studies. Contacts with other countries in the African region are relatively rare and intentionally limited to places where Statistics Sweden is represented.

Training in computers and programming has been arranged in Sweden, in Zimbabwe and in Tanzania. A programmers' course was started in 1984. All but one of those from TAKWIMU who passed the course remain in the computer section, and form a functioning staff resource for TAKWIMU as well as for other computer processing requests today.

Training in micro computers has gained momentum in accordance with the tempo of computer installation and emerging jobs to be performed. Internal TAKWIMU courses have been arranged for subordinate staff. However, the results were largely invisible until concrete areas of application in their day-to-day work had been explored and



Training courses in computers and programming has been arranged in Sweden, Tanzania and Zimbabwe during the past four years.

Photo: Bror Karlsson SIDA's Photolibrary

identified. Significantly, applications did not emerge in TAKWIMU sections as long as heads of sections remained unacquainted with micro computers. Interest is now spreading, primarily in the word processing capacity of the computers, and training is currently requested by heads of sections.

Brief courses in different fields have been arranged for TAKWIMU officers in Sweden. Where they relate to equipment from Sweden to be installed at TAKWIMU, such courses are an obvious necessity. However, study visits and brief courses in countries more similar to Tanzania are to be preferred when quality and content are similar to those in Sweden. Such an orientation serves the double purpose of improving the hitherto weak links existing even between neighbouring countries in Africa, and of providing the participants with knowledge and experience which can be expected to be more closely related to their own work conditions.

A major undertaking in the field of training has been the two successive nine-month courses for regional

statistical officers, RSOs, run in 1983/84 and 1984/85 respectively. 30 RSOs have participated in the courses. The necessity of reinforcing the TAKWIMU regional offices is undisputed. Two major problems were, on the one hand, the wide differences in professional qualifications of the RSOs, and on the other, the actual and potential demands on RSOs through the growing regional planning activities (see 4). Adjusted to suit the majority of the participants, the courses came to be less than optimal for the more advanced, and only one step towards providing the necessary professional requirements for a RSO. No evaluation of the courses embracing the two major problems mentioned above has been undertaken.

The initial and the concluding parts of the course represent a commendable effort by Statistics Sweden to link it to the work realities of the participants. We are convinced that the course period in Sweden had a better balance between theory and application than is usual for such courses.

We identify, as a matter of priority, the need for a plan for further professional reinforcements of RSOs, not least in view of TAKWIMU efforts to bring RSOs closer to regional data collection and planning activities.

Adaptations of equipment to local circumstances

The project has supplied TAKWIMU primarily with three different types of equipment:

- micro computers
- printing equipment
- cars

The adaptation of the first micros installed, the Apple II machines, was rather slow. This was also to be expected as there was previously no active computer setting at TAKWIMU. The recent installation of the JET-80's seems to have been well adapted to the environment. The decision to install only a few computers at a time has contributed

to the by and large successful steps taken towards computerization at TAKWIMU.

Computers are sensitive to the physical environment in which they operate. The climate in Dar-es-Salaam is hot and periodically very humid and dusty and thus far from ideal for computers. Also, the present TAKWIMU premises are not well suited for computers. Some precautions have been taken by installing air-conditioners and by using dust covers in the computer room.

It has been argued that it may be a disadvantage to buy micro computers that are either from a small producer and/or not IBM compatible, as is the case with JET-80's. This disadvantage has to be weighed against the fact that the JET-80's were considerably cheaper than any other relevant alternative. It should also be remembered that the computer technology is changing very rapidly and that investments in micros should not be seen as long-term investments. Against this background and as an introduction to micro computer technology, we conclude that the type of micros purchased is justified. However, future acquisition of hardware should emphasize the compatibility to other well-known hardware and availability of local facilities.

The installation of printing equipment has been well adapted to local circumstances. It is our impression that staff members at the printing unit have the necessary capability to handle the machines in an efficient way and also to carry out normal maintenance work.

20 Suzuki cars have been supplied as part of the project. Each RSO will have one car at his disposal. The reliability of the cars, given the road conditions in Tanzania, remains to be assessed.

External factors that have affected the collaboration

The main factors outside the programme of cooperation that have affected the activities since 1983 are:

- The generally poor infrastructure in Tanzania which creates difficulties when it comes to telephone com-

munications, transport and other fields which make even routine matters a time-consuming procedure.

- The general scarcity of goods in the economy which forces many people to concentrate their efforts on getting basic food and other elementary essentials. This affects work discipline.
- Lack of foreign currency for spare parts, equipment and office material which impedes efficient work, not least in the regional offices.
- Difficulties in completing constructions according to schedule. The TAKWIMU extension building is one case in point, although an important part of the present delay has been caused by the change of intended use by TAKWIMU which made it necessary to change the quotations.
- The parallel market in the country which makes both price and production statistics unreliable.
- Some administrative rules that create difficulties for TAKWIMU; for instance when it comes to the vehicles for the RSOs, as is pointed out in chapter 5.

Impact of support from Statistics Sweden

It is a common opinion among users and producers of statistics, as well as other persons with insight in the field of statistics, that the capacity and image of TAKWIMU has improved strongly compared to the situation 4-5 years ago.

Two main factors behind this are, in our opinion, the reorganization of TAKWIMU including the appointment of a new Government Statistician in 1981, and the cooperation between TAKWIMU and Statistics Sweden since 1983. These two factors have mutually reinforced the effect of the other. Without the reorganization, the impact of the cooperation most probably would have been much smaller and

without the programme of cooperation, the advantages of the reorganization would not have been felt as rapidly.

As can be seen in chapter 5, which deals with the individual subprojects, support from Statistics Sweden is dispersed in many fields. The impression gained from project reporting is that of a wide and comprehensive programme of collaboration. However, a number of activities listed in the reports only include a very marginal input from Statistics Sweden.

The four main fields of support from Statistics Sweden up till now are:

- Improved publishing and printing capacity, leading to more frequent, readable and up-to-date publications.
- Improved data processing capacity.
- Preparatory work and planning of a National Master Sample and an agricultural survey to introduce the use of this sample.
- Training of Regional Statistical Officers and the strengthening of their offices.

One important result of the cooperation within the first and second fields above, together with a more user oriented policy of TAKWIMU, is the improved image of TAKWIMU. This, in turn, creates an increasing demand for statistics and TAKWIMU services.

The National Master Sample is to be built up in stages. The first stage consists of 50 PSUs (Primary Sample Units), to be used for a national agricultural survey and testing and consolidating the whole National Master Sample organization. When conditions permit, the sample will be extended to 150 PSUs and at a later stage, 540 PSUs will be included. Regional estimates are possible from the third stage sample.

The training of the RSOs and their provision with vehicles will improve their capacity to perform the assigned tasks as well as to improve their image within the regional administration. The latter has up till now generally been very low.

Still, more has to be done in this field. Some regional statistical offices lack very basic equipment such as table calculators, functioning typewriters and telephones. The statistical training of the RSOs has to be further improved. In the medium-term perspective, the RSO posts should be upgraded and filled with graduate statisticians. Cooperation between the RSO and the RPO (Region Planning Officer) and RDD (Regional Development Director) office has to be strengthened. A first step should be to move the RSO office into the premises of the RDD and RPO offices.

According to the Government Statisticians, it is now necessary to consolidate TAKWIMU's improved capacity. Such a consolidation will require further support from Statistics Sweden over the next few years. Or expressed in another way, TAKWIMU at present is dependent on Statistics Sweden to maintain and consolidate its capacity. For certain fields of collaboration, a gradual phasing-out can be foreseen, which for some time will be balanced by new demands for support in other fields. Such a process is an integrated part of the adopted form of cooperation.

TAKWIMU, village statistics and village registration

As a result of the villagization campaign of the 1970's, the vast majority of peasant households are now in registered villages with a defined leadership structure. Village location was mapped before the 1978 population census, in which village population data was also published. Since then, various parties have expressed interest in some form of village registration and data collection schemes.

Statistics Sweden and TAKWIMU took active part in the first registration scheme in Tanzania, the Pilot Rural

Integrated Survey Programme (PRISP) supported by UNICEF. 20 villages were included in this pilot survey, through which Statistics Sweden and TAKWIMU gained valuable experience for the National Master Sample (NMS) programme. UNICEF has since continued with new projects including village registration in Iringa, Kagera and Shinyanga regions. TAKWIMU is involved through its regional offices.

A different form of village registration is the vital registration project started by the Registrar-General in 1981 and gradually extended from 3 to 12 districts. Births and deaths are to be registered on elaborate forms, copies of which are shared between the household, the village secretary and a district branch of Registrar-General's office. TAKWIMU has seconded one of its statisticians to work in the project office.

Villages have also been the targets for data collection systems. The Prime Minister's Office has a long and continuous experience of this kind of work. Among other active parties in this field is the Ministry of Agriculture, whose initial pilot surveys in Morogoro and Shinyanga have been followed by regular surveys in four different regions.

TAKWIMU has plans to start village registration in all the NMS selected villages. The explicit intention of TAKWIMU is to make such registration universal in all recognized villages. The same emphasis on the importance of village registration is made by the CCM Party. One objective is to give village leadership better instruments for development planning, another and probably equally important, to create a data base for government and party purposes.

A perhaps trivial experience from surveys so far is that registration systems function satisfactorily only where they serve the village itself. Village participation in the design and content of registration forms has, however, so far been marginal. There is a distinct risk that registration will, in many villages, be only one in a growing series of activities performed at the request of

superior authorities. In these cases, the registration is likely to be inaccurate and a poor basis for data retrieval. It may also negatively influence village response to surveys such as those carried out through the NMS selected villages.

TAKWIMU is playing an active role in present registration schemes as well as in government considerations about the future of these schemes. TAKWIMU has the responsibility to analyse not only the advantages but also the risks with generalized schemes of this kind. TAKWIMU is advised to use its influence to exert caution, to expose conditions under which registration is to the benefit of the villages themselves, and to work for a careful assessment of these conditions in each new registration scheme.

CHAPTER 5 ASSESSMENT OF INDIVIDUAL SUBPROJECTS

General Strengthening

Management Strengthening

This part of the project has mainly had the character of informal and frequent discussions and consultations regarding general and specific matters between the management staff at TAKWIMU and the team leaders. Also, the management staff has made study tours to Sweden, Kenya and Zimbabwe in order to gain experience from statistical work and organizational matters in national statistical offices in other countries.

According to Statistics Sweden, the study tours have led to a stronger concern and interest in the work on the part of those who attended. However, the management has to be strengthened further. An improvement in the capacity of the two sections now lagging behind, foreign trade and labour and prices, should be given special consideration.

Strengthening of Regional Statistical Officers

To increase the competence and the role of the RSOs (Regional Statistical Officers) has been one of the main objectives of the project and many resources have been put into it right from the beginning. Traditionally, the RSOs have been working vertically, i.e. they have been collecting data and sending it to the TAKWIMU headquarters. They have had very little contact with other governmental bodies at the regional level and the relations with the regional planning authorities (RDDs and RPOs) have been particularly weak. The RSO's status seems to have been low.

In view of the increasing responsibilities placed on the RSOs, (e.g. in connection with master sample surveys), and the growing awareness of the mutual benefit from stronger ties between them and other regional authorities, especially on the planning side, it was decided to

strengthen their competence and status. As mentioned above, Statistics Sweden has given considerable support to this effort, mainly by arranging two nine-month training courses for the RSOs. Altogether 30 RSOs have graduated from the courses which both had a theoretical and a practical part. The courses covered statistical theory, applied statistics and basic economics. At the end of each course, the participants had to plan and carry out a statistical survey. A follow-up seminar has also been arranged for all the participants.

In order to enable the RSOs to fulfil their jobs better, the project has provided them with cars. Each RSO has received one Suzuki 4 Wheel Drive jeep. A car maintenance course has been arranged and a stock of spare parts has been established. In principle, the cars should be very useful in the RSOs' work. However, one can foresee problems related to registration, insurance, fuel supply, who the driver should be etc. Another problem is that many RSOs do not have driving experience nor driving licences at the moment. This may imply that many cars will be used for training purposes and subject to unqualified use at least for an interim period.

