

Data for Development

An Action Plan to Finance the Data Revolution
for Sustainable Development



Overview

The Data Revolution for Sustainable Development is poised to transform the way governments, citizens, and companies do business. The revolution is being defined by the explosion in availability of data resources and rapidly evolving technologies. Low-cost data collection tools, ranging from crowd-sourcing to satellite imagery, are changing the way we do business and increasing the availability of data all around us. The creation and implementation of the Sustainable Development Goals (SDGs) offers a unique opportunity to ensure that the benefits of the data revolution are extended to the countries and communities most in need, leaving no one behind.

In October 2014, the Independent Expert Advisory Group on the Data Revolution for Sustainable Development (IEAG) highlighted the opportunities and challenges the world is facing in improving data for sustainable development. In their report, *A World That Counts*, the IEAG identified the need for careful analysis of the levels of investment required to improve countries' statistical systems.

Responding to the IEAG report, SDSN, Open Data Watch, and partners¹ carried out an assessment of the cost of the core statistical tools needed to measure sustainable development. *Data for Development: A Needs Assessment for SDG Monitoring and Statistical Capacity Development* estimates that at least US\$1 billion a year will be needed to maintain and upgrade the statistical systems of 77 of the world's poorest (IDA-eligible) countries, as well as to ensure there is sufficient data collection to monitor the SDGs.² Half of this money will come from domestic resources, whilst the other half will need to be provided by international assistance. One billion dollars a year represents less than one percent of official development assistance (ODA) contributions to IDA borrowing countries, as of 2013.³

The Third International Conference on Financing for Development, taking place in Addis Ababa in July 2015, is a unique opportunity for the global community to make a firm commitment to improve core data systems, crucial to monitor and implement the SDGs. Specifically, the international community should:

1. **Ensure** there is adequate public financing for core national statistical systems to enable SDG monitoring.
2. **Enhance** and broaden the data instruments and tools used for SDG monitoring, starting with the eight instruments identified in *Data for Development* typology.
3. **Commit** to a data revolution for sustainable development, encouraging innovation, while respecting the leadership of national statistical offices and systems.

In order to achieve these main recommendations, we suggest the following concrete actions:

Global Actions

- Ensure global donors and national governments jointly commit to at least US\$1 billion a year in funding for statistical and data systems, including an estimated increase of US\$200 million a year in international assistance.
- Follow the recommendation of the High-Level Panel on the Post-2015 Development Agenda and the IEAG report to establish a Global Partnership for Sustainable Development Data.
- Establish global financing mechanisms that ensure coordination and alignment of donors with national plans.
- Convene a World Forum on Sustainable Development Data in 2016 to create mechanisms for ongoing collaboration and innovation.
- Support the Inter-Agency and Expert Group on Sustainable Development Goal Indicators (IAEG-SDG) and the United Nations Statistical Commission to establish roadmaps for strengthening specific data collection tools that enable the monitoring of SDG indicators.

National Governments Actions

- Provide financial support to develop national statistical systems.
- Improve coordination across government and open datasets related to the SDGs.
- Undertake assessments of existing capacity to fulfill SDG monitoring expectations and integrate needs into National Strategies for the Development of Statistics (NSDSs).
- Prepare robust country roadmaps for implementation of SDG monitoring.
- Incorporate new data collection tools and technologies into SDG monitoring frameworks, such as earth observations, geospatial mapping, new sensors, and cell phone based data.
- Engage with the new Global Partnership for Sustainable Development Data to ensure that each country's unique perspectives and needs are well addressed through global cooperative action.

From MDGS to SDGs: The Expanding Role of Development Data

Monitoring of the SDGs will require substantial additional investment in order to consolidate gains made during the MDG era and to develop reliable, high-quality data on a range of new subjects, such as climate risk mitigation or inequality, ensuring that no groups are excluded, and with an unprecedented level of detail.

A World That Counts

The Millennium Development Goals (MDGs) guided global development efforts from 2000 to 2015. Although they focused attention on important development challenges, a key lesson from the MDGs is that a lack of reliable data can undermine governments' ability to set goals, optimize investments decisions, and measure progress.

Now the world's governments, looking ahead fifteen years, are negotiating a new set of Sustainable Development Goals (SDGs). The SDGs will continue the fight against extreme poverty, adding the challenges of ensuring more equitable development and environmental sustainability. Crucial to their success will be good governance, informed by strong statistical systems that can measure and incentivize progress across all the goals. Furthermore, disaggregated data will be needed to ensure that no one is left behind.

