# Developing a Multi-year Survey Programme at the National Bureau of Statistics for Poverty Monitoring in Tanzania

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**Contents**

# Abbreviations and acronyms

CWIQ        Core Welfare Indicators Questionnaire
DANIDA      Danish International Development Agency
DFID        Department for International Development, UK
DG          Director-General
DHS         Demographic and Health Survey
EA          Enumeration Area
EASTC       Eastern Africa Statistical Training Centre
GDDS        General Data Dissemination Standard
GoT         Government of Tanzania
HBS         Household Budget Survey
HIPC        Highly Indebted Poor Countries Initiative
ILO         International Labour Organization
IMF         International Monetary Fund
IMS         Indicator Monitoring Survey
JICA        Japan International Cooperation Agency
LFS         Labour Force Survey
NBS         National Bureau of Statistics
NORAD       Norwegian Aid
OPM         Oxford Policy Management Ltd., UK
PMI         "Poverty and Welfare Monitoring Indicators" (VPO)
PRSP        Poverty Reduction Strategy Paper
REPOA       Research into Poverty Alleviation
SDA         Social Dimensions of Structural Adjustment
SIDA        Swedish International Development Agency
TSED        Tanzania Socio-Economic Database
UAPP        Urban Authorities Partnership Project
UNDP        United Nations Development Programme
UNFPA       United Nations Population Fund
UNICEF      United Nations Children's Fund
USAID       United States Agency for International Development
VPO         Vice-President's Office

## 1. __Introduction__

Measures to reduce poverty in Tanzania have been receiving increased attention in recent years. The Tanzania Poverty Reduction Strategy Paper (PRSP), prepared in the context of the enhanced Highly Indebted Poor Countries (HIPC) Initiative, was developed through broad consultation with national and international stakeholders.  The PRSP briefly describes (especially in its Annex 3) the elements of a monitoring and evaluation system that will be used to monitor a set of indicators.

The present arrangements for carrying forward the work on poverty monitoring are based on the outcome of the consultative workshop held at White Sands Hotel in October 2000 (Idris Kikula et al.). That workshop concluded that it was necessary to agree on a choice of core priority indicators, and it was recommended that the PRSP indicators be adopted.  It was also agreed that a National Monitoring Steering Committee be formed to provide a broad-based poverty monitoring framework. This committee four specialised sub-committees as follows:  Routine Administrative Data; Surveys and Census; Research and Analysis; and Dissemination.  Responsibility for organizing the Surveys and Census Sub-committee was assigned to the National Bureau of Statistics (NBS).

## 2. __Background information__

This present consultancy was aimed at developing a multi-year survey plan (2001-2010) for NBS on poverty monitoring.  It was requested by the surveys and census sub-committee, and the focus of this consultancy report is therefore mainly on data derived from surveys and from the population census. Less attention is paid to administrative data, to the issues of research and analysis, and to dissemination, since these issues are dealt with by the other sub-committees. But these other areas cannot be ignored when discussing censuses and surveys.  Data derived from administrative records can frequently be validated by carrying out an appropriate survey. The actual carrying out of censuses and surveys is not an end in itself. It is the means to an end, which is reached through the processing of the data, the dissemination of tables, reports and datasets, and  further research and analysis. It is not appropriate to discuss a census and survey programme without considering the use to which the data will be put.

This report represents the outcome of a joint consultancy, carried out during January 2001 by a consultant provided by OPM and a consultant from REPOA.  The external consultant[1] was funded by DFID and the local consultant[2] by JICA. The detailed terms of reference are shown in Annex 1. During the consultancy, the consultants studied a range of documents relevant to poverty monitoring and met with various stakeholders in Government, academic and research institutions, and the donor community (see Annex 2 for a list of persons met).  The consultants acknowledge with thanks the help provided by Mr Cletus Mkai, the Director General of NBS, and his staff in enabling the consultants to carry out their work.  In particular, mention must be made of the support received from two staff members of NBS (Mr Ibrahim Masanja and Mr Mathias Masuka) who were assigned to work with the consultants.

Although several documents have been referred to, there are four key documents that are useful references for the development of indicators: the publication on "Poverty and welfare monitoring indicators" produced by the Vice-President's Office in November 1999; the list of 66 indicators included in the Tanzania Socio-Economic Database (July 2000);  the final version of the PRSP document (October 2000);  and the draft report of the consultative workshop referred to above.

The following approach is adopted in this report.  Given the central role played by NBS in the collection of data through censuses and surveys, we give a brief description of some key features of NBS (section 3) and refer to its Business Plan (section 4). Any proposals for future survey activities need to take account of past experience and present capacity for sustaining survey activities, and we therefore describe NBS experience in this area (section 5).  Some other issues regarding the conduct of surveys are highlighted (section 6), along with other statistical initiatives (section 7). We then present a minimal core list of indicators, and offer a few comments on the list (section 8).  We refer to the contrast between censuses and household surveys on the one hand, and administrative records

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on the other (section 9).  We then move to a brief discussion of some of the instruments that can be used to collect data (section 10), and discuss issues relating to the sequencing, frequency and cost of surveys (section 11)  Finally, and most importantly, we look at the capacity building needs of NBS (section 12), and offer some suggestions for the way ahead (section 13).


## 3.  The National Bureau of Statistics

The main agency for collecting statistics is the National Bureau of Statistics (NBS). The NBS became an Executive Agency in March 1999.  Compared with a staff complement a few years ago of about 250, staffing levels have been cut back substantially. There are now less than 80 posts at NBS headquarters, of which 73 are currently filled.  In addition there about 55 staff allocated to 18 of the regional offices (3 of these offices being in Dar es Salaam itself).

The way in which the NBS operates is set out in a Framework Document, issued by the Minister of State in the President's Office (and Vice Chairman of the Planning Commission).  Through this Document day-to-day management of NBS is devolved to the Director General of NBS.  However, the Permanent Secretary is responsible for strategic management of NBS, and is assisted by a Ministerial Advisory Board.  Under its Director General, staff of NBS have been grouped into four directorates, each headed by a director.  In turn, these directorates are split into departments, each headed by a department manager. Details of the directorates and departments, and the names of the directors and department managers, are shown in Annex 4.
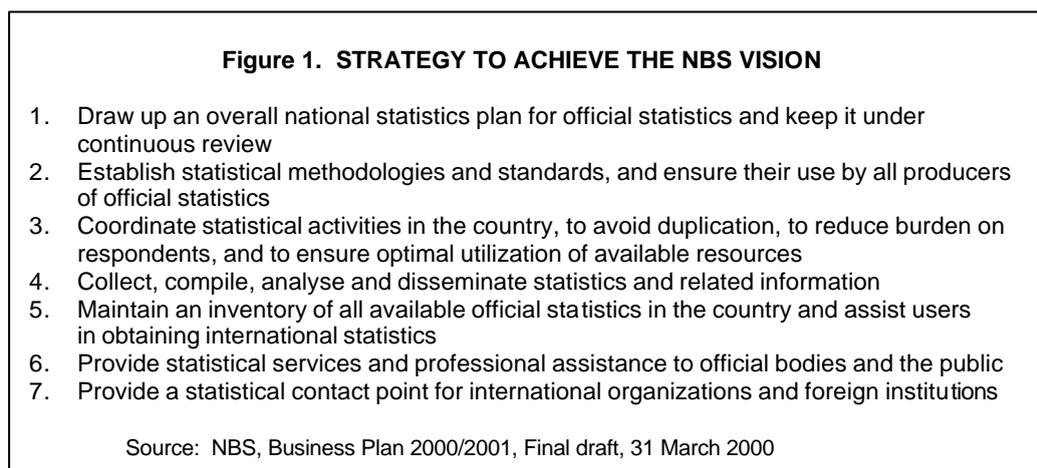
The NBS is responsible only for statistics on the mainland of Tanzania. For the time being the office continues to operate under the old Statistics Ordinance of 1961, which predates both independence and the union.  Statistics for Zanzibar (comprising the islands of Unguja and Pemba) are the responsibility of the Zanzibar Department of Statistics, which operates under its own statistical act. There is, however, close collaboration between the two offices for certain statistical operations. The population census and most of the recent demographic and health surveys have been conducted on a nationwide basis. Other country-wide surveys have covered only the population on the mainland of Tanzania.

