The Role of Geospatial Information in Measuring and Monitoring the Sustainable Development Goals:
Disaster risk reduction, sustainable development, and global urbanization

Moderated by Tim Trainor, US Census Bureau

Seventh Session of the Open Working Group on Sustainable Development Goals
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How can you measure and monitor sustainable development... 

...without location and geography

Positioning geospatial information to address global challenges
UN-GGIM: A global initiative

Formal inter-governamental UN Committee of Experts to:
• Discuss, enhance and coordinate Global Geospatial Information Management activities by involving Member States at the highest level. Reports to ECOSOC
• Make joint decisions and set directions on the use of geospatial information within national and global policy frameworks
• Work with Governments to improve policy, institutional arrangements, and legal frameworks
• Address global issues and contribute collective knowledge as a community with shared interests and concerns
• Develop effective strategies to build geospatial capacity in developing countries
Monitoring Sustainable Development: Why Location Matters?

“I am pleased to see that the importance of reliable, trusted geospatial information is now recognised. The United Nations has now established a Committee of Experts of Member States, which the UK co-chairs, to move this agenda forward”

Rt Hon Nick Clegg MP, Deputy Prime Minister, United Kingdom Government, Rio+20, June 2012
187. We recognize the importance of early warning systems as part of effective disaster risk reduction at all levels in order to reduce economic and social damages including the loss of human life, and in this regard encourage States to integrate such systems into their national disaster risk reduction strategies and plans. We encourage donors and the international community to enhance international cooperation in support of disaster risk reduction in developing countries as appropriate through technical assistance, technology transfer as mutually agreed, capacity building and training programmes. We further recognize the importance of comprehensive hazard and risk assessments, and knowledge and information sharing, including reliable geospatial information. We commit to undertake and strengthen in a timely manner risk assessment and disaster risk reduction instruments.

274. We recognize the importance of space-technology-based data, in situ monitoring, and reliable geospatial information for sustainable development policy-making, programming and project operations. In this context, we note the relevance of global mapping and recognize the efforts in developing global environmental observing systems, including by the Eye on Earth network and through the Global Earth Observation System of Systems. We recognize the need to support developing countries in their efforts to collect environmental data.
Our Countries are Facing Serious Challenges
Collectively we need to create the future we want

Leveraging our best science, technology, and information

Source: Esri
Geospatial Information

Is increasingly contributing to...

...Creating understanding and solving problems

Source: Esri
Monitoring Environmental Change

Ocean Health Index

Micro Climate Change

Ocean Temperature

Deforestation

Habitat

South America

Missouri

Coastal Erosion

Historic Drought

Beach Erosion

Fish and Wildlife Service

USDOI

Willapa National Wildlife Refuge

Horn of Africa

Source: Esri
Managing Natural Resources

- Agriculture Inventory
- Forest Disease
- Forest Heath
- Biomass Inventory
- Groundwater
- Carbon Accounting
- Geologic Exploration
- Oil and Gas
- Geology
- Ecosystem Habitat
- Caribou Habitat

Source: Esri
Developing Energy

Geothermal

Solar Potential

Pipeline

Oil & Gas

Korea

South Asia

Germany

North America

Wind Power

Renewable Energy

Wind Turbine

Wind Farm Management

Wind Farm Management

Source: Esri
Managing Land Information

Cadastre and Registration

Property Boundaries

Public Inquiries

Legal Notification

Parcel Mapping

Tax Assessment

Source: Esri
Planning For and Responding to Natural Disasters

- Fire
- Drought Status
- Severe Weather
- Flooding
- Tsunami Forecast, Earthquake Damage Assessment
- Situational Awareness (COP)
- Quake Tracking
- Recovery Planning

Source: Esri
Today’s Presentations

Objectives

1. Introduce OWG to the importance of reliable geospatial information and its role in measuring and monitoring the SDGs via well defined targets and indicators
2. Begin a dialogue with the OWG and have an interactive exchange of views

Presenters

1. Dr. Hiroshi Murakami, Director-General of Planning Department, Geospatial Information Authority of Japan
2. Dr. Li Pengde, Deputy Administrator, National Administration of Surveying, Mapping and Geoinformation of China
3. Mr. Rolando Ocampo, Vice-President, National Institute of Statistics and Geography, Mexico

Questions