Research Exercise to Establish A Federated Information System for the SDGs

Overview and Discussion
Indicator framework mandate…

Agenda 2030 (A/Res/70/1):

The Goals and targets will be followed up and reviewed using a set of global indicators. The global indicator framework, to be developed by the Inter-Agency and Expert Group on Sustainable Development Goal Indicators, will be agreed by the Statistical Commission …

These will be complemented by indicators at the regional and national levels which will be developed by Member States …

Addressing data needs for the 2030 Agenda…

Need for quality, accessible, timely and reliable disaggregated data

Data on a wide range of topics; unprecedented amount of data

Interoperability and integration of systems is crucial to harnessing the potential of all types of data

Need to include all parts of the statistical system and new data sources
The research and learning exercise seeks to...

- Strengthen the ability of National Statistical Systems and all SDG stakeholders to **share data, knowledge, and best practices** on data for the 2030 Agenda
- Provide a modern platform for collaboration among data producers and users that **facilitates data interoperability** (within and outside NSS and GSS boundaries)
- Enable the **overlaying of multiple national and global data sets** (understand data flows, address inconsistencies)
- Engage communities of interest around SDG policy initiatives
Initially the research and learning exercise aims to accomplish...

- Deploy a limited number of National SDG Data Hubs that are “country owned and country led”
- Deploy a Global UN SDG Data Hub for the SDG indicator framework
- Explore data integration and interoperability from a wide range of sources through the National SDG Data Hubs
- Explore the relationships between national and global data (understand and resolve differences)

Initial focus of the research and learning exercise...

- Demonstrate the ability to develop a scalable solution applicable to all countries that wish to participate
- Pilot a service-oriented, interoperable and standard-driven “system-of-systems” approach to bring together national/subnational data sets and link them to the global SDGs
How is the research exercise being implemented?

• Each participating country determines what SDG indicators are used for this exercise
• The initial subset of indicators are relevant to the national priorities, easily available to be used in the initial phase of the research and will include global SDG indicators
• The system will explore new pathways for facilitating data flows and action around that data (Hubs) and among key SDG stakeholders

Why undertake this research and learning exercise?

• The scope of the 2030 Agenda requires high-quality and disaggregated data that are timely, open, accessible, understandable and easy to use for a large range of users, including for decision making at all levels
• There is a need for a reporting system on the SDGs that would work from the subnational level to the national and allow also for global reporting that builds directly on the data shared by countries
• Important to create an opportunity for countries to directly contribute to the global reporting. While the challenges are immense, the digital technology that is available today allows the necessary transformation
• Strengthen countries’ national geospatial and statistical data systems to further enable a service-oriented architecture that leverages an accessible and interoperable system
The research and learning exercise starting principles…

• UNSD and each participating country will establish **internal teams**
• Key stakeholders will share basic data and statistics on a selected number of indicators through the SDG Data Hubs
• Each **country has ownership of the data shared** through the SDG Data Hubs, and full control on the level of access granted to internal and external stakeholders and partners
• Each **country will define access controls and roles**, including credentials for sharing and accessing datasets and other resources through the SDG Data Hubs
• Sharing from portals and Hubs will make the production, analysis and use of data for sustainable development more efficient

Participants in the research and learning exercise…

UNSD, Esri, Ireland, Mexico, the Philippines, Qatar, Senegal, and South Africa.
Data Hubs
A New Cloud-Based Information System for Community Engagement

Connecting Organizations, Governments & Citizens

- NSOs & Other Data Providers
- General Public
- Local Govt. Agencies
- NGOs and other orgs.
- National Govt. Agencies
- Global Hubs
- UNSD SDGs

Providing / Supporting
- Open Data and Standards
- Scalability
- Governance (Access Control)
- Semantic Interoperability (Rich Metadata)
- Status Reporting and Dashboards
- Data-Driven Analysis (Policy Initiatives)
- Collection of Citizen-Generated Data (Crowdsourcing)

\[...\] New Cloud Offering Including Citizen User Roles.
What are the SDG Data Hubs?