National statistical systems have seen rapid advances over the past ten years; with improved use of national strategies for the development of statistics, and more regular census and survey-based data collection. International donors and the UN agencies have been crucial to these improvements, but to respond to the SDG agenda greater assistance is required.

We must also capitalize on the data revolution and turn it into a revolution for sustainable development. The unprecedented rate of innovation in data collection techniques and technologies, as well as the capacity to distribute data widely and freely, have expanded the horizon. With the right tools, policies, and investments, we can move towards better quality, high-frequency data on sustainable development in all countries. The adoption of the SDGs presents a strategic opportunity to build on the momentum of the data revolution, expanding the

data-input categories with new technology innovations, and demonstrating the central role of data in eradicating poverty and promoting sustainable development.

WHERE DATA MAKE A DIFFERENCE

Good, available, and well-used data can make a difference in people's lives. Data inform government policies and provide evidence of their success or failure. Data are important to businesses and individuals who use information to make daily decisions that affect their well-being. Consider Namibia, where the innovative use of data sources has helped stop the spread of malaria. Cell phone records were used to trace travel patterns whilst satellite images helped to identify places prone to harboring concentrations of mosquito and parasite populations. Bringing these datasets together allowed Namibia's Ministry of Health to target its limited resources to the 80,000 people that were most likely to spread the disease to other parts of the country. In Ethiopia, the Ethiopian Commodity Exchange provides real time price data to small-scale farmers, allowing them to improve their decision-making. Access to information has allowed farmers to double the share of the export price they receive. At the local level, GPS tracking devices have been used in Nairobi, Kenya, to map the routes of private buses and provide bus drivers and commuters with information about optimal trails. In Seoul, South Korea, cell phone data records have been analyzed to improve late-night bus routes. These are some examples of the many ways in which the innovations born out of the data revolution have affected people's lives. Nonetheless, traditional sources of data remain important. The Demographic and Health Survey and the Multiple Indicator Cluster Survey document the lives of women and children to improve programs that address malnutrition, childhood diseases, HIV/AIDS, and gender-based violence. Censuses, surveys, civil registrations, and government administrative records are all important source of data waiting to be put to use to improve people's lives.

These and other examples of data at work are documented at www.dataimpacts.org.

Data for Development outlines the expected core components of an effective national monitoring and statistical system, updating a toolkit of data instruments from the MDG era into the components that will underpin the SDG monitoring process. After extensive consultation with national statistical offices, partner organizations, and leading data scientists and experts, *Data for Development* recommends a framework of eight data instruments and inputs for the SDG statistical and monitoring ecosystem (see Figure 1). These data instruments will form the bedrock of an effective national monitoring system, but will be complemented over time by innovative approaches to data production, dissemination, and usage.

Good quality data yield not only social benefits, but also real economic returns, such that, in the medium term, a data revolution could pay for itself.

The Data Revolution ⁴

Figure 1: A toolkit of data instruments for SDG monitoring.



Census

Systematic recording of information from all members of a given population.



Household Survey

National sample of randomly selected households that provides data on demographic and socioeconomic characteristics.



Agricultural Survey

Surveys of farms, ranches, and people who operate related enterprises, including data on crop yields, economic variables, and environmental data.



Geospatial Data/Infrastructure and Facility Inventories

Data with location-specific information (including other data inputs mentioned above) and spatial visualization, including facility inventories and core geographic data layers.



Civil Registration and Vital Statistics (CRVS)

A form of administrative data that records vital events in a person's life, including birth, marriage, divorce, adoption, and death.



Administrative Data

Information collected primarily for administrative or management purposes, including welfare, taxes, and educational record systems, amongst others.



Economic Statistics

Financial and economic-performance measurements, including labor force and establishment surveys, economic performance, employment, taxation, imports and exports, and other industrial activities.



Environmental Data

Real-time monitoring, ground stations, and satellite imagery for a range of environmental variables, including biodiversity, air quality, water resources, and forest and land use change.

Building Strong National Statistical Systems

The advent of the MDGs drew attention to many gaps in statistical records. In 2003, the Partnership in Statistics for Development in the 21st Century (PARIS21) formed a task team to examine ways to improve support to the statistical systems of developing countries for monitoring development goals. It found national statistical systems characterized by “under-funding, reliance on donor support, particularly for household surveys, and very weak administrative data systems.”⁵ More than ten years later, much progress has been made. Over 100 countries have produced NSDSs.⁶ National data archives have been established in about half of IDA-eligible countries.⁷ The frequency and coordination of internationally sponsored surveys has improved. Ninety-three percent of the world’s population was enumerated during the 2010 census round. However, as recognized by the IEAG, national statistical systems are still beset by challenges.⁸

Many national statistical offices lack sufficient capacity and funding, and remain vulnerable to political and interest group influence (including by donors). Data quality should be protected and improved by strengthening NSOs, and ensuring they are functionally autonomous, independent of sector ministries and political influence.