New statistical legislation is needed to clarify the role of NBS, and draft legislation "to provide for the systematic and harmonized production of statistics" has been submitted to Cabinet. It is expected that it will be approved by Parliament in October 2001. The proposed legislation differs from the old Order in several ways which have implications for census and survey activities. The draft legislation describes in some detail the relationship between NBS and other agencies. It emphasizes the central role played by NBS in controlling and coordinating all statistical activities in the country. For instance, where other agencies are involved in collecting official statistics, they must employ the standard concepts and definitions developed by NBS. They must also seek approval from NBS before publishing any official statistics. The new legislation specifically allows the use of sampling for collecting statistics and for field testing questionnaires, and the fact that it is a sample does not remove the obligation on respondents to complete a return.  It allows NBS to release individual record data (without identifiers) solely for the purposes of bona fide statistical research, but the researchers are required to swear a declaration.  The DG is also required to destroy all original census and survey forms containing personal or business identification, no later than 10 years after the census or survey to which they relate. The draft legislation increases the fines for non-compliance and for unauthorised disclosure of statistical information, to take account of the effects of inflation.  It is important that this legislation be enacted without delay, to provide a modern legal framework for the work of the office.

## 4.  The NBS Business Plan

In accordance with the NBS Framework Document mentioned earlier, the DG is responsible for preparing a three-year Strategic Plan and for putting in place an approved Business Plan at the beginning of each financial year. The NBS has produced a Business Plan for the financial year 2000/2001, and this was apparently approved by the Advisory Board at the beginning of the financial year, in accordance with the requirements.  However, the document has not been released, because some of the costings have been overtaken by events, due to the non-availability of funds that had been expected from Government.  Despite this difficulty, it is recommended that the document be released, but with an addendum explaining the situation.

The NBS is seen as having two main roles:  first, to provide official statistics to the Government, business community and the public at large, as well as to international organizations, for use in planning and decision making;  and secondly, to coordinate statistical activities so as to produce statistics that are consistent.   The NBS also has a 'mission' and a 'shared vision'.  The mission of the NBS is "to facilitate planning and decision making within the government and the business community, to stimulate research and inform public debate through the provision of relevant, reliable and timely statistics and a quality statistical service in general".  The shared vision of NBS staff is for "the NBS to be the authoritative source of statistical information pertaining to socio-economic conditions in the country, an institution able to provide such information most effectively, a point of reference for statistical methodologies and standards".  The strategy proposed for achieving this vision is shown in Figure 1.

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**Figure 1.  STRATEGY TO ACHIEVE THE NBS VISION**

1.  Draw up an overall national statistics plan for official statistics and keep it under continuous review
2.  Establish statistical methodologies and standards, and ensure their use by all producers of official statistics
3.  Coordinate statistical activities in the country, to avoid duplication, to reduce burden on respondents, and to ensure optimal utilization of available resources
4.  Collect, compile, analyse and disseminate statistics and related information
5.  Maintain an inventory of all available official statistics in the country and assist users in obtaining international statistics
6.  Provide statistical services and professional assistance to official bodies and the public
7.  Provide a statistical contact point for international organizations and foreign institutions

Source:  NBS, Business Plan 2000/2001, Final draft, 31 March 2000

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## 5.  Recent NBS experience in censuses and surveys

Before attempting to present a plan for future survey activity, it is necessary to take account of existing capacity and experience in designing, conducting, and reporting on surveys. In recent years the NBS has had extensive experience in conducting national surveys. Table 1 shows the full range of censuses and surveys.  A brief summary of current ongoing census and survey activity relevant to poverty monitoring is given below, along with some suggestions for action.  As can be seen from Table 1, NBS is engaged in many other surveys outside the area of poverty monitoring, and the demand for these other types of survey activity is likely to continue in future.

*Population census*

While surveys can be used to provide broad indicators at the national level, they offer only limited potential for providing information at subnational level.  For instance, a survey would have to be of enormous size (and therefore cost) if it was desired to provide reasonably precise estimates for districts (numbering 115 on the mainland and 10 in Zanzibar) which are the main planning units in the country.  Even at the regional level, the large number of regions (20 on the mainland and a 5 in Zanzibar) makes it difficult to get good regional data from surveys.

The national population census, on the other hand, enables us to obtain accurate population estimates for small areas.   This information is vital for planning the location of services, such as schools and clinics, and for ensuring an equitable distribution of national resources to local areas. It is especially important in the case of new districts that have been formed since the last census, and for which no population data is currently available. On the basis of the results from the population census, demographers will be able to project the likely size of the population in the years ahead, which again will be useful for planning purposes. The estimates of population numbers in various subcategories can then be used in the calculation of various indicators;  for instance, if Ministry of Education figures on enrolments are to be used for calculating a gross enrolment rate for girls in primary school, then an estimate of the total number of girls of primary school age is needed as the denominator.

**Table 1. PROJECTS AND SURVEYS UNDERTAKEN BY NBS IN RECENT YEARS**

| Name of survey | NBS department concerned | Funded by |
|---|---|---|
| Agricultural Sample Survey - 1986/87, 87/88, 89/90, 90/91 | Agric. | GoT |
| National Sample Census of Agriculture 1993/94, 94/95 | Agric. and Min. of Agric. | GoT, World Bank |
| Expanded Survey of Agriculture 1995/96, 96/97 | Agric. and Min. of Agric. | GoT, World Bank |
| Integrated Agricultural Survey 1997/98 | Agric. and Min. of Agric. | GoT, World Bank |
| District Integrated Agricultural Survey 1998/99 (to be published soon) | Agric. and Min. of Agric. | GoT, World Bank |
| | | |
| Parastatal - Annual Surveys, 1990-1998 | National Accounts | GoT |
| Supply and Use Table Project - Three Years Project, 1993 | National Accounts | SIDA |
| International Comparison Price - Six Months Projects, 1994, 1995, 1996 | National Accounts | European Countries |
| Construction, Trade and Transport - One and half Years Project, 1996 | National Accounts | World Bank |
| Revision of National Accounts - Two Years Project, 1996 | National Accounts | World Bank |
| Input-Output Table - Three Years Project, 1996 | National Accounts | SIDA |
| GDP Semi-annual data collection surveys, since 1998 | National Accounts | GoT |
| | | |
| Industrial Census, 1978 | Industrial and Construction | GoT |
| Annual Surveys of Industrial Production, 1979 - 1988 | Industrial and Construction | GoT |
| Quarterly Surveys of Industrial Production, 1985 - 2000 | Industrial and Construction | GoT |
| Producer Price Index, 1993 - 1999 | Industrial and Construction | GoT |
| Industrial Census, 1989 | Industrial and Construction | GoT |
| Annual Surveys of Industrial Production , 1990 - 1991 | Industrial and Construction | GoT |
| | | GoT |
| Monthly Hotels and Accomodation Survey, since 1970s | Trade, Transpt., Tourism & Migration | GoT |
| Census on Private Capital Investments, 1993 - 1999 | Trade/Bank of Tanzania/TIC | GoT, UK |
| | | |
| Population Census, 1967 | Social and Demographic | |
| Population Census, 1978 | Social and Demographic | |
| Population Census, 1988 | Social and Demographic | GoT, UNFPA, DFID, SIDA |
| | | |
| Household Budget Survey, 1969 | Social and Demographic | |
| Household Budget Survey, 1976/77 | Social and Demographic | |
| Household Budget Survey, 1991/92 | Social and Demographic | |
| Household Budget Survey, 2000/2001 | Social and Demographic | *** (see below) |
| National Demographic Survey, 1973 | Social and Demographic | GoT |
| Tanzania Accessibility Survey, 1993 | Social and Demographic | USAID |
| Demographic and Health Survey, 1991/92 | Social and Demographic | USAID |
| Demographic and Health Survey, 1996 | Social and Demographic | USAID |
| Community Based Distribution Survey, 1996 | Social and Demographic | USAID |
| Knowledge, Attitudes and Practice Survey of Family Planning, 1994 | Social and Demographic | USAID |
| Indicator Monitoring Survey (IMS), 1994 | Social and Demographic | SIDA, UNICEF |
| Sumve Survey on Adult and Child Mortality, 1995 | Social and Demographic | USAID |
| Mbeya Knowledge, Attitude and Practice of Family Planning, 1995/96 | Social and Demographic | DFID |
| Mid Decade Goal Survey (MDGS), 1996 | Social and Demographic | UNICEF |
| Reproductive and Child Health Survey, 1999 | Social and Demographic | USAID, UNICEF, UNFF |
| Core Welfare Indicators Questionnaire (CWIQ) - Pilot Survey, 1999 | Social and Demographic | World Bank |
| Core Welfare Indicators Questionnaire(CWIQ) - Survey, 2000 | Social and Demographic | DFID |
| Annual Survey of Training Institutions (Up to 1993) | Social and Demographic | GoT |
| Annual Health Statistics Survey (Up to 1993) | Social and Demographic | GoT |
| | | |
| Labour Force Survey, 1990/91 | Labour and Price | GoT, ILO |
| Informal Sector Survey, 1990/91 | Labour and Price | GoT, ILO |
| Employment and Earnings Survey - Annual (Up to 1984) | Labour and Price | GoT |
| Rural Consumer Price Index Survey, 1994 | Labour and Price | GoT, UNICEF |
| Informal Sector Survey for Dar es Salaam City, 1995 | Labour and Price | GoT, ILO |
| National Consumer Price Index Survey (Since 1960s) | Labour and Price | GoT |
| Integrated Labour Force Survey, Child Labour & Informal Sector Module,2000/01 | Labour and Price | DANIDA, ILO |
| | | |
| Central Registration of Establishments | Field Operations, CRE & GEO Information | GoT |

