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
UNHQ, New York, 10 January 2014

UN-GGIM | United Nations Initiative on Global Geospatial Information Management

Positioning geospatial information to address global challenges

ggim.un.org

How can you measure and monitor sustainable development…

…without location and geography

UN-GGIM: A global initiative

Formal inter-governmental 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

UN-GGIM | United Nations Initiative on Global Geospatial Information Management

Positioning geospatial information to address global challenges

ggim.un.org

RIO+20
United Nations Conference on Sustainable Development

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

UN-GGIM | United Nations Initiative on Global Geospatial Information Management
ggim.un.org

HM Government

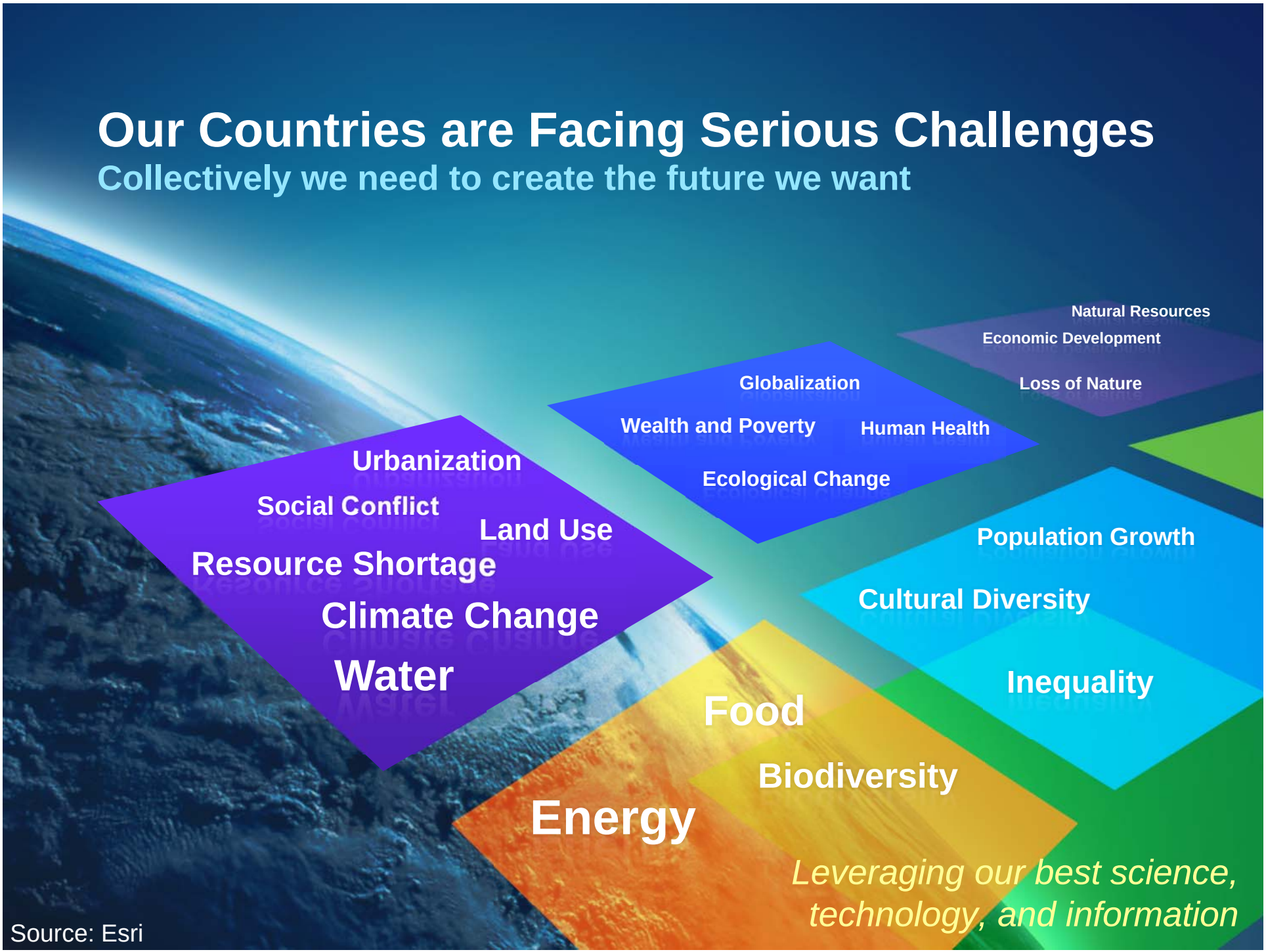
The Future We Want: 19th June 2012

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.

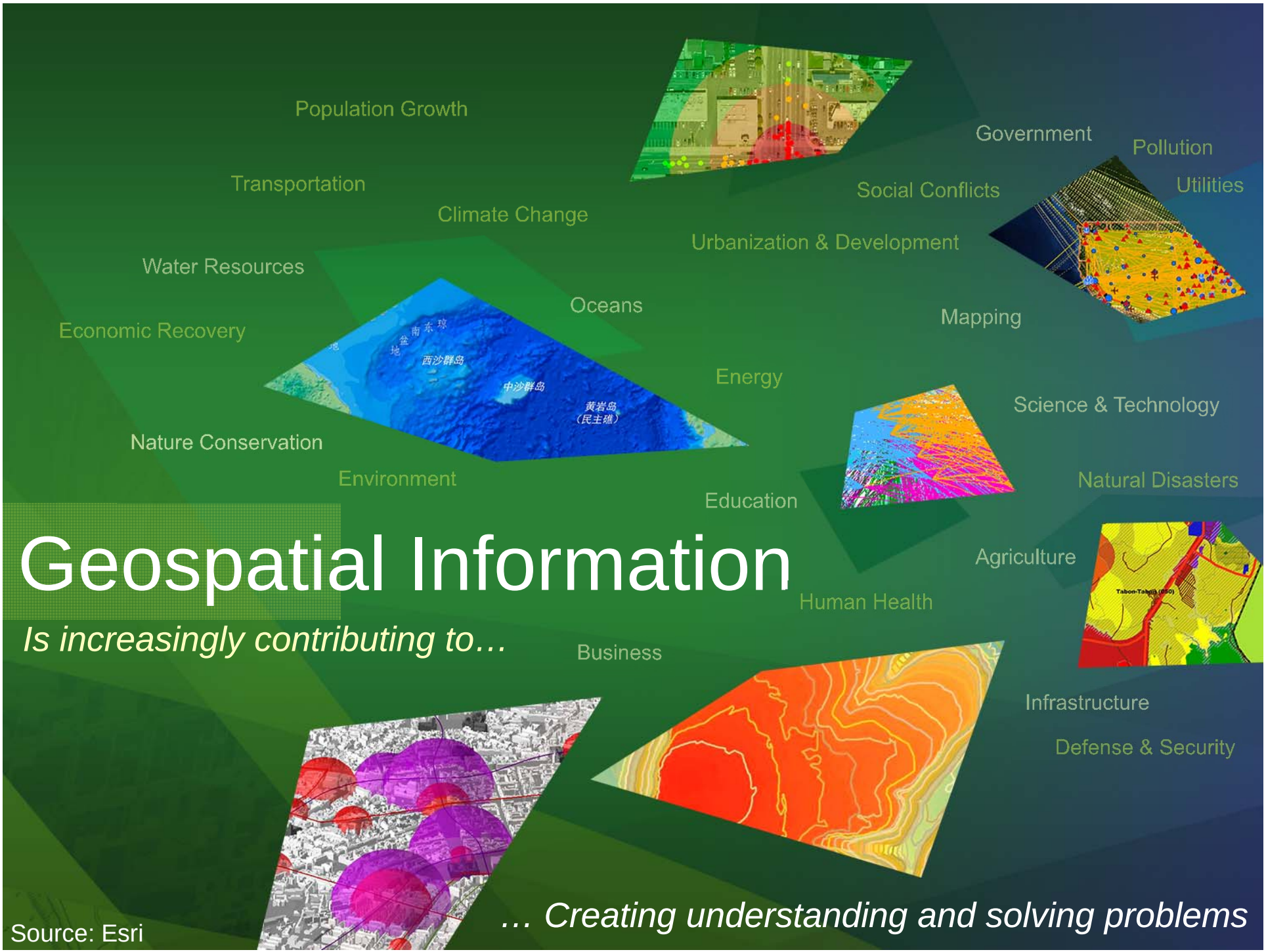
274. We recognize the importance of space-technology-based data, in situ monitoring, and reliable geospatial information for sustainable development policy-making, programming and project operations. In this context, we note the relevance of global mapping and recognize the efforts in developing global 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



