

## **The Virtual Statistical System (VSS) as a Training and Communication Tool for Africa**

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### **Abstract:**

*The paper discusses the Virtual Statistical System (VSS) as a knowledge management tool for statisticians working in the field of statistical production in Africa. The developing world, and Africa in particular, is in urgent need of reliable and timely information. A great deal of information is being generated across the continent, and yet very little is being accessed by African statisticians and planners to inform policy-making. A better use of such data could greatly improve the management of development programs to enhance the wellbeing of communities.*

*The VSS, which is organized across two platforms – namely Activities and Themes – is an internet-based portal that provides information both directly and through interrelated links. Its overarching objective is to allow easy and unlimited access to information. This provides an opportunity for knowledge seekers not only to become better informed but also to disseminate information across the continent at large. In addition, the VSS brings knowledge and skills to support the capacity-building efforts of various development partners, as well as those of national governments. The system also presents itself as effective communication and training tool for young statisticians entering the National Statistical Offices, to help them learn various aspects of statistical production. Finally, the VSS represents a platform of interaction, for those operating inside a statistical agency, as well as linking to others in the wider statistical community at regional and international levels.*

**Key words and phrases:** Activities and themes; knowledge management; statistical capacity building; National Statistical Offices.

## The Virtual Statistical System as a Training and Communication Tool: Its Application in Africa

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### 1. Introduction

Several assessments of National Statistical Systems (NSSs) undertaken in recent years in Africa have shown the systems to be challenged – some more seriously than others. In general, the systems are weak and vulnerable in a number of common areas. First, they tend to be inadequately resourced in terms of budgets, skilled and motivated staff, and in the provision of financial and technical assistance. Second, their outputs are inadequate in terms of data quantity, quality (hence reliability), and dissemination. These capacity constraints resonate at a number of levels: lack of capacity to effectively advocate for statistics; to reform the systems to make them more efficient and effective; to plan and manage the systems strategically; and to collect, store, analyze, disseminate, and use statistics appropriately, especially for policy- and decision-making.

Capacity gaps, which are very serious in some countries, have been caused by the following factors, among others:

(a) Many National Statistics Offices (NSOs) have not developed operational In-Service Training Centers, as recommended by the Reference Regional Strategic Framework (RRSF) for Statistical Capacity Building in Africa (UN Economic Commission for Africa *et al.*, 1996). The RRSF was designed to provide strategic directions and appropriate mechanisms for guiding and accelerating the development of sustainable statistical capacity in Africa for managing for results, and for implementing the Marrakech Action Plan for Statistics (MAPS)<sup>1</sup>. The Training Centers were envisioned by the RRSF to build minimum capacity in data collection and management across government ministries, departments and agencies (MDAs) through the training of statistical staff at an intermediate level. Where Centers have been established, they tend to suffer from a shortage of scholastic resources and materials, a lack of accreditation, inexperienced teachers, etc.

(b) The responsibility for capacity building in statistics at a professional level lies with national training centers and regional statistical training centers (RSTCs). National training centers include Departments of Statistics at national universities. Unfortunately, many universities do not teach the practicalities of collecting and analyzing official statistics as such; instead their curricula focus on theoretical statistics. The RSTCs, on the

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<sup>1</sup> The Marrakech Action Plan for Statistics (MAPS) was endorsed by the Second Roundtable on Managing for Results held in Marrakech, Morocco in 2004 as a time-bound and costed action plan for improving national and international statistics.

other hand, provide a good grounding in official statistics. The RSTCs were established mainly by the United Nations from the mid-1960s onward, to overcome shortages of statistical personnel and thereby scale up the provision of data required by emerging African states. These Centers serve a number of countries and they have over the years successfully trained statistical personnel at a professional level in Africa. Both national statistical training centers and RSTCs have experienced challenges in the form of shortages of qualified teaching staff and a lack of scholastic materials and resources. In addition to these constraints, RSTCs have the problem of funding fellowships for trainees from different countries.

A number of initiatives have been developed to address these challenges, especially by pan-African organizations (the African Development Bank, the UN Economic Commission for Africa and the African Union Commission) and the international community (PARIS21, World Bank, etc.).

This paper discusses one such initiative, the Virtual Statistical System (VSS), which is a critical resource of knowledge management for statisticians working in the statistical production processes.