A World That Counts

At the 46th Session of the UN Statistical Commission and the Post-2015 Inter-governmental Negotiations⁹, governments agreed that strong national statistical offices and cross-governmental statistical systems are needed for monitoring the goals. Stronger open data systems will also improve decision-making, program design, and service delivery, as well as transparency and accountability to citizens. To realize the opportunities of the data revolution, governments need to embark on comprehensive programs of modernization that bolster administrative data collection across all ministries, encourage frequent collection of disaggregated data, and encourage the adoption of new methods, such as geospatial monitoring to track social and environmental dimensions of the goals. Boosting statistical capacity and literacy within government and civil society is also crucial.

TIMOR LESTE TRANSITIONING FROM MDG TO SDG MONITORING AND BUILDING NATIONAL STATISTICAL SYSTEMS

Over the course of the MDG period, the government of Timor Leste demonstrated commitment to building their statistical systems. The World Bank’s Statistical Capacity Indicator¹⁰ has shown their improvement over the past five years in regards to methodology, frequency, and source data; starting with an overall score of 32.2 in 2005 and increasing to 64.4 in 2014—above the average IDA-recipient country score of 62.¹¹ Timor Leste’s government has released three official MDG reports and has completed national scale surveys¹² using six of the eight instruments identified for SDG monitoring—geospatial monitoring and CRVS¹³ are still missing in their data system. They have conducted a census, labor force surveys, and household surveys; they are currently embarking on a new census. While these surveys may not be high in frequency, they reflect the commitment and efforts undertaken by this government to comply with global monitoring frameworks and build critical internal data systems. Although Timor Leste’s data systems have improved significantly in the past ten years, there are still important gaps. Timor Leste is an example of a country transitioning from conflict to resilience, which, with additional financial and technical support, has the momentum to move forward into the SDG monitoring era. This case presents the value of a global goal-based framework underpinned by common metrics, which can be a method to support the development of national statistical systems.

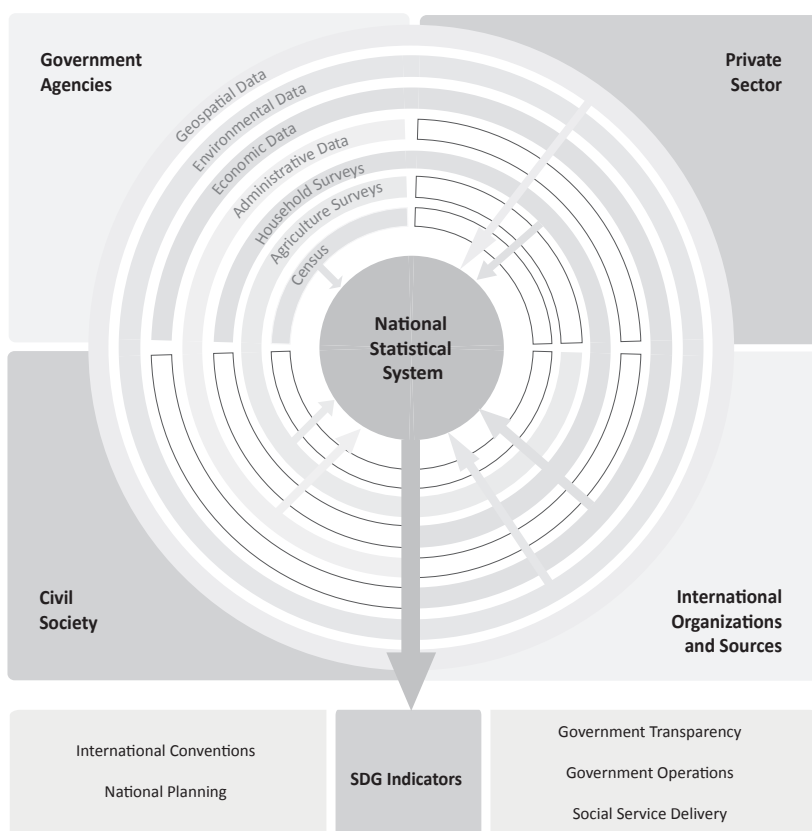


Figure 2: Monitoring the SDGs requires a range of stakeholders and at least eight core data collection tools. This figure depicts a data ecosystem filtering into and around a national statistical system.

