REFORMING NATIONAL STATISTICAL SYSTEMS IN AFRICA

A Case for Making the National Statistics Offices Autonomous

Statistics Working Paper Series
Reforming National Statistical Systems in Africa

A case for making the National Statistics Offices Autonomous

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The views expressed in this booklet are personal to the author and do not necessarily represent the views of the UN Economic Commission for Africa or its subsidiary organs.
In Africa, there has been a substantial increase in demand for official statistics and development indicators as a result of countries signing up to managing for results (or results agenda). This has put massive pressure on National Statistical Systems to deliver better official statistics in terms of relevance, scope, quantity and quality, consistency through time and space as well as timeliness and level of data disaggregation. Various assessments of statistical capacity in Africa show that past inadequate attention to statistics, the low profile for statistics and under-investment in statistical capacity development by national governments have rendered the said systems weak, under-resourced and vulnerable. By and large, statistics has not been mainstreamed as a sector to be targeted for development in national development policy frameworks such as the Poverty Reduction Strategies. And by data producers not getting statistics right and relevant especially for policy and decision-making, they have risked lowering expectation on statistical systems. The same assessments also show that development partners have provided considerable technical and financial assistance to support various statistical activities in Africa. Much of this assistance, however, has not only been uncoordinated at country level but also focused more on meeting short-term data needs and less on building sustainable capacity. For all these reasons, statistical systems in Africa have by and large been under-performing and unable to meet the ever-increasing demand for statistics to support national and international development.

There is now greater recognition among stakeholders in Africa’s development of the need to strengthen National Statistical Systems so that they can better support national, regional and international development agenda and processes to achieve desirable development outcomes/results. Some progress has been made in a good number of countries thanks to various initiatives such as the Marrakech Action Plan for Statistics (MAPS), General Data Dissemination System (GDDS), Partnerships in Statistics for Development in the 21st Century (PARIS21), the Reference Regional Strategic Framework for Statistical Capacity Building in Africa (RRSF), National Strategies for the Development of Statistics (NSDS) and AFRISTAT. However, this progress has been uneven and moreover limited, and many National Statistical Systems and mechanisms for measuring development results remain weak.

There is a need to mainstream statistics into national development agenda and processes, reform the National Statistical System as part of the wider public service reforms and scale up investment in statistical capacity and
infrastructure development. Strengthening of National Statistics Offices should be seen as the entry point in further improving the National Statistical Systems and as part of desirable statistical reforms. It is shown that lack of autonomy can potentially inhibit production of good statistics and in reality this has happened in many countries. A case is, therefore, made for transforming the National Statistics Offices into autonomous government agencies with corporate status as part of the said reforms. However, the concept of autonomy of a National Statistics Office is usually not well understood by policy and decision-makers, and by statisticians themselves. This booklet helps to gain clarity of what autonomy means before making the case for its adoption.

The booklet has been prepared at the request of a number of policy and decision-makers in Africa with whom the author has discussed the issue of reforming their statistical systems with a focus on making their National Statistics Offices autonomous. The need for the booklet was further underscored by participants to the 4th meeting of the “Friends of ECA” held in Pretoria, South Africa in June 2008.

There are two parts to the booklet. The first part highlights the role of official statistics in results-based management – this is something which is not discussed enough as there appear to be two worlds separated by a void. This void is getting the statistics analyzed and effectively used in the countries in support of development processes. The second part is about statistical reforms needed to enhance statistical capacity and development in Africa. This subject has also not been adequately discussed or written about. So as part of the desired statistical reforms, the booklet covers issues of leadership and statistical legislations and their application. An example of successful statistical reforms in Africa is given together with observed success factors. The booklet, however, cautions that while autonomy is necessary, it is not sufficient to deliver an effective statistical system – it is not a silver bullet; it needs to be coupled with other success factors some of which are identified in this booklet.

I am grateful to Prof. Denise Lievesley, the President of the International Statistical Institute (ISI), Professor of Social Statistics and Head of the School of Social Science and Public Policy at King’s College, London and formerly a Special Advisor at the African Centre for Statistics; Dr. Jeremiah Banda,

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1 The “Friends of ECA” was established in 2006 to play an advisory role to the UN Economic Commission for Africa (ECA) and to guide ECA in its quest to fulfill its coordination and leadership roles in statistical development in the region. Membership of the “Friends of ECA” includes 9 countries, namely: Egypt, Ghana, Kenya, Mozambique, Rwanda, Senegal, South Africa and Uganda.
formerly Head of the Demographic and Social Statistics Branch of the UN Statistics Division, N.Y.; Mr. Michel Mouyelo-Katoula, formerly the Manager of the Statistical Capacity Building Division at the African Development Bank and now the Global International Comparison Programme (ICP) based at the World Bank; Mr. Graham Eele, a Senior Statistician with the World Bank; and Mrs. Mary Strode, formerly a Senior Adviser at PARIS21 and now a Principal Consultant at Oxford Policy Management Limited (OPM), for their useful comments on the draft. Mr. Negussie Gorfe, a Statistician at the African Centre for Statistics carefully edited the manuscript and I am grateful to him for that. I would like to thank Mr. Michel Mouyelo-Katoula and PARIS21 for assistance in translating the booklet into French. Finally, I am grateful to all the above mentioned and other professional colleagues across the world with whom I have had and continue to have intellectual engagement and discourse on statistical development and results measurement issues in Africa.

I commend this booklet to all those interested and engaged in statistical reforms, statistical development and development results measurement in Africa.

Ben Kiregyera
Addis Ababa, February 2009
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<tr>
<td>AFRISTAT</td>
<td>Observatoire Economique et Statistique d’Afrique Subsaharienne</td>
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<td>CEO</td>
<td>Chief Executive Officer</td>
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<td>DQAF</td>
<td>Data Quality Assessment Framework</td>
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<td>ECA</td>
<td>Economic Commission for Africa</td>
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<td>GDDS</td>
<td>General Data Dissemination System</td>
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<td>ICT</td>
<td>Information and Communication Technology</td>
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<td>ISI</td>
<td>International Statistical Institute</td>
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<td>MAPS</td>
<td>Marrakech Action Plan for Statistics</td>
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<td>MDGs</td>
<td>Millennium Development Goals</td>
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<td>MfDR</td>
<td>Managing for Development Results</td>
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<td>NSDS</td>
<td>National Strategy for the Development of Statistics</td>
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<td>NSO</td>
<td>National Statistics Office</td>
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<td>NSS</td>
<td>National Statistics System</td>
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<td>ONS</td>
<td>Office of National Statistics of U.K</td>
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<td>OPM</td>
<td>Oxford Policy Management</td>
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<td>PARIS21</td>
<td>Partnerships in Statistics for Development in the 21st Century</td>
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<td>PNSD</td>
<td>Plan for National Statistical Development</td>
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<td>PRS</td>
<td>Poverty Reduction Strategy</td>
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<td>PRSP</td>
<td>Poverty Reduction Strategy Paper</td>
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<td>RSS</td>
<td>Royal Statistical Society</td>
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<td>SESTC</td>
<td>Socio-Economic Statistics Technical Committee</td>
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<tr>
<td>SASDQAF</td>
<td>South African Statistics Data Quality Assessment Framework</td>
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<td>UBOS</td>
<td>Uganda Bureau of Statistics</td>
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<td>UN</td>
<td>United Nations</td>
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“Good statistics are absolutely vital to sensible, sound economic management, to good social policy and are as necessary to the nation as sound money and clean water”, Sir Michael Scholar, the new Chair of the new U.K. Statistics Board

1.1 Managing for results and the role of statistics

1.1.1 Managing for results

Most developing countries, including those in Africa, have made a commitment to the results agenda or managing for development results (MfDR) which aims to achieve sustained improvement in the well-being of people in developing countries: more children educated, fewer infants dying, more families lifted out of poverty. Managing for results incorporates strategies for both Poverty Reduction Strategies (PRSs), and for targeting the Millennium Development Goals (MDGs) as well as other national development plans and programmes which aim to make an impact on the development performance in developing countries. As we will show in the sequel, most, but not all of these results rely on official statistics; some rely on ad hoc information.

The concept of MfDR draws on the theories of development change and change management. At its core are notions of:

- Goal-orientation: setting clear goals and results provides targets for change, and opportunities to assess whether change has occurred,
- Causality (or results chain): various inputs and activities leading logically to outputs, outcomes and impact, and
- Continuous improvement: periodically measuring results provides the basis for adjustment (tactical and strategic shift) to keep programmes on track and maximizing their impact.