*** GoT, DFID, JICA, UNDP, UNFPA, DANIDA, SIDA, CANADA, Netherlands, NORAD, USAID

NBS has faced a difficult time with the population census during the last two or three years. Population censuses had previously been carried out in 1967, 1978 and 1988. The fourth post-independence census was therefore scheduled to be carried out in 1998, in order to maintain the standard 10-yearly cycle, as recommended internationally. However, the office was not able to complete the mapping work in time, and the census was therefore postponed to 1999. In November 1998, a decision was made to postpone the census indefinitely. Finally, in August 1999 it was decided that the census should be held in 2002. Census Day will be 26 August 2002 (i.e. the last Sunday in August). The census is likely to cost about 24.5 billion shillings, with Government meeting the cost of salaries, allowances, printing, stationery, materials, transportation, and office expenses, and outside donors meeting the cost of training for enumerators and supervisors, capacity building, printing equipment, materials, and office renovation).

One indication of the importance Government attaches to the success of the population census is the fact that a senior person has already been appointed as Commissioner for Population Census. The person appointed was formerly a minister of state in the planning commission, and census preparations are well underway. Also, the population census has been singled out under 'Good Governance' as one of the strategic expenditure areas requiring a resource allocation in the "Guidelines for the Preparation of the Medium Term Plan and Budget Framework for 2001/02-20023/4" prepared in December 2000 by the Planning Commission and the Ministry of Finance.

A major part of the preparations involves the mapping and demarcation of EA boundaries. The cartography section in NBS, which currently consists of two permanent and four temporary staff, is being augmented through the recruitment of a statistician and a cartographer. The cartographic team had already completed mapping work for about 60 percent of the country by late-1998 when a halt was called to census preparations. Originally the country had been split into some 56,000 EA's for the planned census in 1998 but, with the increase in population since then, there are expected to be almost 62,000 EA's for the 2002 Census. A particular problem in updating census maps is to take account of the growth in trading areas near to major roads. Since April 2000 two teams (each with a team leader, four field assistants, and a driver) have been working on trying to complete the mapping work, and a further two teams were added in October. Where official maps are too out of date due to rapid growth, it may be necessary to use satellite imagery to determine EA boundaries, but this is an expensive option. In the near future 17 further teams are likely to be put into the field, to ensure that the mapping operation is completed on time (i.e. with documents returned to headquarters by the end of April 2002).

This mapping operation is a very important exercise, since it provides the basis not only for the census itself, but in providing the sampling frame for future surveys. It is essential that the mapping work is done as efficiently as possible. The EA maps produced on the basis of this fieldwork will show and describe the EA boundaries and a few key features, and will include a listing of the heads of household. The list of EA's with their associated household and population estimates will provide the sampling frame for future surveys, and can be held in a database. In designing samples for particular surveys, additional information collected from households in each EA can be added to the database and used for stratification, so as to improve the efficiency of sample designs. The maps themselves will be useful for survey teams working in the field, to help in identifying village boundaries.

The experience in cartography will also prove extremely useful at the dissemination stage. Following the 1998 Census one of the publications produced by NBS was a Tanzania Statistical Atlas, showing the distribution of various census variables on a geographic basis. The cartographic section has the skills and the software to continue producing this sort of publication after the forthcoming census. Some resources should be devoted to this, so that one or more attractive cartographic publications can be produced. It is also hoped that the publication can be produced within two or three years, rather than the eight years time gap experienced after the 1988 Census.

***Household budget surveys (HBS)***

The NBS is currently undertaking a household budget survey. This is the key survey in the poverty monitoring programme, since it is used to provide the quantitative measure of income poverty. The base figure was established on the basis of the previous HBS conducted in 1991/92. The current HBS is largely funded by an impressive range of external donors; the only Government funding is through

the Bank of Tanzania. Zanzibar is not being covered in the survey. Fieldwork for the HBS started in 10 of the mainland regions in May 2000 and in the remaining 10 regions in June 2000. The survey runs for a full year.

The original sample was extremely large, since it was intended to provide estimates at regional as well as at national level. For the first six months of the survey, an average of 60 clusters were covered in each region, with two households being covered per month in each cluster, giving a total sample of 2400 households per month. A third of the sample was in rural villages and two-thirds in urban EA's.

Unfortunately the field workload was seriously underestimated, and therefore underbudgeted. It had originally been assumed that an interviewer in urban areas would be able to cover three clusters at a time, but experience has shown that in fact the realistic limit is two clusters, and even only one in cases where the household is semi-literate and the interviewer needs to visit every day. In the case of more educated households a diary can be left for recording purchases.

Printing costs have also been much higher than expected. The cost estimates had been based on the experience of the previous HBS in 1991/92. However the questionnaire, which is usually completed by the mother in the household, has more pages this time because more information is being collected. A decision was also made this time to give a simple diary to each person in the household who could read and write, rather than leaving the household to record all their expenditures in the one form. This decision was made because it appeared in 1991/92 that many expenditures in Dar es Salaam were missed off the forms.

For the second six months of the survey, NBS has been forced to massively reduce the number of households covered in rural areas. As a result, it will not be possible to get regional estimates for rural areas from the second six months of data, but since the spending patterns in rural areas are more homogeneous than in urban areas, it should be possible to use the information from the first six months to infer the expenditure patterns for the second period.

With hindsight one might question whether it was wise in the first place to embark on such a very large survey. The HBS is a complicated survey, with a very detailed questionnaire. If the sample size is maintained at a reasonable level then there is much more chance that data quality can be maintained, quite apart from any question of cost.

The results from the first quarter are currently being processed and analysed, by NBS and OPM, in an attempt to update the poverty estimates.

