



THE AFRICAN CAPACITY
BUILDING FOUNDATION

ACBF BEST PRACTICES STUDY SERIES

**TOWARDS REFORMING NATIONAL
STATISTICAL AGENCIES AND SYSTEMS:
A SURVEY OF BEST-PRACTICE COUNTRIES
WITH EFFECTIVE NATIONAL STATISTICAL
SYSTEMS IN AFRICA**

AN ACBF STATNET STUDY

ACBF/BPS /01/2007

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Towards Reforming National Statistical Agencies and Systems: A Survey of Best-Practice Countries with Effective National Statistical Systems in Africa

An ACBF STATNET Study
Peter Wingfield-Digby¹

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EXECUTIVE SUMMARY

This is the Annual Position Paper of STATNET for 2007, under the title *Towards Reforming National Statistical Agencies and Systems - A Survey of Best-Practice Countries with Effective National Statistical Systems in Africa*. In it we review some of the major statistical developments of recent years that have taken place at the regional level. We then try to identify some of the elements of an effective national statistical system. In order to measure effectiveness it is helpful to develop indicators of performance. The preference expressed in this paper is for simple measures of performance, which can be easily applied. One such measure is obtained by using the list of indicators developed by the World Bank. The performance of countries is measured along three dimensions: statistical practice, data collection, and indicator availability. On the basis of this set of indicators, a ranking of all African countries is obtained, in terms of the performance of their statistical systems in 2006.

It is clear that the spectrum of performance is very wide. At one extreme are two countries - Egypt and South Africa - to which we award a four-star rating, based on the World Bank scores. At the other extreme are two countries - Liberia and Somalia - that do not merit any stars. In between these extremes are 22 countries that receive three stars, 21 countries that receive two stars, and six countries that receive only one star.

The statistical strengths and weaknesses of different statistical systems are highlighted, and countries are identified that have shown substantial improvement or decline in the last year. Suggestions are made as to possible areas for improvement, and some general conclusions are drawn.

The rankings shown here are based on an evaluation by the World Bank of various indicators of statistical capacity that are available outside the individual countries. If the results are to be used for operational purposes, it would first be necessary to revalidate the findings, by carrying out a more in-depth study of statistical capacity. This could be done for individual countries by collecting information in the format recommended by the PARIS21 Task Team on Statistical Capacity Building.

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Abbreviations

AAPA	Addis Ababa Plan of Action
ABSA	Advisory Board for Statistical Development in Africa
AfDB	African Development Bank
ACBF	African Capacity Building Foundation
ACS	African Centre for Statistics
ADP	Accelerated Data Programme
AFRITAC	African Technical Assistance Centre
AFRISTAT	Observatoire Economique et Statistique d’Afrique Subsaharienne
APEX	Forum for Asia/Pacific Statisticians
ASD	Africa Statistics Day (18 November)
ASJ	African Statistical Journal
ASSD	African Symposium on Statistical Development
AU	African Union
CAS	Conference of African Statisticians
CASD	Coordinating Committee on African Statistical Development
CODI	Committee on Development Information
DQAF	Data Quality Assessment Framework
ECA	UN Economic Commission for Africa
ECOSOC	UN Economic and Social Council
ESCAP	UN Economic and Social Commission for Asia and the Pacific
FASDEV	Forum on African Statistical Development
GDDS	General Data Dissemination System
GDP	Gross Domestic Product
ICP	International Comparison Program
IMF	International Monetary Fund
MAPS	Marrakech Action Plan for Statistics
MDG	Millennium Development Goal
NEPAD	New Partnership for Africa’s Development
NSA	National Statistical Agency
NSDS	National Strategy for the Development of Statistics
PARIS21	Partnership in statistics for development in the 21 st century
PPP	Purchasing Power Parity
PRSP	Poverty Reduction Strategy Paper
RRSF	Reference Regional Strategic Framework for Statistical Capacity Building in Africa
SADC	Southern African Development Community
SCB	Statistical Capacity Building
SDDS	Special Data Dissemination Standard
SMP	Statistical Master Plan
SSA	Sub-Saharan Africa
STATNET	Strengthening and Monitoring of National Statistics Network
TAP-NET	Technical Advisory Panel and Network
TFSCB	Trust Fund for Statistical Capacity Building
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children’s Fund
UNSD	United Nations Statistics Division
WHO	World Health Organization

1. Introduction ²

² The paper has benefited from comments made by individual STATNET members. STATNET, with its focus on the strengthening and monitoring of national statistics, is one of the six Technical Advisory Panels and Networks (TAP-NETs) set up by ACBF to provide advice across its priority work

The pace of change in Africa in recent decades has posed a tremendous challenge for national statistical offices and for national statistical systems as a whole. Recent demands for data, particularly from the international community, have spurred on many countries to initiate statistical reforms. For instance, the needs for timely data to measure progress in implementing the programmes outlined in the Poverty Reduction Strategy Papers (PRSPs), and the indicator demands associated with Africa's efforts to meet the targets of the Millennium Development Goals (MDGs) set for 2015, have helped to galvanize governments into considering how best to organize their statistical systems.

This paper describes the process of change that is taking place. Why do the statistical systems need to be reformed? What are the factors driving this need for reform? How are African countries responding? The paper tries to identify those countries where the statistical system can be considered to be operating most effectively, since these countries may serve as useful role models of 'best-practice', to which others could aspire.

To better understand this process of change, and how it is affecting national statistical agencies (NSAs) and systems, we begin this study by examining in Section 2 some of the key international and regional developments that have taken place in the last few years, which have had a major impact on the way in which NSAs and statistical systems are organized. In Section 3 we attempt to identify some of the key elements of an effective national statistical system. It is one thing to define what those elements are, but an even more important aspect is to ensure that we are able to measure those elements in some meaningful way (Section 4). This leads on to a consideration of what are the best indicators of performance for measuring the success or failure of statistical systems (Section 5). There are problems involved with any system of measurement, and some of the main issues are discussed in Section 6.

In Section 7 we move from abstraction to reality, by examining some indicators of statistical capacity that have been prepared by the World Bank covering the latest three-year period. These findings can be presented in the form of league tables, which enable us to compare how different countries in Africa measure up to the benchmarks that have been set (Section 8). Looking in more detail at how the overall indicators are arrived at, we can see that certain countries are strong in some aspects of their statistical systems, but weak in others. Some countries have statistical capacity indicators that are improving over time, while in some other cases countries actually seem to be moving backwards (Section 9). In Section 10 we highlight some of the characteristics of 'best practice' countries. Then we try to identify areas for improvement, and suggest how the process of development can be carried forward (Section 11). Finally, in Section 12 we draw some general conclusions, and offer suggestions for future activities.

areas. The TAP-NETs aim to share knowledge for capacity building and sustainable development in Africa.

2. Recent Statistical Developments at the Regional Level in Africa

The origins of many statistical systems in Africa can be traced back to the 1960s, when most African countries gained their independence from their colonial masters. Only eight countries had become independent before 1960 (plus Ethiopia which was always independent), but 17 countries became independent in that year, and a further 17 became independent during the remainder of the 1960s. Over the next 20 years the remaining nine countries became independent, the last to do so being Namibia in 1990. One further change occurred in 1993, when Eritrea split away from Ethiopia, increasing the number of countries in Africa to 53.

In the 1960s and 1970s fledgling statistics offices were created in the newly independent countries, and legislation was passed to legitimize and consolidate their position as the main data gathering agencies in their respective countries. During the 1970s and 1980s several international statistical programmes were developed to assist countries in Africa and elsewhere.

Despite these and other initiatives, the quantity and quality of statistics being produced in many African countries declined during the 1970s and 1980s. There was probably no single specific reason for this decline. Rather, it was due to a combination of factors: the low priority attached to the use of statistical information for making policy; cuts in public expenditure, which often affected statistics offices, because of their low status in the machinery of government; loss of trained staff to more attractive employment opportunities elsewhere; reduction in the level of technical assistance available from regional bodies and from multilateral and bilateral agencies; and the general poor management of many statistical systems.

To try to address the problem of declining statistical capacity, the ECA Conference of Ministers adopted the Addis Ababa Plan of Action (AAPA) at their meeting in May 1990. The Plan set out a number of objectives. These included: helping countries to achieve self-sufficiency in statistical production; improving the reliability, relevance and timeliness of statistics; increasing awareness amongst users of the importance of statistics; promoting statistical training programmes at various levels as well as interaction among African statisticians; helping to improve the organisational structure of national statistical systems on the continent; and ensuring a better coordination of statistical development programmes at both national and international level. Two years later a Coordinating Committee on African Statistical Development (CASD) was established, as envisaged in the Plan of Action, to monitor the implementation of the Plan and to provide a forum for coordinating technical cooperation activities. Its membership included the principal international actors and a number of interested donors on statistical development.