Various roundtables have been held to grapple with concepts, approaches and practical issues in getting development results. These include the First Roundtable on Measuring, Monitoring and Managing for Results held in

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2 www.MfDR.org - Managing for Development Results
Washington, USA (2002), the Second International Roundtable on Managing for Development Results held in Marrakech, Morocco (2004), the Paris High-level Forum on Aid Effectiveness held in Paris, France (2005) and the Third Roundtable on Managing for Development Results held in Hanoi, Vietnam (2007). At the Second Roundtable on Managing for Results, the international community agreed on five principles on MfDR, namely:

- Focusing the dialogue on results at all phases of the development process,
- Aligning programming, monitoring and evaluation with results,
- Keeping measurement and reporting simple,
- Managing for, not by, results,
- Using results information for learning and decision-making.

MfDR requires better, clear, unambiguous, systematic and rigorous measurement, monitoring and reporting on progress towards national and international development goals. It requires more relevant definition and measurement of development outcomes and impacts, rather than focusing entirely on inputs, and openly accounting for results. Measurement of and reporting on progress are, therefore, defining characteristics of managing for results. Statistics play a crucial role in this process – in issue identification and definition, identifying options and making choices of actions, forecasting the future (upstream roles of statistics); and in establishing baselines and identifying upfront performance targets and indicators, monitoring progress during implementation and assessing policy/programme impact and outcomes on completion of programme implementation (downstream roles of statistics) (Chris Scott, 2005).

1.1.2 Role of statistics

Varied, timely and reliable statistics are key to the process of MfDR. The Roundtables on Managing for Development results including the one held in Marrakech, Morocco (February, 2004) and Hanoi, Vietnam (February, 2007) as well as a follow-up meeting in Washington, USA in April 2007, agreed that reliable and timely statistics are essential for improving development results and aid effectiveness. In a recent interview, Sir Michael Scholar, the new Chair of the new U.K. Statistics Authority said, “Good statistics are absolutely vital to sensible, sound economic management, to good social policy and are as necessary to the nation as sound money and clean water” (RSS, 2007).

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4 The Second Roundtable on Managing for Results held in Marrakech, Morocco in 2004 agreed an action plan for improving national and international statistics commonly called Marrakech Action Plan for Statistics (MAPS).
The increasing demand for more and better statistics has brought to the fore the importance of statistics as a strategic resource for national and international development. Thanks to managing for results, statistics are now recognized internationally as part of the enabling environment for national development. They constitute an essential element in improving the ability of government to develop appropriate policies, manage the economic and social development processes, monitor improvements in the living standards of the people and report back this progress to the public. In addition, statistics are needed by organizations other than governments (both national and local governments). Various data users and uses are summarized in text box 1.

**Box 1: Various users and uses of data**

**The wider public** – to make individual decisions and assess the performance of government, and for a variety of other purposes including public debate.

**Government ministries and institutions, and local authorities** for policy development, decision-making, planning, administration, monitoring, governance and accountability

**Civil society organizations** *(e.g. non-governmental organizations)* which use population and other statistics to plan, implement, monitor and evaluate their activities. They also use statistics for policy advocacy, lobbying, holding governments to account and for reporting back to their headquarters or funders

**Economic agents** *(industrialists, farmers, service industries, etc)* to assess business opportunities, risks and prospects; planning, decision-making, monitoring, evaluation; reporting on business activities

**Research and training organizations** *(e.g. universities)* to undertake research, conduct socio-economic-demographic analyses and for teaching purposes

**The media** to inform, analyze and report on various development issues and events, and to call organizations and governments to account

**Sub-regional organizations** *(ECOWAS, SADC, EAC, etc)*\(^1\) to foster regional integration

**International organizations and agencies** to assess requirements for assistance and/or participation in development initiatives and to evaluate the effectiveness of the assistance, and to provide a global picture of development

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\(^1\) ECOWAS - Economic Community of West African States  
SADC – Southern Africa Development Community  
EAC – East African Community

Official statistics (bearing in mind the Paris Declaration Principles which give countries precedence over donors) have a very important governance function which is to support accountability to the public; this is first and
foremost an issue for citizens supported by civil society. That is why the wider public comes on top of the list.

Data producers are, therefore, simultaneously accountable to a multiplicity of user communities. It is crucial that data producers understand well the current and anticipated data needs of each of these user communities. For the above reasons, there is an increasing emphasis by countries and development partners on the role of reliable statistics to conduct policy analysis, select and implement policies, measure progress and report on development results at various levels – local, national and international.

It is important to point out at this stage the basic dilemma of official statistics, which is that data users are almost always unable to know anything about the quality of a published statistical series just by looking at the numbers.

1.2 What is official statistics?

National statistical legislations usually (but not always) define official statistics as statistics produced/compiled by government ministries, departments and agencies e.g. National Statistics Office (NSO), Immigration Department, Police Department, Ministry of Education, Ministry of Health, etc. Lately, the drafting of statistical legislations in Africa and the U.K has taken on board the need to redefine official statistics by providing for the Head of the NSO to designate as official statistics any statistics or class of statistics produced from statistical collections by the NSO and other organs of state in accordance with specified criteria. For instance, the South African Statistics Act, Act No. 6 of 1999 defines official statistics to mean statistics designated as official statistics by the Statistician-General in terms of section 14(7) of the Act, which reads in part as follows:

(7) (a) The Statistician-General may designate as official statistics any statistics or class of statistics produced from statistical collections by—

(i) Statistics South Africa; or
(ii) Other organs of state, after consultation with the head of the organ of state concerned.

(b) Such designation must be in accordance with—

(i) the purpose of official statistics and the statistical principles contemplated in section 3; and
(ii) such other statistical criteria as the Statistician-General may determine by notice in the Gazette.
The criteria include, *inter alia*, sustainability – that is data produced in the form or repeating time series – and not ad hoc data; having a use beyond the producing department; and in the public domain as official. This starts to clarify the differences official statistics and data which may be trash and may be collected for internal administrative purposes.

For purposes of enhancing her own statistical collections and certification of data collected by other state organs as is required by the Statistics Act, Statistics South Africa has produced a South African Statistical Quality Assessment Framework (SASQAF) which builds on the IMF’s Data Quality Assessment Framework (DQAF). The SASQAF includes a protocol specifying the requirements that must be met, and the procedures to be followed, before statistics can be certified as official statistics\(^5\). It is important to emphasize the crucial need to prepare such a protocol in a consultative manner and to get members of the NSS buy-in. It is also crucial that certification is appreciated by both data producers and users and does not degenerate into yet another bureaucratic exercise of power.

The essence of official statistics is often not well understood. The Royal Statistical Society (RRS) News (2006) best captures it thus:

“…..selection, compilation, presentation and release of statistics should reflect the *public interest* and *deliver trustworthy statistics* that allow us to assess the *state of the nation* and judge the performance of *government*”.

This is consistent with the importance and use of data by different stakeholders listed above.

At national level, official statistics can be characterized by the following\(^6\):
- are produced and disseminated in compliance with the UN Fundamental Principles of Official Statistics,
- conceptually, they are produced in cognizance of internationally adopted standards of official statistics,
- quality in terms of accuracy, timeliness, etc. is ensured through applying professionally sound methodologies of data collection and


\(^6\) What role for official statistics: providers of statistical services, or more? By Heinrich Brungger, presented at the Conference on Climate Change and Official Statistics, Oslo, Norway, April 2008.
processing, as well as through a regular quality assurance process\textsuperscript{7}, and

\begin{itemize}
  \item elements of modeling are allowed, but all assumptions have to be verified periodically for compliance with good statistical practice and transparency, and adjusted.
\end{itemize}

To this list may be added dissemination of information on the methods and procedures used to compile official statistics.

The \textbf{UN Fundamental Principles of Official Statistics} adopted by the UN Statistical Commission\textsuperscript{8} in 1994, which are presented in the Annex, give a set of fundamental values and principles, which NSOs and indeed other data producers should have/observe in order for the public to have trust in official statistics they produce. Prof. Denise Lievesley, the President of the International Statistical Institute (ISI) has had this to say about public confidence in statistics, \textit{“Public confidence in the objectivity and independence of a national statistical system is vital for a healthy democracy. Statistical information must be seen to come from an authoritative independent source otherwise its value in the public debate, and confidence in the debate itself, will be eroded”}\textsuperscript{9}. The fundamental principles cover independence, relevance, credibility and respondent relations (see text box 2)

In addition to the above principles, the International Statistical Institute (ISI) has issued professional ethics, which provide fairly detailed guidance to professional statisticians on how to handle ethical issues.

\textsuperscript{7} Critical to the concept of quality of official statistics is \textit{“fitness for purpose”} as judged by data users and the need for transparency of methodologies used.

\textsuperscript{8} The UN Statistical Commission is a functional commission of UN Economic and Social Council. It is the global apex inter-governmental organ on statistical and statistical development. This commission is unique because of its high level professional representation – it is attended by Chief Statisticians of UN member countries and international organizations.

