Role of ISI, and Statistical Societies in Measuring SDGs

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Abstract:

The data revolution and adoption of the Sustainable Development Goals (SDGs) gave a new impetus for the development of the national statistical systems. Currently the statistical institutions around the world are working on developing methodologies and conducting new surveys gearing up to better use of administrative records and private sector data for estimation of SDG indicators. This situation requires the larger efforts both from international community as well as from domestic institutions.

External support may come from international organizations and other donors in the form of funds or, more importantly, technical assistance. International organizations are responsible for developing standard methodologies and they should provide assistance but this is not enough. Assistance may come from several alternative constituencies from the public sector (statistical agencies in developed countries) and the private sector (statistical consulting companies and individual consultants). As a part of statistical system, NGOs with statistical backgrounds also play their role. International NGOs, such as the International Statistical Institute (ISI), provide a network for professional communication for all interested participants using various events (conferences, seminars and webinars, etc.) as well as journals and websites for publication of related discussion papers.

At the national level, the composition of statistical systems and functions of different participants in measuring SDGs may vary. It depends on each country's legislation, traditions, and other factors. In many countries, official statistical services play a key, if not an exclusive, role in SDGs measurement using support from the international agencies to solve the methodological problems and shortage of funds. In the case of the SDGs, this scheme may not work very effectively because even international agencies can't provide all necessary support due to ongoing methodological discussions. To solve the problem of measuring SDGs, members of national statistical systems need to act in the same way as their partners at the international level, that is, combine the efforts of official bodies, academia, private business and NGOs.

Keywords:
data revolution; statistical capacity building; public private partnerships; NGO's; private sector.

1. **Introduction:** From 2000-2015, the UN system was guided by the Millennium Development Goals (MDGs). The MDGs centered around eight goals, twenty one targets and 60 indicators. The goals were focused primarily on affecting change within developing countries and had ambitions such as halving extreme poverty. The indicators primarily focused on challenges faced by developing countries. The indicators came from well-established indicators produced through national statistical systems.. Despite these indicators being well defined, there were still challenges around the accuracy, timeliness, and precision of the indicators. However, the data

challenges were around data collected by national statistical offices, primarily using national household surveys or well-established tools.

Beginning in 2012, the UN began a process to identify a new agenda for 2015-2030 with an Open Working Group. The Open Working Group involved nearly sixty member states from all regions of the world. These groups identified a desire to keep some of the key issues embodied in the MDGs around social indicators but sought to expand the agenda to focus more on environmental indicators, peace and security, and inclusive development (Open Working Group 2012).

In parallel with the Open Working Group, the UN Secretary General formed a High-Level Panel of Eminent Persons to discuss the post-2015 agenda. This panel had senior officials from government, the private sector, think tanks and academia. They issued a call for "a data revolution for sustainable development." Such a data revolution would focus on filling gaps in data to improve monitoring of progress, the allocation of resources, and to boost accountability for governments and private sector actors. On data from the private sector, the panel wrote, "Only a few progressive, large businesses try to account for their social and environmental footprint. The Panel proposes that, in future – at latest by 2030 – all large businesses should be reporting on their environmental and social impact – or explain why if they are not doing so." (United Nations, 2013, p. 24). Such a framework for international statistics provides a significant shift from the MDG approach to data.

Following the recommendations of the High-Level Group, the UN Secretary General created the Independent Expert Advisory Group on a Data Revolution for Sustainable Development. This group produced a report on the data revolution. The report makes several points about the role of private interests. The private sector can be one of the key sources of innovations and the governments can occupy a key role in balancing public and private interests (United Nations, 2015).

In response to the Independent Expert Advisory Group, the Global Partnership for Sustainable Development Data (GPSDD) was created. The GPSDD, currently hosted by the UN Foundation, boasts nearly 300 members, including several national statistical offices, think tanks and many companies. It is primarily a source for connecting the many stakeholders in the data revolution and encouraging them to work together. Some initiatives have included creating data roadmaps, developing inclusive data charters, and sharing innovations. Small amounts of funding have been awarded to projects involving more than one member, through financing from the World Bank.

The World Bank has committed to increase the frequency of poverty surveys in conjunction with the demands of the SDGs. They have also employed new methods and new approaches to estimating poverty in contexts where data are frequently missing[1].

This paper is a case study based on practical experience of joint efforts of public sector and private sector institution as well as NGOs to solve the problems related to implementations of SDG estimations at the country level. Using this experience, we are going to demonstrate shortcomings and limitations which currently take place in cooperation of NGO's with other partners in statistical community.