Computers, computer training and data processing

Through the project, two Apple II and five JET-80 micro computers have been supplied. The Apples and two of the JET-80's are installed at TAKWIMU, and one JET-80 at the MFPEA, the Statistical Office in Zanzibar and the PMO in Dodoma.

Several training courses in the use of micro computers have been arranged by Statistics Sweden. The first courses held showed that those given training had difficulties when they were to apply their acquired knowledge to practical problems. It also turned out that parts of the software packages installed were too sophisticated for the level of knowledge at that time. Later on, the computer training has been more practically oriented and with more emphasis on on-the-job training.

The micro computers are used for data processing, design of questionnaires, sample and register work and word processing. The computers are used well and the training given now seems to be bearing fruit. Many of those who have used the computers for some time are now able to apply different software, and one of them is also able to instruct and assist newcomers on the technology.

Statistics Sweden has also assisted in arranging a training course for main frame computer programmers. The course was specially designed for those working on the Treasury's main frame. Eight persons have attended the entire course. Not all have had the possibility to practise their new skills when returning to their jobs. However, others have themselves written programs that are now used regularly.

All the data from the 1976 Household Budget Survey was taken to Sweden and processed there. One officer from TAKWIMU participated in this. Although it was considered important to have the survey results processed and tabulated, the transfer of know-how and capability strengthening element of the service rendered is assumed to have been limited.

Printing and Publishing

Efforts to strengthen TAKWIMUs capability regarding printing and publishing have been a major part of the programme of cooperation. Basic second hand equipment and extensive training in its use and maintenance have been provided under the project. The benefit from statistical data to the users increases when time losses in the printing/publishing process are reduced.

Several short-term missions have assisted in assessing the needs for support in the installation of the equipment and in the training in its use. Also, staff members from TAKWIMU have been in Sweden in order to get training in maintenance and simple repairs of the equipment installed. The support given by Statistics Sweden has been successful so far.

The staff members responsible for printing and handling the equipment show great confidence and interest in their work. According to the coordinator, they have so far been able to carry out the necessary maintenance themselves. The work back-log has been reduced significantly since the new equipment was installed.

Statistics Sweden has also arranged courses for TAKWIMU staff in basic techniques regarding the presentation and dissemination of statistical data. This is an important task and the publications where this matter has been given special consideration, (with the assistance from Statistics Sweden), definitely have a higher standard than they had earlier. This type of support needs to be continued until such techniques are an integral part of TAKWIMU work routines.

Throughout the project, all volumes of the 1978 population census publications have been printed in Sweden.

Development of a library at TAKWIMU

In May 1986 there had been no progress in this subproject, which is included in the programme for 1985/86 - 1986/87. The main reason is that the construction of the extension building in which the library will be accommodated has been delayed. The present archives and publication storage and library situation is very unsatisfactory.

National Master Sample and Surveys

Pilot Rural Integrated Survey Programme (PRISP)

Statistics Sweden has given advice and comments to the planning and implementation of this survey which was initiated by UNICEF. TAKWIMU was responsible for organizing the survey. The project and the assistance provided by Statistics Sweden gave valuable experiences for later work related to the National Master Sample project.

National Master Sample and Survey design

The National Master Sample project has been a main field for support from Statistics Sweden and it has been running

since the beginning of the cooperation. Except for the initial sketching of the framework and the methodological work, which was carried out by several short-term missions from Sweden, TAKWIMU staff members have been responsible for the planning and implementation of the project. The entire household listing of the sample has been carried out, under the supervision of Statistics Sweden, by TAKWIMU field staff trained and instructed at a seminar in Dar-es-Salaam.

The project has lead to a considerable and important strengthening of the capability of TAKWIMU. However, the long-term benefits can only be realized if this instrument for conducting sample surveys now established is used and further developed. The first task for the survey organization is planned to be an agricultural survey in 1986/87. After that, the Population Census planned for 1988 will take much of TAKWIMU's capacity and there is a risk that the survey organization will be left with little relevant work to do, unless it is given specific tasks where its competence can be utilized as part of the Census.

Agricultural Survey

As mentioned above the first application of the National Master Sample is planned to be an agricultural survey.

Statistics Sweden has assisted in the planning of the survey and questionnaire design. It has also participated in a task force committee for the coordination of agriculture statistics. The Ministry of Agriculture has for a long time been collecting and publishing data from the agricultural sector. The quality of the data has been questioned and considerable delays have also caused problems. Nevertheless, the Ministry has rejected the idea of TAKWIMU assuming more responsibility for agricultural statistics.

The steps taken by TAKWIMU, supported by Statistics Sweden, have contributed to a strengthening of TAKWIMU. We have examined the questionnaire draft and found it

quite good except that questions regarding the use of inputs only indicate if inputs are used or not. With a view to national accounting, such questions should ask for quantitative information.

Equipment

Through the project, Statistics Sweden has supplied TAKWIMU with different kinds of equipment necessary for carrying out the field part of the sample listing and will supply equipment for the agriculture survey.

Economic Statistics

Establishment Register

Statistics Sweden has assisted in a transfer of the Establishment Register from the Treasury main frame computer to the micro computer at TAKWIMU. The register contains approximately 8,000 establishments. The software package d-Base is used for storing, updating and retrieval of data. The support was concentrated on the initial design of the programs, while TAKWIMU staff had to refine and detail them.

This subproject has proved beneficial. We met some complaints that the support ought to have covered more than the initial phase. However, the fact that TAKWIMU staff had to finalize the project has resulted in a considerable experience in this kind of work. Today, the register is operated without support from Statistics Sweden.

As a part of the subproject, Statistics Sweden gave advice on a possible integration of several different data collection routines that can be based on the register.

Labour Statistics

Some advice was given in connection with the Arusha Pilot Labour Force survey carried out by students from EASTC (East African Statistical Training Centre). The participation of TAKWIMU staff was negligible and the project has been given very little follow-up. However, the experience

from the survey may be utilized if it is decided to carry out national labour force surveys in the future.

In 1985 the latest issue of the yearly report on "Employment and Earnings" 1978/79 was published. The survey was based on the Establishment Register. In order to improve timeliness in the presentation of data from this survey, Statistics Sweden has recommended a scaling down of the content. So far, the recommendations have not been adopted.

Industrial Statistics

During 1985, Statistics Sweden gave support to the development of a system for collecting, processing and publishing a quarterly index of volumes of production in large-scale manufacturing industries. The assistance was concentrated on the construction of a program for processing the data on micro computers. At present, the project is in its implementation phase. The scope of the index has been scaled down somewhat compared to the original plans.

It is our view that the index will prove beneficial for several users when it comes into operation, given that the results can be presented without delay. The actual design and programming of the index was done by Statistics Sweden with participation of TAKWIMU staff.

Transport Statistics

The support within this field has, so far, been limited to the financing of a study visit to Sweden for one person, who has since moved to the Ministry of Works and Communications, and to provide a short-term expert on aerodrome statistics.

The contribution to the strengthening of transport statistics in general in Tanzania from this subproject has been small and it may be justified to ask if the resources put into it could have been better utilized for other projects.

Foreign Trade Statistics

From the Quarterly Reports it can be seen that missions intended to support the development of foreign trade statistics have been planned. However, so far this has not materialized. The inability of Statistics Sweden to recruit a qualified consultant is one reason why this comparatively important sector of statistics has not been given the attention it deserves. Another reason may also be a rather low priority at TAKWIMU for this subject.

National Accounts

Statistics Sweden has given rather limited support to this area of statistics. The reason is that a consultant from a different institution has provided the assistance for some years. Also, EEC is currently working on plans for future support. Under these circumstances, Statistics Sweden has decided to keep a rather low profile. What has been done is to finance the participation for one person from TAKWIMU at a two-week workshop on national accounts at ECA in Addis Abeba and to provide lecturers for a seminar on input-output tables arranged by TAKWIMU in Arusha.

Although not directly related to national accounts, it should also be mentioned that Statistics Sweden participated in the planning of the publication "Economic Indicators". The publication has proved to be of considerable interest.

Social Statistics

Education Statistics

Education Statistics is the responsibility of the Ministry of Education. Two minor parts of the TAKWIMU - Statistics Sweden cooperation, however, have been involved in this sector.

The field work part of the second training course for the RSOs was held in the Tanga region where the participants planned and carried out a survey on primary

schools. The main objective was to train the participants but the result of the survey may also have been useful for the Ministry of Education.

The head of the Statistical Section of the Ministry of Education has been on a study tour to Sweden, financed by the project. He has prepared a report describing possible areas for assistance from Statistics Sweden to the Statistical Section at the Ministry.

Social and Demographic Statistics

In the early phase of the cooperation programme, Statistics Sweden gave advice on a Village Register project in Morogoro region. The project was supported by UNICEF. The contribution from Statistics Sweden mainly took the form of comments and recommendations regarding the design and content of the questionnaire. The recommendations were only followed to a minor extent. The implementation of the register has been slow and limited to a few regions.

Statistics Sweden also advised on the development of a system of socio-economic indicators. The project received its main support from UNICEF. One publication has been issued and the demand for the publication has been limited.

The Ministry of Agriculture (now MACD) collects and compiles agricultural data from a sample of villages. The questionnaires also contain a few questions related to social conditions. Statistics Sweden has recommended some changes in this part of the questionnaire but, so far, with no follow-up from the Ministry.

Other Activities

Department of Statistics, Zanzibar

A pilot agricultural survey has been undertaken by the Permanent Planning Office's Department of Statistics. Statistics Sweden assisted with advice on the survey design and in analysing the experience that could be drawn

from the pilot survey. Based on these analyses it was decided to make several changes in the questionnaire to be used in the main survey. In addition, the experience from the pilot survey proved valuable for the planning of the agricultural survey on the mainland. The supervisors of the main survey have been trained on Zanzibar by Statistics Sweden.

As part of the preparations for the main survey, Statistics Sweden has supported the Department of Statistics on Zanzibar with survey equipment, including 60 bicycles to be used by the enumerators. Two Suzuki jeeps have also been provided. In early 1984, the director of the department went to Sweden for three weeks in order to study agriculture statistics and Statistics Sweden in general.

One of the micro computers provided through the project has been installed at the Zanzibar office and staff has been trained in the use of both micros and main frame machines. The micro computer is currently used for word processing, the construction of questionnaires and data processing. It should also be mentioned that support to the processing of the Household Budget survey of Zanzibar has been provided through the programming work of participants in the main frame programming course.

Time did not permit a visit to the Zanzibar office, but through discussions in Tanzania and Sweden with persons involved in the activities at Zanzibar, we have the impression that the support has been well adapted to the environment and met its objectives.

Prime Minister's Office

During 1985, collaboration was initiated between the Prime Minister's Office and Statistics Sweden. The background was an attempt by the PMO statistical office to create a comprehensive district status data base by means of a questionnaire aimed at all districts in the country. This was the latest step in a series of measures to improve the flow of information required for regional planning and

budget preparations, following the decentralization reform of 1972.

The first round of collaboration between PMO and Statistics Sweden took the form of a PMO study tour to Stockholm, where part of the questionnaire data was computerized and studied for consistency and validity. In early 1986, seminars were arranged by PMO, with Statistics Sweden participating, with the double purpose of bringing regional planners and statisticians together and of discussing district data collection methods. In February 1986, a joint PMO/Statistics Sweden mission presented a proposal for a three-year support programme intended to improve data collection and compilation for district and regional planning. The proposal is expected to be presented shortly to SIDA with a request for assistance.

The project proposal raises important questions of principle. In reality, it means that two parallel statistical organizations are officially created, TAKWIMU, reaching from central to regional level, and PMO, reaching from central to district level. The present situation has historical roots in the development of the 1970's (see chapter 4). The objective of creating viable systems of data flow at lower levels of the state is in accordance with the shift in emphasis to local government. The question is, however, where the authority for statistics should rest in a longer perspective.

The TAKWIMU central organization has still to get macro-level data aggregation and publication consolidated and delays in diffusion reduced. Its regional organization is as yet comparatively weak, in staff as well as equipment, and has to be further strengthened in order to better fulfil its functions vis-à-vis the central body.

PMO has links to regions and districts. Regional planning offices have for some years been compiling data for planning purposes, in collaboration with their district counterparts.