### Demographic and health surveys

NBS has extensive experience of carrying out large-scale demographic surveys, in cooperation with the Ministry of Health and Macro International. The first DHS was in 1992, the second (a knowledge, attitudes and practice survey) was in 1994, the third DHS was in 1996, and the fourth (a reproductive and child health survey) took place in 1999. All DHS surveys (except the 1994 one) have covered both mainland and Zanzibar. NBS even does the sample selection and the training of interviewers. The DHS has an additional module on medical facilities that is analysed separately from the many survey. Quality control is dealt with by staff at the headquarters in Dar es Salaam, who go over to Zanzibar to check that the survey is going well.

As part of DHS99 an extra detailed questionnaire on the availability of various services was fielded, covering services within a 30 km radius of the cluster being surveyed. This add-on module covered five types of facilities: all facilities in the selected areas, district hospitals, Marie Stopes facilities, UMATI family planning facilities, and additional information for Dar es Salaam. For each of these facilities six separate questionnaires were administered. These questionnaires covered: the community (this information being collected at the listing stage), the facility itself, inventory, service provision, pharmacy inventory, and district health management. The report on this special module has been completed and will shortly be published under the title "Tanzania Reproductive and Child Health Facility Survey 1999".

The DHS surveys are managed by Macro International from the US, and funded by USAID. The big advantage is that the surveys follow a standard and well-developed procedure, and excellent back-up technical support is available from the staff at Macro International.  A possible disadvantage is that the system is rather rigid, with only limited flexibility for incorporating new topics or for analysing the data in new ways.  In the past data analysis was done in the US, and staff from NBS would be sent over to Macro International to assist in the operations of data processing and analysis.  For DHS99 analysis was carried out in both the US and Tanzania, using the ISSA software package.  Macro sends over table outlines of the tables they think should be produced. A first draft of the report is prepared within NBS and then sent over to Macro International by e-mail, and Macro then send back suggestions for changes.

DHS99 was also adapted to meet the particular needs of UNICEF.  Instead of carrying out a separate Multiple Indicator Cluster Survey to obtain the indicators needed for UNICEF's end-of-decade assessment exercise, the several topics (such as section 8.4 on birth registration and section 9.3) were added to the DHS99 questionnaire.  UNICEF also requested additional tables from the survey.

### *Labour force surveys*

NBS is currently engaged in carrying out a labour force survey (LFS), with funding support from the Danish Government.  The survey is in fact called the Integrated Labour Force Survey, because it also contains a module on child labour force and the informal sector (with additional funding from ILO).  An earlier LFS was done in 1990/91, at which time a statistics unit was established in the Employment Section of the Ministry of Labour.  The total sample of almost 12,000 households is based on the national master sample.  In rural areas 100 villages are taken from the master sample, and 80 households selected from each.  An interviewer then covers 20 households each quarter, giving 2000 rural households each quarter and 8000 rural households over the whole year.  For urban areas, the total sample of 3660 households are selected from 122 enumeration areas.

There have been some delays in finalizing the computer programs for this survey, but a consultant will soon be recruited to check the work done so far. There is some urgency to the data processing stage, since the results are needed by July for the HIPC exercise.  Support is also needed for working out the correct weights to apply, and for calculating sampling errors.

### *CWIQ pilot surveys*

The Core Welfare Indicators Questionnaire is a special questionnaire, designed with the assistance of the World Bank to collect data on a range of household and personal characteristics, for use in poverty monitoring.  Its special feature is the use of special response 'bubbles' on the questionnaire which have to be carefully marked by the interviewer in the field, so that the questionnaire can be scanned and the data entered automatically onto the computer. A CWIQ pilot was conducted in November 1999 in Kibaha and Mtwara districts with the support of the Tanzania Social Action Fund.

NBS conducted another CWIQ survey in three urban areas towards the end of 2000. This was carried out for the Urban Authorities Partnership Project, with funding from DFID. The survey had several aims: to obtain indicators in these three urban areas that could be used to monitor and evaluate other projects in these areas;  to assess welfare and social trends at a detailed subnational level;  to provide a quick and easily implemented survey instrument for monitoring changes over time;  and to provide essential indicators for different population subgroups, within and across urban areas.

The survey was conducted in Mbeya, Mtwara and Singida districts:  30 clusters (EA/village) were selected per district, with a sample of 25 households in each, giving a total of 750 households in each district, and 2,250 households in all. The National Master Sample was used to draw the sample. Four reserves were selected in each cluster, for use as replacements (but in practice it was never necessary to use them all).  Listing was done in advance, with final selection being made in the office. There was a two-week gap between listing and fieldwork.  Interviews took 20-30 minutes, depending on the size of the household.  Interviewer training took up to 11 days, fieldwork another 11 days, and fieldwork finished on 28 Dec. The questionnaire is eight pages long, with space for up to 10 members. If there are more than 10 people, it is necessary to use another book.  Editing is done in the field by supervisors. The data are currently being scanned into the computer, and the computer edits are being done.

A particular feature of the training in each district was the fact that the scanner and computer were used during the training process, to provided direct feedback on how well the interviews were conducted. The interview technique of each trainee could be assessed very quickly. This added an extra degree of motivation to the training process, and helped to reinforce the skills learned.

The success of the CWIQ operation depends partly on ensuring that the questionnaires are well protected throughout the survey period, so that the forms can be scanned. Interviewers were given a clipboard for use with their forms, and a bag, but this appears to have been inadequate. Next time, the bag is likely to be replaced by a proper briefcase, so as to give better protection to the forms.

The special 'bubbles' on the forms, which are a particular feature of CWIQ, require training and commitment from fieldstaff, and careful supervision in the field. The 'bubbles' have to be fully blocked in by the interviewers, if they are to be read successfully by the scanner. The interviewers also need to have intensive training on how to record numbers (e.g. ID numbers) since this information has to be scanned by the computer. For the scanning process to work properly, the printed questionnaire needs to be of reasonable quality (not faded) and squared centrally on the paper. A good quality copier machine is required, which NBS appears to have. The World Bank is hoping to make use of EASTC as the regional training centre and resource base for CWIQ. Funding for this has already been approved.

A particular feature of CWIQ is the use of mobile teams for collecting data. This approach has two disadvantages. First, it is expensive in terms of transport costs required to move the teams around. Secondly, the approach adopted is skill-intensive and runs the risk of compromising data quality. The teams descend on villages with their high tech questionnaires, and do not have the chance to be absorbed into the life of the community which they are attempting to survey.

NBS will need to make the survey data available to the client (in this case UAPP) in a suitable form (Access ?) along with appropriate data documentation (metadata): description of data structures, data fields, and possible values for coded variables. As with other datasets, NBS needs to maintain a central depository for all cleaned data, with full documentation and instructions for access.

## 6. Some other issues relating to censuses and surveys

### *Research and analysis*

The boundaries within which NBS operates need to be clearly established. NBS should be seen as the one and only department with responsibility for conducting large-scale censuses and surveys. As such, it needs to continue developing the essential skills needed for this type of work, right through from designing a survey, including the sampling aspects, through the fieldwork, data processing and analysis stages to the writing-up of a basic report, containing the main results of the survey. In all the work of the statistics office, emphasis must be placed on quality control, and on the efficient application of standard definitions and methodologies.

Poverty analysis, involving the calculation of the poverty line and the calculation of the incidence and depth of poverty and the reporting of these results, should be seen as part of the basic toolkit of those working in the statistics office, but that is as far as the statistics office should be expected to go. Further analysis, such as the use of modelling to explore poverty issues, should be carried out by others, either in research units or by academics at the university. It should not be seen as the duty of the statistics office to do this type of work.

NBS needs to be bear in mind its main role and strategy (see Figure 1). To maximize the effectiveness of its contribution to national development, it needs to draw on the skills of its staff and exploit those aspects of its work in which it has a comparative advantage. It would do best to avoid competition with other organisations, especially in areas where the other organisations have greater resources or skills. It should not try to spread its limited resources too thinly, but instead develop its reputation for quality work in a limited number of well-defined areas.