Revitalizing Financing for Statistics

International assistance will be crucial to support countries' modernization efforts. *Data for Development* estimates that a total of US\$1 billion a year will be required to enable 77 of the world's lower-income countries to put in place statistical systems capable of supporting and measuring the SDGs.

We recommend [...] a new funding stream and innovative financing mechanisms to support the data revolution for sustainable development [...]

A World That Counts

Data for Development bases its analysis on 77 countries that currently qualify for concessional borrowing through the World Bank's International Development Association

(IDA) and are therefore likely to be in need of external assistance. This report provides the costs for a selection of core statistical products that will be essential to monitor the social, economic, and environmental dimensions of the SDGs (see Figure 1, p. 3). It also takes into account an overhead for human resource investments and policy and legislative reforms based on current and planned expenditures.

These overall cost estimates are conservative. They do not include the cost of monitoring and evaluation systems in each sector (specifically, for each SDG target) which will be needed for effective program design. Nor do they look at the costs of modernization over time. The report acknowledges that other investments in the data ecosystem will be essential to underpin a more fully developed culture of statistical literacy and a more sophisticated government approach to data analytics, visualization, and communication. Instead, these estimates focus on the core components of an effective national monitoring system and the resources required to bring low and lower-middle-income countries to this basic level.

To meet the US\$1 billion per year requirement, donors will need to maintain their current contributions to statistics of approximately US\$300 million a year, and go further, leveraging up to US\$200 million more in ODA to support country efforts. For their part, developing countries must commit to make-up for the rest, mobilizing domestic resources to fund their statistical development plans.¹⁴ Positively, national expenditure tracking shows an increase in domestic allocation of funds to statistical data plans in recent years.

Good data can lower the costs of borrowing money. The IMF has found that, if emerging market and developing countries invest in better-quality data, they can reduce the cost of borrowing by an average of 20%.

*The Data Revolution*¹⁵

Table 1: Estimated costs for data collection instruments from *Data for Development*. The total figures include support for statistical capacity and overheads, bringing the total cost to over US\$1 billion per year.

Statistical Instrument	Total cost for 77 IDA-eligible and blend countries, 2016 to 2030 (US\$)	Annual cost for 77 IDA-eligible and blend countries (US\$)	Source
National Survey Programs (including household, agricultural, and labor force surveys)	2.0 billion to 2.6 billion	134 million to 173 million	Costs reported on a sample of 30 countries, extrapolated to IDA-eligible/blend countries (PARIS21)
Census	4.8 billion	320 million	Per capita costs based on a sample of 26 countries, extrapolated to IDA-eligible/blend countries (Morten Jerven)
Administrative Data			
• Civil Registration and Vital Statistics (CRVS)	3.3 billion	220 million (It should be noted that 80% of expenditures will take place in the first ten years)	Estimates for CoIA countries, extrapolated by population to IDA-eligible/blend countries (World Bank/WHO)
• Education Management Information System (EMIS)	1.4 billion	90.5 million	Estimates based on a sample of 60 countries (GPE, 2013)
Economic Statistics (excluding labor force surveys and trade statistics)			
• Industrial Establishment Surveys	289 million	19 million	Country-unit costs (UNIDO)
• Improvements to Real Sector Statistics	60 million	4 million	Country-unit costs (Morten Jerven)
Geospatial Monitoring	1.2 billion	80 million	Unit costs (CIESIN)
Environmental Monitoring (other)	514 million	34 million	Unit costs (CIESIN)
Total Costs	13.5 to 14.2 billion	902 to 941 million	

Figure 3: Examples of SDGs and their monitoring tools.



Resources should also be more effectively coordinated. Donors should ease countries' access to funding by creating a new funding stream to support the data revolution for development. Donors are increasingly aligning their contributions with NSDSs, which highlight key priority investments. To ensure maximum coordination and coherence, this funding stream could be a multi-donor trust fund, administered by the World Bank but governed by a broad range of stakeholders, including the UN. This fund should also

seek to align with similar endeavors, such as the World Health Organization and the World Bank's Global Civil Registration and Vital Statistics Scaling Up Investment Plan 2015-2024, as well as to direct resources towards underfunded areas, such as gender statistics and management information systems in the education and health sectors. This new funding stream should also seek to drive improvements in monitoring over time and to foster innovation.