We are of the opinion that short-term needs and their solutions must not overshadow needs for a strategy for

statistical development in Tanzania. And this strategy should not entail the creation of two separate and parallel statistical organizations. Therefore, the joint mission proposal of February 1986 has to be merged into a longer term perspective of the role of TAKWIMU as the government statistical authority, including its relations to PMO and to other statistics producers in the public sector.

Concretely, we would propose:

- that an agreement of understanding is formulated for the long-term development of TAKWIMU together with the government authority responsible for data production for state planning at all levels;
- that a framework is formulated for the gradual merging of PMO and TAKWIMU regional functions to one regional statistical authority, directed to serve regional as well as central data needs;
- that the present proposal for district statistical reinforcement through the PMO will be designed to incorporate organizational reforms as indicated above;
- that a programme will be elaborated for the medium-term upgrading and strengthening of regional statistical offices to enable them to assume the functions included in the long-term development perspective.

East African Statistical Training Centre (EASTC) and
University of Dar-es-Salaam

Staff from Statistics Sweden have acted as guest lecturers at EASTC a couple of times. The topics covered have been applied statistics in general and sample surveys in particular.

The provision of some text books in statistics for the University of Dar-es-Salaam has been financed through the project. The Department of Statistics at the University has also requested cooperation with a similar unit at a university in Sweden. A short-term mission later in 1986 is expected to work out the details of such a cooperation. Although the strengthening of EASTC and the University may be important, we regard this as outside the scope of the project cooperation between TAKWIMU and Statistics Sweden and recommend that assistance be sought through other channels.

CHAPTER 6 BUDGET FOLLOW-UP

The total budgeted expenditures for the first agreement period (July 1983 - June 1985) were 8.0 million SEK. The breakdown and actual expenditures are shown in table 6.1.

Table 6.1 Budget expenditures 1983/84 - 1984/85
(1000 SEK)

Kind of costs	Expenditures	
	Budget	Actual
Fees,	4,835	3,957 ^a)
of which; long-term consultancy	1,200	751
short-term consultancy	1,600	1,523
training, study visits, coordination, backup	1,035	1,353
Reimbursables	3,165	3,304 ^a)
Total	8,000	7,262

a) After correction for fees for RSO-training, originally registered as reimbursables.

The total budget for the second agreement period (July 1985 - June 1987) is also 8,0 million SEK. Breakdown and actual expenditures until April 1986 are shown in table 6.2.

Table 6.2 Budget expenditures 1985/86 - 1986/87
(1000 SEK)

Kind of costs	Budget			Actual exp
	1985/86	86/87	July 85-Apr 86	
Fees	2,100	2,580		1,649
of which; long-term consult.	600	1,050		418
short-term consultancy	1,240	1,260		822
training, study visits, coordination backup	210	220		409
Reimbursables	1,600	1,720		1,832
Total	3,700	4,300		3,481

As can be seen in table 6.1 the volume of short-term consultancies was considerably lower than budgeted, the main reason being an under-estimation of the difficulties to implement such activities in TAKWIMU and in the Tanzania in general. SIDA, with its long experience of Tanzania, should have realized this and reduced the financial frame for the agreement period from the very beginning.

The lower actual expenditure for the long-term consultancy assignment is mainly due to the non-implementation of other long-term consultancies rather than to the coordination activities.

As can be seen in table 6.2, actual expenditures under the heading training, coordination etc in Sweden and reimbursables are higher for the first ten months than the budget figures for the whole year 1985/86. The largest individual expenditures under those headings have been for the report of the joint mission on statistics at district and regional level and the purchases of micro computers, bicycles and printing equipment.

The budgets for the two agreement periods do not permit a subject-oriented follow-up. We recommend that future budgets should be constructed in a way that makes this possible. We also recommend that SIDA takes a keener interest in budgetary questions.

CHAPTER 7 CONCLUSIONS AND RECOMMENDATIONS

A number of sources indicate that the capacity of TAKWIMU as well as the general image of the Bureau has improved significantly during the last 3-4 years. The two main factors behind this are the reorganization in 1981, including the appointment of a new Government Statistician and the cooperation between TAKWIMU and Statistics Sweden since 1983. Those two factors mutually reinforce each other and without the first, TAKWIMU would not have had enough absorption capacity to use this form of support in a reasonably efficient way.

The overall objective of the programme of cooperation is formulated in a general way. This objective has obviously been reached as the TAKWIMU capacity has improved. Some of the subprojects in the programme of cooperation have been very successful, taking into consideration the level of infrastructure and administration in Tanzania. Others have been delayed and two have so far not been implemented at all.

According to the Government Statistician, the present phase of expansion needs to be followed by a period of consolidation, for which continued cooperation with and support from Statistics Sweden is necessary. Institution building and capacity development are important long-term processes. We recommend SIDA to continue to finance the cooperation.

From the beginning, the cooperation program was too optimistically planned, taking the absorption capacity of TAKWIMU and the usual implementation time of projects in general in Tanzania into consideration. As a consequence of this, the budget frame for the programme has been too wide and neither Statistics Sweden nor TAKWIMU has had a great need to make priorities. This is one reason for the wide dispersity of the programme at present.

One advantage of institutional cooperation is the flexibility it can offer and it is natural that a certain degree of ad-hoc activities should be included. We believe, however, that a few of the subprojects under preparation would have been excluded if a financial constraint had been built into the programme.

Related to this point is the important question of a TAKWIMU long-term strategy. We recommend the Government Statistician and Statistics Sweden to identify the fields of statistics that, from a national development point of view, are most relevant and try to concentrate the joint efforts of TAKWIMU and Statistics Sweden in those fields. Users' demands should be an important factor and TAKWIMU should continue to listen to such demands and ask for advice from the users of statistics. It is important, however, to relate these to a long-term perspective, where the improvement of the presently weak but, from a national point of view, relevant fields, is a main objective.

The improvement of the RSO capacity has been an important part of the programme so far. We recommend that high priority is given to a continuation of this activity. Efforts to involve the RSOs in the regional data compilation should be increased. In the long-term perspective, the RSOs should have enough training to analyse collected data and be authorized to share the data directly with the regional planning authorities.

Customs statistics on foreign trade which is the data base both for TAKWIMU and for the Bank of Tanzania are not very accurate, according to both these sources. This field is of great importance for macro economic policy. We have noted that Statistics Sweden support in this area has not been implemented, in spite of being an area of priority in the Joint Mission report. We recommend increased efforts by TAKWIMU and Statistics Sweden to improve the foreign trade statistics.

We recommend that, besides study visits to Sweden, the potential experiences to be gained from visits to

neighbouring states are further to be explored, with the inclusion of countries other than those where Statistics Sweden has on-going programmes.

If domestic consultant capacity is available in certain fields, TAKWIMU should be entitled to take advantage of that too, as a part of the cooperation with Statistics Sweden.

TAKWIMU's capacity for analysis and interpretation needs to be reinforced. Economists and other social scientists may need to be recruited for relevant assignments.

We recommend that any plans for support to university-based institutions be handled independently from the project under review. SAREC might be a suitable source of funding.

Plans for the future computer development at TAKWIMU should take into account the importance of standardization and compatibility between different hardware and software systems.

The form of institutional cooperation developed in the project is assessed in Part III. In this type of support, most of the technical assistance is provided in the form of short-term consultancies. This is more demanding on the recipient organization than "normal" long-term experts. Our impression is that the short-term consultancies have stretched TAKWIMU to its limits and, in certain cases, beyond them.

In spite of this, the general assessment is that institutional cooperation has been an appropriate form for this programme. Contributing factors have been the interest and competence of the relevant TAKWIMU staff, the competence of the Statistics Sweden coordinator and, by and large, successful recruitment of short-term consultants.

PART II - ZIMBABWE

CHAPTER 8 BRIEF PRESENTATION OF CSO - THE CENTRAL STATISTICAL OFFICE

The statistics production system in Zimbabwe consists of CSO - the Central Statistical Office and several statistical and research units attached to ministries and other institutions. There is also a Scientific Computer Centre (SCC) to assist various government institutions with computing services.

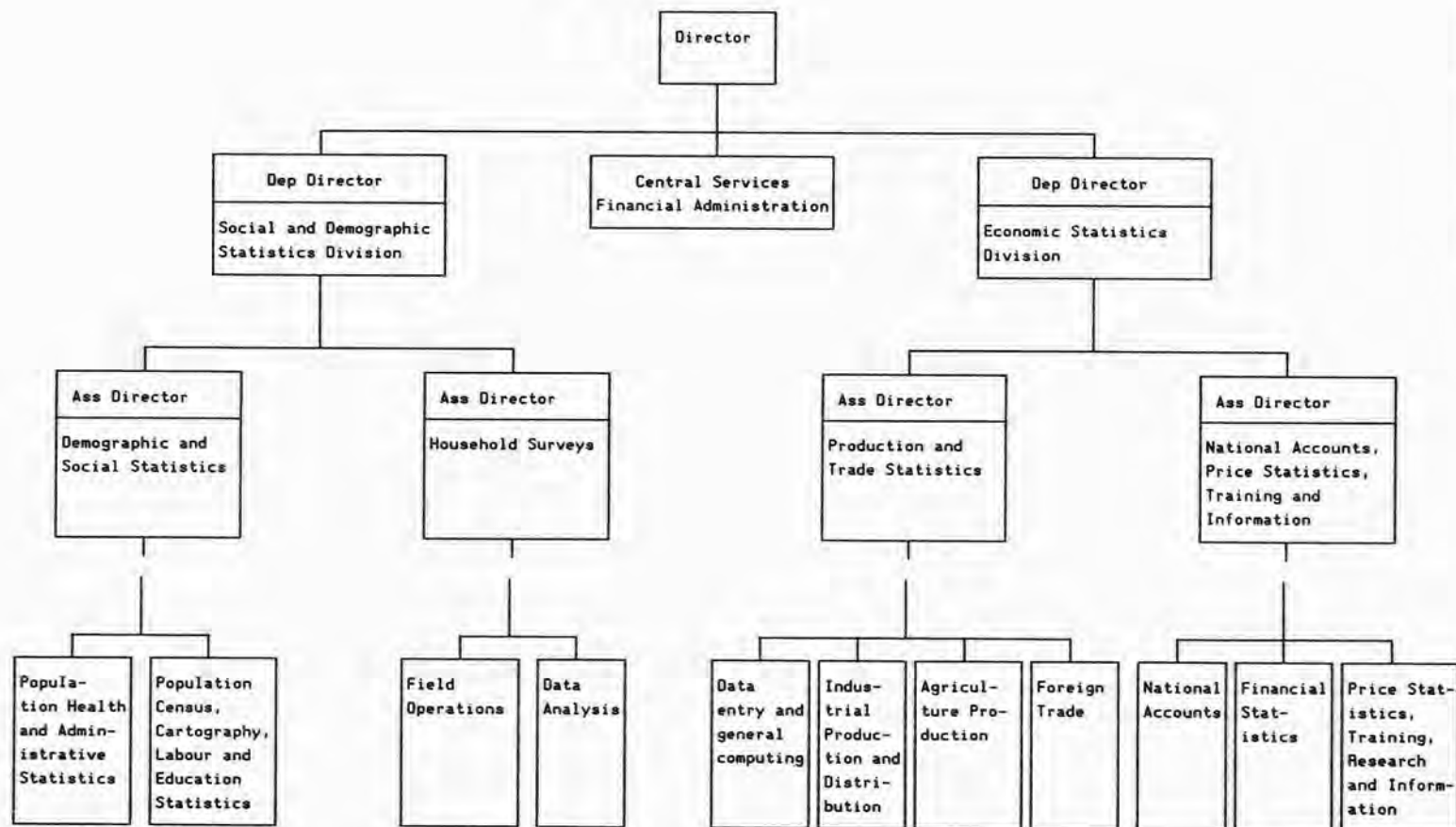
The focus of this brief presentation is on the CSO, the partner in cooperation of Statistics Sweden. In later chapters, a number of other producers and users of statistics will be discussed as far as their cooperation with CSO is concerned.