\textsuperscript{9} Denise Lievesley, The importance of policies and decisions enlightened by information, outline for a public lecture, Addis Ababa, Ethiopia, 2008.
1.3 Challenges of data demand and supply

Because of the new focus on managing for development results and various statistical initiatives such as the Marrakech Action Plan for Statistics (MAPS), General Data Dissemination System (GDDS), Partnerships in Statistics for Development in the 21st Century (PARIS21), the Reference Regional Strategic Framework for Statistical Capacity Building in Africa (RRSF), National Strategies for the Development of Statistics (NSDS) and AFRISTAT (see text box 3), the statistical environment in Africa is changing. Indeed, various assessments undertaken in recent past show that there has been progress in the development of statistical capacity in some African countries. However, the assessments also show that in spite of the said progress, serious deficiencies and challenges remain in effective demand for and supply of statistics. Basically, statistical development in Africa is faced with a twin challenge – the challenge of low effective demand for data and the challenge of inadequate supply of data as can be seen below.

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Box 2: Coverage of the UN Fundamental Principles of Official Statistics

- Independence of the National Statistical Office in order to protect the credibility and integrity of official statistics
- Relevance, which refers to the appropriateness or comprehensiveness of statistical products
- Credibility, which refers to professionalism, transparency and ethical standards that help to create a brand name, and define independence and separation from political influence
- Respondent relations, which cover suppliers, including private sector, and users of statistics, and involve advocating for statistics among policy-makers and profiling statistical products to the public.
### Box 3: Some recent initiatives in statistics

**Marrakech Action Plan for Statistics (MAPS)**

MAPS was adopted at the Second Roundtable on Managing for Development Results held in Marrakech, Morocco in 2004. Adopted actions include: mainstream strategic planning of statistical systems and help all low-income countries prepare national statistical development strategies by 2006, strengthen preparation for 2010 census, increase financial support for statistical capacity building, set up an international household survey network, undertake urgent improvements needed for MDG monitoring for 2005 and increase accountability of the international statistical system.

**General Data Dissemination System (GDDS)**

The IMF launched GDDS in 1999 to help countries, which generally do not have access to international capital markets adopt a holistic approach to developing national statistical systems. Participation is voluntary but participants are expected to adhere to the dissemination of metadata, including plans for improvement for specific economic, financial and socio-demographic data categories to meet coverage, periodicity and timeliness (Kibuka, 2007).

**Partnerships in Statistics for Development in the 21st Century (PARIS21)**

PARIS21 (Partnerships in Statistics for Development in the 21st Century) is a Paris-based global partnership comprising policy makers and statisticians from donor and developing countries, international organizations, professional bodies and academic institutions. It seeks to promote partnerships and collaboration between the donor and developing countries with the overall objective of promoting better use of statistics for improving policy and decision-making, reducing poverty and achieving MDGs.

**The Reference Regional Strategic Framework for Statistical Capacity Building in Africa (RRSF)**

RRSF was designed as a regional variant of the MAPS and it aims to contribute to improved development outcomes and good governance in Africa by guiding and accelerating sustainable statistical capacity building activities. It is built around three themes: meeting user needs, improving the management of statistical systems and ensuring the sustainability and irreversibility of statistical development. Its goal is to raise societal awareness about the role of statistical information, increase user satisfaction by enhancing the quality and usability of statistical information, promote greater use of statistical information, and achieve synergy, cost-effectiveness, and sustainability in statistical information systems.
1.3.1 Demand for data

Although the importance of statistics to good policy development and monitoring is now widely recognized in Africa, this has not necessarily translated into concrete actions for building sustainable statistical capacity to meet the multitude of current and emerging data requirements. National demand as opposed to international demand for data has generally been weak. This has been a constraining factor for statistical development. It is also known that demand for data, which is essential for sustainability of statistical production, has been undermined by, inter alia, lack of public knowledge and awareness of statistics, of its ubiquity and its importance to society - this is one area of potential support which has been neglected – despite the results agenda – in many countries, little or no effort is being
made to support the use of official statistics (OPM, 2008); the inadequate involvement of statisticians in policy dialogue; insufficient data analysis; poor dissemination and difficulty in data access; and the inadequate quality of some data series (due to limitations in scope, doubtful reliability, inconsistency, outdatedness, etc). Therefore, there is sometimes no motivation, on the part of potential users, for an assertive demand for data. It is also often the case that potential users of data are not sufficiently skilled or empowered neither to appreciate the importance of data nor to be able to use data in their work. As a result, policy-making in some countries has remained ad hoc, it can be purely subjective or ideological and the monitoring of policy outcomes is often non-existent in some countries (Tara Bedi et al, 2006). This situation should be redressed by, *inter alia*, getting statistics ready in time for policy cycles, strengthening policy research institutes and improving data analysis and dissemination, and empowering data users in countries.

Increasing demand for statistics to support the new focus on managing for results is the most important factor and a necessary condition for achieving statistical development and for statistics to thrive. It is, therefore, crucial that the opportunities and political momentum presented by managing for results are taken full advantage of to reform and further develop capacity in countries to produce and manage better statistics.

It is important to underscore the fact that not any statistics will do; users will be best served if we give them “good” statistics. But what are “good” statistics? Statistics are good when they are *“fit for purpose”* as judged by data users i.e. have quality as defined by different dimensions (including relevance, consistency in time and space, accuracy, timeliness) and integrity, are accessible and are produced efficiently. Crucially, they are also good to the extent that they are available to a broad range of public and private users, are trusted to be objective and reliable, and have a breadth and depth of coverage to meet policy needs and inform the public..

### 1.3.2 Data supply

In some African countries, demand for data has very much outstripped data supply and there is a clear evidence gap. Indeed the said demand has put a lot of pressure on the already weak and vulnerable National Statistical Systems. The following are some of the factors that have negatively impacted on data supply in many countries in Africa. Many of these factors

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11 A National Statistical System is defined by a legal framework, infrastructure and institutional arrangements for collection, management and dissemination of official statistics.
are organisational and institutional in nature rather than technical. They include, among others:

(a) lack of statistical reforms. Many African countries have undertaken economic, political and wider public sector reforms. There are, however, still many countries where statistical reforms have not been introduced and where:

- official statistics are produced under out-dated statistical legislations of the 1960s;
- there are inadequate links of statistical systems to policy processes meaning that the data are often not relevant to today’s issues;
- statistical production is not aligned with national planning and budget timetable such as reviews of the PRSs and annual national budgets;
- statistics and the National Statistics Offices (NSOs) have a low profile in government;
- arrangements for inter-institutional co-ordination, collaboration, networking and information sharing among data producers are weak and should be strengthened as part of the statistical reforms; and
- indeed not only have statistical systems not been reformed but there has been a failure of the statistics sector to monitor adequately the effectiveness of the aforementioned public sector reforms.

(b) lack of a clear vision and strategies for national statistical development. This has in part contributed to inadequate attention to statistics by governments and limited support from development partners. In particular, the failure to produce a well-designed National Strategy for the Development of Statistics (NSDS)\(^{12}\) has made it difficult for development partners to coordinate and align their support to such countries. This problem has been compounded in some countries by weak strategic leadership and management of NSOs.

(c) inadequate coordination of the multiple players so essential to a well-functioning statistical system – most notably between data producers and users, between the NSOs and line ministries that collect and manage sectoral data, amongst line ministries themselves, between academic and official statisticians. There is also a tendency in some countries for statistical activities to be organized as stove-pipes or

\(^{12}\) “Properly designed NSDSs which address priority data needs and provide a plan for investing in the institutions and infrastructure needed for a well functioning statistical system, have been shown to be the most effective way to guide statistical development”, World Bank (2007).
independent production lines, usually for purposes of meeting the individual needs of their sponsors or specific users. There is, therefore, a need for better-coordinated statistical production and for users to know what statistics to expect and when, irrespective of their sources. In addition, more often than not, there is poor coordination of donor assistance at country level.

The said inadequate coordination has often resulted in inefficiency in the use of resources for statistical production; production of lower quality statistics; duplication of effort; and inadequate data development, use and application; as well as failure to establish synergy amongst the priorities of the different players in statistical development. Lack of donor coordination has often led not only to duplication of statistical activities but also in duplication of effort in reporting to different donors.

