POLICY ANALYSIS

BIG DATA IN THE POST-2015 DEVELOPMENT AGENDA

POLICY IMPLICATIONS FOR OFFICIAL STATISTICS

In September 2015, world leaders adopted a new set of global Sustainable Development Goals (SDGs) as part of a transformative agenda for humanity and the planet. The 2030 Agenda for Sustainable Development represents a plan of action for people, planet and prosperity. It consists of 17 goals which will succeed the Millennium Development Goals (MDGs) on 1 January 2016 and is expected to drive global development efforts in the post-2015 era.

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The architects of the SDGs took into consideration lessons learned by national governments, international agencies and civil society in the implementation and monitoring of the MDGs in crafting the new goals. Of note among these is the paucity of data for measuring progress towards the achievement of the MDGs. The poor quality of available data and the lack of timeliness in generating and disseminating data and statistics have also been noted as major hindrances to the attainment of sustainable development. As the Independent Expert Advisory Group on a Data Revolution for Sustainable Development stated in its report to the United Nations Secretary-General (A World That Counts, November 2014, p.2):

"Data are the lifeblood of decision-making and the raw material for accountability. Without high-quality data providing the right information on the right things at the right time; designing, monitoring and evaluating effective policies becomes almost impossible."

Since the release of that report, the call for a Data Revolution for Sustainable Development has gained momentum. An essential element of this revolution is Big Data; data that are generated in large volume and with great velocity, variety and veracity. In recent times, Big Data has been promoted as a viable alternative or complement to traditionally-sourced official data. This is within the context of rapid advancements in Information and Communications Technology (ICT) that has enabled the production of a great variety of digitally generated information in high volumes as well as in real time. This has led to an explosion in the volume of data available in the world today compared to a decade ago. Meanwhile, critical decisions about development programmes and projects are delayed because of lack of data. Worse still, decisions are routinely made with no evidence-base for such decisions that will have repercussions not just for the current generation but for the generations to come.

A world awash with information but with very little data available to inform sustainable development efforts is paradoxical. Every tweet sent, every Facebook posting made, every scanner transaction conducted at the supermarket, and every Google search carried out creates potentially useful record for developmental purposes. That is not to mention voice and text traffic on cellular networks as well as

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Global Positioning System applications on mobile devices. These are all sources of Big Data and the private sector, some industries better than others, has capitalized on the Big Data that consumers generate to drive business value. The time is now ripe for these same data that we generate just by going about our daily activities to be used in transforming our world; to eradicate poverty, to end hunger, and to ensure healthy lives, just to mention a few.

POTENTIAL TO TRANSFORM OUR WORLD

Big Data has a huge potential to meaningfully transform our world. If SMS could help inform health officials of the possibility of an epidemic long before official statistics are available, would there be an argument against its use? If tweets about fear of job loss is a good predictor of future unemployment, why must we wait for a year or more to know how many people were unemployed? If GPS data can help track displaced residents after a disaster, will there be a popular support for it? These are some of the apparent benefits of Big Data when harnessed by the government. However, the current environment in which National Statistical Systems (NSS) operate does not facilitate this and for the NSS in the region to take full advantage of the Data Revolution for Sustainable Development, they must embrace Big Data and develop a strategy to incorporate Big Data in official statistics.

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Many Caribbean countries today boast a mobile service subscription rate in excess of 100% but the data generated from mobile devices are largely untapped for the public good, except in cases of law enforcement, even though such Big Data could be useful in many facets of the public sector. Tourism, health, agriculture, transportation, and the economy are examples of sectors that can benefit from Big Data. Big Data is especially desirable because it is more cost-effective and timelier. ▶▶

However, Big Data has its challenges. Chief among these is the concern about violation of privacy from government's use of private data. Others pertain to

Caribbean region did not perform particularly well in monitoring and reporting on the MDGs and considering the fact that the SDGs will pose even a greater challenge as the demand for data will be greater, Big Data provides an attractive option for tapping into the enormous amount of data that are generated daily but unused while at the same time we complain of lack of data to inform decisions. The Caribbean region needs to embrace the Data Revolution for Sustainable Development and put policies in place to facilitate the use of Big Data in official capacities.

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issues of technology, access to Big Data, methodology of and expertise in data analytics. These are all well-founded concerns for the National Statistical Offices (NSOs) in the Caribbean. Nonetheless, these concerns should not constitute unsurmountable obstacles to the exploitation of Big Data for developmental purposes.

Tackling the Big Data challenges will require, first and foremost, an ideological shift within the NSS to be open to Big Data. This would be facilitated by amending the Statistical Act of many countries to recognise Big Data as a legitimate source of official statistics. A few countries are already embracing open governance and open data platforms which could aid a Big Data initiative. Developing expertise in data analytics is also crucial for any successful Big Data initiative. Big Data is highly unstructured as opposed to data for official statistics that are very structured. A different skill set is required to make meaningful interpretation of Big Data. More so, official statistics are generated with adequate provisions made for representativeness of the data. Therefore, before Big Data can be incorporated in official statistics, benchmarking studies need to be conducted to calibrate Big Data to survey and administrative data collected from traditional sources. All of these will require manpower and financial investment but there is no better time than now to make these investments.

Unemployment data is one of the critical macroeconomic parameters that are routinely reported by only a few countries and some with long lags. How will we then pursue the goal of promoting full and productive employment and decent work for all if we are not certain how many people need work or the information is only made available after these person had emigrated? If Big Data from search engine results would allow us to predict the unemployment rate months or years before official statistics are produced, policy interventions could be put in place in a more timely fashion.

Similar analogies could be made for the use of Big Data from SMS in furthering the goal of ensuring healthy lives and promoting well-being for all ages or from GPS data in realising the goal to make cities and human settlements inclusive, safe, resilient and sustainable. The 2030 Agenda is upon us and the Data Revolution for Sustainable Development is already underway. Now is the time to get on board and the region should put policy measures in place to facilitate the use of Big Data in official statistics. ∎

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EMBRACE BIG DATA FOR SUSTAINABLE DEVELOPMENT

In comparison to the MDGs that had 8 goals and 21 targets, the SDGs consist of 17 goals and 169 targets. Given that the