CSO has increased its staff from around 75 established posts in 1980 to around 200 positions in 1986, plus 143 enumerators in the Sample Survey Organization. There are a number of vacancies among the qualified statistical staff and there is a high rate of staff turnover. Among the reasons for the high staff turnover are higher salaries in the private sector and few promotion possibilities within the CSO for statisticians. The organization of the CSO is unnecessarily hierarchical and there is a confusion of subject and administrative responsibilities.

The organization of the CSO is shown in the figure below. Before Independence, the CSO mainly worked in the sectors of immediate interest to the white minority, such as the urban sector and the commercial farms. The rural areas where the majority of the population lived were almost entirely neglected.

Since Independence, CSO has expanded its capacity and gradually adapted its services in order to cover all sectors of the society and all geographical areas. The most important examples are the Census carried out in 1982 and

CSO ORGANIZATION CHART



the launching of the National Household Survey Capability Programme (NHSCP) in 1983, the establishment of a computer section and of new positions as Provincial Statistical Supervisors.

The NHSCP has a permanent field organization which so far has been used to collect data for annual Agricultural surveys, a Demographic survey, an Income, Consumption and Expenditure survey, a Nutritional survey and a Labour Force survey (on-going during 1986). However, except for the demographic survey, the processing of data from the surveys has neither been completed nor got off the ground. There are therefore no analysed results. The NHSCP field organization has also been used for data collection by other institutions carrying out their own data processing and analysis. The two main examples are an Energy survey and a Water and Sanitation survey.

CSO is supported by a number of external organizations, in addition to the on-going cooperation with Statistics Sweden. The table gives a condensed view of the situation in April, 1986.

Field of support	Form of support	Supporting Agency
Development of an input-output table	Technical Assistance	NORAD
NHSCP	Sampling expert	UNDP
Analysis of Census	Technical Assistance	UNFPA
Population and Planning Unit	Technical Assistance	UNFPA/ILO
Nutrition survey	Technical Assistance + micro computer + vehicles	UNICEF
Computing	Technical Assistance Scholarships, equipment	ODA USAID
International Price Comparison	Equipment, finance	EEC



Data collecting in one of Zimbabwe's many fields of statistics.
Photo: Ragnar Björk SIDA's Photolibrary

Many government institutions beside CSO produce statistics. Most of these are of ad-hoc character and produced in response to a specific need within an institution. Others are of a more permanent character and a certain co-operation with CSO takes place. Among other institutions, CSO is cooperating on an operational basis with Ministry of Lands, Agriculture and Resettlement, Ministry of Industry and Technology, Ministry of Health, Ministry of Education, Ministry of Employment, Manpower Planning and the Reserve Bank of Zimbabwe. There is an inter-ministerial committee on statistical coordination with members from most of the ministries mentioned as well as from Prime Minister's Office and Ministry of Finance, Economic Planning and Development. This committee has not met since 1982/83.

CHAPTER 9 OBJECTIVES OF THE PROJECT

The cooperation between CSO and Statistics Sweden falls into the category of institution building/capability development. This is normally a process where the overall objectives can seldom be expressed in an operational way, possible to evaluate with quantitative methods.

In this case the overall objective is stated in a very general way. This applies to the original Project Document from 1983, as well as to the Terms of Reference included as an appendix in the agreement between SIDA and Statistics Sweden for the period 1983/84 - 1984/85. For that period there was no proper SIDA project memo only a reference to the project document in the decision to allocate funds to the project, which implicitly must also refer to the objectives stated there. Also for the period 1985/86 - 1986/87 the overall objectives, or rather the purpose of the project, are stated in very general terms.

The next level in a "normal" goal hierarchy consists of the production/output targets. In this case a number of main fields of cooperation have been identified, but not in a way that makes quantitative methods possible to use.

At the level of inputs and activities the targets are clearly stated in the original project document and the subsequent appendices to the agreements between SIDA and Statistics Sweden.

Overall objective

In the original Project Document, as well as in the Terms of Reference, Appendix to the Agreement between SIDA and Statistics Sweden for the period 1983/84 - 1984/85, the overall objective, or rather the purpose of the cooperation, is stated as follows: "The overall co-operation

shall be directed towards the continuous transfer of knowledge in order to strengthen the capability for data collection, compilation, dissemination and utilization in Zimbabwe."

There was no new project document produced for the continuation of the cooperation into 1985/86 - 1986/87. This is quite a normal procedure as the original Project Document was elaborately designed and the programme was envisaged as a long-term one.

The purpose of the programme for that period is stated in the Terms of Reference, Appendix to the Agreement between SIDA and Statistics Sweden and in the SIDA Project Memo as: "...to strengthen the overall statistical services of Zimbabwe in order to improve government planning, monitoring and evaluation."

Objectives formulated in such a general way can only be evaluated by assessing the development of capacity and output of CSO and other supported statistical producers since the beginning of the period of cooperation, and by obtaining the opinion of the users of statistics from CSO.

Project goal or production/output targets

In the project documents four main fields of cooperation are identified, which could serve as frames for an assessment discussion at the level above inputs/activities to the individual subprojects. The four fields are:

- Overall strengthening of CSO;
- Development of the National Household Survey Capability Programme (NHSCP);
- Development of a National Socio-economic data base;
- Capability building in applied analysis and planning.

As can also be seen at this level, the evaluation has to be qualitative, based on assessments from different sources, together with conclusions from the follow-up of the individual subprojects within the four main fields.

Inputs and activities

At the level of inputs and activities, there is more detailed information in the original Project Document and the subsequent Agreements between SIDA and Statistics Sweden, including a specification of the different types of resources to be made available by Statistics Sweden. The follow-up at this level of the different subprojects is carried out in chapter 12, while the general conclusions from that follow-up are summarized in chapter 10 and 11.

The components envisaged to be included in the four main areas of cooperation during the period 1983/84 - 1984/85 according to the project document were:

- a) Overall strengthening of CSO
 - Management and production oriented training
 - o Seminars
 - o Study tours to Statistics Sweden
 - o Workshops and participation in conferences
 - o Backstopping capacity and trouble-shooting at Statistics Sweden
 - Supply of subject matter expertise in i.a.
 - o Financial Statistics and their integration with National Accounts
 - o Analysis of socio-economic and demographic data
 - o Employment statistics
 - Integration of data from the modern sector with survey data measuring activities in the peasant sector
- b) Development of the NHSCP
 - Support in survey design and sampling
 - Supply of subject matter expertise in i.a.
 - o Agricultural statistics
 - o Income and expenditure statistics

- o Labour and employment statistics
 - o Statistics relating to health and nutrition
- Acquisition of equipment and facilities such as:
 - o Transportation equipment
 - o Field equipment
 - o Printing accessories
- Organization and implementation of workshops
- Support in computer management and data analysis
- c) System development of the National Socio-Economic Data Base
 - Basic data base design, retrieval and updating functions for time series
 - Linking of central economic statistics to the data base
 - Development of central data base management organizations
 - Training in data base management
 - Development of functions for analysis of time series
 - Linking of household surveys to the data base
 - Training of users
 - Planning of further development
- d) Quantitative economic analysis and planning
 - Overall and in-depth training of personnel
 - o Management training
 - o Training of project personnel
 - Modelling exercises
 - Structural development
 - o Work with basic data
 - o Estimation of relations
 - o Model analysis and validation

The plan of action for the period 1985/86 - 1986/87 included the following activities:

Overall strengthening of statistical services in Zimbabwe

Reviews have started of different subject matter areas and are proposed to continue. They will be made in different steps including:

- Contacts with different users to identify user requirements and to make a thorough evaluation of present production. The result should be a development plan for that area of statistics.
- Review of publications and other ways of dissemination to establish a plan for the dissemination of the statistics.
- Examination of different data collection methods, integration, where necessary, between data collected in traditional ways and data collected through the household survey organization.
- Development of new production systems including systems analysis and programming of new EDP-systems, and making statistical results accessible in a data base.

The National Household Survey Capability Program

The support to the NHSCP is planned to continue in much the same way as it has been initiated. The EDP area will be in the main focus of the support but also the areas of general planning of surveys, design of questionnaires, training of field staff, and analysis of results requires support. It is necessary to integrate NHSCP with the rest of the statistical organization.

Economic analysis and econometric modelling

The gradual development of planning models for MFEPD and other government institutions is planned to be intensi-

fied. A further two groups of 6-8 officials each will be trained in the use of econometrics and quantitative economic planning. This formal training is planned to be combined with the launching of seminars on applied econometrics in Harare.

The development of macro-economic models calls for extensive experience. It is suggested that a Swedish consultant should be stationed in Harare for some 18 months to advise on various dimensions of the model work.

Development of a socio-economic data base

The socio-economic data base is planned to include one base where the main parts of the NHSCP data are stored in a way that facilitates easy ad-hoc retrievals and to be specifically geared to the information requirements posed by the econometric modelling activities.

CHAPTER 10 ACHIEVEMENT OF OBJECTIVES

A general conclusion from the analysis carried out in chapters 11 and 12 is that the overall objective of the programme of cooperation has been achieved so far. This statement has, however, to be qualified. As the objective is expressed in a very general way, it would also have been achieved without the slightest improvement of the CSO capacity. When we conclude that the stated general objective is achieved, we are therefore saying that the CSO capacity has not declined over the period. In fact, our conclusion is more positive than that. As a result of our discussions we are able to state with certain conviction that the image of CSO has improved over the past three years, that demands from users of statistics has increased, and that complaints are seldom heard about the quality of the statistics but rather because of the delay before they are available.

The analysis in chapters 11 and 12 leads to the general conclusion that in a number of fields the support from Statistics Sweden has contributed to the improvement in CSO capacity.

When it comes to the stated four main fields of cooperation, it is evident that the balance between them is different from what was envisaged in the project document. The field "overall strengthening of CSO" has constituted a larger part of the total programme than was anticipated. Subsequently, the support to the NHSCP and the Development of a socio-economic data base has formed a smaller part, while the capability building in applied analysis and planning has been carried out in accordance with the original intentions.

In this context it could be pertinent to raise the question of the policy of Statistics Sweden as to institutional cooperation. Our assessment is that Statistics Sweden keeps a very low profile regarding changes in existing statistical activities and is particularly reluctant

to suggest the finalizing of any statistical activity which has become irrelevant, because of the changed circumstances in independent Zimbabwe, to mention one example. Statistics Sweden should preferably try to provide more support and firmer advice in these matters.

CHAPTER 11 ASSESSMENT OF THE COOPERATION AND RELATED ACTIVITIES

Role of statistics in the administration

Since Independence in 1980, the Government has put much emphasis on the development of the non-commercial rural sector. This also raised the question of the need for statistical information on this particular sector, information that was previously virtually non-existent. The demand for data from Ministries and other institutions engaged in rural planning was much larger than what could be supplied by CSO or by the institutions themselves. In addition to this new area of planning and statistical data, statistics from the traditionally modern sector were also very much needed and requested by different institutions.

The interest in applying statistical information for planning purposes has, as mentioned above, certainly been growing since Independence. However, the actual use of such data appears to have been less than desirable due to bottlenecks on the supply side. As far as CSO is concerned, the main bottlenecks have been data processing and dissemination. In addition to statistics covering the commercial and industrial sectors, - a continuation from pre-independence time -, the main supply to planners and analysts has been data from the 1982 population census.

The launching of the National Household Survey Capability Programme, which is administrated by CSO, was supposed to create a data base of the utmost interest and usefulness to planners. However, at present very few results from the surveys have been published and made available to the various interested parties. There are examples of surveys for which field work was carried out three years ago, which still have not been processed and published. This is a serious problem for CSO, not only because it reduces the interest in the data since they are outdated when published, but also because the general good-will and reputation of the organization may deteriorate.

rate. This may lead to less usage of statistical information in the administration and that institutions requesting such information will try to collect the data themselves. The latter quite often results in a reduction of quality and loss of multipurpose benefits, compared to a centralized administration.

Organizational level of the cooperation

A central feature of the institutional cooperation established between Statistics Sweden and CSO is the low level of Statistics Sweden staff within CSO. The program is built around a coordinator whose office is located within the premises of CSO and who is collaborating directly with the Director. The coordinator's work is guided by the recommendations of the 1983 Joint Mission. Special needs identification emerges through his contacts with the divisions of CSO as well as his interaction with government bodies and other institutions outside CSO.