Meanwhile, other important developments were taking place during the 1990s. A major development for francophone countries was the establishment of the Observatoire Economique et Statistique d'Afrique Subsaharienne (AFRISTAT) in September 1993. AFRISTAT aims to reinforce the development of economic, social and environmental statistics in its 18 member states.

A further push for statistical development came through the setting up of the Partnership in Statistics for Development in the 21st Century (PARIS21), which was launched in 1999 to act as a catalyst for promoting a culture of evidence-based policymaking and monitoring in all countries, and especially in developing countries.

The attempt to operationalize the Addis Ababa Plan of Action came at a difficult time for regional statistical bodies in Africa. Statistical activities at ECA were being put under tremendous strain. The ECA Statistics Division had for many years provided overall guidance in the field of statistics, as well as technical assistance through its regional advisers. But the resources available for statistics were being reduced, and the very existence of the Statistics Division was being questioned. Indeed, for a number of years the Statistics Division ceased to exist, and its activities were subsumed under the Development Services Information Division.

At the regional level, statistical coordination had traditionally been done through the Conference of African Statisticians (CAS), which was hosted by the ECA. The activities of the CAS became diluted during the early 1990s as its remit and title were expanded to include Planners and Demographers in 1992 and Information Specialists in 1994. After further restructuring at ECA, the function of coordinating statistical activities was taken over in 1997 by the Committee on Development Information (CODI).³

A CASD Task Force review of the Addis Ababa Plan of Action concluded that the Plan did provide a basis for reversing the decline in statistical production in Africa, but that it was largely unsuccessful because it was not publicized, popularized and owned by stakeholders within countries.⁴

The UN Statistical Commission and the Economic and Social Council (ECOSOC) had been stressing for some time that statistical capacity-building efforts and related technical cooperation activities needed to be embedded within a national framework of development policies. They also emphasized the need to build the demand for statistics, in order to secure sufficient national resources to build and sustain statistical capacity. PARIS21 responded to these calls by encouraging countries to make the case for statistical development, and by supporting the preparation of an NSDS to guide the development of a country's statistical system. The extent and speed with which countries are endeavouring to prepare NSDSs can be seen in the fourth column of the table in Annex 1.

A key milestone in the attempt to push forward statistical reform was reached at the second international Round Table on Managing for Development Results, held in

³ A similar dilution of the regional coordination role occurred with the ESCAP Committee on Statistics, which was the focal point for regional statistical development in Asia and the Pacific. It was merged with a planning committee in the late 1980s but the new committee proved unsuccessful. The old Committee on Statistics was reinstated, but has subsequently been reduced to a subcommittee under the Committee on Poverty Reduction. As a consequence, the statistical community in the region has now set up a separate forum known as APEX - Forum for Asia/Pacific Statisticians.

⁴ *Assessment of the Implementation of the Addis Ababa Plan of Action for Statistical Development in Africa in the 1990s*, presented at the Second Meeting of the Committee on Development Information (CODI), Economic Commission for Africa, Addis Ababa, 3-7 September 2001. (ECA/DISD/CODI.2/11)

Marrakech in February 2004. The 200 participants from aid organizations and developing countries attending the Round Table reviewed the progress to date, and agreed on six key actions (known as the Marrakech Action Plan for Statistics - MAPS):

- Mainstream strategic planning of statistical systems, especially through the implementation of National Statistical Development Strategies (NSDS)
- Prepare for the 2010 global round of population censuses
- Increase the finances for statistical capacity building
- Set up an international household survey network
- Undertake urgent improvements for MDG monitoring
- Increase the accountability of the international statistical system

To further improve its work in the area of statistics, ECA set up an Advisory Board for Statistical Development in Africa (ABSA). In 2004 a new Forum on African Statistical Development (FASDEV) was established, with ECA as its secretariat. It meets annually. Its stated purpose is three-fold: to keep an overview of statistical activities in Africa, including assistance and training; to set up a permanent system for monitoring statistical development in Africa; and to strengthen cooperation, by taking advantage of each partner's comparative advantage.

FASDEV II, which took place early in 2006, endorsed a new programme, known as the Reference Regional Strategic Framework for Statistical Capacity Building in Africa (RRSF). The RRSF is in line with the recommendations of MAPS and carries forward many of the ideas that were incorporated in AAPA but never implemented. It is an attempt to address the problem of weak statistical capacity of many countries in Africa, which results in many official statistics being under-used by policy makers and many statistical systems failing to meet their countries' priority needs. The aim of RRSF is to accelerate statistical capacity improvement across the continent, by adopting the NSDS approach, so as to satisfy the demands for data by 2015. The RRSF is built around three themes: meeting user needs; improving the management of statistical systems; and ensuring the sustainability and irreversibility of statistical development.⁵

In January 2006, on the initiative of Statistics South Africa, the first African Symposium on Statistical Development (ASSD) was held in Cape Town. A second ASSD was held in Kigali in January 2007. Both symposia focused particularly on the needs of the 2010 round of population censuses, which was the second major area of work recommended by MAPS.

The statistics function is currently undergoing enormous change in ECA itself. In March 2006 the new Executive Secretary established a Task Force, charged with assessing the current and emerging economic and social challenges confronting Africa and making recommendations on what internal changes ECA must make in order to play a much more effective role in addressing those challenges.⁶

⁵ The required actions relating to these three themes are set out in: Reference Regional Strategic Framework for Capacity Building in Africa, *African Statistical Journal*, Vol. 2, May 2006, pp. 131-134

⁶ *Repositioning ECA to better respond to Africa's priorities: Note by the Executive Secretary*, Conference of African Ministers, Ouagadougou, May 2006

One early outcome of this work was that statistics was identified as an important crosscutting theme, which was considered vital to advancing the special needs of African countries, particularly in respect of NEPAD (the New Partnership for Africa's Development) and the targets of the MDGs. Accordingly, ECA plans to scale up its efforts in the area of data and statistical analyses and in building statistical capacity in member States. The ECA will also help countries in the region develop performance indicators and statistics for MDG tracking. As a first step, the Statistics Division was effectively reborn in 2006, under the title African Centre for Statistics (ACS).

In addition to ECA, another important regional body for statistics is the African Development Bank (AfDB). Like the ECA, it also went through difficult times in the 1990s, but it is now expanding its statistical activities. Its Statistics Department has two divisions, one dealing with economic and social statistics, and the other with statistical capacity building. It is becoming a major provider of technical assistance on the continent, and has developed a strategic plan for building statistical capacities.

Two aspects of its work that are helping to create the dynamic for change are particularly noteworthy: the International Comparison Program (ICP) project with its emphasis on Purchasing Power Parities (PPPs), for which AfDB is the implementing agency, and in which 49 of the 53 countries in Africa are participating; and its publication of the African Statistical Journal (ASJ), in association with the Uganda Bureau of Statistics and the Uganda Statistical Society.

Among several recent initiatives by international organizations, particularly noteworthy has been the establishment by the International Monetary Fund (IMF) of three regional technical assistance centres, known as AFRITACs, in Dar es Salaam, Bamako, and Libreville. These are intended to improve data quality and build statistical capacities of countries throughout Africa. Another initiative has been the work done in improving socio-demographic statistics, through a special project for anglophone countries under the IMF's General Data Dissemination System (GDSS).⁷

Another major initiative is the pilot Accelerated Data Programme (ADP). It is funded by the World Bank MAPS Development Grant Facility, and is implemented as a PARIS21 satellite programme, with various international partners. It addresses three key issues: (i) that existing data are not always fully exploited; (ii) that methods and concepts are not harmonized; and (iii) that timeliness and frequency of data are not optimal. Three tasks, respectively, are being undertaken in an increasing number of African countries to try to address these issues: (i) improving documentation and dissemination; (ii) carrying out further analysis and assessment of survey data; and (iii) supporting an improved survey programme.

An important statistical event on the continent is African Statistics Day (ASD), celebrated each year on 18 November. It is a yearly advocacy tool aimed at raising awareness of the importance of statistics in the economic and social development of Africa. The 2005 event highlighted the 2010 round of population and housing

⁷ Chinganya, Oliver J.M., General Data Dissemination System (GDSS) Project for Anglophone Africa, *African Statistical Journal*, Vol. 1, Nov. 2005, pp. 114-115, African Development Bank

censuses, while the 2006 celebration was used to raise awareness on the importance of National Strategies for the Development of Statistics (NSDSs) as new benchmarks in statistical planning.

At the regional level, the African Union (AU) Commission has recently set up a new statistics unit within its Department for Economic Affairs. At the sub-regional level, the Southern African Development Community (SADC) is active in some statistical areas. One of its activities is to operate a Trust Fund for Statistical Capacity Building (TFSCB) on behalf of the World Bank.

3. Elements of an Effective National Statistical System

In recent years it has become increasingly apparent that governments cannot run efficiently unless they have good quality statistics available to them. Statistics serve several purposes. They are essential for evidence-based policy making, and for use in monitoring a country's development progress. In addition, statistics provide a means for civil society organizations to monitor government activities and to use for planning their own activities.

