Data for Now: Leveraging innovative sources, technologies and methods for better, more timely and disaggregated data for sustainable development

Seven years after the adoption of the 2030 Agenda for Sustainable Development, many countries still rely on out-of-date and incomplete data to inform its implementation. Millions of people globally are not covered by existing data sources and are therefore excluded from decision-making and policies. Moreover, the COVID-19 crisis has highlighted the critical importance of having reliable, timely and disaggregated data to save lives and livelihoods, and exposed the limitations of traditional sources and methods used to produce them. In this context, there is an increased sense of the urgency to use innovative approaches to better meet the data needs to accelerate action towards achieving the Sustainable Development Goals (SDGs) and build agile and resilient data and statistical systems. Heeding this call, the Data For Now initiative is supporting countries in developing their capacity to leverage innovative sources, technologies and methods to deliver better, more timely and disaggregated data for sustainable development.

Data that is accurate, inclusive, and timely is not just essential for successful policymaking, it is also a human rights priority. Without a serious commitment and investment to ensure the availability and use of more reliable, comprehensive and up-to-date data, governments will not be able to keep the promise of the 2030 Agenda or to mitigate the impacts of the COVID-19 pandemic through effective policy interventions.

The 2030 Agenda has significantly increased the demand for high-quality and timely data needed to address the complex, interconnected policy challenges in achieving the Sustainable Development Goals across the economic, social and environmental dimensions, which aim to include the most vulnerable groups and those that are more difficult to reach and count. As a consequence, the implementation of the 2030 Agenda requires the transformation of national statistical systems so that they are more agile in responding to the increased and rapidly changing data demands. This has been further demonstrated by national statistical systems being required to keep up with the new and urgent data needs to respond and mitigate the impact of the pandemic on people's lives.
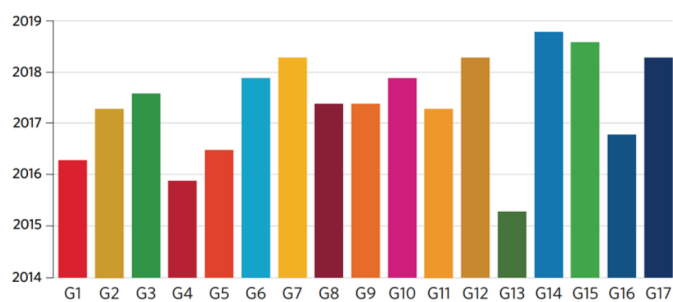
Key messages

» Engaging with policymakers and key data users is critical to identify and prioritize the most urgent data needs to inform policies and decisions towards achieving the SDGs, as well to increase the use and impact of data in informing policymaking

» Given the evolving and urgent data needs to address policy priorities, countries greatly benefit from the use of innovative sources, methods and tools and from integrating them fully into regular data production

» Bringing together various data communities, including partners outside the traditional statistical system, is key to a successful use and integration of innovative approaches for data compilation, processing and communication to inform decision-making

LACK OF TIMELY AND DISAGGREGATED DATA

Today, the coverage, level of disaggregation and frequency of data is insufficient to monitor and follow up on each SDG, leaving critical data gaps and preventing policy makers from reaching those that are furthest behind. For example, traditional poverty measures are in many cases only available at low frequency intervals, and only at a highly aggregated level. Household surveys – key source of data to estimate poverty levels – are not always implemented at regular intervals, and often cover a limited set of topics and dimensions. Censuses are costly, complex endeavors that require the mobilization of a massive amount of resources, and are conducted at low frequency intervals (even less than every ten years for some countries). An analysis on the Global SDG Indicators Database shows that the latest observation available for poverty-related indicators (Goal 1) and for education-related indicators (Goal 4) at the country level is, on average, around the year 2016, and around 2015 for indicators on climate action (Goal 13) (Figure 1).