In Sweden, the backstopping organization has to be both flexible and capable of responding to a wide range of requests. One important part of these is the recruitment of specialists for short-term assignments in Zimbabwe. The system of short-term missions, to give results, has to be based on a correct assessment of CSO's preparedness to receive the specialists at a given time and to absorb the advice and experience he/she will be able to provide.

Of the 27 short-term consultants recruited under the programme until April 1986, seven people did have a previous experience of working in third world countries when they started their first consultancy assignment in Zimbabwe. Of the twelve consultants used only once, only two had a previous experience. Thus, the proportion of short-term consultants without earlier third world experience is high.

The organization of the support from Statistics Sweden has in general been well adapted to the CSO organization and capacity. Normally, but not always, the CSO staff have been able to carry out the agreed preparations

before the arrival of the short-term consultant(s). This is a precondition if this type of cooperation shall function smoothly.

We doubt that the cooperation, and especially the short-term consultancies, would have been carried out as successfully without a competent team leader from Statistics Sweden, working in CSO on a long-term basis. Our opinion is that, in general, the competence of the coordinator to a large extent determines the outcome of the Statistics Sweden supply.

The volume of the total cooperation, and especially in regard to the short-term consultancies, has been overdimensioned compared to the CSO absorption capacity. There have also been a few cases where Statistics Sweden has not been able to send the same short-term consultant to a certain sub-project for a second time, which is unfortunate as the new ones have to start from the beginning when it comes to getting acquainted with the CSO environment.

Level of training activities

The training support provided by Statistics Sweden can be divided into four main components:

- management training;
- computer training;
- quantitative methods;
- on-the-job training.

Sometimes the training has had the form of a combination of components. The management training has consisted both of seminars in Harare and study tours to Sweden. Participants have expressed satisfaction with both forms.

It is our opinion that the computer training has been well adapted to local conditions and that Statistics Sweden has put great emphasis and extensive resources into this subject. The fact that the coordinator has his main



For a few, the training seems to have been too elementary — for others too ambitious.

Photo: Ragnar Björk SIDA's Photolibrary

competence within this field has contributed to this and may also explain why computerization in general has become a considerable part of the project. Seen in isolation, the computer training must be regarded as satisfactory. Those having gone through the training seem to be familiar with simple programming and the use of software packages.

As concerns the training in quantitative methods and the development and use of econometric models, the support of Statistics Sweden has been substantial. When the word econometrics is used, it should be mentioned that the training given has concentrated on basic concepts and tools for analysis of statistical data and to apply them on computers, and not any advanced econometrics. Courses have been arranged both in Harare and at the University of Uppsala in Sweden for staff members of CSO, MFEPD and other institutions. The training seems to have suffered

somewhat from the fact that the participants at the courses formed a rather heterogenous group where skills and competence are concerned. For a few the training seems to have been too elementary and for others too ambitious. However, the majority have obviously gained considerable knowledge through the courses. The success seems to have been highest for the participants from the Reserve Bank, as they have been able to apply and develop their experience further, when returning to their jobs. For some the possibility of applying the knowledge gained has been limited due to lack of computer equipment.

On-the-job training and transfer of know-how has been part of many of the subprojects. To make an assessment of this form of training is difficult at this stage as the effects are of a more long-term nature. But interviews have revealed satisfaction with both the form and the content of the training.

Adaptation of equipment to local circumstances

The project has included installation of several micro computers at the CSO headquarters. Previously they had several terminals connected to the SCC computer. It seems that the installation of the equipment has been well adapted and that no major problem has arisen. Some minor technical difficulties at the initial installation were easily solved. So far, the computers have proven reliable, and regular service and maintenance has been provided satisfactorily by the supplier. By now, the computers are heavily used for data processing, word processing, data analysis and modelling as well as training.

Two main reasons for the successful adaptation of the equipment can be identified:

- a general high level of education, awareness and interest within the CSO staff;
- extensive training in the use of micro computers provided by Statistics Sweden.

However, it should be noted that some of those given computer training have not been in a position to practise when returning to their jobs. This may lead to an adaptation set-back.

It has been argued that there are disadvantages in buying micro computers from a rather small producer and that they are not IBM compatible, as is the case with the JET 80's. This disadvantage has to be weighed against the fact that the JET 80's were considerably cheaper than any relevant alternative. It should also be remembered that computer technology is changing very rapidly and that investments in micros should not be seen as long-term investments. Against this background we conclude that the purchase of the JET 80's can be justified. However, future acquisition of hardware should focus increasingly on the comparability to other well-known hardware products and the availability of local repair and maintenance facilities.

External factors that have affected the collaboration

The main external factors, affecting the cooperation between CSO and Statistics Sweden since it started in 1983 have been:

- Zimbabwe Government Policy to limit the number of civil servants, which is still in force. This is a constraint when it comes to increasing the number of established posts for statisticians and computer programmers and system analysts at CSO.
- The higher level of salaries, other benefits and the better career prospects in the private sector and the parastatals. Accordingly, there is a considerable turnover and many vacancies at CSO. Another result of the turnover is that the period of job experience of the average statistician at CSO remains rather short. This situation is still more difficult when it comes to computer specialists, such as programmers

and system analysts in the public sector, which the experience of the Scientific Computer Centre shows (see below).

- The problems of the Scientific Computer Centre, SCC, that have contributed to substantial delays in the data processing of a number of surveys.

The last constraint should be elaborated on in detail: There are widespread complaints within CSO about the cooperation with SCC. Examples mentioned are the development of a Socio-economic Data Base, the agricultural surveys, including crop forecasts, and the nutrition survey.

It is obvious that cooperation between CSO and SCC has not been functioning properly. There are a number of reasons, which explain the delays in the SCC data processing. The computer equipment received for the Census 1982 was sent back and before new equipment was installed there was a delay of one year. The people installing the computers left immediately, without providing training or supervision for the staff. SCC has also had difficulties to recruit and keep its most qualified staff because of the more attractive conditions in the private sector.

In June 1984 the Government of Zimbabwe decided to computerize the forthcoming elections and from August 1984 to June 1985 the election work absorbed almost the entire capacity of SCC, with subsequent backlogs piling up from all other customers.

In January 1986 SCC lost another five staff members to the private sector. In April 1986 SCC had 13 out of 20 established posts filled.

Later in 1986 a merger is planned to take place between SCC and the Treasury Computer Bureau, TCB, aimed at increasing the efficiency of the Government data processing. During an initial period this merger will, however, create new constraints.

According to the director of SCC, part of the problem in cooperation with CSO is due to the weak CSO capacity to identify its requirements properly.

The solution to the problems as suggested by CSO, is to expand the internal CSO computer capacity, in order to become more independent of SCC. The acquisition of micro computers from Sweden and other sources has started this process. The next step would be to get a mini computer. Even with such a computer installed, CSO will however, continue to be dependent on SCC, when it comes to more demanding applications and processing of large volumes of data, for example census statistics.

To install a more powerful computer, such as a mini computer, at CSO, raises the question of coordination of computer capacity in the public sector. In the shorter perspective a mini computer in CSO could be looked upon as a negative development, especially if there is spare capacity in the SCC and TCB computers, as at least two studies claim.

At the same time, the CSO intention of avoiding a repetition of the experience during the processing of the census data and the election registration is a powerful argument for such an acquisition for CSO. It should, however, also be kept in mind that if CSO gets a mini computer of its own, the problem to recruit (or train) and keep competent programmers and system analysts remains. It is our opinion that this will be one of the most difficult challenges to CSO in the future.

Impact of support from Statistics Sweden

According to information derived from reports and discussions, we conclude that some of the main areas where the CSO cooperation with Statistics Sweden has resulted in changes, which will have an impact on the future work of CSO, are:

- CSO is in the process of becoming a computerized institution and the CSO staff is on its way to becoming familiar with the use of micro computers. This is partly a result of the delivery of 20 micro computers under the Swedish import support programme at the re-

quest of CSO/Statistics Sweden and the subsequent training. It is our opinion that the competence and personal interest of the Statistics Sweden coordinator at CSO has contributed to this development. It is, however, likely that the CSO staff will need continuous supervision and further training for quite some time in order to use the existing and forthcoming computers from different sources in an optimal way.

- A better understanding within CSO of the importance of publishing statistics in a manner that is easy to understand by the users, and the importance of publishing statistics with as short a time-lag as possible. The Statistics Sweden consultancies on the Statistical Yearbook and Stats Flash have contributed to this.
- Statistics Sweden has contributed to filling part of the lack of social and individual statistics, earlier a much neglected field. However, the main part of the Statistics Sweden support, so far, has been in the field of economic statistics.
- Statistics Sweden has been involved mainly in two surveys under the NHSCP, the Agricultural surveys and the Income, Consumption and Expenditure survey. However, so far no results are ready from any of the surveys, mainly due to the lack of data processing capacity. An impact of the Statistics Sweden involvement in this field is a lower level of ambition of the questionnaires, which will make collected data more reliable and easier to process. Both effects are important, especially as data processing has turned out to be a major bottleneck and the backlog of collected data is large.
- The development of a socio-economic data base has been lagging behind the original plans, mainly be-

cause MFEPD, CSO and Statistics Sweden have had other urgent tasks to fulfil and have given the data base development lower priority. The impact of Statistics Sweden here has been to scale down, or rather substitute the original comprehensive system with a pilot system, with around 100 indicators.

- One feature of the programme of cooperation with Statistics Sweden that is highly appreciated by CSO is the flexibility and rapidity of deliveries of equipment and short-term consultancies. Another appreciated aspect is that CSO is now less dependent on the Zimbabwean foreign currency restrictions than before.

CHAPTER 12 ASSESSMENT OF INDIVIDUAL SUBPROJECTS

Within each of the four main subjects covered by the project and described above, Statistics Sweden has been involved in several subprojects. This chapter gives a review and assessment of these subprojects.

It appears that the resources spent on the part of the programme that constitute the National Household Survey Capability Programme and the Economic Analysis and Planning, have been close to what was planned. The General Strengthening part has got more and the Socio-economic Data Base less than planned.

General Strengthening of CSO

General

A short management seminar for the Directorate at CSO has been arranged. Statistics Sweden staff assisted in the planning of the seminar and were engaged as seminar leaders. Several persons holding top management positions at CSO, MFEPD and some other institutions have also been on study tours to Sweden. It is difficult to estimate with accuracy to what extent managerial actions have been influenced by these activities. However, it is our understanding that these activities have stimulated the interest in managerial and organizational matters at CSO.

Publications

A combination of short-term consultancies and work carried out in Sweden has been the form of support related to the publishing of statistical data. The support has been concentrated on three subjects:

- Statistical Yearbooks of 1985 and 1986;
- Stats Flash, a monthly newsletter;
- A General Publication Plan.

As for the Yearbook of 1985, Statistics Sweden assisted in the tabulation plan, overall editing and design as well as the actual printing of the book. The printing took place in Sweden. The 1985 Yearbook is impressive and it is felt that it has contributed to strengthening CSO's reputation. As for the Yearbook of 1986, Statistics Sweden has assisted in making improvements of the 1985 edition.

The Stats Flash is a monthly newsletter initiated in 1985. It contains the latest results from different statistics. In addition to presenting the actual figures, descriptive comments are also made. Statistics Sweden assisted in the original design of the Stats Flash.

In cooperation with CSO staff, Statistics Sweden has worked out a general publication plan. Statistics Sweden has also recommended CSO to establish a special section responsible for disseminating, publishing and distributing statistical information. So far, this has not been implemented.

In addition to the subjects referred to above, Statistics Sweden has given advice on Household Survey publications and trained counterparts in the use of adapted dissemination, analysis and analytical presentation. At present it is too early to make any assessments of the effects of these activities. However, the need for assistance in the topics covered has been verified.

Data Processing

The most serious bottleneck in the production of statistics at CSO is the processing of data. In an effort to overcome this problem it was decided to speed up the computerization of routines that formerly were carried out manually. Some twenty micro computers (JET 80) have been acquired under the Swedish Import Support Program, and Statistics Sweden has been involved in the installation of the computers, development of data entry programs and arranging courses in use of micro computers and software packages. Practical on-the-job training has also been given. Recently, Statistics Sweden has worked out a com-

prehensive plan for EDP training, primarily aimed at the statisticians at CSO.