Source: Esri



Geospatial Information

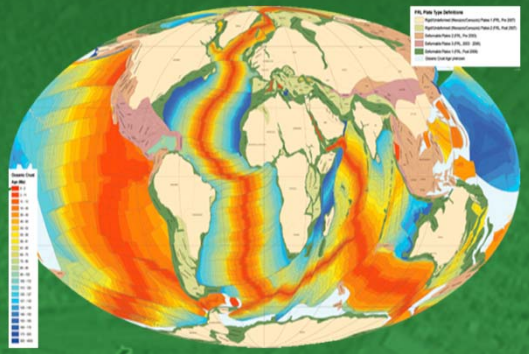
Is increasingly contributing to…

… Creating understanding and solving problems

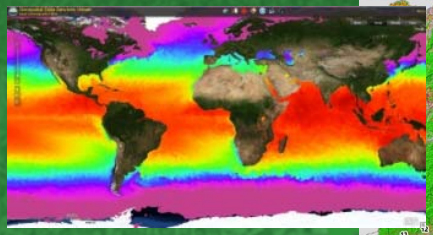
Source: Esri

Monitoring Environmental Change

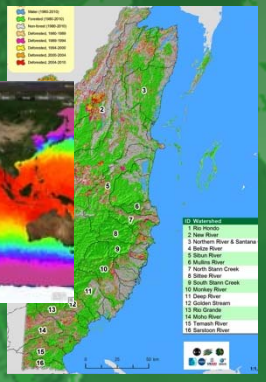
Ocean Health Index



Ocean Temperature

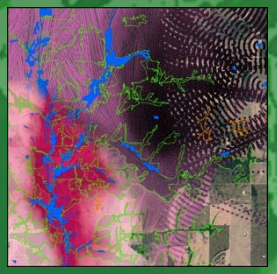


Deforestation



South America

Habitat

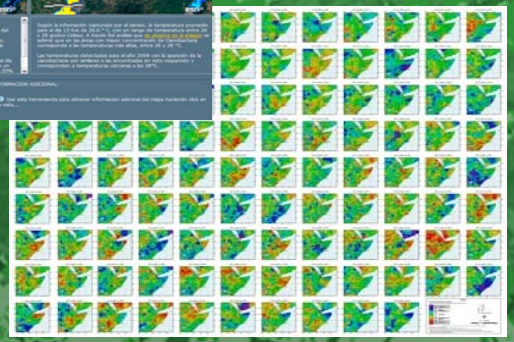


Missouri

Micro Climate Change

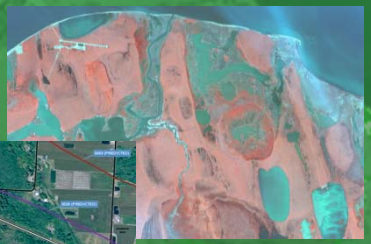
Fish and Wildlife Service

Historic Drought



Horn of Africa

Coastal Erosion



USDOI

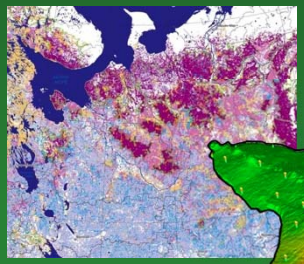
Beach Erosion

Willapa National Wildlife Refuge

Source: Esri

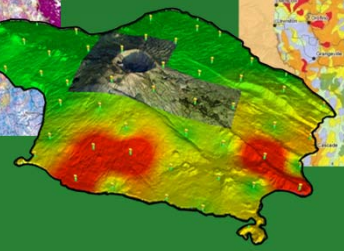
Managing Natural Resources