Providing the full range of statistics needed for various different purposes demands very careful planning and management of the statistical system, so that the required data of sufficient quality can be produced and disseminated in a timely fashion. In many countries the statistical system has been undervalued and under-funded for many years, and has stagnated as a result. Many countries are now trying to break out of this vicious cycle.

Any attempt at identification of 'best-practice' countries with effective national statistical systems, as implied by the title of this paper, really requires us to look first at the issue of statistical capacity. This examination of statistical capacity will help to tell us how well the various statistical institutions in a country (both the national statistical office and other agencies producing and disseminating statistics) perform in producing statistics that are 'fit for purpose'.

The level of statistical capacity of a country is determined by a number of factors. Perhaps the most important elements of an effective statistical system are:

- An adequate budget to enable the statistical system to operate effectively, and sufficient additional funding to invest in new technologies.
- Ensuring a country's ownership of all aspects of its statistical capacity development (e.g. design, implementation, production of statistical outputs, monitoring and evaluation).
- Independence from donor funding as far as possible, so as to avoid the risk of distorting a country's developing priorities by having to go along with the priorities of donors.
- Good technical training, career development, and adequate salaries, so as to motivate staff to stay in their posts and perform to the best of their ability.
- Ensuring that staff follow accepted methodological standards.
- Encouraging the analysis and dissemination of data, and easy access by users.
- Providing a good management structure in the statistics office and in the rest of the statistical system, to enable the staff to work to optimum efficiency.
- Encouraging transparency and open access to data.

Providing the statistical system with an adequate level of human, physical and financial resources is an essential first step in ensuring a high-quality statistical system. But these inputs will not by themselves automatically produce the desired results. They must be skilfully blended by those managing the statistical system, so that the desired outputs of high quality statistics are produced at the right time to meet the needs of policy makers.

4. The Need for Measurement

In order to measure the effectiveness of statistical systems, we need to develop a set of indicators that can help us to measure the degree of success that countries are having in addressing the issues referred to in the previous section.

The PARIS21 Task Team on Statistical Capacity Building (SCB) Indicators was set up in May 2001, and was charged with developing a set of indicators within six months that would help track progress of countries in building statistical capacity. This was the first systematic attempt at the international level to develop indicators of statistical capacity building that would be applicable across countries. It was expected that the existence of a set of indicators would be particularly useful for those countries that are 'statistically challenged', to help them identify their strengths and weaknesses.

The Task Team developed a set of 16 quantitative and 18 qualitative indicators.⁸ The 16 quantitative indicators provide measures in three areas: resources (the domestically and externally funded budget, staffing and equipment); inputs (surveys and the use of administrative data); and statistical products (identified in terms of channels of data release and the range of statistics produced). It was acknowledged that there were limitations with the quantitative indicators. First, there were no benchmarks against which the values of the indicators could be assessed. Secondly,

⁸ The Task Team's report (*Statistical Capacity Building Indicators: Final Report*, September 2002) is available at www.paris21.org/pages/task-teams/teams/introduction/

the output indicators do not provide a measure of effectiveness; since they do not show to what extent and how successfully the statistics produced are actually used.

For these reasons the quantitative indicators need to be supplemented by the 18 qualitative indicators, which help to describe how the statistical activities are carried out. These qualitative indicators take a broader view of the factors in the statistical environment, the statistical process, and the characteristics of the statistical products in meeting users' needs. These qualitative indicators are based largely on the Data Quality Assessment Framework (DQAF) that has been developed by the IMF in recent years. For each of the indicators, a four-point rating scale was used: highly developed, developed, largely undeveloped, and undeveloped.

All the indicators (quantitative and qualitative) are compiled using a questionnaire, which can be self-administered by data-producing agencies. The quantitative and qualitative indicators, taken together, were seen as being able to fulfill the following functions:

- to provide a snapshot picture of a country's statistical conditions;
- to focus on opportunities for the statistical system by highlighting strengths and weaknesses;
- to provide a means to track the results of capacity building efforts over time.

While this set of quantitative and qualitative indicators would clearly provide much detailed information on the state of statistical offices, it would require considerable input from each statistical office to generate the required information. In many ways a more attractive approach is the one described in the next section, which makes no demands on inputs from the national statistical systems, but which allows the generation of a simple index to measure the overall performance of a country in the statistical field.

5. Performance Indicators

To carry out a full evaluation of a country's statistical capacity would require a detailed country visit, involving the cooperation of all producers and users of statistics. In this type of evaluation one would examine all of the characteristics of good statistics and the performance of all participants in the statistical system. The problem with such an approach is that it is not only expensive and time consuming, but it imposes an additional burden on the country being evaluated.

The World Bank has adopted a more limited approach, in an attempt to arrive at a small set of statistical capacity indicators. They have used a set of indicators for which the data are generally publicly available. Their system now covers some 144 countries, and comparisons can be made between countries and over time. Such a system of indicators cannot hope to capture all the dimensions of statistical capacity, but it does help to identify those countries with weak statistical systems and to indicate where improvements are needed.⁹

⁹ The methodology can be viewed at www.worldbank.org/data/countrydata/csid.html

Their framework has three broad dimensions or components: statistical practice, data collection, and indicator availability. As indicated in Table 1, the statistical practice component is represented by ten indicators, data collection by five, and indicator availability by a further ten. This approach captures some aspects of data quality, which can be broadly defined as producing statistics that are 'fit for purpose'. In particular, the indicators reflect aspects of methodology, data access, timeliness, periodicity in availability of data, and comparability of data, all of which are important aspects of data quality.

The approach adopted is necessarily quantitative rather than qualitative. No attempt is made to evaluate the efficiency of statistical systems or to assess the capacity or willingness of countries to use the statistics they produce to make improvements in policy or management.

For each component of the index, countries are scored against specific criteria, using information that is available from the various international organizations. The scores for each component are totalled to give a result on a scale from 0 to 100, and the average of the three components then calculated to give a final score.

Table 1: Components of the World Bank index of Statistical Capacity, 2004-2006

Component of index Item	Status	Possible Scores
Statistical Practice		
National accounts base year	Annual chain linking used, or base year within last 10 years	0,1
Balance of payments manual in use	Latest edition (BPM5)	0,1
External debt reporting status	Actual or preliminary data used	0,1
Consumer price index base year	Base year within last 10 years	0,1
Industrial production index	Available monthly	0,1
Import and export price indexes	Available monthly	0,1
Government finance accounting	Accounts consolidated	0,1
UNESCO reporting	At least 3 times in last 4 years	0,1
National immunization coverage	Consistency between national and WHO/UNICEF estimates	0,1
Special Data Dissemination Standard	Country subscribes	0,1
Data Collection		
Population census	Periodicity of 10 years or less	0,2
Agricultural census	Periodicity of 10 years or less	0,2
Poverty survey	Periodicity of 3 to 5 years or less	0,1,2
Health survey	Periodicity of 3 to 5 years or less	0,1,2
Vital registration system coverage	Whether UN judges system complete	0,2
Indicator availability		
Income poverty (relates to MDG 1)	Periodicity of 3 to 5 years or less, or not at all	0,1,2,3
Child malnutrition (relates to MDG 1)	Periodicity of 3 to 5 years or less, or not at all	0,1,2,3
Child mortality (relates to MDG 4)	Availability of data for reference years	0,1
Immunization (relates to MDG 4)	Annual periodicity of data	0,1
HIV / AIDS (relates to MDG 6)	Availability of an estimate	0,1
Maternal health (relates to MDG 5)	Periodicity of 3 to 5 years or less, or not at all	0,1,2,3
Gender equality (relates to MDG 3)	Periodicity of 3 to 5 years or less, or not at all	0,1,2,3
Primary completion (relates to MDG2)	Indicator observed in last 5 years	0,1
Access to water (relates to MDG 7)	Availability of an estimate	0,1
Per capita GDP growth	Periodicity of 1 to 1½ years or less, or not at all	0,1,2,3

Note: To obtain the overall score for Statistical Capacity, the three components (Statistical Practice, Data Collection and Indicator Availability) are given equal weight. Since a total of 10 points is available for Statistical Practice and for Data Collection, but 20 points are available for Indicator Availability, the points scored for Indicator Availability are halved before being added to the points for the other two components.

Looking in more detail at the three components, the *statistical practice* component gives an indication of the extent to which a country is following internationally accepted statistical standards and methods. In particular, the indicators relate to whether the country is following the guidelines and procedures that should be used for compiling macroeconomic statistics, whether it is following the recommended procedures for reporting social data (for instance on education), and whether the country subscribes to the Special Data Dissemination Standard (SDDS).¹⁰ A score of 100 percent means that a country meets the current international standards in all the areas that are being assessed.