(d) there are weaknesses in statistical capacity to collect, process, manage, analyze, interpret and use statistics arising mainly from government under-investment in statistical capacity building13 (under-staffing, demoralized and despondent staff and limited budget), ad hoc support and lack of coordinated, and predictable longer-term funding by development partners. The Third Roundtable on Managing for Results held in Hanoi, Vietnam, identified under-investment in statistics as one of the constraints to managing for results. The summary of proceedings of the roundtable reads, in part, “There is general consensus among participants in this session that statistics are underfunded….”14. As a result, critical statistical infrastructure has not been built or maintained, and statistical systems and activities in some African countries have become unsustainable. In this connection, we have witnessed significant reversals in statistical development and an inability to continue statistical activities, which were seeded by funding from donor programmes. “What is needed”, concludes the report of the Hanoi roundtable, “is longer-term sustained funding by donors and governments” (ibid). In advocating for better funding for statistics, the point should be made that, “Investment in statistics will pay for itself many times over by improving how resources are allocated. Statistics highlights where resources are needed and what impact those resources have had” PARIS21 (PARIS21, 2006).

13 A number of Roundtables on Managing for Development Results including the one held in Marrakech, Morocco (February, 2004) and Hanoi, Vietnam (February, 2007) (mentioned earlier) identified inadequate investment in statistics as a key constraint to managing for better development results.
What has been the effect of inadequate data supply to meet the ever-increasing demand for data? In a number of countries, the people may be poorer because of evidence gap as:

- policy and decision-making as well as service delivery have suffered,
- proper allocation and targeting of resources and programmes has been hampered,
- citizens have not been enabled to make informed choices, and
- governments have not been able to effectively monitor and report on progress on the one hand and on the other hand, governments have not been properly held to account for some of the policies and decisions.

Governments and other stakeholders are anxious to see improved performance in official statistics. Some of the requirements for this to happen include: a clear understanding of the mission, vision, and objectives of the statistical agencies; clearly defined goals and strategies to accomplish them; a value system that emphasizes performance, capability, credibility, productivity, quality and customer service; a powerful, proactive and innovative management team; a well motivated, committed, skilled and flexible workforce; effective teamwork throughout the organization; continuous pressure to innovate, grow and perform; the ability to respond speedily and effectively to the data needs of key users (especially government); strong and visionary leadership of NSO; the capacity to manage change; a sound financial base and good management, accounting and cost control; and harnessing information and communication technology (ICT).

These requirements can only be met if statistics is mainstreamed in national development policy and budget processes and if this is coupled with statistical reforms which are elaborated in the sequel. It is also important that statistics is included in joint assistance strategies of development partners.

Finally it is important to mention that in spite of the above problems and constraints identified in many countries, there have been changes in domestic data demand in recent past, in many cases spurred by the management for results agenda discussed in the introduction. Actions to help increase demand for and the use of official statistics in African countries as well as data supply will be a topic of a future booklet in this series.
“I like good news. I would like to tell good stories about how well we are performing as a country, but that is not what I need, so I expect statistics to give me what I need and not what I like”, Hon. Trevor Manuel, the celebrated Minister of Finance of South Africa (2002)

2.1 Introduction

In recent years, many countries (both developed and developing) have been assessing performance of their NSSs to answer the following questions:

- What is our mission?
- How do we perform and can we do better?
- How do we convince government that statistics are important and adequate resources are needed to build statistical capacity and produce and manage data well?

These assessments have led to statistical reforms in many countries aimed at improving performance of the NSSs and public confidence in official statistics, and generally providing a hospitable environment for statistics to play a greater role in national and international development. In some countries, these reforms have been partial for example when some parts of the statistical legislations and/or regulations accompanying the legislation have been revised, or they have been total, such as when a new statistical legislation has been written. Statistical reforms have been informed to varying degrees by debates among stakeholders. In recent past, U.K has had the most animated and instructive debate about statistical reforms to-date. The Royal Statistical Society (RSS) played a key leadership role in these debates that led to reforms in U.K, which were underpinned by the U.K Statistics and Registration Service Act of 2007. In this booklet, we draw on this debate and its eventual outcome.

Many countries, both developed and developing, have reformed and changed their statistical systems in recent years, in particular, limiting the amount of direct control that governments have over the day to day operations of NSOs. In this connection, there is a trend to make NSOs autonomous agencies of government. The latest developed country to make the NSO autonomous is the United Kingdom (2008). Developing countries (outside Africa) where the NSO has autonomous agency status include, among others, Malaysia, Pakistan, Philippines, India, and Mexico. In 1996, the Authority of the
Economic Community of Western African States (ECOWAS) adopted a Statistics Policy that urges member states to make NSOs autonomous. As a result, many ECOWAS member states have already transformed their NSOs into autonomous government statistical agencies with corporate status. For instance, Burkina Faso, Côte d’Ivoire, Gambia, Ghana, Liberia, Nigeria, Senegal and Sierra Leone have autonomous NSOs. Other African countries where NSOs have been made autonomous agencies include Uganda, Cameroon, Kenya, Zimbabwe and Botswana (in process). In support of this trend, the roundtable held in Hanoi in 2007 called on developing countries to make their NSOs autonomous to be effective and responsive to user needs as can be seen below.

In this booklet, we show that lack of autonomy of the NSO has the potential to inhibit production of ‘good’ official statistics and that this has in reality happened in many countries. We, therefore, argue that enhanced professional independence and administrative autonomy of the NSO are essential underpinnings of statistical reform. However, in a number of countries, the concept of autonomy of the NSO and the benefits it brings to the development of the NSS are usually not well understood by policy and decision-makers or even by the statisticians themselves as can be seen below. This lack of conceptual clarity has inhibited statistical reforms in some of these countries. This lack of clarity has sometimes led to the perception that autonomy of the NSO means financial independence of the office, or turning the office into parastatal – parastatal organizations have a poor reputation in many African countries as many of them have been mismanaged and have failed to achieve results. Sometimes autonomy of the NSO is confused with organizations seeking independence for its own sake. Autonomy of the NSO is none of these. In the following sub-section, we elaborate this concept of autonomy of the NSO and make the case for embracing it as an antidote for many of the weaknesses of statistical development in Africa. The Uganda Bureau of Statistics is presented to illustrate autonomy of an NSO. The illustration presents how the autonomous Bureau was established, the preconditions that have made it a success and the benefits this has brought to Uganda’s NSS as a whole.

2.2 How does lack of autonomy inhibit production of ‘good’ official statistics?

There are countries where the NSOs are not autonomous and yet they produce good statistics. There are, however, many countries where lack of autonomy of NSOs potentially or in reality has inhibited production of good statistics. These are countries where the NSOs are mainstream departments of the Ministry of Finance or Economy; where decisions on staff are usually handled by the parent ministry in a slow, unresponsive and very bureaucratic
way; where government bureaucracy and civil service rules inhibit introduction of changes and innovation; where working conditions are not attractive and there is high staff attrition: where NSOs’ budgets are part of the budgets of the parent ministries and in many cases, releases of funds to NSOs are usually delayed by the bureaucracy at the ministries and in some cases, not all the money is released; and where administrative regulations require that the NSO releases and reports are cleared by the head of the parent ministry. These conditions make the environment for production of good statistics inhospitable and making the NSOs in these countries autonomous will go a long way in making the environment for production of statistics hospitable thereby improving the state of statistics as we show below.

2.3 Misconceptions about autonomy

Here we look at three misconceptions about the autonomy of an NSO:

2.3.1 Run-away organization

There is some concern that an autonomous NSO will sever the otherwise natural (and vital) links with relevant government ministries and particularly, with the critical Ministries of Finance and/or Planning in order to assert its autonomy. Such a severance would negatively impact the responsibility of NSO to provide data needed by government. This is a real concern, and mechanisms have to be put in place to strengthen these links. It should not be an outcome of making the NSO autonomous and indeed the concern can be countered by the examples of the independent Office of the Auditor General. Rather than cut off links, the autonomous agency can be in a better position to serve the said ministries and ensure relevance to other data users through increased efficiency and effectiveness, and through a more outward looking approach than that adopted by many government departments where services are minimal, the ethos of providing efficient services is non-existent and activities are taken as routine.

In any case, legislation underpinning autonomy of NSO and statistical reforms usually provides for accountability mechanisms to government and other stakeholders. The next sections mention some of these mechanisms. It has been observed that better results occur where the governing body of the autonomous NSO holds statistical producers accountable for meeting the performance targets set by government. A live example to counter the wrong perception of a run-away organization is the triangular relationship that has been established between the autonomous Uganda Bureau of Statistics (UBOS), the parent ministry (Ministry of Finance, Planning and Economic Development) and the Central Bank. In May 2007, the trio established what it
called Socio-economic Statistics Technical Committee (SESTC) to “continuously assess the availability and reliability of socio-economic statistics and ensure their consistency” (Opio, 2008). The meetings of SESTC have been regularized and are held every week (Monday afternoons). Needless to say, the UBOS Statistics Act provides for additional accountability mechanisms. Similar accountability mechanisms have been established elsewhere in Africa where the NSOs have become autonomous.