HOW TO FUND AID FOR STATISTICS

A recent inventory of financial instruments created by Open Data Watch identified a wide range of existing mechanisms currently used to support statistical capacity building. They identified seven major types:

- 1) **Multilateral lending-country focus**
- 2) **Bilateral grant**
 - Country focus
 - Regional focus
 - Thematic focus
- 3) **Bilateral, multilateral, or organizational support in form of technical assistance**
- 4) **Multi-Donor Trust Fund (MDTF) – Country executed**
- 5) **Multi-Donor Trust Fund (MDTF) – Host agency executed**
- 6) **Multi-Donor Trust Fund (MDTF) – Host agency or partner executed**
- 7) **Special development grant**

The inventory identified 31 financing mechanisms contributing approximately US\$264 million

per year in aid to statistics. Financing gaps were identified in several areas, such as gender statistics, data innovations, and open data initiatives. Most importantly, the study identified significant gaps in spending for low-income countries. The report estimates that donors will need to double current contributions through grant-based trust funds to meet needs for the Post-2015 Development Agenda.

Replenishing the existing financial instruments will go a long way in responding to many demands coming from the data revolution. However, the Open Data Watch study also recommends that donors focus on developing multi-donor trust funds for new funding streams to promote alignment with national priorities and reduce duplication between donors.

Adapted from Open Data Watch *Aid for Statistics: An Inventory of Financial Instruments*.¹⁶

Embracing the Data Revolution

As highlighted by the IEAG, new data collection and monitoring technologies are becoming rapidly available. These innovations will dramatically advance national statistical offices' and the international community's ability to monitor the impacts of development programs, in addition to informing the way they are designed and implemented. High-resolution satellite imagery, mobile devices, biometric data, and crowdsourced citizen reporting will change official data collection processes and the design of the programs they monitor. Take for example, satellite imagery. The cost of high-resolution image acquisition is falling while the availability of images and capacity for automated processing are increasing. There are many applications for earth observation data: harvest prediction, disaster response, and food security issues; monitoring geographic patterns and disease transmission corridors with geospatial determinants; measuring population density and the spread of new settlements; and mapping and planning transportation infrastructure.

Many surveys are now being conducted on digital mobile platforms.¹⁷ This practice reduces the time and cost of data collection. It also improves accuracy, simplifies collection of GIS and image data, streamlines integration with other information streams, and opens up the possibility of incorporating micro-chip based sensors into survey processes. Innovation is not just about adopting new technologies, it is also about improving existing ones.

The burgeoning “data revolution” movement should seize on the opportunity to strengthen national statistical systems in the region from the ground up, focusing on underlying political economy issues that have slowed progress on data for decades.

*Delivering on the Data Revolution in Sub-Saharan Africa*¹⁸

Many countries are innovating by expanding the use and impact of data through open data platforms, encouraging citizens to use data to track the quality of their services and to monitor private and public performance. Others are innovating by setting up partnerships for different skill set groups to work together towards a common goal, from research design to data production and analysis. These and other innovations will drive new approaches for achieving the SDGs, from pinpointing specific

communities and households for health initiatives to integrating real-time monitoring of natural resources into allocation schemes, and tracking government and donor investments. In spite of the upfront costs of software, hardware, and training, such innovations have huge potential to lower SDG monitoring costs over time.

SATELLITE IMAGERY IMPROVING REAL-TIME MONITORING

The SDGs will depend on more geospatial and earth observations data than the MDGs. Satellite imagery is increasingly available for free at a moderate resolution, and at a cost for high-resolution sources. Satellite products have the potential to be utilized in monitoring more than 23 potential SDG indicators, ranging from measuring global air quality to crop and forest cover, to disaster impacts, and water resources.

For example, Surface Water and Ocean Technology (SWOT) is a new mission to be launched in 2020 by the United States National Aeronautics and Space Administration (NASA) and the French Centre National d'Études Spatiale (CNES). The primary SWOT instrument has the ability to map water elevation and areal extent at an unprecedented spatial resolution and at a global scale, observing the details of the ocean's surface topography, as well as its terrestrial water bodies. A team of hydrologists recently published a study showing the potential application of SWOT by monitoring Mali's Sélingué dam. They incorporated virtual SWOT observations of reservoir and river levels into a modeling framework that simulated the hydrologic conditions on either side of the dam. The results demonstrated that incorporating altimetry data into this framework improves estimates of water levels and discharge, potentially helping resource managers ensure optimal reservoir releases.¹⁹

New satellite imagery is one example of emerging technology that offers significant opportunities for a global water monitoring platform.