*Dissemination*

The main products of NBS are its publications and, in future, its databases. These represent its shop window, and they must be actively promoted. All publications emanating from the statistics office should follow a standard style.  Normally these publications should carry the name only of NBS itself, though due acknowledgement would of course be given inside the publication to any outside sponsors or researchers who have assisted in producing the publication.

The library should be an important resource centre within NBS, and could act as the sales point for publications. Dissemination channels, for instance to the press, to key government departments, and to the regional statistical offices (for onward transmission) need to become well established, so that NBS develops its reputation for being a quality institution.For dissemination to be effective, there are three requirements: a quality product, good channels of communication, and a clear projection of the role of NBS through its publications.


## 7.  Other relevant initiatives

*Core set of statistics*

According to the "Guidelines for the preparation of the medium term pland and budget framework for 2001/02-2003/04", prepared in December 2000, some core activities will be accorded protection status. A core set of statistics is identified as one such activity, under the heading of 'Good Governance'. The Government recognizes that the demand for quality and timely statistics is growing in response to social, economic and political development in the country, and has therefore accorded priority to the production of a core set of those statistics that are critical for planning, policy analysis, monitoring and evaluation.  The main activities that will be 'ringfenced' in this way involve the collection, processing, analysis and dissemination of priority data relating to semi-annual estimates of GDP, national accounts, employment, prices, and the maintenance of a database.

*GDDS*

NBS is in the process of developing the information base for a wide range of its statistics, in line with the General Data Dissemination Standards (GDDS) system established by the IMF.  The DG of NBS is the chairman, and the head of national accounts is the secretary, of a technical advisory committee, comprising representatives of various key ministries, that is guiding this work.  Metadata relating to various financial and economic data series, as well as for some social and demographic series, is being prepared.  The information should get onto the IMF website later this year, and onto NBS's own website soon after.

*TSED*

With the help of a large number of ministries, and with support from various donors, NBS is in the process of developing a socio-economic database (TSED) of statistics for Tanzania.  The package used for accessing this database is known as TanInfo, and has been developed from UNICEF's original ChildInfo package.  The TSED database will soon be officially launched. Initially it will operate on stand-alone machines, but the aim later is for it to be linked to the network of financial accounting systems of different ministries. Eventually it is hoped to have the system posted on the internet. At present TSED comprises only 66 indicators out of an original total of 330, but many of these 66 indicators are of direct relevance to the PRSP process, and were purposely included in the initial release for that reason.  Using the software, it is possible to produce attractive maps and graphs showing the distribution of key variables. DFID is likely soon to fund a database management adviser to assist NBS in setting up and running the database system.

## 8. Establishing a minimal list of core indicators for poverty monitoring

The core list of indicators from the PRSP are shown in Table 2. The main outcome indicators from the PRSP are shown in bold, while the intermediate indicators are shown in ordinary type. The table also shows the correspondence between this list and the list of indicators included in the PMI list produced by the Vice President's Office and the initial list of indicators for TSED. A few comments are made below, along with suggestions of other indicators that could possibly be included in the list.

It was suggested that walking time to nearest public transport would be a useful indicator of the availability of services. It would be included under Incidence of Poverty. Similarly walking time to the nearest school might usefully be included under human capabilities, and time taken to get to the nearest clinic or hospital (by any means of transport) would be an indicator of survival. Agreement was not reached on suitable indicators of morbidity, but it might be possible to collect data relating to the incidence of diarrhoea or acute respiratory infection, or the incidence of illness during a short reference period such as the last month. Other morbidity indicators, such as those relating to the incidence of HIV or malaria in the general population, are probably ruled out, since they would involve detailed medical tests. Births attended by a skilled health worker is being used as a proxy for maternal mortality rate. It is considered that an underweight indicator should be included, alongside stunting and wasting indicators, although this indicator was not mentioned in the PRSP.

The two indicators of social well-being, both relating to the judiciary, were felt not to give a reasonable measure of social well-being. There was interest in seeing more gender-related indicators, such as an indicator of women's participation in decision making within the household. Possible indicators for extreme vulnerability were the number of orphans, or the number of child-headed households.

## 9. Household surveys/censuses versus administrative records

Some of the indicators can be derived from administrative records, and will not concern us here since they will be dealt with by the working group looking at administrative data. However, in the case of many educational indicators of human capabilities, the indicators can be derived either from the administrative system or from censuses and household surveys.

Collecting data through administrative records has certain advantages. The system is routine, and the data are derived automatically through the system; there is no need to set up a special system for collecting the required data. Because it is already part of the system of administration, the additional cost involved in generating the indicators is minimal. The system is ongoing and indicators can be produced whenever required. Provided the coverage is complete, the system can be used to obtain information, and therefore derive indicators, for small areas as well as at the national level. The knowledge that indicators are being produced, even down to the lowest levels of administration, may help to spur local officials into more efficient methods of data collection, though care must be taken to ensure that false returns are not given.

A major problem with the use of administrative records for generating indicators is that the system provides only the numerator for the calculation of the indicator. The denominator, which is the population of interest, is not known. Calculation of the indicator is therefore dependent on the provision of reliable population estimates by the NBS. When a population census has recently been done, this should not pose a problem, but in the present situation where the census data is more than 10 years old, the estimates are likely to be subject to wider margins of error.

Many of the educational indicators and some of the health indicators can also be collected through censuses and household surveys. This should be done, since the national indicators produced in this way can then be cross-checked against those indicators based on corresponding information derived from the administrative records. Because of the relatively small size of sample surveys, this cross-checking can only be done at the national level. Census data, on the other hand, can be cross-checked at the local area level.

**Table 2    Minimal list of core indicators**

|  | Number in PMI list | Number in TSED |
|---|---|---|
| **INCOME POVERTY REDUCTION** | | |
| **Incidence of poverty** | | |
| **Headcount ratio - basic needs PL** | 2-3 | 15 |
| **Headcount ratio - basic needs PL (rural)** | 2-3 | 15 |
| **Head count ratio - food PL** | - | 16 |
| Overall GDP growth per annum | (2-6) | 11 |
| GDP growth of agriculture per annum | - | 13 |
| Road rehabilitation | - | - |
| | | |
| **QUALITY OF LIFE AND SOCIAL WELL-BEING** | | |
| | | |
| **Human capabilities** | | |
| **Girl/boy ratio in primary education** | (3-2) | (23) |
| **Girl/boy ratio in secondary education** | (3-4) | (23) |
| **Transition rate from primary to secondary** | - | 28 |
| **Literacy rate of population aged 15+** | 3-1 | 20 |
| **Morbidity indicators  ??** | | |
| **Population with access to safe water** | (5-1) | 63 |
| Net primary enrolment | - | 23 |
| Gross primary enrolment | 3-2 | 24 |
| Drop-out rate in primary schools | 3-3 | 27 |
| Percent of students passing Std.7 with grade A,B,C | - | (30) |
| | | |
| **Survival** | | |
| **Infant mortality rate** | 4-1 | 31 |
| **Under-five mortality rate** | 4-2 | 32 |
| **Seropositive rate in pregnant women** | - | - |
| **Life expectancy** | 4-7 | 2 |
| **Malaria in-patient case fatalies for children under 5** | - | - |
| Children under 2 years immunized against both measles and DPT | (6-5) | (43,44) |
| Districts covered by active AIDS awareness campaign | - | 38 |
| Births attended by a skilled health worker | 6-3 | 50 |
| | | |
| **Social well-being** | | |
| Ratio of primary court filed cases decided | - | - |
| Proportion of Other Charges allocated to judiciary | - | - |
| | | |
| **Nutrition** | | |
| **Stunting (ht. for age) of under 5's** | - | 56 |
| **Wasting (wt. for ht.) of under 5's** | - | 59 |
| | | |
| **Extreme vulnerability** | | |
| ?? | | |
| | | |
| **CONDUCIVE DEVELOPMENT ENVIRONMENT** | | |
| | | |
| **Macroeconomic stability** | | |
| Consumer price inflation | 2-7 | 7 |
| Ratio of reserves to monthly imports | | |

Note: PMI: "Poverty and Welfare Monitoring Indicators", V-P's Office, Nov. 1999
TSED: "TSED Indicators for version 1.0 of TanInfo (19.07.00)", mimeo
Brackets around a number indicate that two indicators are similar, but not identical.