2.3.2 Financially independent organization

The autonomy of the NSO is sometimes misconstrued to mean that the NSO will become independent of government with respect to financing. It is important to emphasise that no NSO anywhere in the world can be financed independently primarily because of the heavy cost of data collection and production. Conducting surveys and censuses in particular are resource intensive. Secondly, official statistics, like roads, are a “public good” and are normally provided by Governments throughout the world as part of national infrastructure and as key to the enabling environment for development. It is, therefore, expected that funding for an autonomous statistical agency will remain the responsibility of government. However, this does not preclude the possibility of the agency generating some revenue by undertaking commissioned studies and surveys as well as by selling some statistical products and services. The positioning of the NSO outside of central government can facilitate this. We should, however, caution that not much revenue can be generated by selling statistical products and services in poor developing countries.

It is important to emphasise the fact that in undertaking commissioned work to generate revenue, the NSO should not be distracted from undertaking its core activities including the conduct of censuses and surveys agreed in advance with government and other key stakeholders.

2.3.3 Parastatal fatalism

It is also wrong to look at an autonomous statistical agency in terms of negative experiences with parastatal organizations many of which have been judged to have failed. In Africa, the rationale for establishing parastatal organizations was that they would generate their own revenue and provide more efficient services to the public than was the case when they were departments of government. Unfortunately, many of them were grossly mismanaged and had poor leadership due to their heads and senior staff being appointed on political and other criteria rather than professionalism and merit. What is essential to the competence and relevance of an autonomous statistical agency work, in contrast with these parastatal organizations that
have failed, is precisely what has made Central Banks in Africa and elsewhere work - a leadership and management that is intensively professional which combines public sector values with private sector work ethics and vision. So, crucial to the success of autonomous statistical agencies, will be effective, professional and strategic leadership provided at the level of a Statistical Board, Chief Executive Officer (CEO) and other levels. The lesson for countries, therefore, is that structures alone, important as they may be, will not guarantee success – choosing the right people to run the organizations will be critical to its success (Scholar, 2007).

2.4 The advantages of an autonomous NSO

2.4.1 What autonomy means

Two models of autonomy can be identified, namely the enhanced leadership model and corporate model, with variations in between. Under the enhanced leadership model, autonomy and governance focuses on the role of the Head of NSO who has formal responsibility for statistical policy. There is a Statistics Council to provide advice or accountability mechanism. This model is working well in a number of countries including Australia. Under the corporate model, however, the NSO is a corporate body established by a statistical legislation and is answerable to Parliament and with a separate budget approved by Parliament. The NSO has a governing board with broad functions as we will show later. The agency would still have an associated Ministry, usually the Ministry of Finance and/or Planning. Uganda, Kenya, Nigeria, Zimbabwe and some other countries in Africa have adopted or are increasingly adopting the corporate model. For this reason, much of the discussion of this topic is about the corporate model.

Which model a country should adopt depends crucially on local conditions and the country’s administrative history. The bottom line is that there should be technical and professional independence, the NSO should be publicly accountable and there should be effective coordination and management.

2.4.2 Why do we need an autonomous statistical agency?

There are three main reasons why the NSO should be transformed into an autonomous public statistical agency – enhancing the credibility and impartiality of official statistics, engendering change, and fostering effectiveness and efficiency.
Credibility and impartiality

For official statistics to be used to assess the state of the nation and judge the performance of government, it is crucial that they are not only independent, credible and impartial but also that they are demonstrably free from real or perceived government influence. This point was emphasized by Hon. Trevor Manuel, the celebrated Minister of Finance of South Africa in 2002 when he said, “I like good news. I would like to tell good stories about how well we are performing as a country, but that is not what I need, so I expect statistics to give me what I need and not what I like”. Granting the NSO autonomy goes a long way towards ensuring that this happens. This is a parallel case to that for making the Office of Auditor General autonomous (as has happened in many countries so that public sector accounts are audited without undue influence from government) or the Central Bank (independent so that monetary policies are made by the bank free of inappropriate government influence).

Thus transforming the NSO into an autonomous statistical agency aims to enhance the credibility and impartiality of official statistics both of which serve to gain public trust in official statistics. Prof. Tim Holt, the former President of the Royal Statistical Society (RSS) has argued that, “Public confidence in the statistical system and its outputs is vital. In particular, this is essential if people are to have confidence in decisions that are made on their behalf by elected leaders…Mistrust in statistics undermines the system of government and the democratic process itself” (Holt, 2007). He further argues that, “Public confidence is an essential attribute without which the utility of even the highest quality statistics is undermined. Trustworthy statistics is at the very heart of the democratic contract between the public and its elected government” (ibid). This notion was re-enforced by the Former British Prime Minister, Tony Blair, in his introduction to Building Trust in Statistics – The White Paper on Statistics which states in part, “I believe that having access to official statistics which we can all trust is essential in any healthy society, Statistics encourage debate, inform decision making both inside and outside government, and allow people to judge whether the government is delivering on its promises. For official statistics to play that key role effectively in a democracy, we need to have confidence in the figures themselves”\(^{15}\). And

confidence in the figures effectively must be built on confidence in the statistical agency disseminating them\textsuperscript{16}.

In a number of countries, there is the perception that some key official statistics such as inflation levels, GDP growth rates and poverty levels are manipulated or influence by government to cast government policies and performance in good light. Ensuring that the NSO has a degree of independence and is governed by professional principles helps to correct this and to create positive perceptions about the credibility and impartiality of statistics and hence increases the confidence with which official statistics are viewed and used. It thus can help to ensure that official statistics are both trusted and trustworthy.

In November 2005, the U.K government announced that it would make the Office of National Statistics (ONS) autonomous, declaring that the “governance and publication of official statistics would be the responsibility of a wholly separate body at arms length from government and fully independent of it” (RSS News, 2006). Reacting to the announcement, the Head of the ONS, Ms. Karen Dunnell, expressed a belief that autonomy would increase public confidence in official statistics. She said “ONS has always worked in an independent, open and transparent way but there has been a perception that this is not so, which has been very damaging for official statistics as a whole” (ibid). The point Dunnell makes is that it is not enough for the NSO to produce good and reliable statistics as is the case with some NSOs, which are not autonomous. The acceptance of the statistics does not hinge solely on their probity but also on the perception the public has of the independence with which they are produced and disseminated.

The U.K autonomous Statistics Authority was established on 1 April 2008 by the Statistics and Registration Services Act 2007 as “an independent body operating at arm’s length from government as a non-ministerial department, directly accountable to Parliament” (U.K Statistics Authority). Sir Michael Scholar, the Chair of the new U.K autonomous Statistics Authority, sees the biggest of the authority’s challenges as “remedying the lack of trust that there is in official statistics” (RRS News, 2008). He sees the very creation of the new Authority as giving the country “a completely new start for statistics. It gives us the opportunity to rebuild confidence in official statistics in an analogous way to the way the Bank of England Act 10 years ago improved confidence in monetary policy – and did it in a completely measurable way” (RSS, 2007). He argues that the new arrangement “should give the public

reassurance that we are not being subjected to ministerial interference or manipulation – that the figures can be trusted” (RSS, 2007) and is keen that “there will be robust Parliamentary oversight of its work” (RRS News, 2008). The essence of autonomy is to render official statistics credible and believable.

Making the NSO an autonomous agency of government is very much consistent with the United Nations recommendation that “a statistical agency should be distinct from those parts of the government that carry out enforcement and policy-making activities. It should be impartial and avoid even the appearance that its collection, analysis and reporting process might be manipulated for political purposes” (UN, 2003). There is another point here – the NSO needs to exert authority over all statistics – not just those it produces itself. Autonomy removes the NSO from the departmental hierarchy of government – and should enable the Director General to exert authority over the parent ministry and other government ministries, departments and agencies without interference or being inhibited because of considerations of rank or comparable status.

Engendering change

It can be difficult to meet the evolving needs for official statistics, often with inadequate resources, using the traditional ways of doing things – “business as usual”. What is required is a fundamental change in the mindset of all staff of NSOs, and a willingness to explore new approaches to statistical work. Also essential is a higher level of accountability to government and other user communities in terms of delivering statistics of appropriate scope, quantity, quality and timeliness. Statistical development must be moved onto a wholly new trajectory. It cannot be over-emphasized that well-managed change has become the “silver bullet” in successfully managing processes, people and culture in modern organisations. Indeed, breakthroughs in performance require that major changes be undertaken as drivers of strategic success [8]. Fred R. David points out that, “successful organizations effectively manage change, continuously adapting their bureaucracies, strategies, systems, products and cultures to survive the shocks and prosper from forces that decimate the competition” (David, 1997). It is for this reason that understanding and managing change are now the dominant themes of management today. Taking a proactive approach to change and adopting a positive attitude towards it is the only way to take charge of the future (ibid).