The activities undertaken by Statistics Sweden are important, given that they can be adapted as logical parts in the total chain of CSO activities. It is also important that there are no other factors in the system which will put any major constraints on the potential positive effects of the computerization. The full productivity effects of this subproject remain to be seen.

Supply of General Equipment

Within the framework of this project, CSO has been supplied with some office equipment such as typewriters, copier and paper. Though not large in scale, this has contributed to higher effectiveness in the daily routines at CSO.

Foreign Trade Statistics

Statistics Sweden has assisted in a complete revision of the foreign trade statistics. The assistance included an assessment of user requirements, specifications of recorded layouts and coding, a system for data entry and error control and a tabulation plan. Statistics Sweden has also assisted in the implementation of the new system. The implementation is still on-going. The work was carried out in close cooperation with counterpart staff at CSO.

This sub-project seems to have been successful. The experience gained by CSO staff through the project has also increased their capability to initiate and conduct revisions in other statistics. Users have also expressed satisfaction with the work carried out.

Agricultural Statistics

Historically, statistics on agriculture were collected only for the commercial farming sector. After Independence, it was decided that data from communal and resettlement farming areas also should be collected. Statistics Sweden has supported the work aimed at establishing a co-

ordinated tabulation and publication plan for the entire agriculture sector. More specifically, the Statistics Sweden assistance concentrated on the following topics:

- assessment of user requirements;
- list of tables to be included in annual or other publications;
- draft skeletons for the tables;
- review of questionnaires;
- improvement in the descriptions of methods and definitions, data collection methods and analytical commenting of results to be published;
- assessment of the computing facilities available to CSO for agriculture statistics.

It is our view that the assistance given by Statistics Sweden has been relevant and adapted to the existing environment. As the implementation of the new plan is at an early stage, it is not possible to make any final assessment of the subproject yet.

Demography

A short-term consultancy in 1985 had the objective of:

- reviewing the on-going analysis of the 1982 Population Census data and propose future actions;
- comparing census data with survey data from NHSCP;
- reviewing the progress of the establishment of a Population Planning Unit and propose future actions.

In order to meet the immediate need of population projections, a micro computer-based analytical model of the cohort-component type was developed by Statistics Sweden and used for projections.

It seems clear that the support given by Statistics Sweden was important to CSO. However, as much of the work was carried out under a considerable time constraint, the training and transfer of know-how component became rather limited. It should also be mentioned that the population projection model constitutes one area where certain difficulties have been experienced due to different opinions among consultants from Statistics Sweden and other expatriates working at CSO.

Short-term Economic Statistics

As to the area of price statistics, the input from Statistics Sweden has concentrated on the development of a new producer price index. The progress has been rather slow mainly as a result of a number of CSO staff members assigned to this particular field leaving CSO along with other staff involved in the international price comparison study. Support has also been given to the development of a new EDP-program for the consumer price index.

A short-term consultancy carried out in June 1985 assisted in drafting a development program for short-term economic indicators. The work involved participation from several staff members at CSO. Discussions with potential users of such statistics were also held. It is our view that the work carried out and the programme presented is important and of high standards. However, the implementation is rather slow, perhaps because it has been difficult to get qualified personnel at the Statistics Sweden headquarters to take time off for a follow-up visit.

National Accounts

In 1985, Statistics Sweden assisted in the development of an input-output table for Zimbabwe. The table was a 26 times 26 matrix and based on national account figures from 1980. The primary objective of the table was to serve as

a tool for planning in connection with preparation of the 5-Year Plan. As it turned out, the models based on the table were finalized too late in order to be fully utilized for the Plan. The table was prepared at very short notice and there was little time available for training counterpart staff in the subject of input-output tables. But the table has served as an instrument in the courses and training in quantitative methods arranged by CSO.

It is known that NORAD is supporting a project to develop a more detailed input-output matrix based on the 1984 national account figures. This implies that the Statistics Sweden support in this field can be regarded as having a short-term and immediate objective, which has only partly been fulfilled.

The National Household Survey Capability Programme

Data Processing

From the very beginning of the cooperation between CSO and Statistics Sweden, it was clear that the very ambitious survey program could be negatively affected by lack of data processing capability. Therefore, it was agreed that Statistics Sweden should assist in the design of a system for efficient data processing as well as the development of a data processing unit at CSO. Several short-term missions have supported these activities. Based on an assessment of the data processing capability at CSO, a scaling down of the survey program was recommended. The involvement in data processing routines has affected the following surveys:

- income/consumption/expenditure survey;
- labour force survey;
- agriculture survey;
- demographic and socio-economic survey.

Part of the assistance given has included the objective of training CSO staff in the handling of survey data.

Statistics Sweden feels that the progress regarding data processing and dissemination has been slow. So far, very few results from the different surveys have been published.

It is our judgement that the assistance provided by Statistics Sweden in this field has been important, but that the full effect of the support so far has been hampered by lack of capacity at CSO and problems with entering and processing data on computers outside CSO.

Agricultural Survey

In the agricultural survey, Statistics Sweden has contributed to the specification of variables and to the design of questionnaires and as well as to the sketching of a tabulation plan in addition to the general data processing support mentioned above.

The assistance rendered to the Agricultural Survey has laid the ground for the production of agricultural statistics for communal lands. The plan seems well adapted to user requirements. However, for reasons mentioned earlier, the final product still remains to be seen.

Also, courses in crop-cutting as a method of yield estimation have been provided. The courses had both a theoretical and a practical component and were held for staff from the Permanent Sample Survey Unit. A problem has arisen as production estimates based on the crop-cutting technique have turned out to be much higher than those based on eye estimates. This discrepancy has not yet been sorted out.

Equipment

The project has supplied the Survey Unit with some field equipment like pencils, papers, bags etc. Survey questionnaires have also been supplied.

Economic Analysis and Planning

As the statistical data base expands in a country, the possibility of applying quantitative methods for planning

purposes increases. In order to take advantage of this, it was agreed that Statistics Sweden should assist in the capability building regarding economic modelling and planning.

Courses in Statistical Analysing Methods

After discussions with MFEPD, CSO and other institutions and organizations, Statistics Sweden worked out a proposal for a training programme in simple applied econometrics. The first course was held in 1984 and started with an intensive 3-week seminar in Harare for 10 participants from various institutions. Later, the course continued with a ten-week visit to the University of Uppsala in Sweden. One of the main ideas of the training programme was to enable the participants to use computers and statistical software packages in their work. It was also assumed that the formal training should be followed by extensive on-the-job training. Statistics Sweden had the overall responsibility for the training and provided lecturers. Another course was held in 1985. Some minor adjustments in the programme were made, based on experience from the first course.

At the end of the course in Sweden, the participants were supposed to present a paper where they applied acquired knowledge on case studies of relevance to their job. We have reviewed both the content of the courses and the work on the case studies. It is our feeling that the participants formed a rather heterogeneous group regarding the level of competence before attending the courses and that this reduced the outcome of the course for some of them. This was especially so for the first course. The papers presented by the participants also indicate that the overall and deeper understanding of the methods learned have varied somewhat.

The two courses held in 1984 and 1985 have been followed up by further training and seminars in Harare in 1986 after the arrival of an econometrician from Statistics Sweden on a long-term stay.

It is our view that capability building through training in use of quantitative methods is important and that the courses have contributed to this. However, the importance of getting more homogenous groups of participants could have been emphasized more strongly. Also, the fact that some of the participants have had little opportunity to practise the acquired knowledge when returning to their jobs, is worrying.

Development of Models

Statistics Sweden has assisted in the establishment of two analytical models based on the input-output table mentioned earlier. The two models, one real growth model and one price model, can be run on micro computers. They are rather simple in the sense that they are linear and static. The models are very easy to use when first established and computerized. However, this is also a danger as anyone, even without knowledge of models and their constraints, will be able to run them. So far, Statistics Sweden has been only briefly involved in the plans for establishing medium/long-term models for Zimbabwe.

Recently, a framework for the establishment of a social accounting based general equilibrium model for Zimbabwe has been developed by Statistics Sweden through a short-term consultancy. The framework was developed with some, but not much, participation by counterpart staff in Zimbabwe.

It is our view that the two input-output models established and made operative may become beneficial for economic planning, but that considerable concern should be given to secure proper use of the models. Concerning the work on a social accounting matrix-based equilibrium model, this certainly is important given the right context. The practical outcome of the work remains to be seen and further Statistics Sweden and SIDA involvement should be carefully examined.

Data Base Development

Development of Time Series Data Base Handler (TSDBH)

The progress of this subproject has been slower than originally planned. One reason was that originally, the data base was planned to be established on a SCC computer. As a result of slow progress, it was later decided to establish a pilot version on a JET 80 computer at CSO. Another reason might be that the coordinator, who himself has been responsible for much of the work with the data base, has given priority from time to time to other activities considered of greater importance. Also, it seems that the ministries supposed to participate in the work have not been fully prepared yet.

Towards the end of 1985, the pilot version was ready on the JET 80. It contains approximately 100 different time series. All of them are annual series, but the system is built in order to handle both quarterly and monthly data. A data base software package has been applied for the data base. The pilot version was tested during the first quarter of 1986. Special emphasis was given to establish efficient interface to software packages for time series analysis and modelling. It is planned to enlarge the number of series in the data base gradually. The participation from counterpart staff has been rather small except for the selection of series to be included in the pilot version.

CHAPTER 13 BUDGET FOLLOW-UP

The total budgeted expenditures for the first agreement period (July 1983 - June 1985) were 5.0 million SEK. Breakdown and actual expenditures are shown in table 13.1.

Table 13.1 Budget expenditures 1983/84 - 1984/85
(1000 SEK)

Kind of costs	Expenditures	
	Budget	Actual
Fees,	2,725 (3,100) ^{a)}	3,088
of which; long time adviser	700	664
short term consultancies,	1,270	1,338
training, study visits,	755	1,084
coordination, backup		
Reimbursable expenditures	2,275 (1,900) ^{b)}	1,864
Total	5,000	4,958

a) Increased from originally budgeted as a consequence of increased fees from July 1984.

b) Reduced as a compensation for the increased fees.

The total budgeted expenditures for the second agreement period (July 1985 - June 1987) are 8,4 million SEK. Breakdown and actual expenditures until January 1986 are shown in table 13.2.

Table 13.2 Budget expenditures 1985/86 - 1986/87
(1000 SEK)

Kind of costs	Budget		Actual exp
	1985/86	86/87 July 85-Jan 86	
Fees,	2,250	2,716	833
of which; long term advisers	768	1,096	346
short term consultancies,	1,302	1,428	304
training, studyvisits,	180	196	184
coordination, backup			
Reimbursable expenditures	1,950	1,484	927
Total	4,200	4,200	1,760

The budget for the two agreement periods do not permit a subject oriented follow-up. We recommend that future budgets should be constructed in a way that makes this possible. We also recommend that SIDA takes a closer interest in the budgetary questions.

CHAPTER 14 CONCLUSIONS AND RECOMMENDATIONS

Based on the analysis in the previous chapters we have the following conclusions and recommendations regarding the future cooperation between Statistics Sweden and Central Statistical Office:

A number of sources indicate that the capacity and image of CSO have improved during the last 3-4 years. An important factor behind this is the cooperation with Statistics Sweden. There are very few complaints regarding the accuracy of the data from CSO. Although improvements have taken place regarding the time before data are available, there still are a number of complaints about long delays.

The overall objective of the programme of cooperation is formulated in a general way and has been fulfilled. The balance between the four main fields of cooperation has changed compared to the original plans.

Institutional building and capacity development is a long term process. SIDA should continue to finance the programme beyond 1987. Its total volume should not expand.

More emphasis should be given to social and individual statistics. This part has been lagging behind the development of economic statistics. Support of economic statistics should be limited mainly to the development of a system for short-term economic indicators. The support for the establishment of a socio-economic data base should continue. However, care must be taken so that the support is kept within CSO absorption capacity. Bottlenecks and delays as can be seen at present within NHSCP should be avoided.

We find that the present backlog of collected but neither processed nor analysed surveys is unacceptable. To carry out surveys and then wait many years before the results are published has also a demoralizing effect on staff and respondents.



