2nd Global Conference on Big Data for Official Statistics

Organized by NBS/UAE, UNSD, ABS and GCC-STAT

20-22 October 2015, Abu Dhabi, UAE

Concept Note

Introduction

Innovations in technology, widespread penetration of electronic devices, and the rapid rise in the use of technology for social purposes all bring fundamental changes to the availability of real-time information. Such massive, highly dynamic and weakly structured data is commonly referred to as *Big Data*. The statistical community officially recognized the potential of Big Data, when, in March 2014, the UN Statistical Commission established a global working group (GWG) mandated to provide strategic vision, direction and coordination of a global programme on Big Data for official statistics. The GWG promotes its practical use of Big Data, capacity building and sharing experiences, while finding solutions for the associated challenges.

The first global conference on Big Data[1] was organized in Beijing in October 2014 and showcased a variety of examples of Big Data projects for official statistics, such as Mobile phone data for daytime population statistics, Satellite imagery data for agriculture statistics and Social media data for consumer confidence indicators. The second global conference will take place in Abu Dhabi in October 2015 and can take the development of Big Data one step further by moving from examples to guidance. On the basis of detailed descriptions of a significant number of Big Data case studies, some generalized lessons learned can now be brought together as a first step towards guidelines for Big Data. Those guidelines can stimulate training, pilot projects and bringing pilot projects into the production environment. Therefore, the theme of the second global conference is 'moving from examples to guidance'.

The context of the Post-2015 development agenda

On 25-27 September 2015 many heads of states will come to New York to adopt the Post-2015 Development Agenda, which calls for global action to transform our world by 2030.This Agenda is a plan of action for **people, planet and prosperity** that also seeks to strengthen universal peace in larger freedom. All countries acting in collective partnership will implement the Agenda

[1] See http://unstats.un.org/unsd/trade/events/2014/Beijing/default.asp

to end poverty and hunger, secure education, health and basic services for all, achieve gender equality, foster economic growth and protect the planet. The national policies to achieve these goals in each and every country need to be informed by high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts.

SDG indicators framework

The heads of states will most probably sign off on 17 goals and 169 targets to be achieved by 2030. The post-2015 agenda will be universal, addressing the needs and seeking contributions of all people across the planet. It will aim at economic progress, social inclusion and environmental sustainability in a balanced manner, and be relevant to all countries. To ensure the full implementation of this agenda and respond to the level of ambition of the new goals and targets, the statistical community will need to develop and implement a robust framework of indicators. This is an important task which will require intense methodological and technical work. The implementation of a new monitoring framework for SDGs will pose a challenge even for the most advanced statistical systems, and will certainly require significant efforts to strengthen the capacities of national statistical systems in many developing and least developed countries.

Transformative agenda for official statistics

The formulation of a Transformative Agenda for Official Statistics – to be better prepared for the challenges of the post-2015 era – will focus on the following thematic areas: i) coordination of the global statistical system; ii) communication and advocacy; iii) data collection, processing and dissemination through integrated statistical systems; iv) innovative methods, tools and IT infrastructure, including standards based production architecture; and v) capacity building. Big Data plays an important role in the transformation both for modernizing the statistical production and for meeting the demand for timelier and more detailed data to monitor the SDGs.

- *Modernization of Statistical Production and Services*

The business case is increasingly made for why and how national statistical offices and their statistical systems need to transform their statistical production processes to meet the emerging multi-dimensional and integrated data demands of the post-2015 development agenda; how this transformation process can be financially assisted; and what other institutional and management implications at the national, regional and global levels exist or should be addressed. The transformative agenda is taking shape in the form of a concrete programme with short, medium and long-term actions by statistical services. The programmatic actions are to be agreed gradually and should contribute to closing the data gaps, strengthening national statistical capacities and improving regional and international coordination in delivery of capacity-building and mechanisms for monitoring and reporting on the sustainable development goals.

- *Big Data for SDGs*

The new integrated production architecture will also introduce innovations to incorporate non-traditional sources of data, especially big data that thus far have been underutilized in producing

official statistics. Notwithstanding their potential benefits, the suitability of new, non-traditional data sources for official statistical purposes needs to be thoroughly examined and evaluated maintaining the existing strict quality and other requirements followed by official statistics. Big Data sources need to be leveraged and considered for adequacy to enrich the sources of official statistics so that the data needs in new development areas can be satisfied and timely, detailed and spatially disaggregated data can be produced and made available to decision makers. This implies that the innovative and transformative power of information technology may be harnessed: from the collection stage (through, for example, the use of computer-assisted collections through mobile devices), to the dissemination stage (through advanced visualization tools, such as data on maps).

World Statistics Day: *Better Data. Better Lives*

Early June 2015, the General Assembly adopted the resolution to celebrate World Statistics Day on 20 October 2015. This will be the second World Statistics Day and it will coincide with the opening day of the second Global Conference on Big Data. The slogan of World Statistics Day 2015 is "Better data. Better lives." which conveys the idea that the ultimate goal of producing high quality official statistics is to improve the lives of people and underlines the connection of data and sustainable development. This also means that we have the unique opportunity to celebrate World Statistics Day, while celebrating the benefits of Big Data for official statistics.

Objective of the 2nd Global Conference on Big Data for Official Statistics

Given the need to modernize the statistical production and services, given the need to meet the increasing demands for timelier and more detailed data for monitoring the Post-2015 development agenda and given the progress made thus far on a considerable number of Big Data projects, this second Global Conference on Big Data for Official Statistics wants to move beyond the examples of Big Data projects and make the first steps towards developing guidance, which will support training on Big Data issues, support initiatives for Big Data projects and support moving Big Data from pilots to production.