SUSTAINABLE DEVELOPMENT GOALS

IAEG-SDGs

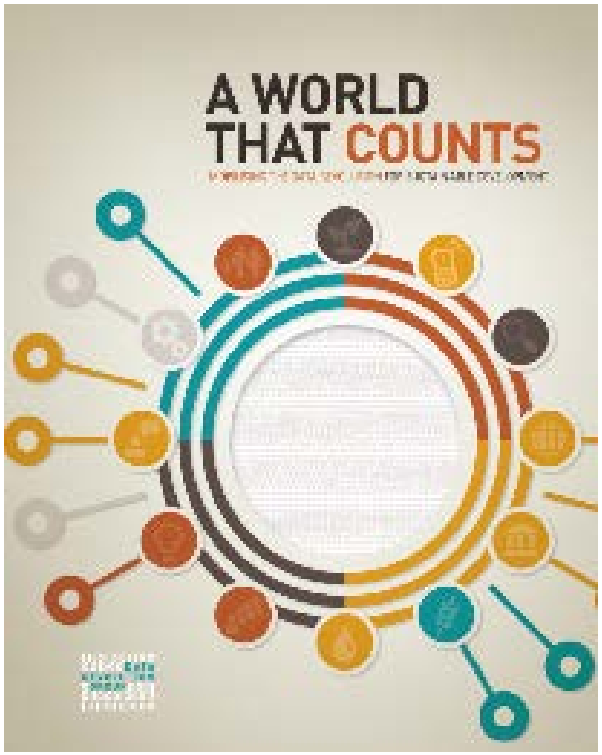
Inter-agency Expert Group on SDG Indicators

Working Group on Geospatial Information

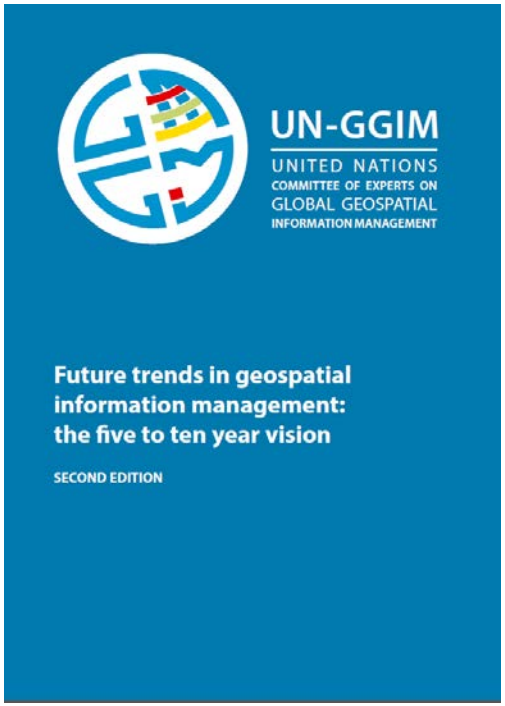
Monitoring Agenda 2030
through a geospatial lens

Marie Haldorson, Director Regions and Environment Department, Statistics Sweden

SUSTAINABLE DEVELOPMENT GOALS



The time is right for contributions from Geospatial Information to the Sustainable Development!