The *data collection* component shows whether a country is carrying out its various data collection activities at the recommended intervals, and also whether data is available from administrative systems and is being used. The specific topics covered include whether population and agricultural censuses are carried out at least every ten years, whether surveys to measure poverty and health are conducted every three or five years, and whether there is a proper system of vital registration in the country. A score of 100 percent would mean that the country meets all the standards included in the assessment.

The *indicator availability* component shows whether countries are producing some key indicators (for instance some of the MDG indicators), and the frequency of their production. Information about the availability of these indicators is taken from the World Development Indicators database. This component thus reflects how successful a country is in converting source data into timely statistical outputs. A score of 100 percent would mean that the country is producing all the indicators included in the assessment on a regular basis and with acceptable frequency.

A particular problem with this latter component is that in some cases the international agencies estimate data that are missing from countries, and so the use of these data sources imposes some limitations on the analysis. The alternative would be to assess data availability at the national level, but this would be time consuming and costly, and the feeling in the World Bank is that such an approach is not worthwhile from a cost-benefit point of view.

6. Problem of Measurement

There are several problems involved with using these indicators. The first is a general problem that arises with the use of any performance indicators. Using indicators like these to measure performance is necessarily a rather crude operation. Indeed, the very existence of these indicators might distort country perspectives, and even lead them to develop their statistical systems in the wrong way. They might be tempted to strive to meet the particular indicators that are included in this World Bank list,

¹⁰ The SDDS was established by the IMF for member countries that have, or that might seek to have, access to international capital markets, to guide them in how to provide their economic and financial data to the public. The SDDS is expected to enhance the availability of timely and comprehensive data and improve the functioning of financial markets. More detailed information on the SDDS is given in Section 8 of this paper.

while failing to do anything about other areas of their statistical operations that are equally important. The indicators that go to make up the index are merely one possible set (though an admittedly important set) of indicators. They are in effect acting as proxies for a large number of other indicators which the index does not attempt to measure.

A second problem relates to what we are measuring. We can see that the indicators used by the World Bank for each dimension of statistical capacity are measuring inputs and outputs (e.g. whether certain surveys are being carried out frequently enough, or whether a particular series is being produced with the desired frequency). The indicators do not measure outcomes or impacts, such as whether the results of these surveys, and the indicators produced, feed into the development process, and whether people's lives are improved as a result.

A third problem, and an important one, is that these indicators do not capture all aspects of data quality. Were the samples large enough? Was the field force trained properly? Did the interviewers apply correctly in the field what they had been taught in the training room? Was there proper editing of the questionnaires in the field and back at headquarters? Was careful attention paid to the whole processing operation, and errors promptly corrected? Were the indicators calculated in the correct way? These and many other questions could be asked about the quality of statistical operations.

A fourth problem relates to the whole way in which the index is constructed. It is designed primarily as a tool for use by the World Bank, and inevitably the choice of indicators reflects the Bank's priorities in the statistical field. It is commendable that the Bank has placed the indicators in the public domain, along with the results for three years, so that others may comment on the system that has been devised. Others may wish to question the choice of items that have been included in the index, and whether the benchmarks chosen are appropriate. Questions might also be raised about the weighting system used, and the method of aggregation.

Despite any possible criticisms, the index should be accepted for what it is: a simple and necessarily crude indicator of how country statistical systems are developing. The index may be valuable to countries, in helping them to see how their statistical development compares with that of their neighbours and with that of the continent as a whole.

7. League Tables

The overall results can be displayed in the form of a STATS league table (Table 2).¹¹ It can be seen from the table that, if this were an Olympic Games or World Cup competition, Egypt would have won the gold medal or winner's cup and South Africa

¹¹ There was a natural inclination to want to call this league the STATCAP league, but the expression STATCAP is already used by the World Bank as the title of its major new lending programme to support more efficient and effective statistical programmes in developing countries.

the silver or runner-up position, with Morocco (the winner of the bronze) coming in some way behind.

If we award a star for every 20 points gained in the classification, then Egypt and South Africa can be described as having 4-star statistical systems, while a further 22 countries can be classified as 3-star. These 4-star and 3-star countries are highlighted in Figure 1.

Statistics are often presented only for Sub-Saharan Africa (SSA), but we have preferred here to cover the whole of the continent of Africa. Since these six additional countries in north Africa (Algeria, Djibouti, Egypt, Libya, Morocco, and Tunisia) that are not part of SSA include one 4-star country (Egypt) and three 3-star countries (Morocco, Tunisia, and Algeria), the effect of including them is to raise the overall percentage rating of countries during the three years 2004 to 2006 by one percentage point. As far as the separate components of statistical capacity are concerned, the inclusion of these six countries raises the overall score for statistical practice and data collection by one or two percentage points each year, but it makes no difference to the score for indicator availability.

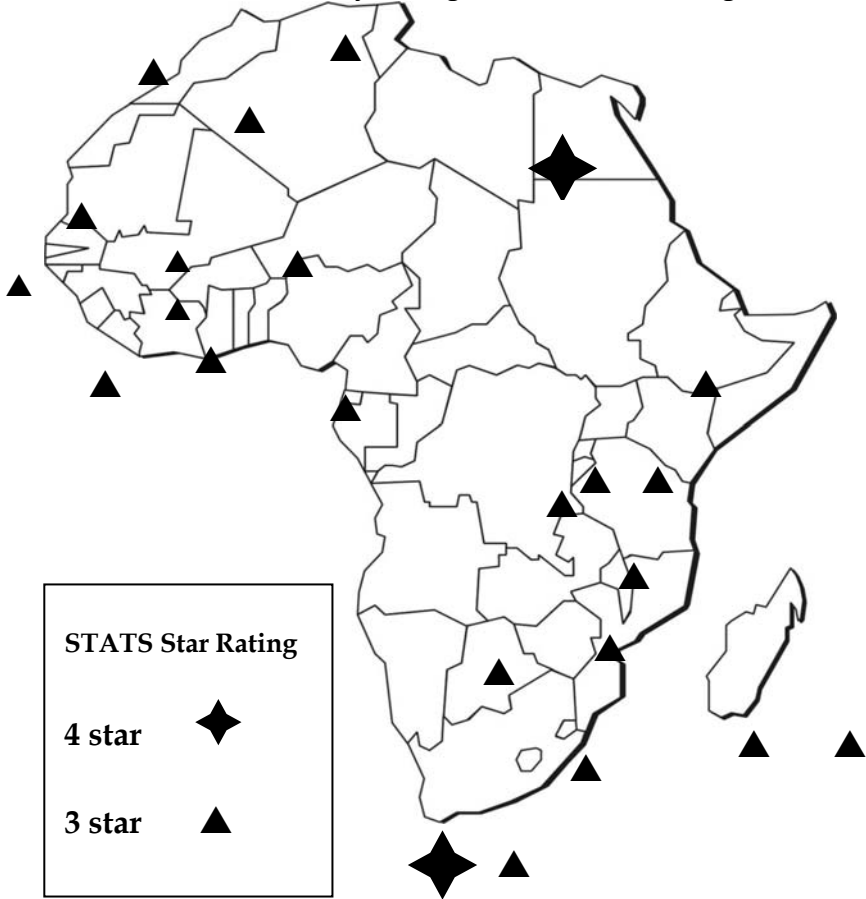
One noteworthy feature seen in Figure 1 is that while most of the larger countries on the eastern side of the continent and in West Africa receive a 3-star rating, there is a swathe of large countries running down the centre of the continent where the capacity of the statistical system is rated as being less satisfactory.

No country receives a 5-star rating, which represents a perfect score on all indicators. At the other extreme, six countries receive only a 1-star rating and two countries no stars at all. A particular characteristic of several of these countries that perform poorly is that they are currently faced with internal strife, or have only recently ended a period of civil unrest. As with the development of probably all other institutions of government, a basic requirement for the development of statistical systems would appear to be the existence of a peaceful environment. A country that is not at peace with itself and its neighbours is unlikely to be able to do much to develop its statistical system.