## 10. Instruments needed for collecting appropriate datasets

Table 3 shows those indicators for which information can be collected through surveys or the census. In most cases a specific survey has not been identified in the table, since the information can be collected by means of any survey covering the general population. For the survival and nutrition indicators, however, the DHS seems the most appropriate vehicle for collecting the required information.

### Table 3    Use of surveys and population census for collecting data for indicators

| INDICATOR | SOURCE OF BASE | ALTERNATIVE SOURCE |
|---|---|---|
| **Incidence of poverty** | | |
| **Poverty headcount ratios** | HBS | HBS & proxies |
| **1. Human capabilities** | | |
| **Girl/boy ratio in primary education** | Educ | Census & surveys |
| **Girl/boy ratio in secondary education** | Educ | Census & surveys |
| **Transition rate from primary to secondary** | Educ | Census & surveys |
| **Literacy rate of population aged 15+** | Census & surveys | |
| **Morbidity indicators  ??** | | Surveys |
| **Population with access to safe water** | | Surveys |
| Net primary enrolment | Educ | Census & surveys |
| Gross primary enrolment | Educ | Census & surveys |
| Drop-out rate in primary schools | Educ | Census & surveys |
| Percent of students passing Std.7 exam with grade A, B, C | Educ | Surveys |
| **2. Survival** | | |
| **Infant mortality rate** | DHS | Surveys |
| **Under-five mortality rate** | DHS | Surveys |
| **Life expectancy** | Census | |
| Children under 2 yrs immunized against measles & DPT | DHS | DHS |
| Births attended by a skilled health worker (MMR proxy) | DHS | DHS |
| **4.  Nutrition** | | |
| **Stunting (ht. for age) of under 5's** | DHS | DHS |
| **Wasting (wt. for ht.) of under 5's** | DHS | DHS |
| **5. Extreme vulnerability** | | |

In terms of possible instruments to be used for collecting the required information, there are several options. One can continue to use large scale surveys at present.  Additional modules can be added to ongoing surveys, so as to collect specific information.  But this option should not be seen as being without cost, in terms of the quality of data collected. If the additional module is 'heavy', it may damage the quality of the data collected on the main survey.

One alternative is of course to follow the CWIQ approach favoured by the World Bank, though some doubts should be expressed.  The method is likely to produce fairly rapid results, and it is certainly cheaper than doing a full HBS, but it is appropriate to question whether the technology and the skill level required to operate the method are appropriate in the present context of Tanzania, or even sustainable. The CWIQ does not generate the data required for calculating income poverty. Instead, it uses a set of proxies which are thought to provide a good indicator of poverty levels.

Another possibility is to follow the scheme originally suggested by NBS, which involves making a series of repeat visits to the same household over a period of a month, with different instruments being used on each occasion. The NBS approach involves five visits during the month.  Such an arrangement is initially attractive, since it covers all the main elements required (parts of HBS, LFS, and DHS) but the heavy burden placed on households to respond during these multiple visits may lead to respondent fatigue and consequent loss in data quality.

A similar option might be to have a regular core annual survey (containing much the same information as that contained in the present CWIQ), but with the data being collected and processed using traditional methods. Provided the core questionnaire remains unchanged from year to year, all the design work necessary for data processing can be done at the beginning, and the output of survey results would not be held up through lack of the necessary programs for table production. Additional modules could be added to the survey as required each year, but these would be processed separately, so as not to delay the main results.

The experience of the 1994 Indicator Monitoring Survey (IMS) needs to be carefully examined, to determine whether that survey (despite the problems it faced) might provide a model of the way forward. That survey was conducted under the Data Production Programme (DPP) within the Social Dimensions of Adjustment (SDA) programme, and was specifically designed to gather basic data for generating indicators for monitoring purposes.

Two questionnaires were used for the 1994 IMS, one for adults aged 10 and over and the other for children under that age. The adult questionnaire covered the following topics: household membership and family relationships; health and education; current and usual activities; agriculture and livestock; informal sector activities; housing conditions; household food security; informal social security system; and security against crime. The questionnaire for children covered: health and education; immunization and anthropometric measurements for the under-5 children; types of meals eaten by the children; and maternal mortality with respect to the sisterhood method (though subsequently serious doubts were expressed about the quality of the maternal mortality data). Unfortunately no full report was ever issued on the survey, although some information about the survey is contained in a Preliminary Report issued in May 1996.

In addition to quantitative surveys, there is a need to collect more qualitative information, such as is obtained through PRA methods. These types of survey should be conducted by outside research organizations rather than by NBS.


## 11. Sequencing, frequency and cost of surveys

Up to now the NBS survey programme has operated very much in an 'ad hoc' way. Often surveys have been mounted in response to specific requests from donors, without any attempt being made to coordinate a long-term series of surveys. The move now is to try to establish a sequenced programme of surveys, which will provide a guide and reference base for NBS, other government departments and the donor community. Donors will be encouraged to support surveys within the context of this sequenced programme. Some flexibility will still be needed, so that the NBS can respond in a timely fashion to any urgent needs for data, but at least it will be done within the context of an overall ongoing programme. In many respects this idea of developing a programme of surveys over several years resembles the efforts made in the 1980s with the National Household Survey Capability Programme (NHSCP), though in that case the focus was on gathering data across a broad spectrum, rather than just focusing on poverty.

Whatever approach is adopted, it needs to be appreciated that getting good statistics costs money. However, having bad or no statistics often 'costs' even more !

In terms of a programme of work, NBS is already fully committed over the next 18 months. Completing the two surveys (HBS and LFS) currently in the field and preparing for the 2002 Population Census will keep the office fully occupied through until the end of 2002. If large surveys are to be mounted, they should not begin until the end of 2002. In terms of frequency of occurrence, the census should be held every 10 years. Both the HBS and the LFS should be conducted once every five years, while five years is also probably a reasonable interval for a full-scale DHS. Other surveys, such as those on the informal sector, child labour, or on the disabled, could be carried out as stand-alones or as add-on modules to other surveys. Agricultural surveys will also be needed; agricultural surveys used to be conducted on an annual basis, but this regularity now seems to have been lost.

Because it is impossible to carry out an HBS every year, it is not possible to obtain a measure of income poverty for every year. Instead, research agencies should assist the NBS in identifying those variables from the HBS that are highly correlated with poverty, and these variables should then be tracked through other surveys. Since the relationships may not hold good indefinitely, the correlations will need to be revalidated when the next HBS is carried out, to ensure that the selected variables are still the appropriate ones to use.

Table 4 shows a possible timetable for major surveys, with a monitoring survey carrying alongside throughout the period.

**Table 4    Suggested programme of work**

| Tentative schedule | |
| --- | --- |
| 2001 | Finish HBS, LFS |
| 2002 | CENSUS |
| 2003 | DHS |
| 2004 | |
| 2005 | LFS |
| 2006 | HBS |
| 2007 | |
| 2008 | DHS |
| 2009 | |
| 2010 | LFS |
| 2011 | HBS |
| 2012 | CENSUS |

It is difficult to be very specific about the likely costs at this stage, until the nature of the programme has been firmed up. However, the NBS Business Plan does provide some information on likely costs. The cost of the current HBS is almost 1½ million US dollars, though even that proved inadequate for the size of sample that was originally envisaged. If we include the cost of the child labour component as well, the total cost of the present LFS is around ½ million dollars. It therefore seems unlikely that an annual large-scale monitoring survey, probably larger than an LFS but smaller than a full-scale HBS, could be done for much less than 1 million dollars.