The urgent need for computerization — decades of backlog to catch up with.
Photo: Bror Karlsson SIDA's Photolibrary

The most serious bottleneck is the lack of data processing capacity. This is the weakest link in the chain of activities from the initial planning of data collection to the published results. One important factor is the lack of systems analysts in Zimbabwe. It is suggested that Statistics Sweden should assist CSO in training the best of those that have attended programming courses in systems analysis. This should be seen as part of continued assistance to develop and make use of data entry and tabulation programs. Efforts must be made by CSO to keep the

analysts, which is easier said than done under the present circumstances in Zimbabwe. However, from a CSO point of view, the suggested training would otherwise be meaningless.

We recommend that CSO reduces the number of new surveys to be carried out as long as the backlog of non-processed surveys is significant.

In addition to the micro computers received under Swedish Import Support, CSO has another micro computer, financed by UNICEF. Discussions are taking place with other aid organizations which will probably result in a number of additional micro computers as well as a mini computer. We assess the lack of training in computer handling to be the main bottleneck over the next few years, and not the lack of computer capacity. We recommend, therefore, that no additional micro computers should be included.

The support from Statistics Sweden should continue in the field of analysing, editing and publishing statistical data and results. The objective should be to make it easier for the public in general to understand and make use of statistical data for information, analytical and planning purposes.

A prerequisite for further support to capability building through training should be that participants chosen should return to conditions where they can practise their newly acquired knowledge. A repetition of the experience from the econometric courses where this was not the case for a number of participants is not acceptable.

In order to improve the balance between the different links in the chain of statistical activities, CSO should, possibly with support from Statistics Sweden, develop a framework for the planning of future activities. Such a planning frame should include detailed one-year plans which are part of a five-year main objective plan.

The form of institutional cooperation developed in this project should continue, as it has proven successful so far. Some of the factors contributing to this have

been the general capacity of CSO, the competence of the coordinator from Statistics Sweden and the capacity of that institution to recruit suitable short-term consultants. However, it should be borne in mind that this type of cooperation has to be adapted if new circumstances arise.

PART III - ASSESSMENT OF INSTITUTIONAL COOPERATION

CHAPTER 15 INSTITUTIONAL COOPERATION AS A FORM OF AID

The concept of institutional cooperation

There are different forms of institutional cooperation within the Swedish development assistance programme. Common for all is that SIDA finances a programme of cooperation between one institution in Sweden and one in a programme country. The two institutions cooperate directly without involvement from SIDA once a project document has been agreed upon. That document should include the objectives, the main activities to be carried out and a budget for the programme of cooperation. This is the frame within which cooperation is developed.

The various Swedish institutions hitherto involved in this type of cooperation have organized their work slightly differently. Statistics Sweden is the only institution using a long-term coordinator stationed within the partner institution.

Statistics Sweden present their model for institutional cooperation as being based on the following principles.

- The technical assistance is primarily channelled into long-term coherent projects with an emphasis on developing the overall infrastructure.
- Before the start of a project, an extensive fact-finding study is made, which forms the basis for a long-term plan for cooperation.
- The project activities are carried out both in the client country and in Sweden.
- For each country project there is a project supervisor in Sweden and a coordinator of project activities

in the client country. Both persons are engaged for long periods of time. The main part of the technical work is, on the other hand, carried out by experts commissioned for short periods of time.

- Within Statistics Sweden there are special capacities 1) to plan and organize programmes in Sweden, covering activities at both Statistics Sweden and other Swedish institutions and 2) to evaluate, acquire and ship technical equipment needed for by-passing or eliminating bottle-necks.

Background of the assessment

Institutional cooperation as a form of Swedish public administration support started in 1983. So far it has been used in seven cases: Statistics Sweden in Zimbabwe since 1983, in Tanzania since 1983 and in Lesotho since 1985. The National Institute for Civil Service Training and Development (SIPU) in Zimbabwe since 1983 and in Botswana since 1983. The Swedish Association of Local Authorities (SALA) in Zimbabwe since 1984. The Institute for Societal Organization (ISO) in Lesotho since 1984.

Thus the experience of this form of cooperation is limited. However, some of the projects have now been going on for three years and it should be possible to draw some tentative conclusions from those projects. It is therefore the intention of the Education Division of SIDA, which is the responsible unit for public administrative support, to carry out, during 1986 and 1987, assessments or evaluations of the institutional cooperation projects that have been going on since 1983.

The first of these assessments is based on the co-operation between Statistics Sweden on the one hand and CSO in Zimbabwe and TAKWIMU in Tanzania on the other. It was carried out as part of the evaluation of those two co-operation programmes which took place in April-May 1986,

by an evaluation team consisting of Bertil Odén, SIDA, Halvard Lesteberg, NORCONSULT, and Bertil Egerö, SIDA (Tanzania only). The findings are presented in this report.

Comments from TAKWIMU, Tanzania

In general the comments given by TAKWIMU staff on the form of cooperation were positive. There was, however, a certain variation in the responses.

The advantages of institutional cooperation are mainly of the same nature as was the case in Zimbabwe:

- It is a flexible system and normally there is only a short lapse of time between request and delivery.
- The advantages of short-term consultancies, including the broader spectrum of specialist competence made available, the necessity for TAKWIMU staff to prepare the consultancy, and the time-efficiency.
- The acquisition of equipment runs smoothly.

Further advantages stated by TAKWIMU staff were:

- The acquisition of micro computers and computer training.
- The study visits to Sweden which give new perspectives on the work within TAKWIMU, even though the differences between the Swedish society and the Tanzanian are an obstacle to any direct application of Swedish methods and models.
- The vehicles received.

Some argued that the consultants should stay longer in Tanzania. This, however, depends partly on the field in

which they are working. It might, for example, be necessary with longer consultancy periods in national accounts than in the field of industrial statistics. Another argument against short-term consultants was that "things slow down" as soon as the consultant leaves. Yet another argument was that sometimes TAKWIMU has to adapt itself to the wishes of the consultant as regards timing. The result of this is that the consultant will, at times, arrive during a period which is not an optimal one from the TAKWIMU point of view.

Comments from CSO, Zimbabwe

It is obvious that the directorate and staff of CSO appreciate the form chosen for cooperation between CSO and Statistics Sweden. A number of advantages of this form are mentioned as follows:

- It is flexible and normally there is a very short time between a request for equipment or short-term consultancies and the arrival of the goods or consultants. This is considered unique, compared to other aid forms and especially assistance received from UN agencies.
- The main part of the technical assistance is in the form of short-term consultancies. The advantages of this form were pointed out as follows:
 1. CSO can obtain a broader spectrum of specialist competence, compared to the same number of man months for long-term personnel.
 2. CSO staff is required to identify and prepare the tasks of the short-term consultant thoroughly.
 3. During a short-term mission it is possible to work very intensively, thereby obtaining on the average

a more time-efficient output from the short-term consultant and also from the CSO staff directly involved in the collaboration with the consultant.

4. As long as Statistics Sweden sends the same short-term consultants to a certain subproject, the cost of the need of new consultants to familiarize themselves with the CSO and the Zimbabwean environment is kept at an acceptable level.
5. The acquisition of office and other equipment runs smoothly and with a minimum of red tape.

Other comments not related to this form of cooperation were:

- The coordinator's competence, especially in data processing, has been of great help when it comes to supervision and training in this field. (This is in fact an argument for long-term consultancies.)
- The advantage which comes first into the minds of most CSO staff asked, is the acquisition of 25 micro computers. They have been financed under the Swedish Import Support Programme to Zimbabwe and thus fall outside the programme of institutional cooperation.

Assessment of the experiences gained

- 1) One main prerequisite to make institutional cooperation successful is that the recipient institution has the necessary absorption capacity to benefit from the system of short-term consultancies.

By and large, this condition has been achieved in the case of CSO. Most of the staff cooperating with the consultants are competent and sufficiently trained to make good use of the consultants' work and

advice, and normally the necessary work required for preparation and follow-up of consultancies is carried out.

The condition has not entirely been achieved in the case of TAKWIMU. Or expressed in another way: The volume of short-term consultancies has been somewhat too large, compared to the absorption capacity of TAKWIMU. This is shown in the delays of certain subprojects, as well as in the insufficient preparatory work carried out before the arrival of the consultant, and in the planning periods which turned out much longer than envisaged.

- 2) The role of the project coordinator is extremely important in this type of cooperation. With a good coordinator, the chances are high that planning and implementation will run as planned. With a less able coordinator those chances are strongly reduced. Among other things the output of the short-term consultancies is greatly dependent on the capability of the coordinator to plan these activities.
- 3) The open framework for this form of cooperation permits the coordinator's professional competence and interest to influence the relative attention given to the different subprojects within the programme. For example we believe that with another coordinator in Zimbabwe the present cooperation between Statistics Sweden and CSO would have contained a smaller computer and computer training component. In the case of TAKWIMU we believe that the increasing interest in supporting district and regional statistical work, exemplified by the proposal of a new project for co-operation between Statistics Sweden and the Prime Minister's Office, is partly an effect of the competence in this field of the present coordinator.

- 4) Because of the important role of the coordinator, the period of assignment should preferably be three or four years and the absolute minimum two years. It is unfortunate that the present coordinator in Tanzania will serve for a shorter period.
- 5) When it comes to the supply of short-term consultants from Sweden we note that, so far, Statistics Sweden has by and large been able to recruit good or acceptable consultants.

From July 1983 until April 1986, Statistics Sweden has used 48 short-term consultants, carrying out in all 92 consultancies. 25 of the short-term consultants have been used for one consultancy each, while the other 23 have carried out between two and six consultancies each. That more than half of the consultants have been used only once can partly be explained by the initial stage of the cooperation. But the number of "newcomers" with their inevitable need to familiarize themselves with a very different milieu, has been high. This is specially so taking into consideration that of the 48 short-term consultants, 33 had no earlier experience of work in other third world countries when they performed their first consultancy within the Statistics Sweden cooperation programme.

We have two main comments on this. On one hand, some of the short-term consultancies would have been more efficient with more experienced consultants. From that point of view, the share of "newcomers" is too high. On the other hand all cooperation must start somewhere and gradually the number of people with at least some experience of work in Tanzania and/or Zimbabwe is increasing and that this group will form an important resource base in the future.

Finally, a word of caution should be introduced concerning the long-term development in this field. After a number of short-term consultancies by one

consultant, opposition against further consultancies might develop within the department or institution where the consultant normally works as well as in his/her family. If Statistics Sweden at the same time expands its activities to new countries, the supply of competent short-term consultants may lag behind the demand.

- 6) In situations when management in cooperating institutions is weak, the role of Statistics Sweden should be discussed. So far the policy has been to keep a low profile. Of course this field is a sensitive one, but at the same time weak management or bad organization should not be the main obstacle to successful implementation. To put it another way, such obstacles reduce the absorption capacity. In such a situation the volume of the support from Statistics Sweden should be reduced.
- 7) One risk with institutional cooperation is that the programme of cooperation expands into too many sub-projects that are not part of an overall strategy or plan to strengthen the institutions. When two parties find a field that needs support they start activities. If the overall goal of cooperation is to increase the capacity and one main area is identified as general strengthening, there is formally room for almost any activity. We have found examples of this in the programme of cooperation between Statistics Sweden and TAKWIMU. Part of the blame for this situation should be directed towards SIDA. Experience from implementation of projects in Tanzania should have made SIDA reduce the suggested financial frame in order to give Statistics Sweden and TAKWIMU an incentive to make priorities.
- 8) So far the coordination capacity in Stockholm has deliberately been kept to a minimum. The advantage of

this is flexibility and avoidance of unnecessary bureaucracy. As the activities are spread to more countries and experience is gained, we think that Statistics Sweden should strengthen its capacity to follow-up activities in Stockholm. This would also be of use to SIDA. A strengthening of the Statistics Sweden organization in Stockholm would also improve the planning perspective, and thereby avoid situations where Statistics Sweden, at short notice, has to send someone who might not be the most appropriate person for the consultancy. Another area for improvement could be information to the short-term consultants during their stay in Sweden on the progress of the subprojects they are involved in.

