# Sharing value The GIS Platform for Disaster Management

**Emanuele Gennai** 

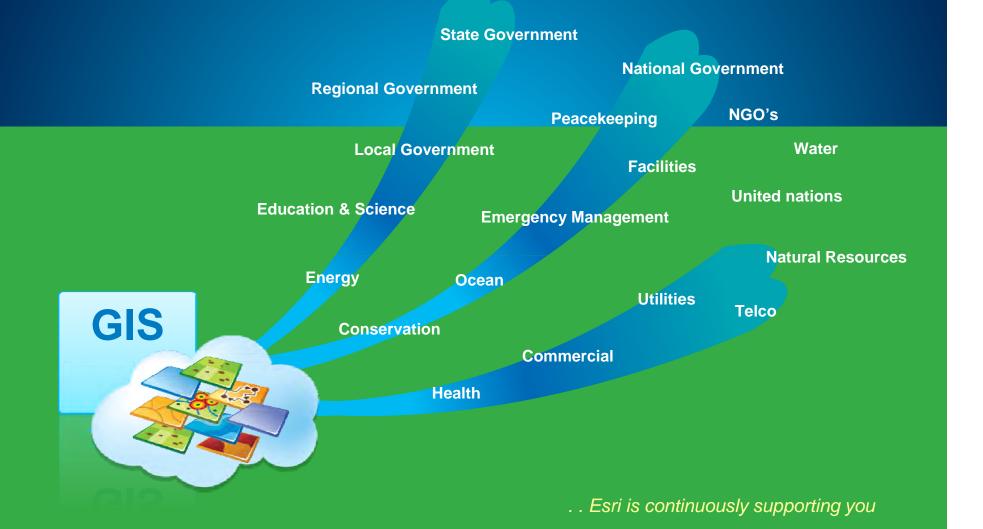
**Esri Global Affairs** 

**UN SPIDER Early Warning workshop Bonn, June 2013** 



# Your Work Is Making a Difference

Supporting Mapping, Data Management, Analysis and Visualization Workflows





# **Peace and Security**

### **Internally Displaced Persons**



UNAMID

### **Deployment Map - UNMISS**



Darfur

**UN Cartographic Section** 

### **Peace Operations**



**UNMIT** 

### **Security Council**



**UN Cartographic Sectio** 

### **Conflict Monitoring**

**Trans National** 



Darfur Ground Clashes
Documer 2010 - September 2011

5 U D A N

US Department of State

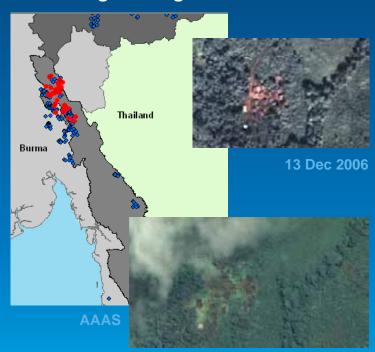
### **Briefing with Maps**



HMIMI

# **Human Rights**

# **The AAAS Science and Human Rights Program**



Papun District Village: June 24 2007 Reported Attacks April 22 2007 Copyright 2008 DigitalGlobe

### **Eyes on Syria**



### **Collaborative Decision Making**



Human Rights Watch

# **Public Health**

### Global Health Situational Awareness – Avian Flu



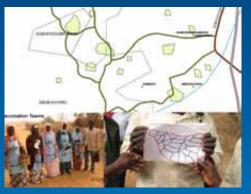
### Esi

### **Food Insecurity - Yemen**



**IFPR** 

### **Polio Eradication**



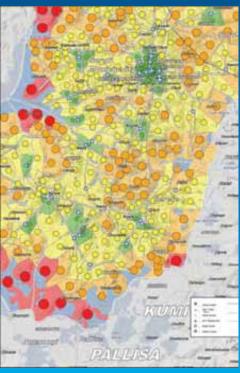
Bill and Melinda Gates Foundation World Health Organization

### **HIV Infected Population**



**USAID/ICF Macro/Blue Raster, LLC** 

# Estimated Mean Distance to Health Centers by Village Unit Soroti, Uganda



UNOSA'