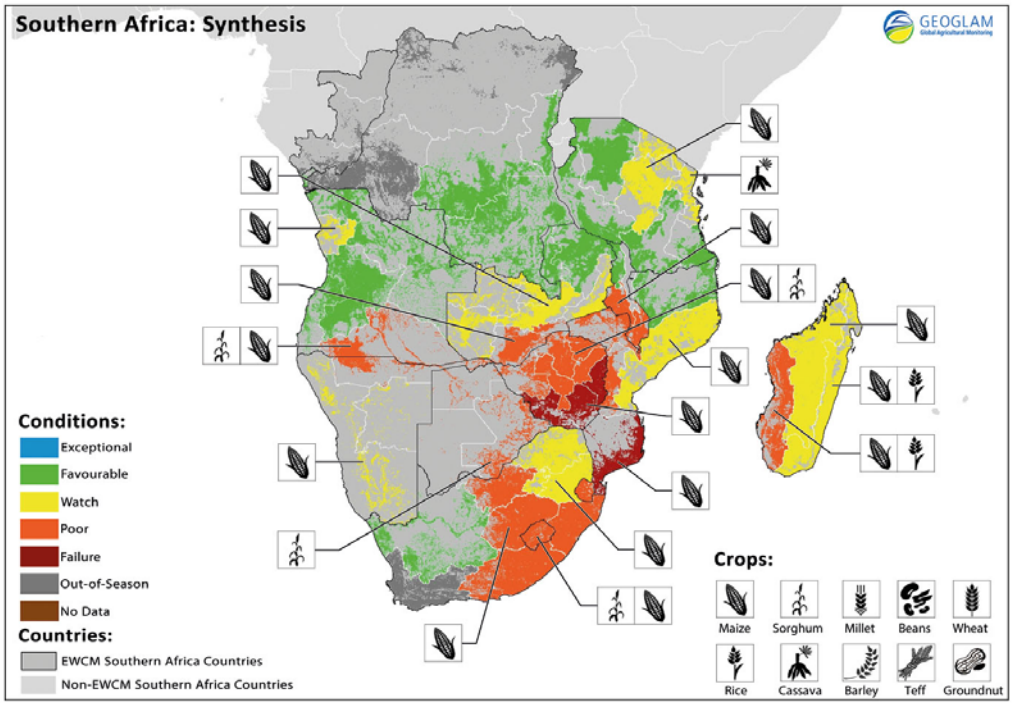
Future trends:
Increased need for integration of Statistical and Geospatial information

- SDG monitoring on all levels
- Producing information at the right scale
- Institutional arrangements

Target 2.c Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility.

MONITORING CROP CONDITIONS WITHIN COUNTRIES AT RISK OF FOOD INSECURITY

Crop condition map synthesizing information for all Early Warning Crop Monitor (EWCM) crops. Crop conditions over the main growing areas are based on a combination of national and regional crop analyst inputs along with Earth observation data. Crops that are in other than favourable conditions are displayed on the map with their crop symbol.



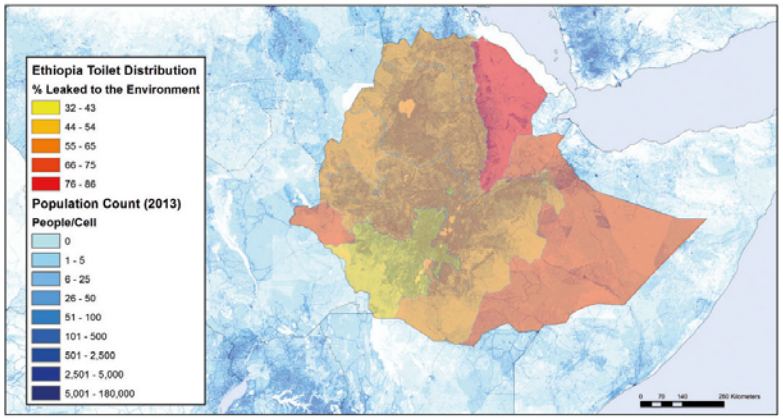
GEOGLAM Early Warning Crop Monitor

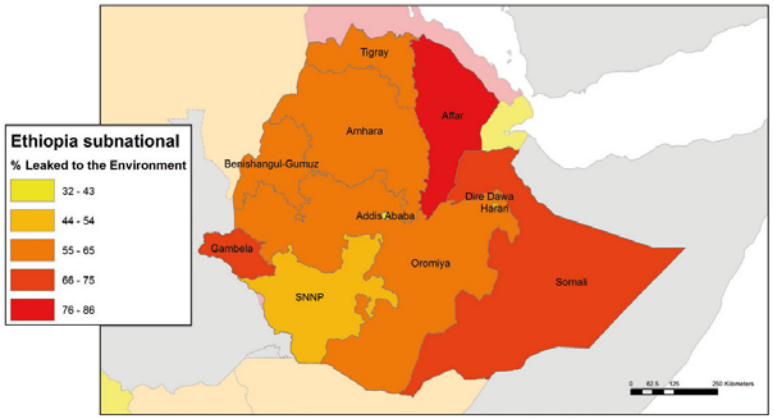
"Development planning and SDG outcomes can be visualized with maps." (CIESIN)

6 CLEAN WATER AND SANITATION

Target 6.3 By 2030, improve water quality by reducing pollution, illuminating dumping and minimizing the least hazardous chemicals and materials, halving the proportion of untreated waste water and substantially increasing recycling and safe reuse globally.