Managing change requires that we look for areas where improvements can be made (e.g. in procedures and in quality); assess benefits against any potential problems change may cause; consult with all concerned to get them to agree to proposed changes; implement plans for change and evaluate
whether improvements have been achieved. It involves introducing new procedures, people or ways of working which will have a direct effect on various stakeholders.

It is very difficult to introduce the scale of change needed within the context of an NSO as a mainstream government department. Providing the NSO with the flexibility which autonomy brings improves the chances to introduce required changes rapidly in relation to the governance and management of official statistics in our countries.

**Fostering efficiency and effectiveness**

In general, making the NSO an autonomous agency results in a much more efficient and effective organisation. In many countries where the NSO is a mainstream department of a ministry, decisions on staff (the main resource of any organization) are usually handled by the parent ministry in a slow, unresponsive and very bureaucratic way. And some “NSOs are burdened by large numbers of unproductive staff who cannot be disposed of and who add significantly to costs” (OPM, 2008). In addition, government bureaucracy – rules, procedures and work culture - make introduction of changes and innovation difficult even where governments aim to cultivate a new culture of managing for results. It is also the case that where statisticians are scarce and demand for them is high, mainly from the private sector, civil society organizations (especially NGOs), and international organizations, retaining highly qualified and experienced staff has become tenuous. Many of these NSOs have experienced high levels of staff attrition of the most competent staff and in this way, the capacity of the statistics offices to deliver and sustain statistical activities has been eroded.

Autonomy should lead to cutting bureaucracy from the NSO operations, effecting needed changes including change in mindset, better motivating and retaining staff through improved schemes of service, etc. However, it is important to mention that improving conditions of service for staff, important as it is, is not the only – nor necessarily the main – reason for seeking autonomy for an NSO. Reacting to the intent to make the ONS autonomous, Professor Tim Holt, stated that “an independent statistical service was fundamental both to the effective functioning of the statistical service and to public confidence in official statistics” (RSS, 2006).

It is expected that an autonomous NSO will be more visible, efficient and effective. Finally, creating an autonomous statistical agency has the prospect of raising the visibility and profile of statistics in a country.
2.4.3 Caution

Without in any way weakening the argument for autonomy, we must mention and emphasize the fact that while autonomy is necessary, it is in no way sufficient to address all the ills facing NSOs in Africa. Indeed, in some countries, the move to autonomy has resulted in little or no improvements in either the availability or quality of statistics available to users, or in the capacity of the NSO itself. Autonomy must be coupled with other success factors some of which are given later in sub-section 2.5.4 if we are to achieve desired results. One such factor is effective leadership which is discussed at length later in sub-section 2.5.2.

2.5 What is involved in the corporate model of autonomy?

2.5.1 De-linking the NSO from civil service

Making the NSO an autonomous agency involves de-linking it from government Civil Service and vesting its management into a governing Board. Such a Board will have delegated overall responsibility to ensure that data producers fulfill their missions, that the profile of statistics is commensurate with its role in national development and that there is general development of official statistics in the country.

The specific responsibilities of the Board may include, among others:

- promoting and protecting the credibility, integrity and impartiality of official statistics as well as the professional independence of the NSO;
- formulating and monitoring the implementation of policies for more effective co-ordination of the NSS;
- monitoring compliance with best practices and international recommendations on production of official statistics;
- formulating and monitoring the implementation of policies pertaining to the organisation and management of the NSO;
- approving terms and conditions of staff;
- appointing the right senior staff, promoting and disciplining them, and overseeing the process of recruiting other levels of staff;
- approving the structure, corporate plans, work plans and budgets of the NSO;
- making the case for appropriate levels of funding of the statistical system;
- meeting with key users on a regular basis to judge their satisfaction with the statistical service they receive; and
• investigating complaints with respect to the quality and integrity of official statistics; and
• outward looking focus on promoting statistics and use of statistics in the wider national debate including commenting on the erroneous use of statistics.

For the Board to be effective, it should be small, focused and composed of committed high-level professionals in statistics and related subjects, representing key stakeholder constituencies like government, the private sector, the civil society sector and research and training institutions, and having particular competence in the policy use of data. The Board will be responsible for all functions that hitherto were being taken care of by the Civil Service and will be expected to do this using results management principles.

A governing Board has a heavy responsibility. In a sense, it can make or break an NSO. It is, therefore, crucial that the above responsibilities, qualifications criteria for appointment and removal of Board members are entrenched in the country’s statistical legislation, and that selecting and appointing members of the Boards should follow due process. Choice of Board members is crucial and the respective roles and responsibility of the Board versus those of the Director General need to be very clearly defined as this has caused problems in several countries.

The agency should have its own budget approved by Parliament. As a ministerial department, its budget will have been approved as part of the budget for the parent ministry. It should also be ensured that appointments are made through open and fair competition. This will enhance the credibility of the agency.

In decentralized National Statistical Systems, it will be necessary to define appropriate coordination mechanisms between the autonomous NSO and government ministries and agencies. What some countries are opting for is an arrangement where the NSO outposts its professional staff to various government ministries and agencies as the need arises. This arrangement has immense benefits for the NSS that include, among others:

(a) promotion of professionalism and better coordination of statistical work in government ministries.
(b) cost effectiveness in statistical production through sharing of strategic human resources and skills.
(c) improved career prospects for statistical personnel. In a number of line ministries, for instance, there are two or so establishments for statistical personnel, which do not offer career prospects. By having
all professional statistical staff under one umbrella, an appropriate career path can be developed for them.

(d) better prospects for training and professional advancement for statistical staff, and

(e) improved quality of administrative data.

2.5.2 Leadership

One of the characteristics of an effective NSS is that it is well coordinated and led. Statistical reforms, therefore, should re-affirm the centrality, coordination and leadership roles of the NSO in the development of the NSS. However, such leadership can be provided only if the NSO is strong and credible, well resourced and structured, and has technical expertise, organizational systems and capability to coordinate and lead. The NSO will have these if it is well led; so effective leadership of NSO is critical for the NSO to, in turn, provide leadership to the NSS.

The need for the NSO itself to have effective leadership, a leadership that Envisions, Enables, Empowers, Energizes (4E’s) and which at the end of the day, achieves results, cannot be over-emphasized. Effective leadership is the more important and assumes a special dimension in African countries where statistical systems are young, fragile, vulnerable and, lately, over-taxed with increasing demand for more and better statistics. The Statistical legislation should provide for the appointment of effective leaders and for legal safeguards to prevent their arbitrary appointment and dismissal. In particular, the legislation should spell out the required qualifications, criteria for selection and tenure of the head of NSO and circumstances under which tenure may be terminated.

Qualification for the head of NSO should include proficiency in statistics or profound understanding of statistics, ability to manage a large organization, and sensitivity to the needs of users. The head of NSO should bring to the post the knowledge, prestige and wisdom usually but of course not always acquired over a long professional career - there will be cases where younger and energetic people can make a difference. The head of NSO should also have a strong professional bent, be highly independent, have good and demonstrable managerial instincts, have good contacts in government, etc. He/she should be looked at as an embodiment of the status, image, integrity and professionalism of the NSO, the NSS and the statistical profession. He/she must protect the integrity, credibility and impartiality of official statistics while being accountable to and taking political guidance from appointing authority. It is becoming an emerging trend to appoint the heads of NSOs on fixed term performance contracts (renewable) in the spirit of results-based management of public services (Kiregyera, 2004).
The governing Board and governments must be judicious in selecting and appointing the head of the NSO.

2.5.3 The statistical legislation and its application

The Statistical legislation

It is generally agreed internationally that a strong statistical legislation is a fundamental prerequisite for an effective statistical system\textsuperscript{17}. It is essential to underpin statistical reforms and to regulate statistical activities and operations. Almost all countries have an enduring legislative framework to ensure uttermost effectiveness and credibility of the NSO, professional independence and to underpin the institutional arrangements for the collection, management and dissemination of official statistics. These legislations go by different names – Statistics Act, Proclamation etc. Professional independence of the NSO is crucial for enhancing the integrity, impartiality and credibility of official statistics. The UN Handbook of Statistical Organization of 2003 posits that, “The subject of statistical legislation can be reduced to two major issues: the compulsory aspect, that is, the power the Government asserts, through the statistical agency, to collect data and the guarantee it provides for safeguarding the confidentiality of the information collected from individual respondents”\textsuperscript{18}. Sarmad Khawaja and Thomas K. Morrison (2003) present a minimum list of items that a Statistical legislation Act should contain\textsuperscript{19} while T. Holt (2003) provides a comprehensive checklist on possible contents of a Statistical legislation\textsuperscript{20} which includes the following:

1. Establish the scientific independence and objectivity of statistics
2. Establish that national statistics serve all users and reaffirm the role of statistics in the democratic process and as a public good
3. Establish the Head of the National Statistics Office as a statutory post and define his or her roles and responsibilities\textsuperscript{21}

