



**TRENDS**  
Thematic Research Network  
on Data and Statistics

# Counting on The World to Act

A Roadmap for Governments to Achieve Modern  
Data Systems for Sustainable Development

EXECUTIVE SUMMARY





# Executive Summary

Eradicating poverty and hunger, ensuring quality education, instituting affordable and clean energy, and more – the Sustainable Development Goals (SDGs) lay out a broad, ambitious vision for our world. But there is one common denominator that cuts across this agenda: data. Without timely, relevant, and disaggregated data, policymakers and their development partners will be unprepared to translate their promises into reality for communities worldwide. With only eleven years left to meet the goals, it is imperative that we put in place the fundamental building blocks for robust, inclusive, and relevant national data systems that support the curation and promotion of better data for sustainable development:

- **Strong leadership and governance** with an empowered national statistician or relevant national data coordinator who is open and enabled to collaborate with third parties, and is actively encouraging a more inclusive international statistical system
- **Common principles, standards, and policy frameworks** to ensure data comparability and the capacity to integrate data from different sources, as well as a supportive environment for collaboration
- **An open, user-centric system** that actively supports public and private data demands, collaboration, and innovation at the local, national, and international levels
- **A robust funding model** that ensures the long-term production of the vital data we need to manage progress towards sustainable development

These building blocks respond to the key challenges laid out in TReNDS' 2017 report, *Counting on the World*, such as acute capacity gaps, lack of political leadership, and inadequate financing. The problems are well known and, fortunately, there are some signs of progress such as growing evidence of satellite imagery and other innovative techniques being used to augment traditional statistical methods. Nevertheless, persistent data gaps and lags remain the reality in many countries. Countries in Africa and Asia, on average, have data available to monitor a mere 20 percent of SDG indicators (United Nations, 2018). Only 35 percent of sub-Saharan African countries (16 out of 46) have poverty data collected since 2015 (World Bank, 2019). Meanwhile, policymakers struggle

to accurately track the estimated 25.4 million refugees missing from national statistics worldwide (UNHCR, 2018), or to reliably monitor shoreline change to curb erosion rates within 24 percent of the world's sandy beaches (Luijendijk et al., 2018).

World leaders and their development partners need better information at their fingertips not only to look back on progress to date, but also to make real-time course corrections – redirecting services and investments in response to acute needs – and forward-looking projections. Essential to this latter imperative is that intra-national datasets can be compatibly integrated as parts of planetary-scale evaluations.

The 2017 report details how collaboration among a broad set of actors must occur across all stages of the data process, from collection and cleaning through dissemination and analysis, and how catalyzing this collaboration in the first place requires an array of innovative institutional arrangements, roles and responsibilities, and incentives. But with limited progress two years on, it is time to revisit these recommendations, focusing on the central agents of change: governments.

In our forthcoming 2019 report, *Counting on the World To Act*, TReNDS details an action plan for governments and their development partners that will enable them to deliver the

*“Poverty and basic health data, such as that relating to child stunting, is often five or more years out of date, while birth registration is often even older. Administrative data like what children are learning, whether hospitals have enough medicine and whether people have access to transport are grossly underfunded in many parts of the world – if funded at all.”*

—COUNTING ON THE WORLD (2017)

SDGs worldwide by 2030. Our recommendations specifically aim to empower government actors – whether national statisticians, chief data scientists, chief data officers, ministers of planning, or others concerned with evidence in support of sustainable development – to advocate for, build, and lead a new data ecosystem. These recommendations draw inspiration from best practices and notable examples from the Philippines, Bangladesh, Colombia, and other regions. These country examples, in particular, illustrate the power of governments to make such big changes even when constrained by resources.