Table 2 Africa's STATS league: Ranking of all countries in Africa, based on an assessment of their statistical capacity in 2006					
Country	Score (max=100)	Country	Score (max=100)	Country	Score (max=100)
Four-star		Two-star		One-star	
Egypt	90	Chad	58	Central African Rep	38
South Africa	87	Ghana	58	Eritrea	38
		Comoros	57	Libya	37
Three-star		Swaziland	57	Angola	35
Morocco	77	Guinea	55	Sudan	30
Tunisia	75	Gambia	53	Equatorial Guinea	28
Senegal	75	Zimbabwe	53		
Uganda	73	Cape Verde	52	No star	
Burkina Faso	72	Nigeria	52	Liberia	18
Cameroon	72	Seychelles	52	Somalia	17
Cote d'Ivoire	70	Togo	52		
Niger	70	Congo Rep.	50		
Mauritania	68	Namibia	50		
Mozambique	68	Sao Tome & Principe	48		
Zambia	65	Botswana	47		
Benin	63	Sierra Leone	47		
Madagascar	63	Djibouti	45		
Malawi	63	Congo DR	43		
Mali	63	Gabon	43		
Mauritius	63	Guinea-Bissau	43		
Kenya	62	Burundi	40		
Lesotho	62				
Tanzania	62				
Algeria	60				
Ethiopia	60				
Rwanda	60				

Based on data in the Country Statistical Information Database at www.worldbank.org. In making this table, a star has been awarded for every 20 points scored. For detailed data, see Annex 2

Figure 1: African countries with statistical systems given a 3 or 4 star rating in 2006



8. How Well Do Countries Measure Up?

We have already noted that Egypt and South Africa are really in a league of their own as far as statistical capacity is concerned. Looking at the individual 3-star scores, we can see that several francophone countries in West and North Africa are also doing well in this STATS league. Morocco, Tunisia, Senegal, Burkina Faso, Cameroon, Cote d'Ivoire, and Niger all had scores of 70 or more in 2006. Of the Anglophone countries, only Uganda could match them.

At the other extreme, two countries - Liberia and Somalia - do not receive a single star and clearly have much work to do in the statistical field to recover from years of strife and instability. The same could be said of three countries that receive one-star ratings (Angola, Sudan and Eritrea) though in the latter case there is also the important point that the country is barely a decade old, and it takes time to build statistical institutions. Three other countries (Libya, Central African Republic and Equatorial Guinea) receive only one-star ratings, and still have a long way to go to develop their statistical systems.

Table 3 provides a more detailed breakdown of the STATS rankings for 2006, according to the three dimensions used by the World Bank: statistical practice, data collection, and indicator availability. For simplicity of presentation our table uses the same star rating system; the original index figures can be found in Annex 2.

Table 3: Detailed STATS indicators				Score	Overall	Statistical	Data	Indicator
2006 Ranking	Country		(max=100)	star rating	Practice	Collection	Availability	
1	Egypt	90	****	****	*****	*****	*****	
2	South Africa	87	****	*****	*****	*****	*****	
3	Morocco	77	***	****	****	***	****	
4	Tunisia	75	**	***	***	***	****	
4	Senegal	75	**	***	***	****	****	
6	Uganda	73	**	***	***	****	****	
7	Burkina Faso	72	**	**	**	****	****	
7	Cameroon	72	**	***	***	***	****	
9	Cote d'Ivoire	70	**	***	***	****	**	
9	Niger	70	**	**	**	****	****	
11	Mauritania	68	**	**	**	****	****	
11	Mozambique	68	**	**	**	***	****	
13	Zambia	65	**	*	*	****	****	
14	Benin	63	**	**	**	***	****	
14	Madagascar	63	**	**	**	***	****	
14	Malawi	63	**	***	***	**	****	
14	Mali	63	**	**	**	****	**	
14	Mauritius	63	**	****	****	**	**	
19	Kenya	62	**	**	**	***	**	
19	Lesotho	62	**	**	**	***	**	
19	Tanzania	62	**	**	**	***	**	
22	Algeria	60	**	**	**	**	****	
22	Ethiopia	60	**	**	**	***	**	
22	Rwanda	60	**	**	**	***	**	
25	Chad	58	**	**	***	*	****	
25	Ghana	58	**	**	*	***	**	
27	Comoros	57	**	**	*	***	**	
27	Swaziland	57	**	**	*	***	**	
29	Guinea	55	**	**	*	***	**	
30	Gambia	53	**	**	**	***	**	
30	Zimbabwe	53	**	**	***	*	**	
32	Cape Verde	52	**	**	**	***	**	
32	Nigeria	52	**	**	**	**	****	
32	Seychelles	52	**	**	**	***	**	
32	Togo	52	**	**	**	**	****	
36	Congo Rep.	50	**	**	**	**	**	
36	Namibia	50	**	**	**	**	****	
38	Sao Tome & Principe	48	**	**	*	***	**	
39	Botswana	47	**	**	*	**	****	
39	Sierra Leone	47	**	**	*	***	**	
41	Djibouti	45	**	**	**	*	****	
42	Congo DR	43	**	**	**	*	**	
42	Gabon	43	**	**	*	**	****	
42	Guinea-Bissau	43	**	**	*	**	****	
45	Burundi	40	**	**	**	*	****	
46	Central African Rep.	38	*	*	*	**	**	
46	Eritrea	38	*	*	*	*	****	
48	Libya	37	*	*	**	**	*	
49	Angola	35	*	*	**	*	**	
50	Sudan	30	*	*	*	*	****	
51	Equatorial Guinea	28	*	*	*	*	**	
52	Liberia	18					**	
53	Somalia	17					**	

Note: A star is awarded for every 20 points gained.

On the statistical practice dimension (as measured with the indicators shown in Table 1), South Africa gets a 5-star rating (100%). At the other extreme, four countries (Central African Republic, Equatorial Guinea, Liberia and Somalia) do not get enough points to merit a single star for statistical practice, and Somalia (without a fully-functioning government) actually scores zero on this dimension.

On the data collection dimension (defined as in Table 1), Egypt gets a perfect score. At the other extreme, Angola, Liberia and Sudan do not gain any star rating, and Liberia and Sudan actually score zero on this dimension.

There are less extreme variations on the dimension covering indicator availability (defined as in Table 1). No country gets a 5-star or unstarred rating, and only Libya gets a 1-star. This lack of variation is partly due to the particular problem involved in collecting information for this dimension (see comment above at the end of Section 5), in that the international agencies often make their own estimations for those indicators that are missing at the national level or are considered unreliable.

Although it is important to see how individual countries perform on each indicator, it is also useful to make comparisons for a particular country across the three dimensions. This analysis may help to show that a country is strong in two of the dimensions while weak in the third, which may help the country to see what needs to be done to improve their statistical capacity. Again we make use of the star-rating system for simplicity; the detailed figures are in Annex 2.

Looking at the 3-star countries in Table 3, a few of the major highlights are worth noting. For instance, Zambia gets four stars for both data collection and indicator availability but only one star for statistical practice. Detailed examination of the Country Statistical Information Database on the World Bank website can help to reveal the reason for a particular score on any dimension. For instance, in Zambia's case, the base years for national accounts and consumer price data are more than 10 years old, there is no national reporting of external debt, indexes for industrial production and import and export prices are not available monthly, government finance accounts are not consolidated into one set of accounts, data on national immunization coverage is not consistent with WHO/UNICEF recommendations, and Zambia is not a member of the Special Data Dissemination Standard (SDDS). The only scores for Zambia on this dimension are in relation to the two remaining indicators: Zambia uses the latest edition of the Balance of Payments manual in compiling its Balance of Payments, and it has reported education data to UNESCO in at least three of the last four years.

Regarding the inclusion of the SDDS indicator in the statistical practice dimension, it should be remembered that this system of indicators has been devised to cover countries around the world that are at different stages of development, and in a few cases an indicator may not necessarily be fully relevant to a particular country. This indicator is a case in point.

The Special Data Dissemination Standard (SDDS) was established by the IMF for member countries that have or that might seek access to international capital markets, to guide them in providing their economic and financial data to the public. Although subscription is voluntary, the subscribing member needs to be committed to observing the standard and to provide information about its data and data dissemination practices (metadata). The metadata are posted on the IMF's Dissemination Standards Bulletin Board. The SDDS is expected to enhance the availability of timely and comprehensive data and improve the functioning of financial markets. In Africa, only Egypt, South Africa, Morocco and Tunisia are members of SDDS; it is also perhaps not surprising that they happen to be the top four countries in our STATS league.

In contrast, as many as 41 other countries in Africa are members of the IMF's General Data Dissemination Standard (GDDS). While the SDDS prescribes specific standards that must be observed by countries that subscribe to it, the GDDS is less prescriptive. It provides recommendations on good practice for the production and dissemination of statistics that are generally less demanding than the corresponding requirements of the SDDS. Instead, emphasis is placed on progress over time towards higher quality data that are disseminated more frequently and in a more timely fashion.¹²

Two other 3-star countries, Malawi and Mauritius, score well on statistical practice and indicator availability, but their overall score is handicapped by their low score on data collection. In the case of Mauritius, we can see from the World Bank web site that there has been no agricultural census in the last ten years, and that poverty and health surveys are done less frequently than every five years. On the plus side, Mauritius scores points for its population census, which was conducted less than ten years ago, and for having a complete birth and death vital registration system. Malawi, in turn, loses points because of the absence of an agricultural census in the last ten years and its incomplete vital registration system. It scores one point for doing poverty surveys, but loses one for not doing them as often as it should. It scores points because it has conducted a population census within the last ten years, and because the periodicity of its health surveys is at least once every three years.