Agriculture Inventory

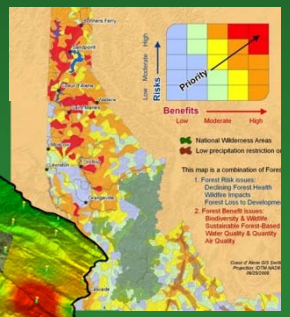


Russia

Forest Disease



Forest Health



Idaho

Biomass Inventory

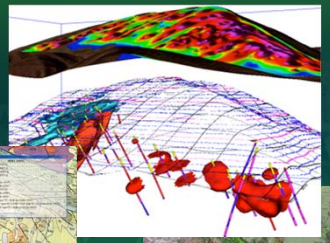
USA

Groundwater

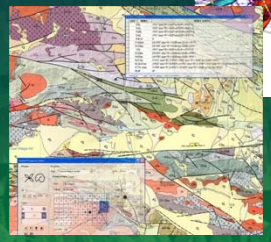
Carbon Accounting

Indonesia

Geologic Exploration

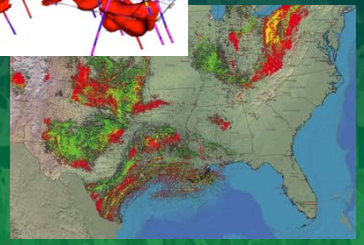


Geology



Czech Republic

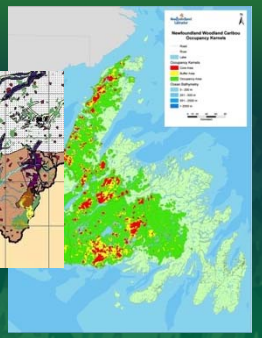
Oil and Gas



Ecosystem Habitat

Nigeria

Caribou Habitat

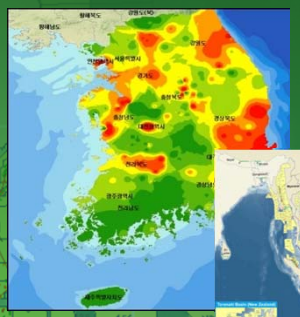


Newfoundland

Source: Esri

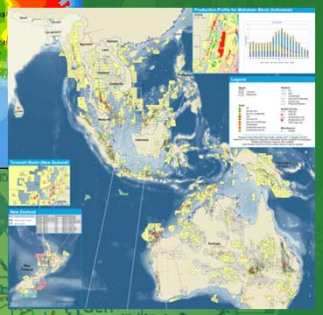
Developing Energy

Geothermal



Korea

Oil & Gas



South Asia

Solar Potential

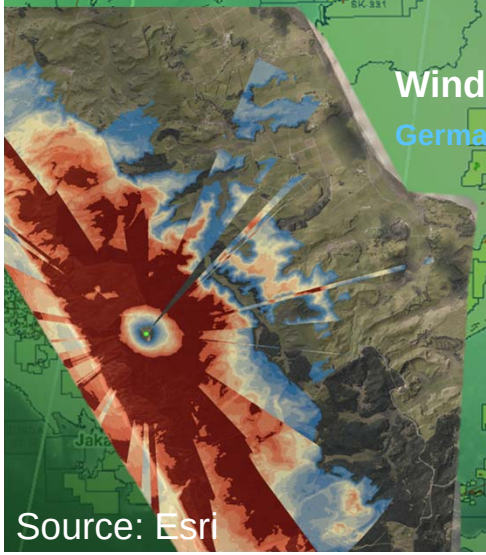
Germany

Pipeline

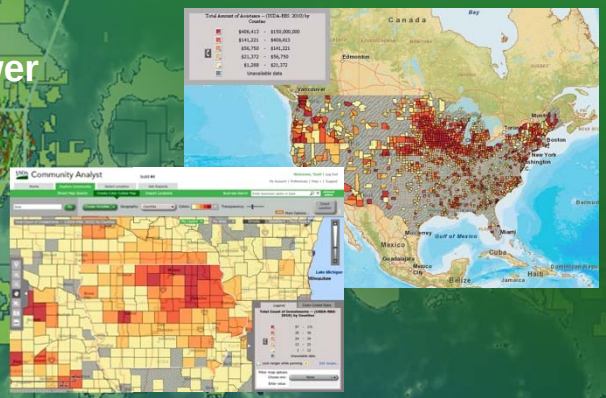
North America

Wind Power