POPULATION DENSITY OVERLAID ON UNTREATED WASTEWATER LEAKING TO THE ENVIRONMENT, ETHIOPIA SUB NATIONAL



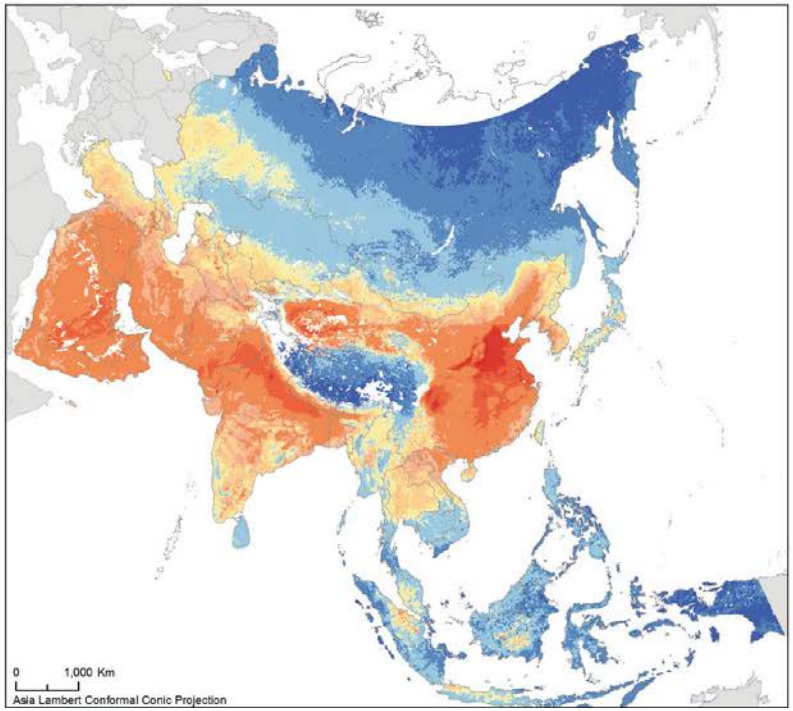


WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation

Integrating data from Earth observations and geospatial information with national surveys to monitor the impact of untreated wastewater on the population. The map on the left shows the extent of leakage of wastewater, excreta and grey water, with areas in red denoting extensive pollution. The map on the right integrates all data and shows where there is high impact, i.e., high leakage in densely populated areas.

Target 11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.

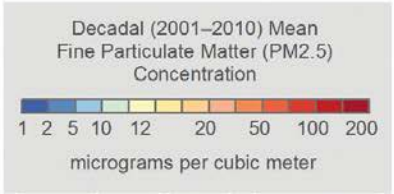
MEASURING AIR QUALITY IN CITIES AND ACROSS REGIONS



CIESIN Columbia University, April 2015

Global Annual PM2.5 Grids from MODIS, MISR and SeaWiFS Aerosol Optical Depth (AOD), 2001–2010: Asia

Measurements from satellites provide information on air quality in communities and regions. For example, this map shows baseline data on particulate matter that could be used by statistical agencies, public health organizations, and environmental protection officials to develop more in-depth indicators, for example by deploying sensor networks to efficiently generate complete national data in near real-time.