We highlight four building blocks of an innovative and inclusive national data system. First, these systems should have **strong leadership and governance**, with an empowered national chief statistician working across government to ensure a supportive policy and regulatory framework for data innovation. The chief statistician should foster collaborations that produce novel data, promote greater openness and availability of data, and advocate for effective data systems across agencies. To facilitate this change, countries should review their legal frameworks or statistical legislation to fully integrate the use of new data sources in the official statistical system, as well as redefine or expand the role and mandate of the chief statistician. In some places, such as New Zealand and the Philippines, the chief statistician is already playing such a role. But in many other countries, this is a sizeable jump in mandate and portfolio for which they may not have sufficient capacity; alternatively, the organization of the statistical system may not be conducive to this broader mandate. In such cases, countries may consider appointing an additional data coordinator, such as a chief data officer (as in France), who can support the chief statistician and help to advocate for data innovation across government. Such appointments can also spur progress at the subnational and international levels. Buy-in from city officials is critical to ensuring data is sufficiently disaggregated to support front-line service delivery.

Crucially important is a supportive international policy environment that encourages governments to partner with new actors and try innovative approaches. Chief statisticians, in their capacity as members of the UN Statistical Commission (UNSC), should push for the UNSC to extend its role and become a more inclusive international platform for data sharing and coordination. The UNSC needs to engage beyond the “usual suspects” and build trust and common cause among official and unofficial data providers, specifically around data gaps and capacity challenges. Governments should also call for the UNSC to take on a broader mandate, providing guidance and setting standards on data across the entire data and statistical system, including facilitating data sharing with non-governmental partners.

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Common **principles, standards, and policy frameworks** are also critical for an enabling environment that encourages data sharing and interoperability and fosters trust. The lack of agreed hazard terminology is a prime example of a standards issue; governments and private entities, such as insurance companies, are struggling to collate, report, and share information on hazards as per their commitments under the SDGs, Paris Climate Agreement, and Sendai Framework for Disaster Risk Reduction. Where such confusion exists, governments and the UN should bring together epistemic communities to agree upon clear national, regional, or global terminology and data collection standards (such as the Hazard Terminology and Classification Review, co-facilitated by the UN Office for Disaster Risk Reduction and the International Science Council). As another approach, open data policies can help to foster collaboration and trust. *Counting on the World to Act* discusses the power and potential of the “open by default” movement, as well as the legal, commercial, and privacy issues that ought to be considered when deciding how to make data public. Another way to encourage collaboration between public and private entities within a secure operating framework (particularly where open by default policies are not necessarily appropriate) is for governments to establish trusted user frameworks, data protection acts, and data sharing agreements. In this regard, we highlight the work of Contracts for Data Collaboration (a collaborative of which TRenDS is a member) to create a repository of data sharing agreements. This repository will document how innovative collaborations – including open data initiatives – are negotiated and structured, thereby encouraging replication.

A supportive policy environment is essential to realizing the ambition of an **open data innovation system**. TRenDS’ vision is a user-centric system that actively supports public and private data users and encourages collaboration at the local, national, and international levels. Such a system should enable access to new technologies and the uptake of new data sources (from private partners as well as academic sources and citizens), as well as the development of new technical capacities. To this end, we endorse and encourage the adoption of the UN Environment Programme’s proposed digital ecosystem framework, which would incentivize and

support private actors in sharing information and using advanced technologies to provide better access to data. Additionally, we recommend the establishment of good practice coalitions and platforms – such as POPGRID, another consortium to which TRenDS contributes – to make international data sources, methods, and innovations more standardized and accessible across countries.

