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Common cause, common language

Harmonising key concepts in the data revolution

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Introduction

In July 2012, the Secretary-General of the United Nations (UN) created a High-Level Panel of Eminent Persons to make recommendations on the development agenda beyond 2015. Its report, published in May 2013, called for “a data revolution for sustainable development, with a new international initiative to improve the quality of statistics and information” available to citizens and governments.

This ‘new’ emphasis on data-driven development would require a radical shift in how data and information are leveraged for development decision-making. Hence it set in motion global, regional and national conversations and processes on the data revolution mainly led by think tanks, civil society, multilaterals and to a lesser extent national statistical offices (NSOs). Examples of these processes include the Transformative Agenda for Official Statistics, the Global Partnership for Sustainable Development Data and the High-Level Conference on the data revolution in Africa, which led to the drafting of an ‘Africa Data Consensus’.

If one of the keys to the success of the data revolution for sustainable development is the ability of a diverse set of stakeholders to work together, they all need to speak the same language.

This paper proposes a way for all data revolution stakeholders to harmonise their thinking on key definitions.

Multi-stakeholder conversations are now ongoing at different levels in many countries. A common thread in these discussions is the importance of collaboration between all data producers and users.

Notwithstanding this progress, different perspectives on the meaning of the data revolution and associated terminologies and the best approach to carry it forward have emerged. Some new terms, such as ‘**data communities**’ and ‘**data ecosystems**’, that have mostly originated from new ‘non-official’ players are not understood in the same way by the more traditional, government entities such as NSOs and line ministries. Similarly, there is no harmonised understanding of who or what constitutes the ‘**national statistical system**’ and, consequently, the exact scope of ‘**official statistics**’. This lack of a common language has the potential to hinder progress, especially if official and non-official actors misunderstand and misinterpret one another.

Common roots

Since the late 1980s, many initiatives and agreements have attempted to improve the role and relevance of statistics and data as a key element in planning and monitoring development.

Global processes	Regional/Africa processes	National processes
<ul style="list-style-type: none"> • United Nations Fundamental Principles of National Official Statistics, 1994 • General Data Dissemination System (GDDS), 1997 • Trust Fund for Statistical Capacity Building (TFSCB), 1999 • Partnership in Statistics for Development in the 21st Century (PARIS21), 1999 • Marrakech Action Plan for Statistics (MAPS), 2004 • Declaration Of Principles For Statistical Activities In International Organizations, 2004 • Global Partnership for Sustainable Development Data, 2015 • Transformative Agenda for Official Statistics, 2015 • Global Action Plan for Sustainable Development Data, 2016 	<ul style="list-style-type: none"> • Addis Ababa Plan of Action for Statistical Development in Africa in the 1990s, 1990. • CODI II Resolution on statistical development in Africa, 2001 • Forum on African Statistical Development (FASDEV I), 2004 • African Symposia for Statistics Development, 2005 • Reference Regional Strategic Framework for Statistical Capacity Building in Africa, 2006 • The Africa Charter on Statistics, 2009 • The Strategy for the Harmonization of Statistics in Africa (SHaSA), 2011 • The Africa Data Consensus, 2015 	<ul style="list-style-type: none"> • National Strategies for Development of Statistics (NSDS), 2003 • National statistical legislation • National development plans • National data revolution roadmaps

Note: Please see Annex for full source information.

There are common themes running through most of the processes described here:

- **Coordination and collaboration**
It's clear that most of the processes and declarations underscore the importance of working together among all stakeholders as an important element of statistics strengthening.
- **Role of technology**
From an early stage these processes recognised the role that the then emerging

ICTs (information and communications technologies) and other technologies would play in changing the nature of statistical production, dissemination and use.

- **Role of evidence-based development**

Then, as now, these initiatives portrayed a picture of a development regime in which interventions are evidence-based and results are measured.

- **Capacity development and investment in data**

Strengthening the human, technical and financial capacities for data production has been a consistent priority in all of the processes referenced here.

These processes, in the similarity of their declarations, underscore that much of the data revolution debate is not new. It is therefore important to find a common language around key concepts as one of the ways to promote collaboration and coordination.

The national statistical system

The term 'national statistical system', or NSS, is widely used in the world of official statistics. However, there is no agreed definition of an NSS. Most international definitions tend to go with the traditional consideration of the NSS being made of only the NSO and a few government entities. The Organisation for Economic Co-operation and Development (OECD), for example, defines it as "the ensemble of **statistical organisations and units** within a country that jointly collect, process and disseminate official statistics on behalf of national government". There is, however, a broader view.

The UN Fundamental Principles of Statistics state that "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".