Several of the 2-star countries are pulled down in their overall rating because of their poor scores on statistical practice. This is particularly the case for Ghana, Comoros, Swaziland and Guinea, but also for Sao Tome & Principe, Botswana, Sierra Leone, Gabon and Guinea-Bissau. All these countries get only one star for statistical practice.

Similarly, other 2-star countries are held back because of their poor scores on data collection. This is particularly the case with Chad and Zimbabwe, but also to some extent with Djibouti, Congo DR and Burundi, which get only one star for data collection.

In the case of the rating for indicator availability, one of the 2-star countries, Chad, does particularly well, getting four stars for indicator availability. Most other

¹² For further information, see <http://dsbb.imf.org/Applications/web/gdds/gddswhatgdds/>

countries get three stars, but Cape Verde, Seychelles, Congo Republic, Sao Tome & Principe, Sierra Leone and Congo DR, get only two.

Nigeria, the most populous country in Africa, is a very disappointing performer in the STATS league, securing only 32nd place out of 53 countries, and a 2-star ranking. It gets a respectable but not impressive three stars for indicator availability, but only just manages to achieve two stars for statistical practice and data collection.

Among the 1-star countries, the Central African Republic gets two stars for its data collection and indicator availability, but does not get any stars at all for statistical practice. Eritrea and Sudan score quite well for indicator availability, but appear to be weak on the other dimensions of statistical capacity. Angola gets two stars for both statistical practice and indicator availability, but does not rate any stars for data collection. The most surprising country in this group is Libya, which just manages to get two stars for statistical practice and data collection, but whose overall rating is pulled down by the fact that it gets only one star for indicator availability.

9. Changes Over Time

These indicators are only shown on the World Bank web site for three years (2004-2006) so no long-term trends can be discerned, but some initial impressions can be given, as indicated in the table in Annex 2. There has been very little change in the overall score for African countries. The overall score remained at 54 in 2004 and 2005, and rose slightly to 56 in 2006. Over the period, the score for statistical practice rose slightly, while the score for indicator availability remained virtually unchanged. The score for data collection fell slightly in 2005, but then more than recovered in 2006.¹³ Despite the relative stability of the overall figures in each of the three years, there have been some significant changes in the scores for individual countries. In looking at the league positions for the three years, it is best to concentrate on the positions in 2005 and 2006, since six countries (Cape Verde, Comoros, Djibouti, Equatorial Guinea, Sao Tome & Principe, and Seychelles) were not ranked in 2004. Some countries are showing signs of moving strongly forward. Particularly noteworthy was the improvement in the score of Cameroon, who moved up 25 places in the league in just one year. Madagascar and Mauritania also moved up several places. Other notable upward movers were Guinea-Bissau and Sierra Leone, though admittedly they were both starting out from a low base. In contrast, some countries seem to be slipping back; for instance, Zimbabwe and Botswana both dropped a long way down the league in 2006, Zimbabwe by 23 places and Botswana by 20 places.

10. Characteristics of 'Best-Practice' Countries

Countries develop in different ways, and have different cultural and historical conditions. In examining the experiences of different countries in Africa, one possibly

¹³ It appears that there may be a set of World Bank statistical capacity indicators going back as far as 1999, but the indicators for the earlier years are not displayed on the World Bank site.

productive approach would be to compare countries according to the main working language that they use. Some interesting differences might be revealed by grouping countries according to whether they use English, French, Portuguese or Arabic as their working language.

The analysis presented earlier does suggest certain key characteristics that 'best-practice' countries are likely to have. They are likely to have the necessary statistical legislation in place, to establish the authority and powers of the statistical agency. They are likely to have prepared a statistical master plan and/or a national strategy for statistical development, to provide the vision and direction for their future activities.

Another sign of a 'best practice' country should be that it has an up-to-date website, providing background information about the country's statistical system, and recent and planned activities. The website should provide the latest key indicators available for the country, there should be a facility for downloading key documents and reports, and the contact details of the person one can turn to for more information should be provided. The website should focus less on personalities and local events, and more on the range of indicators available for the country and the associated methodology. The website should be updated regularly, at least once a month.

'Best-practice' countries are likely to be following the well-established and most current international guidelines for the production of key statistics. In the case of statistical series (such as national accounts or the consumer price index), which use base years, the series should be kept up-to-date by rebasing the figures at regular intervals. Agreement should have been reached with international agencies, so that national and international estimates do not conflict.

In the area of data collection, countries should be conducting all their major censuses and surveys at regular intervals. Population and agricultural censuses should be conducted at least once every ten years, and the other main surveys (such as on poverty and health) at least every three years.

One specific area where almost all countries in Africa are failing badly is the very poor state of vital registration. Having a good vital registration system, with a clear record of births, marriages and deaths for its citizens, is extremely useful for any country. For instance, birth registration records help to establish the identity of all its citizens. Evidence of birth registration may be useful in gaining access to schooling or health services, for getting an identity card or passport, or for being registered to vote in an election.

Developing a complete system of vital registration is much easier in the island context, particularly in small islands, and four island groups in Africa (Cape Verde, Mauritius, Sao Tome and Principe, and Seychelles) appear to have complete systems of registration. In mainland Africa, it is much more difficult to ensure complete registration, because of the large size of some countries and their porous borders. Currently, only one country in mainland Africa (Egypt) is considered to have a complete vital registration system.

It is not sufficient to carry out censuses and surveys with the required periodicity. The statistical agency needs to have in place sufficient skilled resources and equipment to analyze the data, and to produce in a timely fashion the vast range of statistical indicators that are demanded. This requires a very good understanding of the underlying methodology for these indicators, and a keen awareness of the strengths and weaknesses of the statistical system, to ensure that only reliable estimates are produced.

In addition to analyzing the data coming from censuses and surveys, statisticians need to pay more attention to the potential use of data from the government's various administrative systems. Resources devoted to improving administrative systems might have a double spin-off, in helping to improve the quality of government administration itself, and in providing additional statistical information at low cost. Vital registration is a good example of an administrative system where there could be enormous benefits to all concerned if the systems could be improved.

11. Areas for Improvement

For any particular country, the first step is to examine Table 3 to find out its overall star rating in 2006, and its star rating on each of the three components of statistical capacity: statistical practice, data collection and indicator availability. The exact scores on each component over the three-year period 2004-2006 can be seen in Annex 2. Much more detailed information can be obtained by going to the World Bank website. There it is possible to see, for each component, those items where points were dropped because the country's statistical system did not meet the requirements shown in Table 1. A full summary of the World Bank SCB information for a particular country, showing the scores obtained on each item within each of the three components, can be downloaded from the website.¹⁴

The African STATS league presented in Tables 2 and 3 highlights the fact that Egypt and South Africa may be regarded as 'best practice' countries in Africa, with Uganda and several francophone countries in west and North Africa also showing up well. Other countries that do less well would benefit from studying the experience of these 'best practice' countries. One way of doing this would be through study visits to a 'best practice' country. Thus, statistical managers from arabic-speaking countries could usefully visit the Egyptian Central Agency for Public Mobilization and Statistics; those from anglophone countries could benefit from visits to Statistics South Africa; those from francophone countries in central and east Africa could visit one of the 3-star countries in west or north Africa; and those in lusophone countries could visit Mozambique, which had a 3-star rating.

Rather than attempt to present a new set of recommendations for improvement of statistical systems, it is more appropriate to highlight the main recommendations that

¹⁴ This is done by going to www.worldbank.org/data/countrydata/csid.html and selecting a particular country. Below the box marked '2006 Statistical Capacity Indicator', the user can choose to view either a summary description or a detailed description of the indicators.

have already been agreed at recent international gatherings. The most recent and most relevant recommendations are those contained in the Luanda Declaration, which was agreed in December 2006 by the African Union Commission, the ECA, and representatives of national statistical offices of African countries when they gathered in Luanda. The full text is shown in Annex 3. The gathering not only made its own recommendations, but also endorsed the main recommendations of the earlier ASSD meeting that had been held in Cape Town in January/February 2006.

It was resolved that meetings should be arranged on an annual basis, under the umbrella of the ASSD. (A second meeting of ASSD was held in Kigali in January 2007.) Countries should review their statistical legislation. The coordinating role of ECA should be strengthened through the creation of a Bureau of Statistics (based on the "Friends of ECA" concept that was already in place). And finally, the Principles and Recommendations for Population and Housing Censuses should be reviewed.

The Luanda Declaration also included an endorsement of the recommendations made at the earlier ASSD meeting. Several recommendations were endorsed. All countries should conduct a census in the 2010 round. Countries should institute a comprehensive capacity building programme, including a needs analysis; ensure universities and other training institutions provide appropriate statistical training to equip people to work as members of the government statistical service; and increase public awareness of the importance of statistics. Efforts should be made to build sustainable statistical systems in Africa. This could be achieved by conducting population censuses; by improving data coverage and quality for MDGs; by aligning national statistical systems with AU and NEPAD programmes, including gender; by lobbying; and by producing national strategies for the development of statistics.