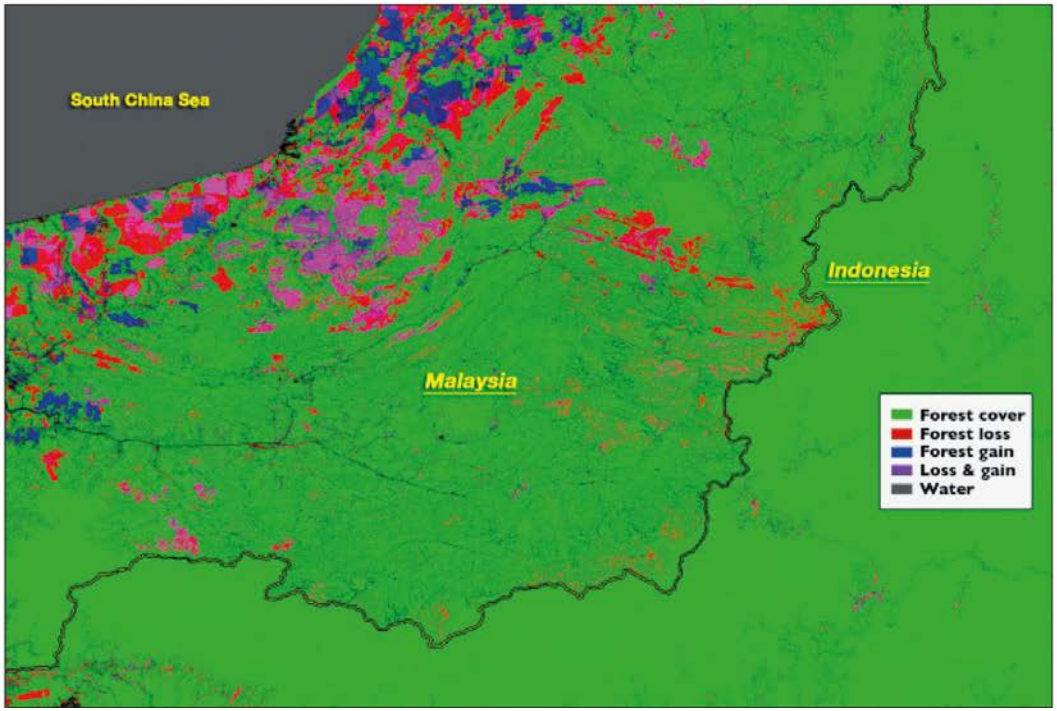


15 LIFE ON LAND

Target 15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.

EARTH-OBSERVING SATELLITES CAN TRACK TREE COVER EXTENT AND FOREST LOSS AND GAIN OVER TIME

The border between Malaysia and Indonesia on the island of Borneo stands out in the Landsat-based map of forest disturbance. Red pixels represent forest loss between 2000 and 2012.



NASA Goddard, based on data from Hansen et al., 2013.

"Mapping SDG-related data will improve measuring and monitoring of progress toward the SDG Indicators."

Tasks of the IAEG-SDGs

- Develop the global indicator framework and a list of indicators
- Provide technical support for the implementation
- Review methodological developments, the indicators and their metadata
- Review capacity-building activities
- Report on progress at the global level

Indicator Tier System

- **Tier I**: methodology and standards exist, data regularly produced by countries
- **Tier II**: methodology and standards exist, data are not regularly produced by countries
- **Tier III**: no established methodology and standards, no data