Figure 4: There are numerous options for new technology and data collection innovations that could advance monitoring of the SDGs. This figure summarizes key tools identified to offer immediate Post-2015 opportunities.

Satellite Imagery

The cost of high-resolution image acquisition is falling, while the availability of images and capacity for automated processing are increasing. There are many applications for such data across multiple goals, such as predicting harvests, disaster response, earth observations, and food security situations; monitoring geographic patterns and likely transmission corridors of diseases that have geospatial determinants; measuring population density and the spread of new settlements; as well as mapping and planning transportation infrastructure.

Mobile Network Call Records

The rapid increase in cell phone users has opened new flows of data that have been used in post-crisis response, like during Haiti's 2010 earthquake to the recent climate data challenge. There is growing potential for systematic use of this data for sustainable development objectives.

Crowdsourcing

Global connectivity has created the opportunity for wide-scale participation in data collection and data processing, with applications in road mapping, land cover classification, human rights monitoring, price tracking, species inventories, and disaster response planning; with new uses unfolding regularly.

Smart Meter Technologies

The increasing use of smart metering systems for energy and water distribution, that transmit usage information over communications networks, create novel capabilities to measure and manage service provision. Enel's Telegestore system in Italy is one of the largest and most successful examples.

Smartphone and Tablet-based Data Collection

As described in SDSN's *Indicators and a Monitoring Framework for the Sustainable Development Goals* report, many surveys are now being conducted on digital mobile platforms. This practice reduces the time and cost for data collection, improves accuracy, simplifies collection of GIS and image data, streamlines integration with other information streams, and opens up the possibility of incorporating microchip based sensors into survey processes.

Data Mining

New uses have been discovered for data sources emerging from processes that are not explicitly designed for such purposes, such as social media, cell phone records, commercial transactions, and traffic records. Proven applications have been developed in a range of areas including crisis response, urban planning, and public health management.

NIGERIA EXPANDS ITS STATISTICAL TOOLKIT FOR MDGS INTO SDGS

The government of Nigeria has a very active statistics office, completing annual labor force, health, household, and agriculture surveys. It has scored significantly higher than other IDA-eligible countries on the World Bank's Statistical Capacity Indicator, receiving a score of 72.2 in 2015—compared to the average IDA-eligible country score of 62.²⁰ Nigeria's government has gone beyond traditional MDG monitoring instruments and implemented new data collection approaches that are being used to complement official statistics in a national effort to improve MDG implementation. Under the President's MDG office, the government deployed mobile-phone-equipped enumerators to each region of the country to collect georeferenced inventories of

health, education, and water facilities, including both basic location information and attribute data on the quality and capacities of each facility. They have now documented 250,000 facilities and effectively linked this data to planning via their MDG debt-relief local grants programs. This model serves to demonstrate potential new data inputs for the SDGs.²¹ Georeferenced facility surveys could cover waste treatment plants, bus stops, schools, water points, health facilities, agricultural infrastructure, and more. Nigeria's example shows that cellular devices are efficient tools for rapid collection of data and are capable of generating new geospatial data resources for SDG monitoring systems.

A Call for Action

Monitoring the SDG agenda will require substantive improvements in national statistical capacity. Collecting recurrent, quality data on the varied dimensions of sustainable development also requires that we innovate and seek to modernize statistical systems. The Financing for Development conference is a unique moment for governments to commit resources, both financial and technical, and to forge partnerships that capture the benefits of the data revolution in support of the SDGs.

Since May 2013, when the High-Level Panel on the Post-2015 Development Agenda called for a “data revolution for sustainable development,” there has been an outpouring of reviews, studies, and blog posts on this topic. *A World That Counts*, issued at the end of 2014, is the most comprehensive. There has also been follow-up work led by the UN statistical community, as well as donor-supported special studies, such as the PARIS21 review of the status of the data revolution in developing countries.²² *Data for Development*—produced by SDSN, Open Data Watch, and partners—is the most recent contribution to this discussion. It offers concrete estimates of overall costs and a framework for understanding the core data needs.