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Figure 1: The most recent year of available data for SDG indicators (**weighted average**), by Goal
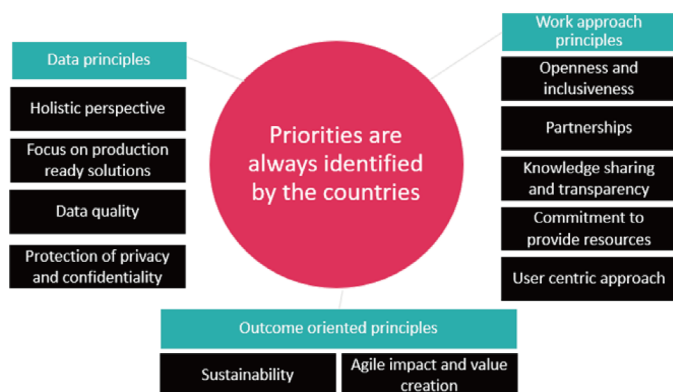

Source: The Sustainable Development Goals Report 2021

RESPONDING TO THE URGENT DATA NEEDS FOR THE 2030 AGENDA

The _Data for Now_ initiative was launched by UN Deputy-Secretary General Amina Mohammed in 2019 to help develop countries' capacities to respond to the urgent data needs for local and national policy and decision-making to achieve the 2030 Agenda. The initiative is co-led by four core partners, including UN DESA's Statistics Division (UNSD), the World Bank's Development Data Group (WB), the Global Partnership for Sustainable Development Data (GPSDD), and the Thematic Research Network on Data and Statistics of the Sustainable Development Solutions Network (SDSN TReNDS). It supports national statistical systems in participating countries to leverage innovative sources, technologies and methods for the streamlined production and dissemination of better, more timely and disaggregated data for sustainable development.

In doing so, the initiative works with local, regional and global partners from intergovernmental organizations, academia, civil society, the private sector and project-based technical consultants to provide data solutions for priorities defined by countries – a key guiding principle – through a national consultative process. The initiative emphasizes that the implementation of solutions should be in line with the Fundamental Principles of Official Statistics, following key data quality, privacy and confidentiality standards, while leading to production-ready solutions that lead to regular production of official statistics following a testing phase. These data solutions can be further expanded to more countries by making technical materials available online for increased efficiency and value addition. See Figure 2 for a full list of the initiative's guiding principles.

Figure 2: Data For Now guiding principles

ENGAGING WITH DECISION-MAKERS TO PRODUCE DATA THAT MEET COUNTRY POLICY NEEDS

Engaging with policymakers and diverse data users is not only important to identify policy priorities at the inception phase of the data value chain, but also throughout the process to increase the use and the impact of data in informing policymaking. Several national statistical offices (NSO) already engage effectively with policymakers. Palestine's Central Bureau of Statistics, for instance, conducts user-producer dialogues to introduce statistical activities and understand user needs. The United Kingdom's Office of National Statistics has embedded policy liaisons in teams across the central government, such as its COVID-19 Taskforce, its Levelling Up Task Force, and its Supply Chains Unit, to ensure data and evidence are central to the policy process. Similarly, the Ghana Statistical Service, under its Data For Accountability project, provides trainings to parliamentarians and to statistical office's top and middle-level managers to strengthen capacity to use data for monitoring progress of the 2030 Agenda.

This user-centric approach is embodied in the implementation of the Data For Now initiative, guided by its principle 10, which states that "All partners are committed to first and foremost address the needs of the users of the data, adhering to national priorities and decision-making needs." The initiative defines the activities based on the goals prioritized by each country through engagement with users of data. For instance, in Senegal, UNSD, under the Data For Now initiative worked closely with the country's national statistical office (ANSD) and its vast national statistical system at the inception of the project to identify 5 priority areas to fill data gaps. Following this, a workplan was agreed upon in consultation with ANSD to develop solutions and build in-house national capacity for sustainability to fill those data gaps. In Bangladesh, with support from the UN Resident Coordinator Office, the project brought together key government counterparts to identify and address the need to have geographically disaggregated poverty estimates to inform decision-making.