2. Measuring the SDGs:

No country in the world currently can provide data on all the SDG indicators as presented by the UNSD. Furthermore, methodology for some of the indicators are not even developed. This situation requires larger support to the national statistical systems particularly in developing countries.

The adoption of the 17 Sustainable Development Goals and the commitment to achieve them by 2030 puts enormous pressures on many countries mostly those with low level of development.

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[1] See for instance, World Bank https://www.worldbank.org/en/news/immersive-story/2017/07/26/the-tech-revolution-thats-changing-how-we-measure-poverty

The 17 SDGs are measured by more than 240 indicators, divided in 3 tiers.

Tier 1 indicators are conceptually clear, have an internationally established methodology, all related technical standards are available, and estimated results are regularly produced by at least 50 percent of countries in every region where the indicator is relevant.

Tier 2 indicators are conceptually clear, have an internationally established methodology, all related standards are available, but estimated results are not regularly produced by countries.

Tier 3 indicators have no internationally accepted methodology or/and standards, but methodology/standards are being (or will be) developed and tested.

As of 13 February 2019: tier 1 contains 101 indicators, tier 2 contains 84 indicators and tier 3 contains 41 indicators. In addition to these, there are 6 indicators that have multiple tiers (different components of the indicator are classified into different tiers).

With the adoption of the SDGs comes the problem of their measurement. The methodology for SDG indicators is developed by Custodian agencies most of them are UN agencies or multilateral organization. These agencies have huge experience in such work and all necessary capacities. However, there is so much methodological and organizational work to be done that international agencies need the support of the entire statistical community. Academia and private institutions like Gallup Institute could provide additional ideas about possible methodological and technical solutions based on their experience and statistical NGOs may want to create a network for discussion for all interested parties.

ISI is a great example of such network. At the international level, ISI plays the unique role as the strongest and most reputable organization. Its membership has data scientists and statisticians who should work together to help combine the data coming from surveys, censuses, administrative sources and the "big data" into common data bases. These data bases should serve as a background to estimate the SDG indicators. The ISI through its Statistical Capacity Building committee design and roll out training courses and get involved in provision of methodological assistance.

But new methodologies are not the only problem.

What is more important is that the development of SDG indicators in many cases require new surveys or changes in current ones. In some cases, the questionnaires must be adjusted to get the disaggregation needed for the indicator, in some cases the sub-national data are not representative enough to allow for sub-regional estimates of SDG indicators. The countries are struggling to collect data to compile the SDG indicators as they need to introduce new surveys or adjust the ones which are in operation. These and other issues not only require a lot of efforts from country statisticians but also from those who are able to support capacity building in the statistical systems in developing countries.

Beside international agencies, there are two groups of organizations who support developing countries by providing technical assistance: statistical agencies of statistically developed countries (public sector) and consulting companies (private sector). The massive amount of interventions needs many actors to work together to help. Therefore partnerships between private and public sector entities in this endeavour are a key. They compete for projects in an open market. Often, they create partnerships in the forms of joint ventures, consortiums, twinning arrangement to compete. NGOs could provide support, participating in these projects or recommend to their members (including corporate members) to participate. For example, ISI, as a non-governmental, not-for-profit organization, can't compete in the market. If they have funds, provided by donors and they rely on volunteer labor force they cannot compete in the market as they would undermine the open competition. Therefore, it is imperative for the NGOs to find a way to join the partnership to be able to contribute to the capacity development in the field of statistics.

This paper is a case study based on practical experience of joint efforts of public sector and private sector institution as well as NGOs to solve the problems related to implementations of SDG estimation at the country level. Using this experience, we are going to demonstrate shortcomings and limitations which currently take place in cooperation of NGOs with other partners in statistical community.

3. Case Study:

In 2018, the Bureau of Economic Analysis (BEA) Foundation, which is a non-profit entity which function is coordination of projects financed jointly by World Bank loans to Russia and Russian government funds for the Russian Statistical Service (Rosstat) has announced a project to support Rosstat in the compilation of a wide range of indicators for monitoring SDG.

The project calls:

- Propose criteria for compilation of 17 SDG indicators for further developing methodology for their calculation in order to enable a comprehensive monitoring of the SDGs in the Russian Federation and develop methodological recommendations for improving the empirical base that ensures regular calculation of these indicators. Compile these indicators using the proposed criteria.

- Review and systematize methods for the calculation of SDG indicators, included in the list presented in the methodological materials of the custodian agencies for SDG indicators by the spheres of their responsibility, and in the methodologies used by UN member states.

- Carry out test calculations of the SDG indicators for Russia as a whole and for the subjects of the Russian Federation using the available empirical base.