Finally, all of these actions and opportunities depend on the availability of **adequate financing**. As documented by PARIS21, the Sustainable Development Solutions Network (SDSN), Open Data Watch, and others, there exists a substantial financing gap for data and statistics. The full report highlights three ways in which governments and their development partners can mobilize the financial resources needed to close this shortfall. First, in advocating for domestic and international financing we need a common message highlighting the returns on investing in these data. One example: The joint NASA/U.S. Geological Survey Landsat program, which operates satellites that provide Earth observation

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data, has enabled discoveries and interventions across science and health and provided an estimated worldwide economic benefit as high as US\$2.19 billion a year as of 2011. Second, we call for the High-level Group for Partnership, Coordination, and Capacity-Building for Statistics for the 2030 Agenda for Sustainable Development to establish clear, quantifiable goals for governments and their development partners that motivate investment in data and track resource mobilization to fill key data gaps and build statistical capacity at local and national levels. We also support the High-level Group's efforts to develop a practical implementation framework for the Cape Town Global Action Plan and the Dubai Declaration. Third, we call for governments and their partners to improve the efficiency of financing for data by agreeing to common operating principles, such as aligning with the National Strategies for the Development of Statistics and focusing on sectoral funding rather than piecemeal approaches. They should also consider a coordinated donor platform for statistics to better align resources and ensure no country or region is left behind. The Bern Network on Financing Data for Development should play an important role, helping to mobilize donor support for such a platform and to identify the best institutional mechanisms and practices.

Four years have already elapsed since world leaders committed to achieve the SDGs in their countries by 2030. Only eleven years remain. Now is the time for action, not theorizing. The forthcoming TRenDS report provides concrete and pragmatic recommendations that aim to identify, replicate, and scale success stories from around the world. Governments are in the driver's seat, determining the direction and speed, but they will need a substantial and diverse coalition of partners to achieve the systemic change that a modern data ecosystem demands. TRenDS is one such coalition of technical partners standing by to help.


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For more information on TRenDS' research and projects visit: [www.sdsntrends.org](http://www.sdsntrends.org).

**TABLE 1 Illustrative recommendations from Counting on the World to Act, 2019**

BUILDING BLOCKS	RECOMMENDATIONS	
 <p><b>Governance and Leadership</b></p>	1	Countries should review their legal frameworks or statistical legislation to fully integrate the use of new data sources in the official statistical system and redefine or expand the role and mandate of the chief statistician, as well as considering the appointment of a supportive national data coordinator.
	2	Governments should pursue partnerships with city-level actors, universities, and local civil society groups to support local government capacity for developing SDG-aligned monitoring frameworks and other data activities.
	3	<p>a. Governments should call for reform of the UN Statistical Commission (UNSC) to ensure more focus on and resources allocated to addressing data gaps and capacity issues, as well as a more inclusive governance structure which invites in expertise from non-governmental groups.</p> <p>b. Governments should call for the UNSC to take on a broader mandate, providing guidance and setting standards on data across the whole statistical system, including facilitating data sharing with non-governmental partners.</p>
 <p><b>Laws, Principles and Standards</b></p>	4	Countries should promote a culture of open data, integrating principles of open data into their statistical legal framework and ensuring that adequate resources and capacities are in place to fully implement open data practices within the statistical system.
	5	Governments should look to examples of successful public-private data sharing agreements to tease out good practices and encourage frequent replication of public-private partnerships, with legal support and advice offered by the international community.
 <p><b>Technology and Innovation</b></p>	6	Governments should support the implementation of the UN Environment Programme’s proposed new digital ecosystem to support environmental monitoring and the broader sustainable development agenda. This would involve creating a new incentive structure and infrastructure to encourage private actors who currently monopolize digital technologies to share their information.
	7	The international community, coordinated by a more inclusive UN Statistical Commission, should build platforms to make international data sources, supply side innovations, and methods more accessible to countries.
 <p><b>Capacity and Resources</b></p>	8	The UN Statistical Commission (and its High-level Group) should form a shortlist of 8 to 10 clear, compelling goals that motivate the global community to invest in data, while also encouraging governments to track overarching progress in building inclusive and modern national data systems.
	9	International donors should agree upon a set of common operating principles, based upon the Paris, Accra and Busan Declarations on Aid Effectiveness, to help improve the efficiency of donations and investments in data and statistics, particularly in low-income countries.





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