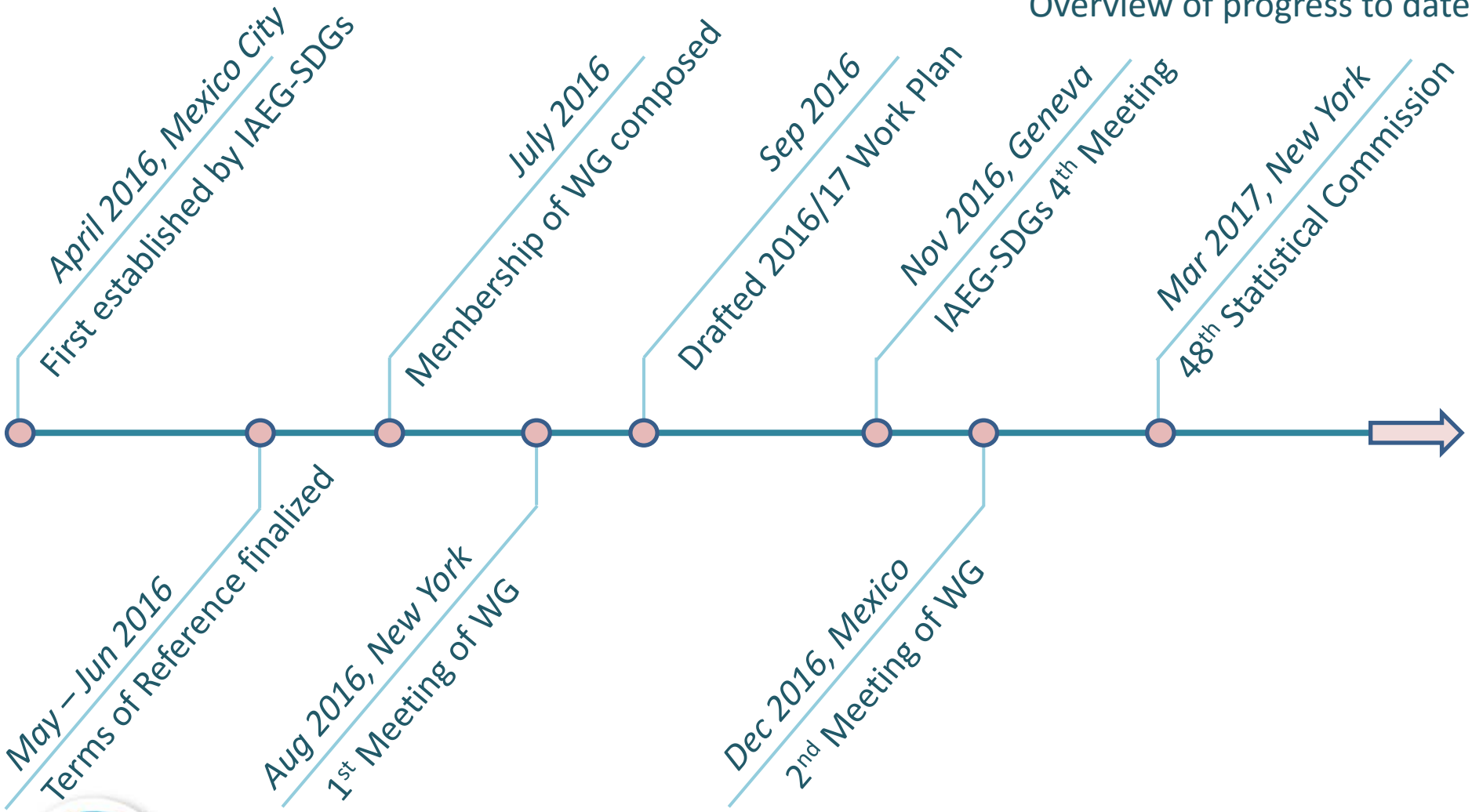
Potential for geospatial and other data sources to address these gaps

IAEG-SDGs Working Groups

IAEG-SDGs at its 3rd Meeting in Mexico City (30 March-2 April), decided to create three working groups:

- Interlinkages
- Geospatial information
- Statistical Data and Metadata Exchange (SDMX)

Overview of progress to date



Tasks will include to consider how geospatial information can contribute to the indicators and metadata:

a) as a direct indicator in itself;

b) to support and augment statistical data;

c) to improve the production process of statistical data;

d) to validate national statistical data inputs;

e) to communicate and visualize the geographic dimensions and context of the indicators where appropriate; and

f) to provide granularity and disaggregation of the indicators where appropriate.