- Compare the calculation results for the SDG indicators with statistics from other countries and with data for Russia presented in the UN information sources. Make conclusions about the methodological reasons for possible differences between the calculated indicators and the results from other countries and those presented in UN information sources.

- Indicate additional variables needed to improve the coverage of SDG indicators and formulate recommendations for their consideration within new or existing federal statistical observations, including suggestions on introducing new questions in the statistical surveys.

- Justify the optimal placing of the proposed above questions into the specific programs and statistical surveys taking into account their subject matter, frequency, and sample sizes. Estimate approximate budget for the calculation of SDG indicators in Russia.

- Develop guidelines for Rosstat to generate final statistics on SDG indicators, taking into account the need to supplement the empirical base, for submitting to the international organizations.

- Evaluate the possibilities for using alternative data sources (Big Data) for the calculation of SDG indicators.

US-based private consulting company ODW Consulting participated in competition. It has employed an international NGO Open Data Watch which works on different aspects of SDGs from calculation of indicators to estimating of costs needed to measure SDGs. In addition to work on the international methodology the project includes estimates using original Russian data as well as recommendations regarding improving of Russian official statistics. ODW Consulting employed several local experts to assist international experts, to collect initial data, and to make estimations. In this case ODW Consulting partnered with the Russian Association of Statisticians (RASt) to provide local experts with necessary background.

Currently this project is underway. In a recently conducted unpublished study, ODW Consulting looked at a sample of SDG indicators to understand the clarity of the write-ups by the custodian agencies placed on their websites. The study reveals that some indicators are not very clear, some write-ups are more than ten years old. Others have too many options for countries to choose from. It is known that no country in the world can deliver even on tier 1 indicators. We would expect that the champions can present around 90 indicators on their SDG web portals.

This concrete project may serve as a success story of cooperation between government, national statistical services, international agencies, private business and NGOs. This is because of clear distribution of functions between all these institutions. In many other cases, progress is not so visible.

The situation calls for strengthening the statistical systems worldwide to be able to deliver on indicators. The analysis of country and UN data portals demonstrate that the situation is not very promising. The call to support capacity development is not answered by those who finance statistical work – country governments, multilateral, bilateral, and private donors. Many estimates indicate significant gaps. Private and public sector entities should provide support to the least developed national statistical system. Ways of working together must be explored and agreements be reached rather sooner than later.

NGOs look like a weak point in this chain. NGOs have a high potential because in many countries their membership is very diverse. Their members are statisticians and data scientists working in statistical agencies, academia, private sector. In many countries, statistical societies are providing technical assistance and long- and short-term training. However, most of NGOs do not provide statistical training and do not conduct research themselves but work as a platform for communication for statisticians serving in both official and independent statistics and such communication is an important part of statistical system. This activity helps to keep dialogue open between the national statistical agencies, academia, universities and users of statistical data. Thus, NGOs should participate more actively in statistical capacity building process.

ISI is a flagship body of statistical community in the world. Other NGOs closely monitor its activity and try to use its experience at the national level. ISI should create the effective model for participation in statistical capacity building to provide example for the national NGOs.

4. Discussion and Conclusion:
Some examples of possible interventions and organization of the technical assistance process within ISI should be considered.

International Statistical Institute is in a unique position to help countries to improve statistical systems due to its diverse membership. No other organization in the world has academics, experts in official statistics, mathematical statisticians, data scientists, economists and other specialists who together can help countries to improve their statistical systems to enable them to deliver on the SDG measurement. Through the Statistical Capacity Building Committee (SCB) the ISI is planning to support statistics in several areas.

The partial list follows:
- Provide technical assistance in official statistics by creating a cadre of high-level statisticians in different areas of statistics interested to donate some of their time to deliver TA in the field.
- Organize workshops, seminars on important topics for official statisticians, such as management, data revolution, measurement of SDGs, etc.
- Support training institutions in developing countries by providing curricula, liaising with professors and creating possibilities for professors from abroad to work with colleagues in developing countries to deliver lectures, master classes, etc.
- Support statisticians from developing countries (mostly young statisticians) to participate in conferences.

For these to happen ISI should first to obtain financing from donors to be able to conduct those activities. A serious fundraising campaign must be launched by ISI SCB. The candidates to be approached, are World Bank, IMF, African Development Bank and other multilaterals, UK, USA, Canada, Sweden and other bilaterals, Gates, Hewlett and other private foundations.

They should internally conduct a survey of members who are willing to donate their time for support the statisticians in developing countries. ISI should find the modus operandi how to work with partners in the field.

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