# **Humanitarian Affairs**

### **Populations in Crisis**



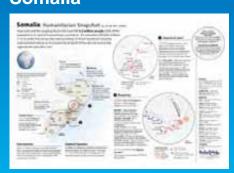
**US Department of State** 

### Flooding - Thailand



UNOSAT

# Humanitarian Snapshot – Somalia



**Earthquake Response - Haiti** 



Damage Assessment - Brazzaville, Congo



UN OCHA

WEE

UNOSAT

# **Environmental Management**

### **UNEPLive**



### **Global Biomass**



**Woods Hole Research Center** 

### Forest Atlas - DRC

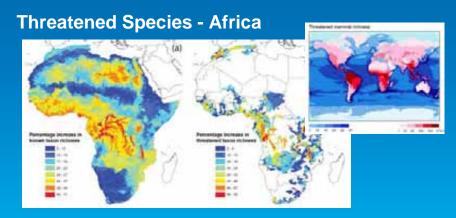


**World Resources Institute** 

### **Hydrology and Biofuels**



Conservation Internationa



IUCN

# **Development**



World Bank Project –Caracas, Venezuela by Rosario Giusti de Perez

### **Global Population Density - 2015**



**FAO, CIESIN, CIAT** 



UNFPA





# **Esri programs**

- Non-Profit Program (for NGOs)
- United nations program
- ArcGIS for home use (for volunteers)
- Conservation program
- ArcGIS for research institutes
- 100 Universities Program for developing countries
- Esri mentor program «adopt an university»
- Disaster Response Program
- http://www.esri.com/grants
- http://www.esri.com/services/disaster-response
- http://www.esri.com/industries/aid-development