Membership of the Working Group

Co-Chair:	Sweden	Co-Chair:	Mexico		
Members:	Botswana	*Members:*	Brazil	*Members:*	UN-GGIM: Africa (Ethiopia)
	Cabo Verde		Colombia		UN-GGIM: Americas (USA)
	France		Germany		UN-GGIM: Arab States (tba)
	Jamaica		Uganda		UN-GGIM-Asia Pacific (China)
	Denmark		GWG-Big Data (tba)		UN-GGIM: Europe (Germany)
	WHO		UN-GGIM EG-ISGI (United Kingdom)		UN-GGIM: Europe (Italy)
	EuroStat		OECD		GEO

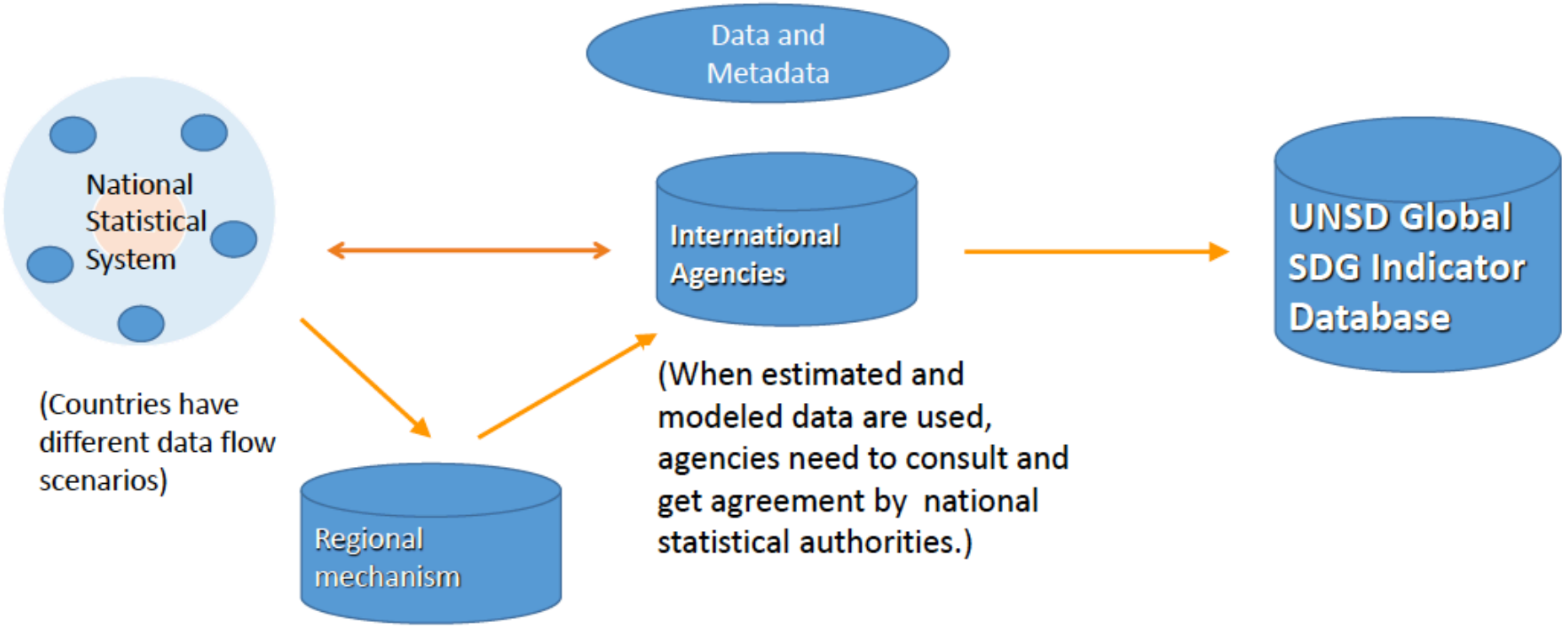
2016/2017 Work Plan

Focus: Consider how geospatial information can contribute to the global indicators and metadata

- Review the global indicators incl. metadata through a 'geographic location' lens
- Identify existing geospatial data gaps, geospatial methodological and measurement issues
- Propose means of addressing these data gaps and issues