Data for Development puts forward three high-level recommendations to the international community:

1. **Ensure** there is adequate public financing for core national statistical systems to enable SDG monitoring. To achieve this, an additional US\$200 million per year will be required from the international community, alongside commensurate increases in domestic contributions for the development of national statistical systems.
2. **Enhance** and broaden the data instruments and tools used for SDG monitoring, starting with the eight instruments identified in *Data for Development* typology.
3. **Commit** to a data revolution for sustainable development, encouraging innovation, while respecting the leadership of national statistical offices and systems.

Concretely, the following actions are recommended in support of the three high-level recommendations:

Global Actions

- Ensure global donors and national governments jointly commit to at least US\$1 billion a year in funding for statistical and data systems, including an estimated increase of US\$200 million a year in international assistance.

- Follow the recommendation of the High-Level Panel on the Post-2015 Development Agenda and the IEAG report to establish a Global Partnership for Sustainable Development Data. It should be launched at the United Nations General Assembly in September 2015 to increase incentives, capacity, standards, and resources for the generation and use of data for development. This Partnership should encourage governments, firms, and civil society to adopt ambitious programs of modernization in the way they generate, share, and use data to make decisions that affect citizens’ well being. The Partnership should include a coalition of governments, international organizations, citizen groups, scientists, and private sector actors dedicated to building strong national statistical systems.
- Establish global financing mechanisms that ensure coordination and alignment of donors to NSDSs and national roadmaps. A new multi-donor trust fund may help to ensure coordination and to leverage the impact of investments.
- Convene a World Forum on Sustainable Development Data in 2016 to create mechanisms for ongoing collaboration and innovation. This follows the recommendations of the *A World that Counts* to bring together the critical data ecosystem to share ideas and experiences for data improvements, innovation, advocacy, and technology transfers. Such a gathering could make the data revolution a sustainable revolution for all.
- Support the IAEG-SDG and the United Nations Statistical Commission to establish roadmaps for strengthening specific data collection tools to enable the monitoring of SDG indicators.

National Government Actions

- Increase national budget allocations for the development of national statistical systems.
- Maintain high-level commitment to engage in the data revolution and monitor the SDGs by improving coordination across government and opening datasets related to the SDGs.
- Undertake assessments of existing capacity to fulfill SDG monitoring expectations and integrate needs into NSDSs.
- Prepare robust SDG-aligned NSDSs or national roadmaps to strengthen country-specific capacity to monitor the SDGs. Well-articulated roadmaps, accompanied by realistic budgets, are needed to enlist domestic support and to coordinate with donors.
- Incorporate new data collection tools and technologies into SDG monitoring frameworks, such as earth observations, geospatial mapping, new sensors, and cell phone based data.
- Engage in ongoing global processes, including the Statistical Commission, IAEG-SDG, and dialogue on the new Global Partnership, to ensure that each country’s unique perspectives and needs are well addressed through global cooperative action.

TIMEFRAME OF 2015 AND 2016 GLOBAL OPPORTUNITIES

Financing for Development Conference

July 2015, Addis Ababa

FFD will include a high-level launch of initial commitments in support of a new Global Partnership for Sustainable Development Data, with initial group of countries, businesses, academia, and NGOs. These commitments will be launched at a dedicated side event at the FFD, as well as in a meeting with CEOs and political leaders as part of the Business Investment Summit that will run parallel to the FFD.

IAEG-SDG Indicator Review

Summer 2015, New York

The UN Statistical Commission has mandated an inter-agency expert group to decide upon the final set of indicators for SDG monitoring. Deliberations will run until November 2015, with the final indicator set to be presented at the 2016 March Statistical Commission.

70th Session of the UN General Assembly

September 2015, New York

High-level launch of a new Global Partnership for Sustainable Development Data, including new financial and political commitments to track and achieve the SDGs. It will include country-level commitments to develop data roadmaps and action plans.

United Nations Climate Change Conference

December 2015, Paris

High-level launch of new financial and political commitments towards data for monitoring climate change.

47th Session of UN Statistical Commission

March 2016, New York

Member state representatives from national statistical offices will review the recommended SDG Indicators.

World Data Revolution for Sustainable Development Forum (World Data Forum)

Mid-to-late 2016

This is envisioned to occur periodically, every 2-3 years, to track progress on commitments and accelerate learning and innovation.

There is much energy and enthusiasm among stakeholders for a data revolution in support of sustainable development, in particular, to support SDG monitoring. Now is the time to build on the previous progress and chart the path for the next generation of action.