Professor Ben Kiregyera, in his groundbreaking study *The Emerging Data Revolution in Africa*, argues that the lack of proper understanding of 'system' in NSS alone could be a basis for misinterpretation of what constitutes an NSS and who runs it. He refers to "a general tendency to narrowly conceive the NSS as comprising data producers, leaving out altogether or paying cursory attention to other components of the NSS and the interplay among these components". He defines an NSS as: "Comprising a legal framework, institutional and organisational arrangements for data collection, management and dissemination of official statistics" and identifies four key components of an NSS as:

- Data users: who he calls 'the most important component of the NSS'
- Data producers (including non-NSO producers)
- Data suppliers
- Research and training institutions.

Several governments and NSOs have extended the OECD definition to include other data producers and users.

- The **Uganda** Statistics Act of 1998, which established the Uganda Bureau of Statistics (UBOS), for example defines the NSS as that which:

“Includes all agencies in Uganda, whether Government or not; under any enactment or otherwise; responsible for gathering statistical data through either surveys or administrative action.”

The act goes further to designate UBOS as the coordinator of the NSS stating in Article 4 (1) that “The Bureau shall be the principal data collecting and disseminating agency responsible for coordinating, monitoring and supervising the National Statistical System”.

- The **Kenya** Statistics Act, No. 4 of 2006 that established the Kenya National Bureau of Statistics defines the NSS as:

“...composed of the individual units engaged in the production and use of official statistics in the country. It comprises producers, users, suppliers of statistical information as well as research and training institutions.”

- The **Rwanda** Institute of Statistics includes in the composition of the NSS:

“The National Institute of Statistics of Rwanda; various state institutions that provide statistical information, organs which use statistical information; organs that provide statistical information, including public and private institutions, non-governmental organizations, households and the population; and institutions of research and training including institutions of higher learning.”

These examples illustrate an emerging trend towards a more inclusive definition of an NSS: one that includes other ‘non-official’ producers and users of data within and out of the government ecosystem. None of these progressive approaches undermine the fact that NSOs need to retain leadership of this broader NSS in order to maintain the integrity of official statistics and to provide quality assurance. The role of setting benchmarks, standards and rules governing the collection, analysis and use of data by all entities in an NSS indisputably belongs to the NSO.

All constituencies that recognise the transformative potential of the data revolution are demonstrably committed to improving collaboration and partnerships between themselves.

An inclusive definition of an NSS – that embraces *all* organizations and individuals that collect, process and disseminate data and statistics, within specified standards and benchmarks set by the NSO – can play a decisive role in bridging the divide between the ‘official’ and ‘non-official’ actors in the data revolution.

Official statistics

The current ambiguity around definitions of an NSS means that what is regarded as 'official statistics' generally does not include the use of data produced by non-state agencies. Even in South Africa, which has a broad NSS definition, the Statistics Act maintains that:

"The Statistician-General may designate as official statistics any statistics or class of statistics produced from statistical collections by Statistics South Africa; or other organs of state ..."

What is missing from this, from a data revolution point of view, is the power for the head of the NSO to formally recognise – subject to due diligence and all necessary quality assurance – statistics produced by non-state agencies.

The adoption of a progressive definition of the NSS requires that *all* relevant statistics produced, processed and disseminated by organisations that fall within the NSS and which satisfy standards and benchmarks set by the NSO should be eligible for recognition as official statistics.

Data communities and ecosystems

The concepts of data communities and ecosystems have gained widespread use in recent years with the bursting onto the scene of new, mostly non-state, players and data sources (such as social media and big data). The Africa Data Consensus, for example, defines a data community as:

"a group of people who share a social, economic or professional interest across the entire data value chain – spanning production, management, dissemination, archiving and use"

and the data ecosystem as:

"Multiple data communities, all types of data (old and new), institutions, laws and policy frameworks, and innovative technologies and tools, interacting to achieve the data revolution."

These are useful definitions that describe the inter-relationships that are critical to the success of the data revolution. They become problematic, however, when they are misused or misunderstood. There is for example a tendency for non-state actors to confuse data and statistics. Furthermore, non-state actors tend to have difficulty recognising that all statistics do not, even in an ideal world, qualify as official statistics. State actors, in turn, tend to be suspicious of new data sources. At times, they may even feel challenged by a multitude of new actors and technologies.

Conclusion

If a key to the success of the data revolution for sustainable development data is a diverse set of stakeholders being able to work together, they all need to speak the same language.

Global consensus on an inclusive definition of the NSS – one that recognises both the centrality and rigour of official statistics and the diversity and contribution of all stakeholders – would represent a major step forward toward integrated and united action.

Annex: References

Processes preceding the data revolution movement

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