## 12. Capacity building needs in NBS and elsewhere

The success of any survey programme will depend largely on the calibre and commitment of the staff in NBS.  In terms of qualifications, there are 10 staff who hold a master's degree, and three with postgraduate diplomas. A further 34 have a bachelor's degree. Inevitably, NBS loses staff from time to time, but these staff frequently move on to other work which has direct relevance to statistics. For instance, one person with a training in demography is now acting director of the poverty eradication unit in the Vice-President's office.  Another is head of research and statistics at the Tanzania Revenue Authority.  A third has gone to the Bank of Tanzania.  These departures cannot be considered a loss (except in a narrow sense) since the country is still benefiting from their statistical skills.

NBS appears to be well provided with staff trained in demography. This is an encouraging fact, in view of the forthcoming census. As is to be expected, a very large number of the graduate staff in NBS have degrees in statistics.  Many of these have obtained their degrees from the University of Dar es Salaam, whilst some have degrees from Makerere.  If the office is to make a useful contribution to the debate on poverty, it would be useful for all staff to receive some exposure to basic courses in economics, as part of their degree training.  It appears that the statistics courses in Dar are rather weak in this regard, whereas those attending courses at Makerere are likely to get more exposure to economics.

In terms of the basic skills required for successfully implementing a survey programme, a strong emphasis needs to be placed on nurturing quality control procedures at all stages of the survey process. This quality control affects all stages of the survey process, from the design aspects (sampling, questionnaire, etc.) through fieldwork to the data processing, analysis and write-up of the results.  These skills are not taught very much in university courses, but they need to be inculcated in the working environment, under guidance from more senior staff. As part of this process, staff will gain increasing experience in data processing, the methods of analysing and presenting data, and in report writing and in the graphical presentation of results. Staff will also need more formal training in IT skills and in such specialised areas as sampling.  Support in this regard can probably be provided by the statistics department at the university, or by staff at EASTC.

In order that staff can benefit from training experience on the job, it is important that outside consultants working with NBS are carefully briefed about how they should perform their consultancy role. It must be impressed on them that they need to work alongside the local staff in NBS so that these staff get direct benefit from the training.  Those hiring consultants need to appreciate that the process of the consultancy, that is the skill transfer, is more important than the output of a highly polished report.

Finally, on the management side, NBS would benefit from the appointment of a Deputy Director General, who would thus have sufficient authority to direct the office and make decisions when the Director General is absent.

## 13.  **The way ahead**

This report should be seen as being an interim report, since further work is required to firm up a survey programme. It is suggested that the following steps be taken:

1.  NBS needs to maintain a careful balance between poverty-focused work and work in other key sectors such as agriculture, industry and tourism.  Despite the present interest in the poverty field, NBS must continue to provide technical support, including sometimes survey activity, in other areas.

2.  NBS should carry out research on the HBS, with the support of research agencies and academics, to determine suitable proxies for income poverty.  These proxies will then be incorporated into the regular monitoring surveys, as well into any large-scale surveys.

3.  Further work is required in determining the correct instrument to use for poverty monitoring, and in costing the total survey package.

4.  NBS needs to identify and cultivate its key collaborators in other departments, so that they can support its survey and database activities.

5.  Attention needs to be focused on improving the amount and quality of on-the-job training provided to staff in NBS in all aspects of survey activity.

**Background**

In the context of the PRSP, timely and accurate data on progress in poverty reduction is required. As the key data collection agency in Tanzania, the National Bureau of Statistics will play a pivotal role in ensuring that the PRSP data requirements are met. The NBS has many other roles to play, apart from its role as central data collection agency for the PRSP. Therefore, a strategic long-term onflash is required to manage the many competing and sometimes even conflicting demands that are placed on the NBS. To  ensure that the agency adequately responds to national data requirements within the constraints of its available resources, it is proposed to develop a multi-year survey program for the NBS to serve this purpose.

During the execution of the Social Dimensions of Structural Adjustment Programme (SDA) by the Planning Commission in the late 1980s and early 1990s the Bureau of Statistics coordinated the Data Production Programme for SDA.  The main undertaking of this component was to design data collection instruments for generating indicators to monitor economic and social concerns.  An indicator Monitoring Survey was thus conducted in 1994. This experience will serve as useful background to the monitoring of poverty in the context of the PRSP.

The consultancy report by Mr. Ken Williams on "Critical Elements of Data Collection for Poverty Monitoring" March 2000 notes, as one of the recommendations that there needs to be an ongoing (annual) core poverty Monitoring Survey programme which is flexible and have the capacity for  add on modules and can quickly collect key indicators and present results in a user friendly format.

The proceeding of a "Consultative Workshop on Poverty focused Social Analysis and Strategies for Monitoring Systems and Institutional Framework in the context of Poverty Reduction Strategy Paper" by Prof. I. Kikula outlines  some proposed structure and an institutional framework for monitoring poverty.

Under the chapter on Monitoring and Evaluation of the Poverty Reduction Strategy of the PRSP it is noted that the government will coordinate the preparation of a proposal which will be submitted to donors and used to secure appropriate allocations for monitoring purposes. The proposal will take the form of a poverty -monitoring master plan. The output of this consultancy will be a critical contribution to this poverty monitoring master plan.

The National Bureau of Statistics (NBS) now a Government Executive Agency since March 1999, will be expected more so than earlier years to play a pivotal role in harmonizing official statistics.


**Objective/outputs**

The overall output of the consultancy will be a multi-year survey programme, indicating resource requirements and capacity building needs. This programme will be an important input into the production of an overall poverty monitoring master plan.
The following achievements should be possible to be reached during this mission:

1.       A minimal list of core indicators from census/household based survey datasets
2.       The list of instruments to collect the data sets necessary to derive the indicators
3.       A sequencing of censuses/surveys  relevant to poverty monitoring
4.       Cost implications in the short, medium and long term i.e. 2001/02 and 2001/02 – 2003/04 and 2001 – 2010
5.       A outline of capacity building needs on the part of the NBS and other respective data collecting agencies
6.       A clear over view on options to help firm up the instrument  (core survey questionnaire) to collect data for the indicators to be produced from household based surveys on a regular basis.
7.       A revamped Strategic and Business Plan documents for the NBS.

**Activities**

The main activities to be undertaken by the consultant in order to achieve the above listed objectives are the following:

1. Dialogue with key stakeholders including research departments in institutions of higher learning and research NGOs on the proposed list of indicators and survey instrument
2. Study and consult on all relevant reports from the period of the Social Dimensions of Structural Adjustment Programme (consultancy reports leading to the conduct of the Indicator Monitoring Survey 1994, the report on Poverty and Welfare Monitoring Indicators, TAS working Group on Data and Information background paper, consultancy report by Mr. Ken Williams on Critical Elements of Data collection for Poverty Monitoring, Proceedings of A consultative Workshops by Prof. I. Kikula and the work on the Poverty Baseline in Tanzania and Updating the Poverty Baseline in Tanzania.
3. Study the Tanzania Assistance Strategy Paper and the PRSP document.
4. Study the Public Expenditure Review (PER) and Medium Term Expenditure Framework (MTEF) documents.
5. Study the cost structure of censuses/household based surveys during the last 10 years
6. Work out pertinent capacity building shortfall and thus requirements at the NBS, including level of funds
7. Develop alternative options for questionnaire and facilitate consultative meeting to firm up final choice on methodology.
8. Study the Strategic and Business Plans and propose major modifications.

**What to be done before the consultancy**

1. Dialogue with UNDP on consultancy arrangements. The consultancy firm to work with the NBS and VPO will be REPOA.

2. REPOA, having consulted the funding agency, may invite an external consulting firm. REPOA will work with the NBS and VPO to prepare for the maximum facilitation of the external consultant.