Germany



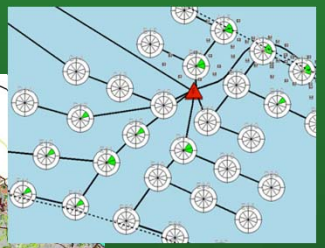
Renewable Energy



Wind Turbine

Massachusetts

Wind Farm Management



Denmark

Source: Esri

Managing Land Information

Cadastre and Registration

Portugal

Property Boundaries

Nigeria

Parcel Mapping

Illinois

Colorado

Public Inquiries

France

Legal Notification

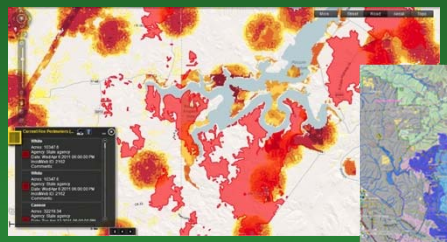
Belgium

Tax Assessment

Source: Esri

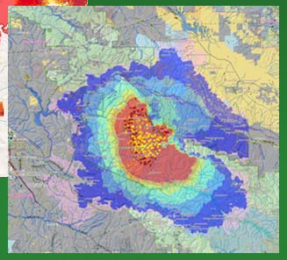
Planning For and Responding to Natural Disasters

Fire



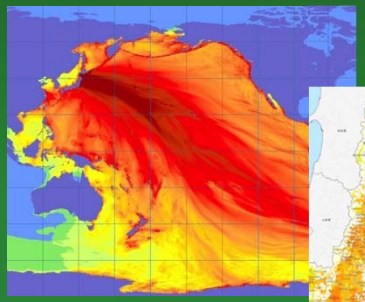
Texas

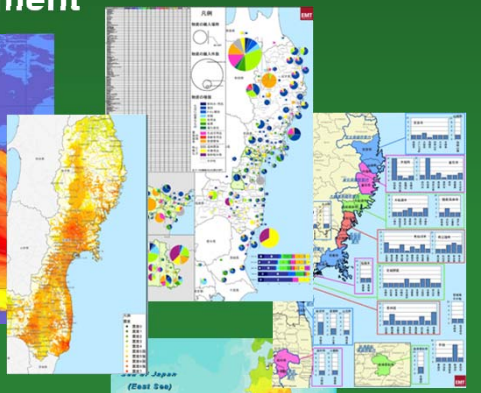
Fire Simulation



California

Tsunami Forecast, Earthquake Damage Assessment





Tohoku, Japan

Drought Status

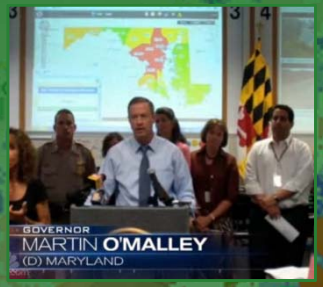
USACE

Situational Awareness (COP)