The ASSD had also recommended that international and regional organizations should support census proposals, with ECA being the lead agency, and UNFPA being encouraged to provide technical and financial support. The UN Statistics Division (UNSD) was encouraged to extend its technical support to capacity building in Africa, through the establishment of an International Statistics Development Centre. ECA was urged to support south-south cooperation by convening symposia on census developments, and the AU and NEPAD were urged to build in a statistics component to their regional initiatives.

12. Conclusions

The main analysis presented in this paper is based on existing information, easily available on the Internet. No country surveys have been undertaken. To carry out a full study of 'best-practice' countries would require a much more detailed examination 'in situ' of the experience of individual countries. Given the present fluidity in statistical arrangements, with many countries under severe pressure to produce the data required for monitoring their progress towards meeting the MDGs and other targets, it has not been felt appropriate to impose an extra burden on individual countries at this time.

This study, however, provides valuable initial insights into the state of statistical development in Africa. The indicators provided on the World Bank website have helped to highlight the tremendous variation between countries in their statistical capacities. At one extreme are two countries that score far in excess of 80 points out of 100. At the other extreme are two countries that score less than 20. While some countries are well advanced down the path to statistical development, others are taking their first cautious steps. International agencies (including ACBF) that provide financial and technical support to countries would do well to take account of these disparities when targeting their assistance to countries.

To improve their statistical systems, countries should also aim to take full advantage of the technical cooperation opportunities that are available to them through regional and international initiatives, such as the programmes of ICP and GDDS. Both of these programmes have been tailored to the needs of African countries at different stages of statistical development.

The information provided in this paper presents a useful picture of the current state of statistics in Africa, but it would be unwise to attempt to base operational policies (such as the disbursement of grants to countries for statistical development) on this information alone. The information provided here can help to highlight particular countries that need to develop their statistical systems, but a more detailed in-depth assessment would need to be made within each individual country of interest. This assessment can be carried out most easily by using the detailed questionnaires already developed by the PARIS21 Task Team on Statistical Capacity Building.

The prospects for statistical development on the African continent are probably brighter now than they have ever been. What is required is bold leadership of statistical offices, careful and honest management of financial resources, improvements in statistical literacy amongst policy makers and the general public, and the establishment of a culture of good governance.

Annex 1 : Legal and strategic frameworks, and websites of African statistical offices

	Statistical law	Statistical master plan	NSDS status	Website (www.)
Algeria	No. 94-01, 15 Jan 1994	NSO Programme 2005-9	Initiated 2006	ons.dz
Angola	-	Plano da Actividade Estatística de Médio Prazo (1998-2001)	Initiated 2005	
Benin	Decree No.97-168, 7 Apr 1997	Prog. d'activités stat. 2003	Initiated 2004	insae.bj
Botswana	Stats 1967, Census 1904	CSO Strategic Plan 03/4-04/5	Initiated 2005	cso.gov.bw
Burkina Faso	No. 2003, MEDEV/SG/DG-INSD	Schéma Directeur de la Stat 2004-09	Completed by '04	insd.bf
Burundi		Statistics Action Plan 2004-07	Underway 2006	
Cameroon	Decree 2001/100 for INS, 93/407 & Law 91/023 for censuses & surveys	Pluri-Annual plans 2003-05		statistics-cameroon.org
Cape Verde	Lei 15/V/96 for system, 49/96 for INE	Plano da Actividade Estat. 1998-01	Initiated by 2004	ine.cv
Central African Rep.	Law 01.008 2001, Decree 01.273, 2001			stat-centrafrique.com
Chad	Presidential decree no. 116, 1978	Programme pluriannuel 2002-07	Completed by '04	inseed-tchad.org
Comoros		Minimum stats programme 2001-05	Initiated by 2004	
Congo, Dem. Rep			Initiated by 2004	
Congo, Rep.	Law 27/82, 7 July 1982. Decree 2003	Programme pluriannuel 2005-09	Completed 2005	censee.org
Côte d'Ivoire	Decree 96.975 of 1996	Schéma Directeur de la Stat 2001-05	Completed by '04	ins.ci
Djibouti		Schéma Directeur de la Stat 2006-10	Completed 2005	ministere-finances.dj
Egypt, Arab Rep.	Presidential decree 2915, 1964		Not yet started	capmas.gov.eg
Equatorial Guinea	Ley no. 3 of 2001	Stratégie de développement 2003-08	Completed by '04	dgecnstat-ge.org
Eritrea			Initiated 2006	
Ethiopia	Proclamation 303, 1972	Nat. Stat Prog. 2003-7, CSA Strategic Plan 2005-09	Underway 2006	csa.gov.et
Gabon	Decree 00718/PR/MPAT 1983		Initiated by 2004	stat-gabon.ga
Gambia, The	Statistics Act 1972	Master Plan for Stats System	Underway 2005	csd.gm
Ghana	Statistical Service Law 1985	GSS Short term action plan	Underway 2006	
Guinea	Decree no. 03/10211/MP/CAB, 2003		Underway 2005	stat-guinee.org
Guinea-Bissau	Decreto-lei no. 2, 1991		Initiated 2005	stat-guinebissau.com
Kenya		Strategic plan for NSS 2003-07	Completed by '04	cbs.go.ke
Lesotho	Bureau of Statistics Act, 2001		Initiated 2005	bos.gov.ls
Liberia	Act of 2004		Initiated 2006	
Libya			Initiated 2006	
Madagascar	Law no. 98-031, 1999	Plan dir. du système d'info stat 03-7	Underway 2006	instat.mg
Malawi	Statistics Act 1967	Strategic plan 2002-06	Underway 2005	nso.malawi.net
Mali		Schéma Directeur de la Stat 2001-05	Completed 2005	dnsi.gov.ml
Mauritania	Décret 90.026, 1990	Les plans d'action 2000-05	Underway 2006	ons.mr
Mauritius	Statistics Act 2000	Strategic Plan, 2006-08	Draft NSDS 2007	gov.mu/portal/site/cso
Morocco	Royal decree 370-67 & 371-67, 1968	Plan d'action à long terme 2002-12	Completed by '04	statistic-hcp.ma
Mozambique	Presidential decree 9/96, 1996	Plano estratégico do Sistema Estat. Nat. 2003-07	Completed by '04	ine.gov.mz
Namibia	Statistics Act 1976	Third National Statistical Plan	Completed by '05	npc.gov.na/cbs
Niger	Law 011, Decrees 264, 265 of 2004		Underway 2006	stat-niger.org
Nigeria		Statistical Master Plan 2004-08	Completed by '04	
Rwanda		Plan Stratégique de Développement 02-07	Completed by '04	statistics.gov.rw
Sao Tome & Principe	Law No. 5, 1998	Projecto de Plano Estratégico 04-07	Underway 2006	ine.st
Senegal	Law No. 59 of 1966, and later decrees		Initiated 2005	ansd.org
Seychelles	National Statistics Bureau Act 2005		Not yet started	nsb.gov.sc
Sierra Leone	Statistics and Census Act 2002		Underway 2005	
Somalia			Not yet started	
South Africa	Statistics Act, no. 6, 1999	Strategic Plan 2003-05	Completed by '04	statssa.gov.za
Sudan	Statistics Act, 2003	Strategic Plan (2002)	Not yet started	cbs.gov.sd
Swaziland	1967 Statistics Act	Strategic Plan 2004-07	Completed 2005	
Tanzania	2002 Statistics Act	Poverty Monitoring Master Plan 01-4	Underway 2005	nbs.go.tz
Togo			Initiated by 2004	
Tunisia	Law no. 32 of 1999, and decrees	Prog. national de la stat. 2002-06	Underway 2006	ins.nat.tn
Uganda	Uganda Bureau of Statistics Act, 1998	Corporate Plan 2002-07	Underway 2005	ubos.org
Zambia	Census and Statistics Act, 1964	Strategic Plan 2003-07	Underway 2005	zamstats.gov.zm
Zimbabwe	Census & Stats Act 1971, amended '89	Strategic Plan 1998-03	Underway 2005	

Sources : World Bank site for stats law, SMP, and NSDS ; ECA and UNSD sites for website addresses. With some additions.