INNOVATIVE APPROACHES TO ADDRESS PRIORITY DATA GAPS

National Statistical Offices, in collaboration with national and international partners, are increasingly using innovative approaches to fill priority data gaps. These approaches use various sources of data, including non-traditional data, hosted by various entities, with application of advanced methodologies to transform and produce data in a usable format to inform decision-making. For instance, Norway's national statistical office uses web scraping to extract and transform unstructured data from online stores to obtain price data to measure consumer index. Indonesia's national statistical office processes mobile positioning data to increase coverage and timeliness of tourism data, thus producing collective anonymous statistics that capture

location and movement of residents and visitors to make better policy decisions. However, these methodologies are still in a nascent stage, especially in developing countries, highlighting challenges in terms of quality assurance and international comparability.

The *Data For Now* initiative recognizes the value of innovative approaches to fill priority data gaps, and aims to develop national capacities to mainstream the use innovative data sources, methods and technologies for the sustainable production of timely and disaggregated data and statistics for the 2030 Agenda. For instance, Colombia's national statistical office (DANE), within the Data For Now umbrella, integrated various data sources, such as the National Census of Population and Housing 2018, the Colombia's Statistical Directory of Educational Centers, and the administrative registry of the Integrated Enrollment System, to analyze the existing relationship between the home-to-school distances and dropout rates in urban areas of students 5-17 years old, during 2018-2020. See the statistical note published by DANE here.

Adopting innovative approaches also requires an IT infrastructure that supports integration of traditional and new data sources for efficient and sustainable statistical production. For example, Colombia, upgraded its IT infrastructure with support from a Data For Now project funded by the Italian government. This entailed understanding existing gaps in the data integration, storage, and processing capabilities for statistical production at the national statistical office, followed by building the human capacity to enhance the IT infrastructure. As a result, some processes now take up to 90 per cent less time than they used to, before the infrastructure upgrades.

BRINGING TOGETHER LOCAL AND INTERNATIONAL PARTNERS TO ADDRESS POLICY PRIORITIES

Various partners contribute to leverage new approaches in data production and use by bringing valuable data sources and expertise. For example, Ghana's statistical office collaborates with Ocean Conservancy's International Coastal Cleanup to obtain citizen science data to track marine litter. This will enable Ghana, for the first time, to report on SDG 14.1.1b. Involvement of UN Regional Commissions and UN Resident Coordinator Offices in each country is also key in supporting national coordination and bringing the right stakeholders on board to identify and address priority policy needs.

Data For Now initiative's guiding principle number 7 emphasizes partnership across national statistical systems, government agencies, donors and solution providers. In doing so, the initiative promotes and facilitates partnerships between NSOs and key data solution providers who share a commitment to creating data systems that contribute to sustainable development (see Box 1 for example).

Box 1: Implementing innovative solutions in Colombia

Colombia identified the need for more geographically disaggregated multi-dimensional poverty estimates to inform decision-making. The Colombian national statistical office, the Departamento Administrativo Nacional de Estadística (DANE) worked with various partners to build the office's capacity using non-traditional data sources and methods, including mobile data, gridded population data, Bayesian statistics for predictive modelling, satellite imagery and small area estimation methods to achieve this objective. SDSN TReNDS, funded by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), partnered with Centro de Pensamiento Estratégico Internacional (CEPEI) and local academic experts to identify methodologies and data gaps for multi-dimensional poverty and conducted a series of technical trainings. DANE applied these methods to estimate multidimensional poverty in the country's Pacific region, that has high poverty rates. Following this, UNSD, with funding from the Italian Government, partnered with Oxford Poverty and Human Development Initiative (OPHI), the World Bank, and the University of Southampton to support DANE to refine the methods and expand measurement to the whole country. DANE is now applying these techniques to estimate monetary poverty, taking data quality into account to include the indicator in official statistics.

For more information on the Data For Now initiative, please visit: https://bit.ly/3KXstSx