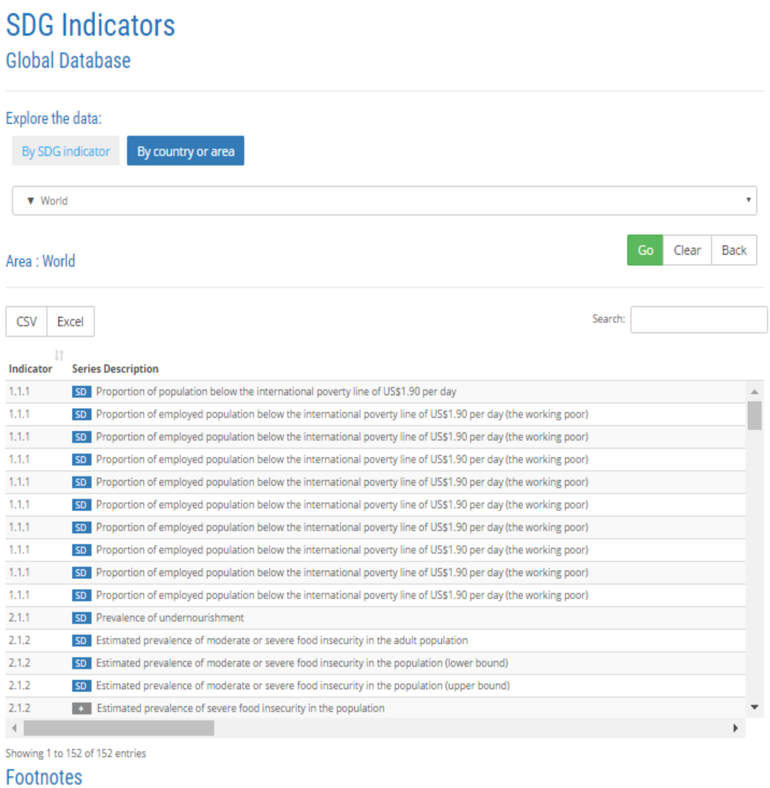
Global Reporting Mechanism

Data flow from national to global level

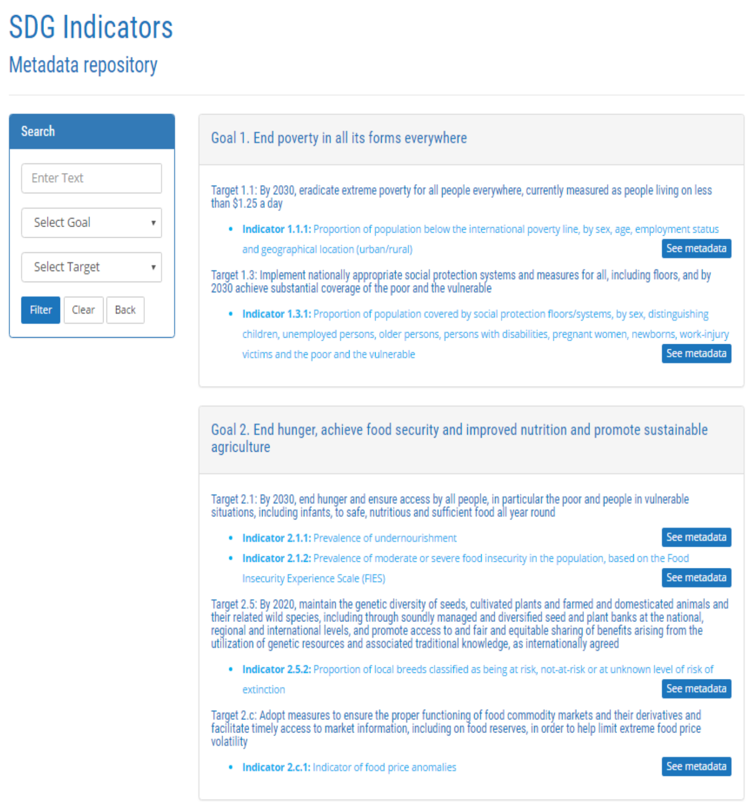


SDG Website: http://unstats.un.org/sdgs/

SDG Indicators Global Database with global, regional and country-level data



SDG Indicator Metadata available



Thank you!

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