Annex 2: Indicators of Statistical Capacity for All Countries in Africa, 2004-2006

Abbreviations: SP Statistical Practice, DC Data Collection, IA Indicator Availability												
	2004				2005				2006			
	Overall	SP	DC	IA	Overall	SP	DC	IA	Overall	SP	DC	IA
Algeria	52	30	50	75	58	50	50	75	60	50	50	80
Angola	33	30	10	60	37	40	10	60	35	40	10	55
Benin	53	40	50	70	57	40	50	80	63	40	70	80
Botswana	65	50	70	75	58	50	50	75	47	30	40	70
Burkina Faso	67	40	80	80	67	50	60	90	72	50	80	85
Burundi	42	40	30	55	40	40	20	60	40	40	20	60
Cameroon	48	40	30	75	48	40	30	75	72	60	70	85
Cape Verde	-	-	-	-	53	40	60	60	52	40	60	55
Central African Rep.	40	0	60	60	38	10	50	55	38	10	50	55
Chad	57	50	50	70	55	60	30	75	58	60	30	85
Comoros	-	-	-	-	50	20	60	70	57	30	70	70
Congo, Dem. Rep	38	50	10	55	38	50	10	55	43	50	30	50
Congo, Rep.	40	40	30	50	40	40	30	50	50	50	50	50
Côte d'Ivoire	75	70	80	75	75	70	80	75	70	60	80	70
Djibouti	-	-	-	-	45	40	30	65	45	40	30	65
Egypt, Arab Rep.	80	50	100	90	88	70	100	95	90	80	100	90
Equatorial Guinea	-	-	-	-	30	10	20	60	28	10	20	55
Eritrea	38	20	20	75	38	20	20	75	38	20	20	75
Ethiopia	63	40	80	70	63	40	80	70	60	50	60	70
Gabon	43	30	40	60	43	30	40	60	43	20	50	60
Gambia, The	60	40	70	70	53	30	60	70	53	40	60	60
Ghana	55	30	60	75	57	30	60	80	58	30	70	75
Guinea	57	40	70	60	55	30	70	65	55	30	70	65
Guinea-Bissau	28	10	20	55	30	10	20	60	43	30	40	60
Kenya	65	60	60	75	53	40	50	70	62	40	70	75
Lesotho	70	50	70	90	67	50	70	80	62	50	60	75
Liberia	17	10	0	40	17	10	0	40	18	10	0	45
Libya	25	40	0	35	38	40	40	35	37	40	40	30
Madagascar	62	40	60	85	53	40	40	80	63	50	60	80
Malawi	67	60	60	80	60	60	40	80	63	60	50	80
Mali	53	30	60	70	55	30	60	75	63	40	80	70
Mauritania	55	20	60	85	55	20	60	85	68	40	80	85
Mauritius	63	80	40	70	63	80	40	70	63	80	40	70
Morocco	67	70	70	60	70	70	70	70	77	80	70	80
Mozambique	63	40	70	80	68	50	70	85	68	50	70	85
Namibia	53	40	50	70	52	40	50	65	50	40	50	60
Niger	58	40	60	75	60	40	60	80	70	50	80	80
Nigeria	40	20	40	60	52	40	40	75	52	40	40	75
Rwanda	53	40	50	70	53	40	50	70	60	50	60	70
Sao Tome & Principe	-	-	-	-	42	30	40	55	48	30	60	55
Senegal	75	60	80	85	75	60	80	85	75	60	80	85
Seychelles	-	-	-	-	53	50	60	50	52	50	60	45
Sierra Leone	27	20	20	40	37	20	40	50	47	30	60	50
Somalia	13	0	10	30	17	0	10	40	17	0	10	40
South Africa	87	90	80	90	85	90	80	85	87	100	80	80
Sudan	35	20	20	65	25	20	0	55	30	30	0	60
Swaziland	58	30	70	75	60	30	70	80	57	30	70	70
Tanzania	65	50	70	75	65	50	70	75	62	50	60	75
Togo	48	40	40	65	48	30	40	75	52	40	40	75
Tunisia	72	60	70	85	77	70	70	90	75	70	70	85
Uganda	60	40	60	80	67	60	60	80	73	60	80	80
Zambia	70	50	60	100	65	40	60	95	65	20	80	95
Zimbabwe	68	70	50	85	68	70	50	85	53	60	30	70
Overall	54	41	51	70	54	42	49	71	56	45	54	70

Source of data: World Bank web site - www.worldbank.org - (Country Statistical Information Database)

Annex 3: Luanda Declaration, 7 December 2006

We, the African Union Commission, the United Nations Economic Commission for Africa, as well as representatives of National Statistical Offices of African countries under the auspices of the UNECA, gathered here in Luanda, Angola, on this 7th day of December 2006

considering the limitations of the institutional capacity of National Statistical Systems across Africa;

aware of the urgent need to address issues of poverty and other challenges around the world, and the opportunity provided by the Millennium Development Goals (MDGs), to create a rallying challenge for global partnership as the cornerstone for an international and regional development policy;

considering the initiatives adopted by the United Nations, namely the Principles and Recommendations for Population and Housing Censuses;

considering that Statistics constitutes a fundamental instrument for the monitoring of socio-economic development in African countries;

aware of the fact that focused initiatives have been put in place towards the development of Statistics in Africa;

conscious of the fact that countries which have emerged from conflict need support to strengthen their institutional capacity in the area of Statistics and to be better positioned to inform on their national priorities;

determined to actively support African countries, particularly those in post-conflict situation, in conducting a Population and Housing Census in the 2010 Round of Population and Housing Censuses, within the context of the resolutions of the Cape Town 2006 Africa Symposium on Statistical Development (ASSD):

Do hereby declare and commit ourselves to adopting the following Resolutions:

Resolution 1

Convene annually with the African Statistical Community, using the ASSD fora, to confer on the most important issues that affect Statistics and the Political and Socio-Economic situation of the Continent, in the context of NEPAD and the mandate of the African Union.

Resolution 2

Institutional strengthening in Africa is encouraged, as well as the need to proceed with appropriate institutional arrangements and with assuring that, in each country, the legislation on the issue be reviewed, taking into account the Fundamental Principles of Official Statistics adopted by the United Nations Statistical Commission; and, whenever necessary, the regional African agencies should develop Protocols to guide on the implementation of institutional reforms.

Resolution 3

The coordinating role of UNECA needs to be strengthened and, in this context, it has been decided that the Bureau of Statistics (Friends of ECA) shall be created, and its own capacity shall be promoted to ensure especially the success of the 2010 Round of Population and Housing Censuses.

Resolution 4

The Principles and Recommendations for Population and Housing Censuses shall be reviewed and the following instruments shall be adopted: a) Standards and structure; b) Census planning and management; c) Census promotion.

Resolution 5

The African countries present at the Luanda meeting have accepted the invitation made by the Republic of Rwanda to host the Symposium on Statistical Development in January 2007.

Resolution 6 (see next page)

Resolution 6

Furthermore, we reaffirm the following resolutions adopted at the Cape Town 2006 Africa Symposium on Statistical Development (ASSD), namely:

a. "All African countries represented at the Symposium agreed that all African States should conduct a census in the 2010 Round of Population and Housing Censuses in line with the resolution adopted by the Economic and Social Council of the United Nations on 22 July 2005.

b. The symposium recommended that a comprehensive capacity building program be initiated. Such a program should focus on the following areas:

i. The capacity of the national statistical agencies in addressing the broad needs of the organisation for survey and statistical skills, project management skills and general management skills. A detailed needs analysis should be done within each agency to guide our regional and continental efforts to develop capacity of the agency;

ii. The need to engage with universities to ensure that appropriate undergraduate and post-graduate programmes are developed to prepare students that can be absorbed by the statistical agencies; and

iii. The need for national statistical agencies to take steps to increase the broad public awareness of its role in society and cultivate a culture of learning in mathematics and statistics amongst Africa's youth and the African population in general.

c. Sustainable statistical systems will be developed in Africa by:

i. Reversing the decline of African statistical systems partly through census taking;

ii. Improving data coverage and quality for MDGs;

iii. Aligning national statistical systems with the African Union and NEPAD programmes (after the example of the European Union);

iv. Deliberately including gender in national statistical systems;

v. Lobbying governments to invest in reforming their national statistics systems by political support, undertaking legal reforms, institutional reforms, and adequately funding the development of their National Statistical Systems; and

vi. Developing National Statistical Development Plans.

d. The symposium acknowledged the range of technical and financial support of the United Nations system funds and programmes, other international agencies, and development partners and exhorts these organizations to extend their support to ensure the success of the 2010 round of Population and Housing Censuses. However, the Symposium specifically:

i. Urges the Economic Commission for Africa to provide critical leadership for the implementation of the 2010 round of Population and Housing Censuses in Africa;

ii. Urges United Nations Population Fund (UNFPA) to provide technical and financial support in census planning and implementation to countries in the promotion of advocacy and resource mobilization for the 2010 round of censuses;

iii. Encourages the United Nations Statistics Division to extend its technical support to capacity building in Africa through the establishment of an International Statistics Development Centre;

iv. Urges the Economic Commission for Africa to support the south-south cooperation and continue the convening of Symposia on the progress of countries in the implementation of the 2010 Round of Population and Housing Censuses; and

v. Urges the African Union to include statistics as one of its programme areas and ensure that other regional initiatives, such as NEPAD, have a statistics component."

Witnessing what has been stated, we, the African Union Commission, the United Nations Economic Commission for Africa, as well as the present representatives of the National Statistical Offices, duly authorized, unanimously adopt the present Declaration.