## **2. Virtual Statistical System (VSS)**

The VSS is a new initiative that was proposed by the World Bank and is being taken forward by a PARIS21 Task Team, in collaboration with the Development Gateway Foundation. It is designed as an online resource for NSOs, other data-producing agencies, and the broad community of data users, including policy-makers, academics, students, and anyone who wants to know more about official statistics. The VSS can be considered as a toolkit providing relevant information in a structured format to different users, to assist with their specific needs. It is a web-based resource providing online statistical information in different statistical areas. Its principal functions include: access to structured information across a wide range of statistical fields; access to other websites and documents that provide information on statistical capacity building; and provision for comments. In this way, it serves as a consolidated web portal for tools, methods, standards, and advice that are currently available from international organizations or NSOs. It is designed to:

- Provide a “one-stop shop” for access to key tools to build statistical capacity in developing countries;
- Facilitate access to existing capacity-building initiatives;
- Encourage a “virtuous cycle” of better data collection, analysis, and dissemination to inform evidence-based policies and decision-making; and
- Address the major gaps in access to statistical resources.

The VSS provides the following:

- Online training tools (modules, handbooks, online videos, pod-casts);
- Software (business registers, survey design/protocol, databases, publishing);
- Best-practice guidance and statistical standards; and
- An online community of practice with interactive tools and applications.

The VSS is organized around three main components:

- **Knowledge base:** A repository of reference material in two main areas: (i) the building blocks of National Statistical Systems (NSSs) and (ii) information on thematic or sector-specific statistical operations;
- **e-learning** through a rich library of courses on 10 selected topics; and
- **Knowledge exchange** designed to allow for the sharing of best practice and collaboration on issues related to the development of NSSs.

### 3. The VSS's Application to Africa

The VSS is another initiative with great potential to boost ongoing statistical reforms and development in Africa. How exactly can the VSS achieve its objective? Below we provide three examples of areas where the initiative will be most relevant.

#### *Statistical reforms*

Many countries are undergoing statistical reforms as part of the ongoing statistical renaissance in Africa. These reforms are aimed at making National Statistical Systems (NSSs) more efficient and effective. For this purpose, they need to address a raft of institutional issues, including: clarifying the legal responsibilities of different statistical bodies; the mobilization of financial resources; defining the role of statistical councils; closer alignment between data providers and the needs of users; delineating the role of national governments in promoting statistics; institutional coordination across the NSS; adherence to international standards and best practice, etc. The VSS speaks to all these issues; it allows easy and unlimited access to information directly and through many other links. Furthermore, it provides best-practice guidance and statistical standards which countries badly need to guide the said reforms.

#### *Capacity building*

It was mentioned earlier that there are capacity gaps which need to be filled if statistical development is to be scaled up in Africa. There are many ways in which the VSS will support statistical capacity-building efforts – both as an effective knowledge base as well as a communication and training tool. These include the following:

- (a) The VSS contains a wealth of knowledge and information to serve as the building blocks of the National Statistical System, as well for thematic or sector-specific statistical operations. This knowledge is an invaluable resource for practicing statisticians and especially young statisticians who join the NSOs without much experience in statistical organization, management, and operations. These young statisticians need to be brought up to speed on the various aspects of statistical production. RSTCs will also need the VSS for teaching official statistics and for giving advice to countries.
- (b) Many NSOs are constrained by a severe shortage of trained statistical personnel. This makes it difficult for their staff to absent themselves from their home duties for an

extended period of time in order to undergo training at RSTCs. Moreover, fellowships to enable such staff to train at the Centers have dwindled over the years. RSTCs are, therefore, beginning to introduce e-learning not only to provide training for staff who are unable to leave their workplaces, but also to scale up the number of staff who can benefit from e-learning methodologies. The VSS provides the online training tools and a rich library of courses which can be harnessed for e-learning purposes.

(c) Development partners have a crucial role to play in assisting developing countries in the design of training programs and in making effective statistical learning tools readily available. In this context, it is essential that these training programs be linked to statistical work programs, especially in a particular statistical area. This will include: assistance with the design, content, management, and delivery of such programs. The VSS can play an important role in providing the necessary information to set up the training program.

### ***Knowledge and information sharing***

National Statistical Systems in Africa are at different stages of development. Some are doing well in certain areas while others are lagging behind. It is important to showcase success stories and best practice so that other countries can learn from them. In addition, communities of practice are being formed to effectuate the Working Groups of the Statistical Commission for Africa (StatCom-Africa). StatCom-Africa is the apex inter-governmental body established by the Conference of African Ministers of Finance, Planning and Economic Development in April 2007 to oversee statistics and statistical development in Africa. There are working groups on gender, national accounts, MDG monitoring, informal sector, etc. Much of the work of these groups is done virtually and the VSS can serve as a platform to facilitate this.

The VSS will be particularly useful as a communication tool to enable knowledge and information sharing and exchange. Its other application in this respect is as an online community of practice, with interactive tools and applications.

## **4. Conclusion**

Increasingly, challenges relating to statistical reform and development (especially capacity building) as well as knowledge and information sharing are being met head-on through a number of initiatives. The VSS is an innovative initiative that will be appropriated to great effect by African countries as a statistical knowledge base for e-learning and for knowledge and information sharing and exchange.