\textsuperscript{18} Handbook of Statistical Organization, Third Edition, Studies in Methods, Series F No. 88, United Nations, N.Y.
\textsuperscript{21} Some countries are establishing the post of Director General (some countries use different names) of the country rather than of the NSO in order to provide leadership and quality control in NSS.
i. Authority to collect and analyze data and publish statistics and related material
ii. Authority to determine concepts, definitions, methods and choice of data sources
iii. Authority to determine the form, content and timing of statistical releases
iv. Authority to determine the scope of official statistics
v. Duty to maintain and enhance the professional independence and integrity of official statistics
vi. Duty to maintain a culture of openness and transparency in relation to methodology and quality
vii. Duty to establish user consultation process
viii. Duty to ensure that data collected under the act are used for statistical purposes only and the confidentiality of respondents is protected

4. Define the responsibility of the Head of the National Statistics Office for the national statistical system
5. Determine arrangement for the appointment and dismissal of the Head of the National Statistics Office
6. Establish the Statistical Council and provide for regulations to govern its activities
7. Determine arrangements for the appointment of the Chair and members of the Statistics Council
8. Define ministerial responsibility for statistics
9. Establish statutory responsibility of other Ministers who have responsibility for staff producing official statistics
10. Provide provision for annual planning arrangements
11. The Head of the National Statistics Office to create and maintain a professional code of conduct for statisticians
12. Authority to access administrative information held by government and other public bodies
13. Authority to require businesses and natural persons to provide data as requested by the Head of the National Statistics Office
14. Authority to require government and other public bodies to provide data as requested by the Head of the National Statistics Office
15. Set out the basis for collecting data from household surveys (could be mandatory, but may be better to be voluntary)
16. Authority of the Head of the National Statistics Office to set charges for statistical outputs and services
17. Provide for data linkage for statistical purposes (ability to link sets of data)
18. Define statistical purposes
19. Authorize the Head of the National Statistics Office to promote international cooperation
20. Authorize the Head of the National Statistics Office to coordinate requests for data from international and regional agencies
21. Require the Head of the National Statistics Office to promote the quality of national statistics throughout the producing system
22. Authorize the Head of the National Statistics Office to have full access to administrative records throughout the public service for statistical purposes
23. Duty of the Head of the National Statistics Office to coordinate the national statistical system
24. Authority of the Head of the National Statistics Office to release suitably anonymized microdata
25. Provide for delegation to place statutory obligations on staff for confidentiality etc.
26. Provide for appropriate penalties for a failure to provide information and for breaches of confidentiality etc
27. Responsibilities for annual reports to National Assembly
28. Arrangements for pre-release and release of preliminary data
29. Repeal existing acts.

In the past, statistical legislation were NSO-centric and not holistic in the sense of covering the whole NSS. And yet in addition to NSO, there will usually be other government institutions that collect and compile statistical data including the Central Bank and line Ministries using other legal provisions. It is important that the Act becomes the fundamental law on statistics, taking precedence over provisions for statistical operations in other agencies of government.

In many countries, statistical legislations provide for the NSO to undertake the population and housing census every ten years so as to provide basic data needed for socio-economic planning and monitoring development progress. There are, however, countries where the conduct of the census is the responsibility of a Census Commission established on a permanent basis or as an ad hoc structure set up purely for purposes of undertaking the census. When the said Commission is ad hoc, not only are start-up costs high but also the infrastructure built for the census is dismantled when the census exercise is over, and the experience gained in organization and management of such a colossal exercise is lost. It is important, therefore, that a strong case is made for the census to become a function of the NSO where it is currently undertaken by Census Commissions mentioned above. In making the case, the point should be made that the census is a foundational activity that invariably assists to strengthen the NSO infrastructure, broaden and deepen partnerships and networking with key stakeholders, build capacity in all departments of the statistical value chain, etc.
It has been observed that in some countries, census results have to be approved by government or the national Parliament. Not only does this legal requirement delay the release of census data to the public but also it raises questions of professional independence and autonomy of the statistical processes. There is also the possibility that for some reason, the political leadership may reject the results thus putting the NSO or Census Commission in an awkward position. There is a need to make a strong case for the NSO or Census Commission to release the census results without the encumbrance of having to seek clearance to do so. Where the NSO is autonomous, this problem will be easier to handle. For instance in Uganda when the Minister of Finance, Planning and Economic Development rejected the results produced by the Uganda Bureau of Statistics which showed that the population below the poverty line had increased from 34% in 1999/2000 to 38% in 2002/2003, the Board of Directors took the bold decision to release the results arguing that it was not only government that needed these results but a host of stakeholders. It would have been difficult for these results to see the light of day if the Bureau were a mainstream government department.

There are also countries where detailed census information is passed on to the national authority in charge of elections for purposes of compiling electoral registers. The propriety of this practice has been discussed in international meetings including at the International Statistical Institute (ISI) session in Sydney, Australia in 2005. In these meetings, the advice has been that detailed census information is not to be shared out without due regard for confidentiality which is enshrined in national statistical legislations.

Application of the statistical legislation

It is important to mention that in some countries, parent ministries of NSOs have put in place administrative arrangements to ensure that the Head of the Ministry sanctions statistics and statistical products prior to publication. This kind of arrangement is not consistent with the principle of equal access to statistical data and information as enshrined in the UN Fundamental Principles for Official Statistics and could also lead to suspicion that NSO data are “doctored” by the parent ministry. It was mentioned earlier that such perception could do a lot of harm to the credibility, impartiality and believability of official statistics. Making the NSO autonomous is one way to solve this and related problems.

There are also countries where the statistical legislation has not been followed properly. This has in some instances been attributed to lack of knowledge and awareness among policy and decision-makers about the purpose, the spirit and letter of the Act and its provisions. In fact, there are
some professional statisticians who are not sufficiently familiar with the provisions of their national statistical legislation. It is the responsibility of the leadership of the NSOs, national statistical training centres and national statistical associations to ensure that there is wide knowledge and awareness about the statistical legislation and its provisions among all stakeholders in the NSS, and that the legislation is followed in regulating statistical activities and operations in the country. These leaders ought to speak out and act when the provisions of the legislation are flouted.

2.5.4 Statistical reforms in Uganda - Creation of Uganda Bureau of Statistics

(a) The reforms

Statistical reforms that took place in Uganda in late 1990’s culminating in the establishment of the Uganda Bureau of Statistics (UBOS) as an autonomous agency of government illustrate some of the above ideas and give some objective lessons on how the transition could be managed. The author has first hand experience with this illustration because as the first Chairman of the Board of Directors of UBOS, he oversaw the transition from a statistics department of government to an autonomous statistical agency with corporate status. He was the Chairman of the Board for 8 years (up till July 2007 when he joined the United National Economic Commission for Africa as the first Director of the African Centre for Statistics).

In 1998, the Department of Statistics in the Ministry of Finance, Planning and Economic Development was transformed by an Act of Parliament into an autonomous agency, fully-funded by government, to act “as the principal data collecting and disseminating agency responsible for coordinating, monitoring and supervising the National Statistical System” (Government of the Republic of Uganda, 1998). The Bureau became operational with the swearing in of its Board of Directors in August 1999. The Board is small and highly focused and professional. It has seven members including a non-executive chairperson and the Executive Director of the Bureau. Other members represent the parent ministry (Ministry of Finance, Planning and Economic Development), the Institute of Statistics and Applied Economics (Makerere University), the private sector and the civil society. The Board is required to present a progress report to the Minister of Finance every quarter and an Annual Report to Parliament. The Bureau has a separate budget vote, which is approved by Parliament. The government funds the core activities of the Bureau under a Poverty Action Fund - this protects the budget for the Bureau against cuts should government revenue fall.
The first thing the Board did was to approve a transitional structure, attractive and competitive terms and conditions of service, appoint an Acting Executive Director and introduce temporary recruitment procedures that emphasised meritocracy and professionalism in staffing the new Bureau. In order not to disrupt ongoing work, all employees of the Department of Statistics (predecessor to the autonomous Bureau) were deemed to have been seconded to the new Bureau on a temporary basis. The Board then advertised all posts from that of the Executive Director downwards in a phased manner. All temporary staff were encouraged to apply and compete with other applicants from the open market. All applications were processed, candidates short listed and interviewed. The best candidates were selected. Those who were not selected were sent back to government, the original employer, for redeployment. The Act did not foresee this problem, so special negotiations had to take place with government over the matter. This whole process took about one year to complete and necessitated the Board and its committees meeting more frequently than is provided for in the Statistics Act.