References

- ¹ This paper was written by SDSN, CIESIN, and Open Data Watch. It is based on the full report *Data for Development: A Needs Assessment for SDG Monitoring and Statistical Capacity Development*, written by Jessica Espey (SDSN); with Eric Swanson, Shaida Badiie, and Zach Christensen (Open Data Watch); Alex Fischer, Marc Levy, Greg Yetman, Alex de Sherbinin, Robert Chen, and Yue Qiu (CIESIN); Geoffrey Greenwell, Thilo Klein and Johannes Jutting (PARIS21); Morten Jerven (SFU); Grant Cameron, Ana Milena Aguilar Rivera, Victoriano C. Arias, and Samuel Lantei Mills (World Bank); and Albert Motivans (UNESCO).
- ² Espey, J. et al. (2015). *Data for Development: A Needs Assessment for SDG Monitoring and Statistical Capacity Development*. Available at <http://unsdsn.org/resources/publications/a-needs-assessment-for-sdg-monitoring-and-statistical-capacity-development/>
- ³ Net ODA (ODA minus principle repayments) to the 77 IDA-eligible countries in 2013 was US\$69.8 billion. Using the estimate of IDA-eligible countries needing roughly \$500 million a year in concessional support for statistics, it amounts to 0.7% of ODA. The World Bank (2015). *World Development Indicators*. Available at <http://data.worldbank.org/data-catalog/world-development-indicators>
- ⁴ Stuart, E. et al. (2015). *The Data Revolution: Finding the Missing Millions*. Overseas Development Institute (ODI). Research Report 03, Development Progress, p. 27
- ⁵ Paris21. (2015). *National Strategies for the Development of Statistics*. Accessed on June 6, 2015: <http://www.paris21.org/nsds-status>
- ⁶ Idem.
- ⁷ Accelerated Data Program Central Catalogue is available at <http://adp.ihsn.org/survey-catalogs>
- ⁸ Independent Expert Advisory Group on the Data Revolution for Sustainable Development. (2014). *A World That Counts: Mobilising the Data Revolution for Sustainable Development*. Available at <http://www.undatarevolution.org/wp-content/uploads/2014/12/A-World-That-Counts2.pdf>
- ⁹ IGN Session 3, March, 2015. See Chair's summary at <https://sustainabledevelopment.un.org/post2015/sdgsandtargets>
- ¹⁰ The Statistical Capacity Indicator (SCI) Country Dashboards provides individual country scores for the overall SCI average as well as for the three categories, i.e., Methodology, Source Data, and Periodicity.
- ¹¹ The World Bank. *Statistical Capacity Indicator Dashboard*. Accessed June 6, 2015: <http://datatopics.worldbank.org/statisticalcapacity/SCIdashboard.aspx>
- ¹² PARIS21, MetaBase Website. Accessed June 6, 2015: <http://metabase.paris21.org>
- ¹³ Author's calculations. Compiled by Open Data Watch from the IHSN Survey Catalog (<http://catalog.ihsn.org/index.php/catalog>) and other online sources.
- ¹⁴ Espey, J. et al. (2015).
- ¹⁵ Stuart, E. et al. (2015). p. 27
- ¹⁶ Open Data Watch. (2015). *Aid for Statistics: An Inventory of Financial Instruments*. Available at <http://www.opendatawatch.com/Pages/Aid-For-Statistics-Inventory-of-Financial-Instruments.aspx>
- ¹⁷ SDSN. (2015). Indicators and a Monitoring Framework for the Sustainable Development Goals: Launching a Data Revolution. SDSN Report. Available at <http://unsdsn.org/resources/publications/indicators/>
- ¹⁸ Center for Global Development and The African Population and Health Research Center. (2014). *Delivering on the Data Revolution in Sub-Saharan Africa*. Available at <http://www.cgdev.org/publication/delivering-data-revolution-sub-saharan-africa-0>
- ¹⁹ Munier, S., Polebistki, A., Brown, C., Belaud, G., and Lettenmaier, D. P. (2015). *SWOT data assimilation for operational reservoir management on the upper Niger River Basin*. Water Resources Research, Vol. 51, doi:10.1002/2014WR016157.
- ²⁰ The World Bank. *Statistical Capacity Indicator Dashboard*. Accessed June 6, 2015: <http://datatopics.worldbank.org/statisticalcapacity/SCIdashboard.aspx>
- ²¹ Nigeria MDG Information System. Accessed June 6, 2015: <http://nmis.mdgs.gov.ng/about>
- ²² PARIS21. (2014). *Road Map for a Country-led Data Revolution*. Available at <http://datarevolution.paris21.org/sites/default/files/Road%20Map%20draft%200.pdf>