# **Geography Provides Our Common Platform...**

... For Understanding the World



. . . Helping Us Integrate and Apply Our Knowledge



**Supporting Integration and Collaboration** 



Integrating and Synthesizing Information from Many Sources





Facilitating
Communication
and Collaboration

. . Becoming a Common Language

# GIS is at a Major Turning Point

# **GIS Is Transforming Into a Platform**

**Integrating Software and Services** 

Cloud/ Device Client/Server

Web Server

Desktop

Workstation

Minicomputer

**Mainframe** 

1960's 1970's

1980's

1990's

2000's

2010's

# **This New Platform**

**Connects and Leverages Existing GIS Investments** 

### **Pervasive**





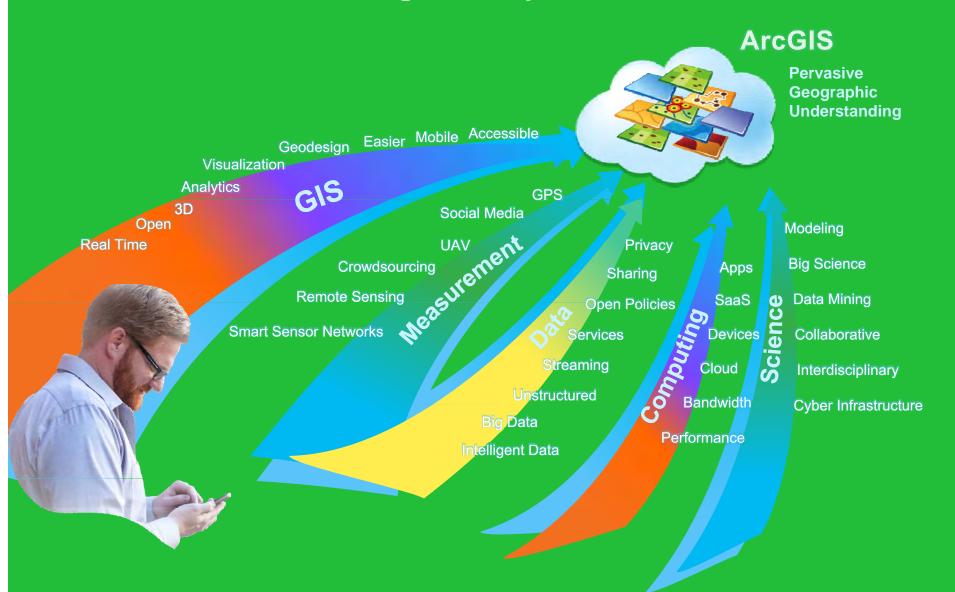
Cloud

# **Providing Mapping and GIS**

To the Entire Organization

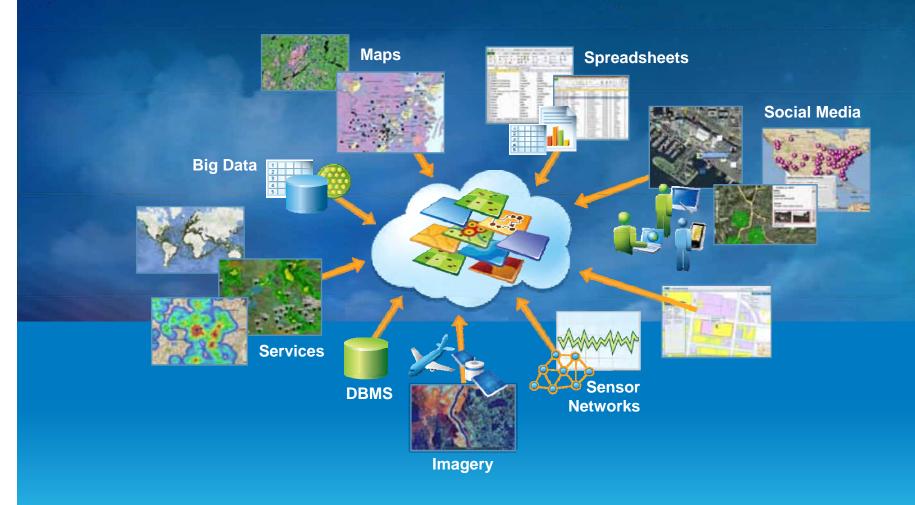


# **This Platform Leverages Many Trends**





# The Platform Integrates All Types of Geospatial Information



Using Web Maps to Normalize the Information . . .

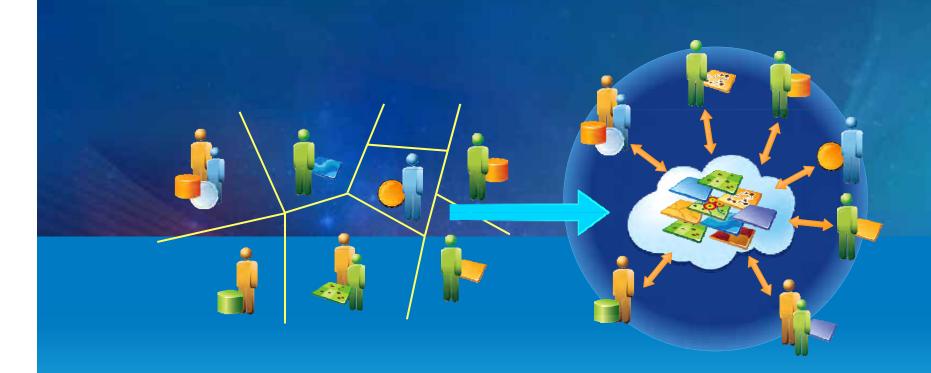
# **Web Maps Are Fundamental**

**Providing a New Medium for Organizing and Publishing** 



# **This Platform Transforms Organizations**

Breaking Down Barriers Between Workflows, Disciplines, and Cultures



Enabling Collaboration, Sharing, and Holistic Approaches

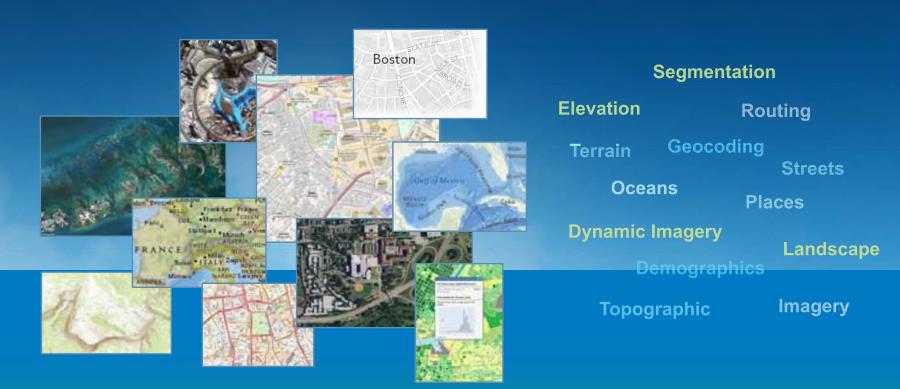
# **Organizations Are Rapidly Adopting This Pattern**

**Organizing and Sharing Their Information** 



# **Content Is An Important Part Of The Platform**

**Integrating the Best Available Data** 



**Many Community Contributions** 





Understanding our world.