Flooding

North Dakota

Severe Weather



Quake Tracking

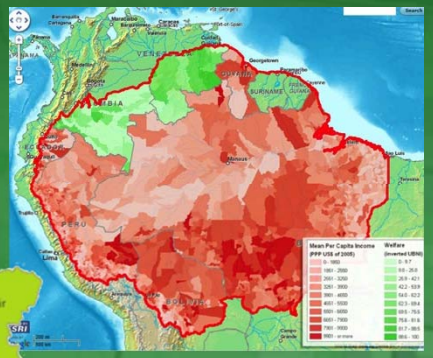
Recovery Planning

International Committee of the Red Cross

Source: Esri

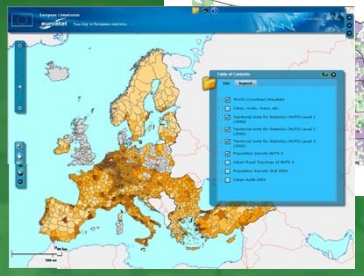
Understanding Demographics and Human Health

Population and Environment



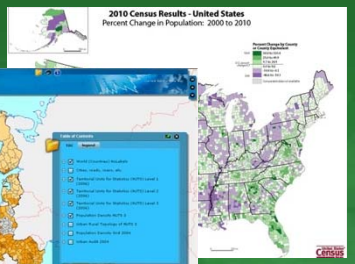
Amazon

Density

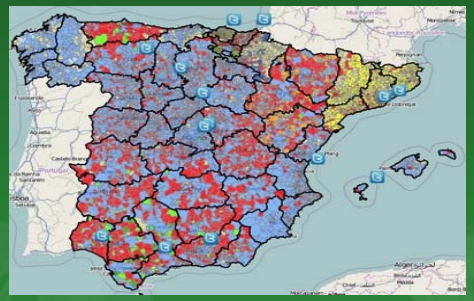


Europe

Population Change



Election Tracking



Spain

Spread of Disease

HIV Distribution

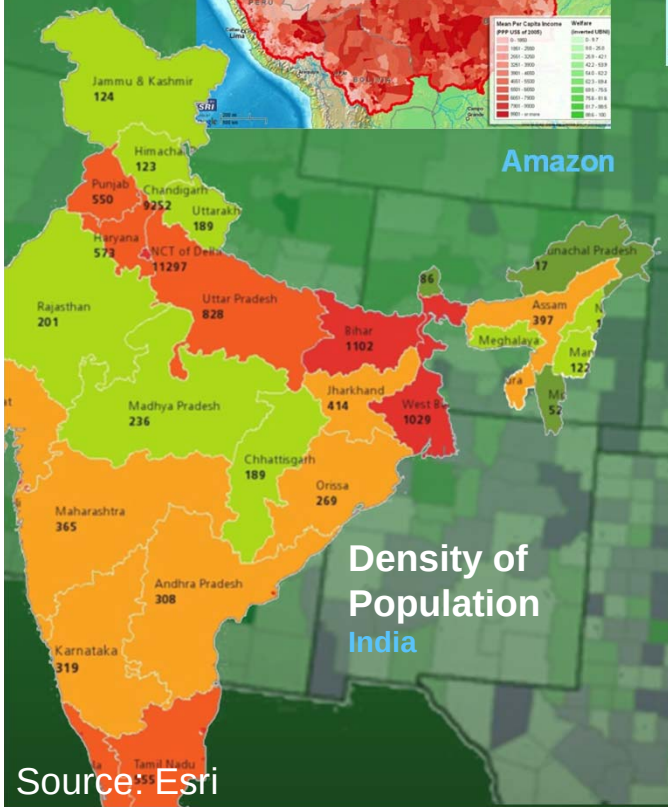
U.S. Dept of State

Ethnicity

Afghanistan

Polio Cases

Density of Population India



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