Cost effectiveness

Institutional cooperation as a form of aid should also be assessed from the financial point of view. Is it cost effective compared to other forms of aid? Of course it is difficult to give a firm answer to this question, as it is difficult to assess the quality of different forms of aid in programmes of cooperation aimed at building up institutions and capacity development. One obvious advantage of institution cooperation, which is very highly appreciated, is the much shorter period of time between identification of needs and the supply of necessary means and resources. Another aspect of this flexibility is the access to back-up capacity without long delays.

We are of the opinion that to balance this advantage, a comparison with other forms of aid must show significant cost disadvantages.

A cost comparison could be carried out against an alternative where costs are calculated as if the input of personnel had been in the form of staff, employed under a normal SIDA contract for two years and with the same amount of equipment, study visits and courses in Sweden.

Such a comparison is biased against the institutional co-operation model on two main points. 1) Three or four people on long-term contracts will never be able to cover the same wide range of specialist competence as the short-term consultants. 2) SIDA would have to use many more hours to organize and implement the same volume of training and study-tours in a field where much of the competence is available within Statistics Sweden and other institutions more familiar to Statistics Sweden than to SIDA.

We will compare figures from the Statistics Sweden budget for Tanzania 1985/86 with figures received from SIDA recruitment division for the beginning of 1986. This rough comparison is based on the following methods and assumptions.

To calculate the Statistics Sweden expenditures, we have used the long and short-term fees agreed upon by Statistics Sweden and SIDA for 1985/86 and the total number of months budgeted for the two year period. To that we add the budgeted reimbursables for the long-term and short-term consultants and the fee for Statistics Sweden's costs for project work and development (which includes the day to day coordination, financial monitoring etc) in Stockholm.

To get the "SIDA comparison" we transform the number of months in the Statistics Sweden agreement into long-term SIDA expert years by calculating 10.5 months actual work per year. The total number of SIDA expert years according to such a transformation is 6.6. This is multiplied by the actual average cost per year in Tanzania which is 560,000 SEK. This figure has to be adjusted for SIDA overhead and for the fact that SIDA average cost is based on a salary level of around 10,000 SEK per month, which is considerably lower than the actual average salary of the consultants used by Statistics Sweden.

The SIDA overheads, including recruitment, training, administration at headquarters and SIDA field office, rents, telephones etc, is calculated on an assumption that

in total 1.5 months are used by SIDA staff per expert year. The average salary level of the Statistics Sweden consultants is assumed to be 14,000 SEK per month, which increases the average annual cost to around 620,000 SEK.

The total cost for the Statistics Sweden consultancy input during the period would be, according to this calculation, 5.5 million SEK and the comparable SIDA expert cost around 4.3 million SEK. As stated earlier the comparison is biased against Statistics Sweden. We are also aware that we "are comparing apples and oranges". Still it is our conclusion that the extra cost to get the benefits built into the institutional cooperation model is in this case acceptable.

A second possible comparison would be to use SIDA recruited long-term and short-term consultants of the same kind as Statistics Sweden use. The fees in this case would not be lower than what SIDA pays Statistics Sweden. The time needed for SIDA staff to recruit specialists in the field of statistics would be considerable longer than when staff from Statistics Sweden recruits. Accomodation costs would be higher as the short-term consultants would normally use hotels, whereas Statistics Sweden often lodge their personnel in a rented guest house. The backup would be more difficult and probably more expensive to organize.

In conclusion: This alternative would be more expensive and the services would possibly be of lower quality.

Relations SIDA - Statistics Sweden

Statistics Sweden has implemented the two programmes of cooperation with a minimum of involvement from SIDA. The quarterly reports from Statistics Sweden to SIDA have normally arrived soon after the end of the relevant quarter. The reports from short-term consultancies have been delivered to SIDA in that context or separately. SIDA has seldom expressed any opinion on subject matter in the reports and has normally agreed to proposals from Statistics

Sweden, including to finance the procurement of micro computers to CSO and MFEPD in Zimbabwe under the import support programme.

Part of the explanation of the uncritical attitude of SIDA is probably the lack of statistical competence of the programme officers in charge of the Statistics projects.

It would probably be advantageous if SIDA had someone with competence in statistics and discussing monitoring the projects further. This is not to suggest that the present relative autonomy of Statistics Sweden in its relations to SIDA should be changed. But statistical competence at SIDA would facilitate subject matter discussions with Statistics Sweden to the advantage of both partners. Irrespective of the statistical competence of the programme officer at the SIDA office, a closer monitoring of the statistics cooperation is recommended, including a closer follow up of budget matters.

The budget of the programme shall in the future be constructed in a way that permits a subject-oriented follow-up and SIDA shall take a closer interest in budget questions.

ANNEX I

TERMS OF REFERENCE

Background

Since 1983, Sweden has financed a development assistance programme in the field of statistics in Tanzania and Zimbabwe. The method has been a so called institutional co-operation between Statistics Sweden*) on one hand and its opposite numbers in Tanzania (Central Bureau of Statistics, abbreviated TAKWIMU) and in Zimbabwe (Central Statistical Office, abbreviated CSO) on the other. In Tanzania, Swedish support in other forms, mainly in connection with the population censuses of 1967 and 1977, preceded the present programme.

The objectives of the present Swedish statistical assistance to Tanzania are stated in SIDA Project Memo of 1985-04-04. The objectives of the programme in Zimbabwe are correspondingly stated in the SIDA Project Memo of 1985-05-21. Generally speaking, the objectives are to increase the efficiency of statistical operations and to make them more adapted to the demand of the users.

The content of the two programmes are similar to a substantial degree. Improvement of national accounts, agricultural statistics and a national master sample programme are included in both programmes. Training forms a pronounced part of the two programmes. Beside consultancies, support to publishing of statistics and introduction of micro computers form part of both programmes. Other parts differ. For instance, the programme in Tanzania covers more subsectors and the financing of a building.

During the two-year period 1983/84 - 1984/85 SIDA allocated SEK 8.0 million to the programme in Tanzania and SEK 5.0 million to the programme in Zimbabwe. Corresponding amounts for the two-year period 1985/86 - 1986/87 are SEK 8.0 million for Tanzania and SEK 8.4 million for Zimbabwe.

The methods used are similar in the two programmes. One coordinator from Statistics Sweden, works in TAKWIMU and CSO respectively. Long-term and short-term consultants, recruited by Statistics Sweden are carrying out well defined tasks. Training is provided i.a. through courses and study visits. Certain equipment and material is included as well as backstopping capacity in Sweden.

Reasons to evaluate the two programmes together

The similar methods and content of the two programs warrant an evaluation of the two programmes together. Thereby, a "cross-fertilization" effect might be created, which can give more firmly based conclusions from which both programmes will gain.

*) Statistics Sweden (Statistiska Centralbyrån) is the National Central Bureau of Statistics in Sweden

Purpose of the evaluation

The purpose of the evaluation is to provide SIDA with additional information on the outcome of the two programmes in order to improve the base for a SIDA decision on how and to what extent Swedish development assistance shall continue to support the statistical programmes in Tanzania and Zimbabwe after the present agreement period, 30 June 1987.

Scope and focus of the evaluation

In addition to a follow-up of the results of individual subprojects compared to their targets, the evaluation will focus on the following questions:

- The role of statistics in the administration of the recipient country, the demand for and use of statistics and steps taken to adapt the production to the demand.
- The technical and organizational level of the programme, compared to the conditions and possibilities to continue the activities without Swedish aid.
- The level of the training activities compared to the general level of education and the environment in which the statistical work is carried out.
- The adaptation of equipment, especially the computers, to the environment in which it will work.
- Pros and cons of institutional cooperation compared to personnel assistance.
- Extensive use of short-term consultants - pros and cons.
- The importance of the coordinator in institutional cooperation.
- The cost effectiveness of the programme.
- Factors outside the cooperating institutions that have affected the results of the programme.

Organization and staff

The evaluation was carried out by a team of three persons, independent from the institutions cooperating: One senior statistician, one sociologist or a person with similar background and one SIDA person as teamleader.

ANNEX II

1 PERSONS INTERVIEWED, TANZANIA

In Dar-es-Salaam, Dodoma and Morogoro.

TAKWIMU

Mr N.K. Mbalilake
Mr J.M. Komba
Mr S.M. Mbaruk
Mr C. Mkai
Mr P.C.T. Mayeye
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Mr E.D. Maimu
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Mr B.M. Mahiza
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Mr A.S. Baruti

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Mr P. Chirika

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Regional Planning Office, Morogoro

Mr A. Ngaleya

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Mr E. Mwana

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East African Statistical Training Centre

Dr P. Namfua

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Ms A. Näsström

Mr J. Essner

2 PERSONS INTERVIEWED - ZIMBABWEList of Interviewed people

in Harare and Bindura

Central Statistical Office

Dr G. Mandishona

Mr M. Jambwa

Mr M.B. Nyoni

Mr R. Tendere

Mr D. Mzite

Mr C. Maxwebo

Mr Gowore

Mr J. Herzog

Ms L. Björnland

Mr Madondo

Mr M. Tin

Mr T.N. Chirimanyemba (Bindura)

Mr K. Makoni (Bindura)

Ministry of Finance, Economic Planning and Development

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Mr N. Ncube

Ms S. Taziona

Ministry of Industry and Technology

Dr Takundwa

Ms M. Choguya

Ministry of Lands, Agriculture and Resettlement

Mr Murphy

Reserve Bank of Zimbabwe

Mr Collins

Scientific Computer Centre

Dr Zwangobane

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Mr C. Agren

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Mr C. Arvas
Mr A. Arvidsson
Mr D. Bråmer
Ms A.N. Bråthén
Mr C.O Cederblad
Ms C. Denell
Mr J. Eklöf
Mr A. Fyhrlund
Ms U-S. Hagberg
Mr J. Högrelius
Mr U. Jorner
Dr A. Lönnqvist
Mr L. Nordström
Mr P.O. Olofsson
Mr L. Olsson
Mr H. Pettersson
Mr T. Polfeldt
Mr J. Redeby
Mr B. Roström
Mr L. Stigendahl
Dr A. Taube
Dr A. Ågren
Mr P. Östling

ANNEX III

ABBREVIATIONS - TANZANIA

CCM	Chama Cha Mapinduzi (The party in Tanzania)
DEVPLAN	Ministry of Planning and Economic Affairs (from 1986 merged with Ministry of Finance into MFPEA)
EASTC	East African Statistical Training Center
MACD	Ministry of Agriculture and Cattle Development
MFPEA	Ministry of Finance, Planning and Economic Affairs
PMO	Prime Minister's Office
PRISP	Pilot Rural Integrated Survey Programme
RDD	Regional Development Director
RPO	Regional Planning Officer
RSO	Regional Statistical Officer
SIDA	Swedish International Development Authority
TAKWIMU	Bureau of Statistics, Tanzania
UNICEF	United Nations International Children's Fund

ABBREVIATIONS - ZIMBABWE

CSO	Central Statistical Office. Zimbabwe
EDP	Electronic Data Processing
EEC	European Economic Community
MFEPD	Ministry of Finance, Economic Planning and Development, Zimbabwe
NHSCP	National Household Survey Capability Program
NORAD	Norwegian Agency for International Development
ODA	Overseas Development Administration, UK
SCC	Scientific Computer Centre, Zimbabwe
SIDA	Swedish International Development Authority
TCB	Treasury Computer Bureau, Zimbabwe
UNDP	United Nations Development Program
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations International Children's Fund
USAID	United States Agency for International Development

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STATISTICAL COOPERATION IN TANZANIA AND ZIMBABWE

During the 1980s SIDA has supported a programme of institutional cooperation between the National Bureau of Statistics (SCB) in Sweden and its counterparts in Tanzania and Zimbabwe. The programme has been judged as successful in familiarizing the institutions with the use of a much needed socio-economic data base in both countries. In Tanzania, however, the poor infrastructure and economic constraints are holding back statistical production while in Zimbabwe a problem is the difficulty of attracting programmers and system analysts due to higher salaries in the private sector.

These are some of the findings of this evaluation report written by a team consisting of Mr Bertil Odén and Mr Bertil Egerö, SIDA, and Mr Halvard Lesteberg, Norconsult.



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