Positioning geospatial information to address global challenges

Present and agreed data flows in global SDG reporting

Regional Organizations

CSOs
Private Sector
Academia

Global SDG Indicator Database (UNSD)

Country Data Lab (UNSD)

National Statistical System

Only statistical aggregations
No geospatial inputs
No country implementations

International Agencies

Data and Metadata
Adjusted, estimated or modelled data

Only statistical aggregations
No geospatial inputs
No country implementations
National Coordination

National data is adjusted, estimated, modelled

Global SDG Database - UNSD

Access to Visualization Data and Reports

Global Indicators

Global SDG Indicator Database (UNSD)

Regional & Partner Organizations

Custodian Agencies

Global Indicators

New sources of data from private sector, academia, community and civil society

National Information Systems and Data Resources

Provision of relevant Data for Goals, Targets and Indicators

Federated Information System for the SDGs

Policy initiatives aligned to National Development Strategies

National SDG Hub

Compare Progress

Explore Goals

View into countries

NSO

National Statistical System

Administrative Records

Statistical Surveys

Census

Geospatial Information

Other Data Sources

Achieving Sustainable Development

Federated Information System for the SDGs
The federated information system for the SDGs...

• Incorporates shared experiences (through narratives), identifies and disseminates methodologies for SDG indicators, disaggregation, and dissemination as a core knowledge exchange product
• Allow actors to convene communities through technologies and foster an engaging environment around the SDGs that utilize crowdsourcing capabilities, dynamic and engaging visualizations, and shared analytics
• Will strengthen internal data management and analytic capacity, harness and promote stakeholder interactions around the SDGs; and in an open standard, open access environment
• Brings “geo-statistical intelligence” to SDG activities across multiple organizations, Member States and individuals. Accomplished through a scalable geographic analysis and mapping system that can be utilized anywhere at anytime via the cloud (or hybrid on-site/cloud constellations)
Goal 1: End poverty in all its forms everywhere

In signing Agenda 2030, governments around the world committed to ending poverty in all its manifestations, including its most extreme forms, over the next 15 years. They resolved that all people, everywhere, should enjoy a basic standard of living. This includes social protection benefits for the poor and most vulnerable and ensuring that people harmed by conflict and natural hazards receive adequate support, including access to basic services.

Nearly a billion people have escaped extreme poverty since 1990; three quarters of a billion remain in its grasp

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Working poverty has decreased, but it is still pervasive in many regions and disproportionately affects the young.

Many of the world’s workers live in extreme poverty due to a lack of decent work opportunities, despite 10 per cent of the employed population globally living with their families on less than 1.90 US dollars per person per day in 2015.

While the percentage of the “working poor” has been cut by more than half since 2000—when it stood at 21 per cent—it remains pervasive in a few regions. In sub-Saharan Africa, 34 per cent of workers and their families continued to live in extreme poverty in 2015. Meanwhile, poverty affects 46 per cent higher rates than workers in OECD

Note: “Working poor” refers to those earning income in sub-Saharan Africa.
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Interactive Map: Proportion of population below the international poverty line of US$ 1.90 per day - 2013

Interactive Map: Proportion of population below the international poverty line of US$ 1.90 per day - 1990

Working poverty has decreased, but it is still pervasive in many regions and disproportionately affects the young.

Many of the world’s workers live in extreme poverty due to a lack of decent work opportunities. Almost 15% of the employed population globally live with their families on less than $3.10 per US dollar per person per day in 2015.

While the percentage of the “working poor” has been cut by more than half since 2000—when it stood at 25%—it remains pervasive in a few regions. In sub-Saharan Africa, 34% of workers and their families continued to live in extreme poverty in 2014. Working poverty affects youth at a much higher rate than adults in 2014. In low-income countries, 45% of the workforce is young, compared to 15% of the adult population.

Interactive Map: Proportion of population below the international poverty line of US$1.90 per day (SL_POV_DW1) (2013)

Goal 1.1.1: Proportion of population below the international poverty line of US$1.90 per day (SL_POV_DW1)

- Target 1
- Indicator Ref: GDI1.1.1
- IndicatorRefOrder: 011011
- IndicatorRefList: GDI1.1.1
- Indicatorunit: CL0101
- IndicatorDescrip: Proportion of population below this
Goal 1: End poverty in all its forms everywhere

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In 1990, governments around the world committed to ending poverty in all its manifestations, including its most extreme forms, over the next 15 years. They resolved that all people, everywhere, should enjoy a basic standard of living. This includes social protection benefits for the poor and most vulnerable and ensuring that people harmed by conflict and natural hazards receive adequate support, including access to basic services.

Interactive Map: Proportion of population below the international poverty line of US$1.90 per day - 2019

Working poverty has decreased, but it is still pervasive in many regions and disproportionately affects the young.
ERADICATE POVERTY

By 2030: End poverty in all its forms everywhere.
Federated Information System for the SDGs
Achieving Sustainable Development
Discussion!