**Composition of the Mission**

The consultancy firm will be REPOA assisted by Peter Wingfield Digby.
The counterparts will be from the NBS and Poverty Eradication Division, Vice President's Office (VPO).

**Timing of the Mission**

The mission is scheduled to be for a duration of four weeks during January 2001. The consultants will be required to have a series of meetings with among others, committees in the PRSP monitoring area and will conduct a three hour seminar to a cross section of actors a day before the end of the mission.

## Annex 2      Persons met or attending group meetings during the consultancy

**National Bureau of Statistics**

| | |
|---|---|
| Mr Cletus P.B. Mkai | Director-General |
| Mr Damas A.K. Mbogoro | Commissioner of Population Census |
| Mr Ali Athmani | Director, Economic statistics |
| Mr Abdulrahaman M. Kaimu | Director, Social statistics |
| Mr Hamis M. Mbaruku | Director, Statistical operations |
| Mr Juma H. Mjariwa | Director, Finance, administration & marketing |
| Mr Said Aboud | Head, Social & demographic statistics dept. |
| Ms Albina Chuwa | Senior statistician/Demographer |
| Mr Amelian N. Karugendo | Statistician, Household budget survey |
| Mr Zacharia F. Kilele | Statistician, Labour statistics |
| Mr I.G. Komba | Head, National accounts dept. |
| Ms Aldegunda Komba | Department manager, Agriculture statistics |
| Mr Ephraim Kwesigabo | Statistician, Labour statistics |
| Mr Gabriel Madembwe | Administration manager |
| Ms Sozy Mahmoud | Principal information officer |
| Ms R.H. Maro | Head, Industry and construction dept. |
| Mr Ibrahim Masanja | Senior statistician, public health |
| Mr Mathias K. Masuka | Statistician, Statistical methods and standards |
| Mr S.M. Mbaruku | Head, Field operations dept. |
| Mr G.L.E. Millinga | Head, Information unit |
| Mr Vincent C. Mugaya | Statistical Officer, Census cartography/geo-information unit |
| Mr I.A. Mwenda | Head, Labour and prices dept. |
| Mr William D.M. Ndossi | Head, Marketing and EDP Troubleshooting Unit |
| Ms J.E. Sawe | Head, Marketing, information, and data management dept. |
| Mr Valerian Tesha | Statistician, Trade & transport |
| Ms F.U. Timothy | Head, Statistical methods and standards dept. |

**Vice-President's Office**

| | |
|---|---|
| Ms Anna Mwasha | Acting Director, Poverty Eradication Unit |
| Mr Paschal Assey | Poverty Eradication Unit |
| Mr Mudith Cheyo Buzenja | Economist, Poverty Eradication Unit |
| Mr Clifford Tandari | Agricultural Economist, Poverty Eradication Unit |
| Ms Alice Matembele | Economist |

**Planning Commission**

| | |
|---|---|
| Mr Arthur G.K. Mwakapugi | Director, Macro economy divison |

**Ministry of Education**

| | |
|---|---|
| Gichomo Tigani | Educationist/Statistician |

**Ministry of Health**

| | |
|---|---|
| Mr Daniel Mmari | Logistics officer, Reproductive and child health section |
| Mr Sylvester Njallaba | Statistician, PPU |
| Mr Wilfred Yohana | Statistician, Health management information system |
| Mr Philip Steel | Project director, Adult morbidity and mortality project |

**Ministry of Labour**

| | |
|---|---|
| Mr Johanssen Kaijage | Statistician |

**Ministry of Communications and Transport**

| | |
|---|---|
| Mr Kamulika Masegese | Statistician, Department of policy and planning |

**Ministry of Community Development and Women's Affairs**
Mr Achilles R. Ndyalusa          Acting head, Research and statistics section
Mr Ahmed Makbel                  Senior project officer, Training fund for Tanzanian women

**Ministry of Works**
Mr Tinka-Ligaile                 Economist, Planning unit
A.L. Kasauwa                     Engineer

**Attorney General's Chambers**
Mr Donald L Chidowu              State attorney

**Tanzania Social Action Fund (TASAF)**
Mr Emanuel K. Kamba              Executive Director
Mr L.M. Salema                   Director, Public works programme

**Tanzania Food and Nutrition Centre (TFNC)**
Mr Benedict Jeje                 Director of nutrition policy and planning
Mr Wenceslaus Bategeki           Principal programme officer

**Eastern Africa Statistical Training Centre (EASTC)**
Mr Vitalis E. Muba               Director
Mr Michael Sindato               Lecturer
Mr Zakayo E. Msokwa              Lecturer
Mr Slaus Mwisomba                Lecturer

**University of Dar es Salaam**
Mr Maurice Mbago                 Associate professor (Statistics)

**Economic and Social Research Foundation (ESRF)**
John Kajiba                      Information technology expert

**United Nations Development Programme (UNDP)**
Mr Oddvar Jakobsen               Deputy resident representative
Mr Arthur van Diesen             Poverty monitoring adviser
Mr Christopher Mushi             Poverty analyst
Mr Pim van der Male              Programme analyst, monitoring and evaluation

**United Nations Children's Fund (UNICEF)**
Ms Valerie Leach                 Head: Analysis, monitoring, communication & advocacy

**International Labour Organization (ILO)**
Mr Andrew Rossi                  Associate expert (IPEC)

**International Monetary Fund (IMF)**
Mr Tsidi Tsikato                 Resident representative

**World Bank**
Mr Benno Ndulu                   Lead economist
Mr Ben Tarimo                    Macro-economist (consultant)

**World Food Programme**
Mr Juvenal Kisanga               Vulnerability analysis and mapping officer

**UK Department for International Development (DFID)**
Ms Alana Albee                   Social development adviser

**Japan International Cooperation Agency (JICA)**
Mr Mitsuaki Furukawa             Deputy Resident Representative
Ms Tomoko Enoki                  Specialist, Gender/poverty alleviation

**Swiss Embassy**
Mr Olivier Burki                    SDC

**Netherlands Embassy**
Mr Felician L. Mutasa               Programme officer

**Swedish Embassy**
Mr Jan Lindstrom                    First secretary, SIDA

**Embassy of Ireland**
Mr Sean Courtney                    Development officer

**USAID**
Ms Vicky Chuwa                      Project management specialist

**Oxford Policy Management (OPML)**
Mr Patrick Ward                     Social policy consultant (visiting)
Ms Trudy Owens                      Consultant (visiting)

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**Annex 3**       **Structure of the National Bureau of Statistics**

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**National Bureau of Statistics**

**Director-General**                                                      **Mr C. P. B. Mkai**

<u>Directorates</u>       <u>Departments</u>                             **<u>Director/</u><u>Dept. Manager</u>**

**Economic Statistics**                                                  **Mr Ali A. Athmani**

       National Accounts                             Mr  I.G. Komba (acting)

       Agriculture Statistics                        Ms A.S. Komba

       Industrial & Construction Statistics          Ms R.H. Maro

       Trade, Transport, Tourism & Migration Statistics   Mr M.B. Chimtembo

**Social Statistics**                                                    **Mr A.M. Kaimu**

       Social & Demographic Statistics               Mr S.M. Aboud

       Labour & Price Statistics                     Mr I.A. Mwenda

**Statistical Operations**                                               **Mr Hamis M. Mbaruku**

       Statistical Methods & Standards               Ms Filimina U. Timothy

       Field Operations, Central Register of
          Establishments & Geo-information         Mr Sange M. Mbaruku

**Finance, Administration & Marketing**                                  **Mr Juma H. Mjariwa**

       Finance                                       Mr Juma H. Mjariwa

       Administration & Personnel                    Mr Gabriel G. Madembwe

       Marketing, Information & Data Management       Ms J.E. Sawe