It is important to mention that services of a Management Agent were hired from time to time to recruit some categories of personnel. Also some experts in different areas were invited to join the interviewing panel of the Board as needed. While the responsibility for staff recruitment was vested in the Board, recruitment of non-professionals and temporary staff was delegated to management. However, the Board provided guidelines and procedures for recruitment of these categories of staff.

Change management was the biggest problem that the Board faced. The Board set new and high standards of performance and demanded that they be met – it did not hesitate to show the door to any staff who failed to measure up; it also hired services of management experts to train all staff in the disciplines of change management, strategic management and leadership, communication, marketing, etc. All this had great impact in creating a new work culture that emphasises performance and results, in cultivating the right and new attitudes and mindsets, in identifying and quickly responding to new and emerging policy needs for statistics, in building strategic skills and team work, etc.

There is every indication that official statistics have very much improved in Uganda since the NSO became autonomous in 1999. The impartiality, credibility and trustworthiness of official statistics have been enhanced; there is much better coordination of production of official statistics; there is better responsiveness to user needs for statistics in the country; the production and delivery of official statistics have become more effective and efficient; and the staff of the agency are better developed, professionalized, motivated and retained.
Referring to the strategic decision by government of Uganda to transform the then Department of Statistics into an autonomous government agency during the official opening of Statistics House (the new home of UBOS) and the launch of the Plan for National Statistical Development (PNSD) on 12 October, the President of the Republic of Uganda had this to say on statistical reforms in Uganda and the creation of UBOS, “...It is now evident that the above strategic decisions taken by government .......have paid dividends. We now have in Uganda a good statistical infrastructure and the Uganda Bureau of Statistics, as we have repeatedly heard, has become a role model national statistical office in Africa. Let me take this opportunity to commend the Board, management and all staff of the Bureau for a job well done and for raising the stature of the Bureau ....... in just 7 years of its existence”.

(b) Success factors

The success factors in Uganda’s statistical transformation have been identified as (UBOS, 2007):

- ability to assess demand for data especially among key policy and decision-makers and aligning the data production cycles and processes with key national policy and planning cycles such as PRSP reviews,
- effective leadership provided by a highly technocratic, focused, hands-on and small Board of Directors, and a professional and dedicated management team selected in a transparent manner that is responsible for day-to-day operations of the agency,
- effective organizational management systems including a legal framework governing statistical production, favourable terms and conditions of service, advanced financial management systems and an information technology strategy,
- establishment of structures that promote vertical and horizontal coordination in the NSS e.g. data producer-producer committees, data user-producer committees, etc, recruitment of highly skilled and motivated staff,
- statistical and physical infrastructure investment including IT networks, capacity building programmes and a modern building.

The weakest aspect of the above statistical reforms in Uganda is that they were NSO-centric. In fact, the 1998 Statistics Act is for the Uganda Bureau of Statistics rather than the National Statistical System even though the Act empowers the Bureau to be “the principal data collecting and disseminating agency responsible for coordinating, monitoring and supervising the National
*Statistical System*\(^{22}\). The Act is under review with a view to extending its scope to cover the entire NSS.

A full account of how Uganda made the above transition is given in the paper by the author titled “Strengthening National Statistical Systems in sub-Saharan Africa - Some Lessons from Ugandan Experience” which was published in 2006 by the African Capacity Building Foundation (ACBF) under Lessons Note series.

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Conclusions and Challenges

The results agenda or managing for results to which African and other developing countries have committed themselves, has substantially increased demand for official statistics and indicators to facilitate, among other things, evidence-based policy and decision-making, measuring progress and reporting on development outcomes. Statistics are now recognized internationally as an essential part of results agenda. Statistics are needed not only by government for the aforementioned purposes but also by other stakeholders, viz. the private sector, civil society, academia, researchers, regional and international agencies and organizations, for a host of purposes. In many African countries, however, National Statistical Systems are weak, under-resourced and unable to meet the ever-increasing demand for development statistics. Whereas there has been some progress in statistical capacity in a number of countries owing to national commitments to managing for results and various statistical initiatives that have been put in place in recent past, there remain challenges of data demand and supply. There is a need to reform and strengthen National Statistical Systems. Statistical reforms need to be effected in tandem with broader public sector reforms initiated by African governments – reforms in the economy, body politic and public sector, and to scale up investment in statistical capacity and infrastructure. This will not only help to provide a firmer basis for monitoring and evaluating the effectiveness of the said broader public sector reforms but will also provide support to managing for results to which, as was mentioned earlier, many African countries have made commitments.

The statistical reforms should aim to foster credibility, impartiality and probity of official statistics; engender change in the organization and management of official statistics; and foster efficiency and effectiveness in the statistical value chain from data demand through production and to actual use of statistics – in short to provide a hospitable environment for statistics to play a greater role in national and international development. These reforms will need to be underpinned by an enabling statistical legislation. Experience from many countries shows that by providing the NSO with more autonomy as part of national statistical reforms, the impartiality, credibility and trustworthiness of official statistics are enhanced; necessary changes needed to innovate and become more efficient can be more easily introduced; the staff (most important resource of any organization) are better developed, professionalized, motivated and retained; and the production and delivery of official statistics becomes more effective and efficient. Finally, the national
development processes are better supported and policy and decision-makers together with other data users are satisfied.

The challenge, therefore, is for government ministries of finance/economy to take the bold step to reform official statistics and to ensure that statistical agencies are fully accountable to users. One of the best solutions may be to make the NSOs autonomous government agencies, if the following conditions are in place:

- a results focused government,
- effective leadership at policy, management and technical level,
- effective organizational and institutional systems,
- effective coordination, and
- enabling statistical, physical and technical infrastructure.

It is in their best interests and the best interests of the country to effect statistical reforms. There are countries in Africa (one example has been given for illustrative purposes) and abroad where statistical reforms have been successfully undertaken and these could provide objective lessons for those countries still contemplating the reforms.

However, it must be emphasized that autonomy is not a silver bullet”” but rather, the first step in effecting statistical reforms and change to make the NSOs more accountable and responsive to user needs. There are other success factors that need to be factored into the reforms, including effective leadership.
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Annex

UN Fundamental Principles of Official Statistics

Preamble

The Statistical Commission,

- Bearing in mind that official statistical information is an essential basis for development in the economic, demographic, social and environmental fields and for mutual knowledge and trade among the States and peoples of the world,

- Bearing in mind that the essential trust of the public in official statistical information depends to a large extent on respect for the fundamental values and principles which are the basis of any society which seeks to understand itself and to respect the rights of its members,

- Bearing in mind that the quality of official statistics, and thus the quality of the information available to the Government, the economy and the public depends largely on the cooperation of citizens, enterprises, and other respondents in providing appropriate and reliable data needed for necessary statistical compilations and on the cooperation between users and producers of statistics in order to meet users' needs,

- Recalling the efforts of governmental and non-governmental organizations active in statistics to establish standards and concepts to allow comparisons among countries,

- Recalling also the International Statistical Institute Declaration of Professional Ethics,

- Having expressed the opinion that resolution C (47), adopted by the Economic Commission for Europe on 15 April 1992, is of universal significance,

- Noting that, at its eighth session, held in Bangkok in November 1993, the Working Group of Statistical Experts, assigned by the Committee on Statistics of the Economic and Social Commission for Asia and the Pacific to examine the Fundamental Principles, had agreed in principle to the ECE version and had emphasized that those principles were applicable to all nations,
Noting also that, at its eighth session, held at Addis Ababa in March 1994, the Joint Conference of African Planners, Statisticians and Demographers, considered that the Fundamental Principles of Official Statistics are of universal significance,

Adopts the present principles of official statistics:

**Principle 1.** Official statistics provide an indispensable element in the information system of a democratic society, serving the Government, the economy and the public with data about the economic, demographic, social and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by official statistical agencies to honor citizens' entitlement to public information.

**Principle 2.** To retain trust in official statistics, the statistical agencies need to decide according to strictly professional considerations, including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data.

**Principle 3.** To facilitate a correct interpretation of the data, the statistical agencies are to present information according to scientific standards on the sources, methods and procedures of the statistics.

**Principle 4.** The statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics.

**Principle 5.** Data for statistical purposes may be drawn from all types of sources, be they statistical surveys or administrative records. Statistical agencies are to choose the source with regard to quality, timeliness, costs and the burden on respondents.

**Principle 6.** Individual data collected by statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes.

**Principle 7.** The laws, regulations and measures under which the statistical systems operate are to be made public.

**Principle 8.** Coordination among statistical agencies within countries is essential to achieve consistency and efficiency in the statistical system.
Principle 9. The use by statistical agencies in each country of international concepts, classifications and methods promotes the consistency and efficiency of statistical systems at all official levels.

Principle 10. Bilateral and multilateral cooperation in statistics contributes to the improvement of systems of official statistics in all countries.