

Challenge to Change

Corporate voyage towards a
CCA/CCM-centered business strategy



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Who we are

Kokusai Kogyo is an engineering consulting company based on geo-spatial information technology

Solutions:

- Green Energy
- Disaster Risk Reduction
- Environmental Protection
- Infrastructure
- Marketing and Location Information services and etc.

Founded:	1947
Net Asset Value (consolidated):	201 mil USD
Annual Sales (consolidated):	433 mil USD
Employees (consolidated):	2,300



Our wake-up call

Three connected global agendas were adopted in 2015

- Sendai Framework for Disaster Risk Reduction 2015-2030
- Sustainable Development Goals (SDGs)
- Paris Agreement (COP21)

Kokusai Kogyo engaged via

- UN Office of Disaster Risk Reduction (UNISDR)

Private Sector stakeholder input into Sendai

Framework formulation process

Private Sector Alliance (ARISE)

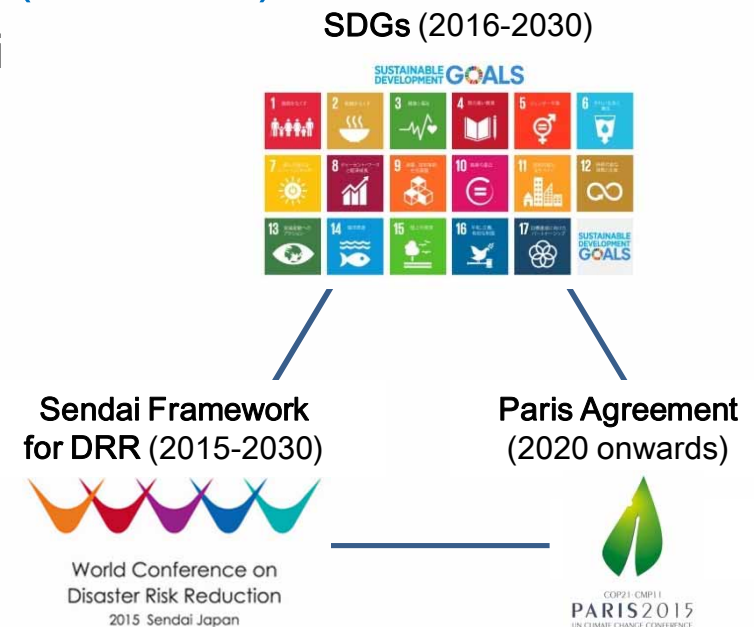
- UN Global Compact

Caring for Climate Initiative

- COP21

- World Economic Forum

Climate CEOs Initiative



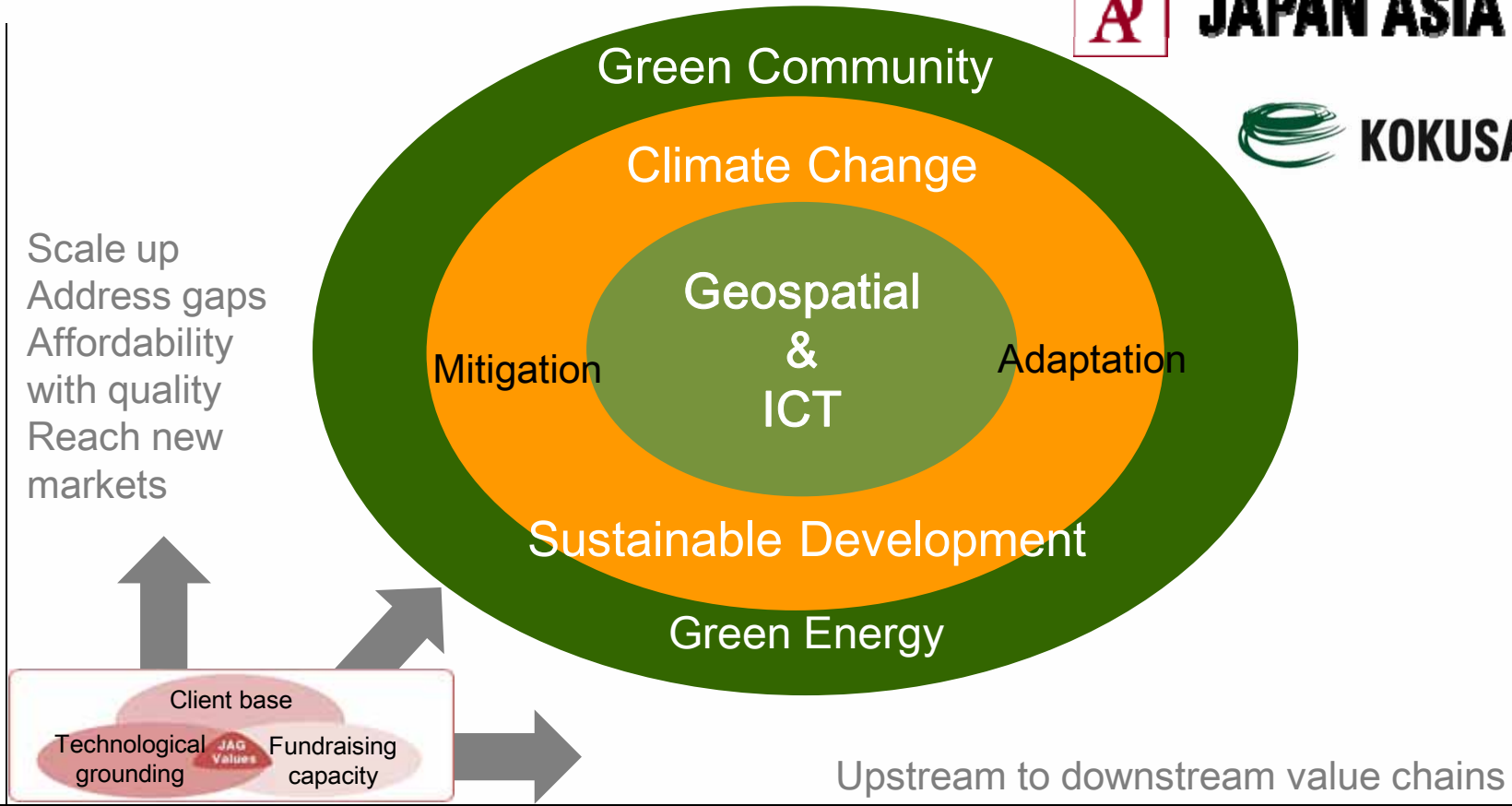
Towards a new global agenda



A new guiding vision

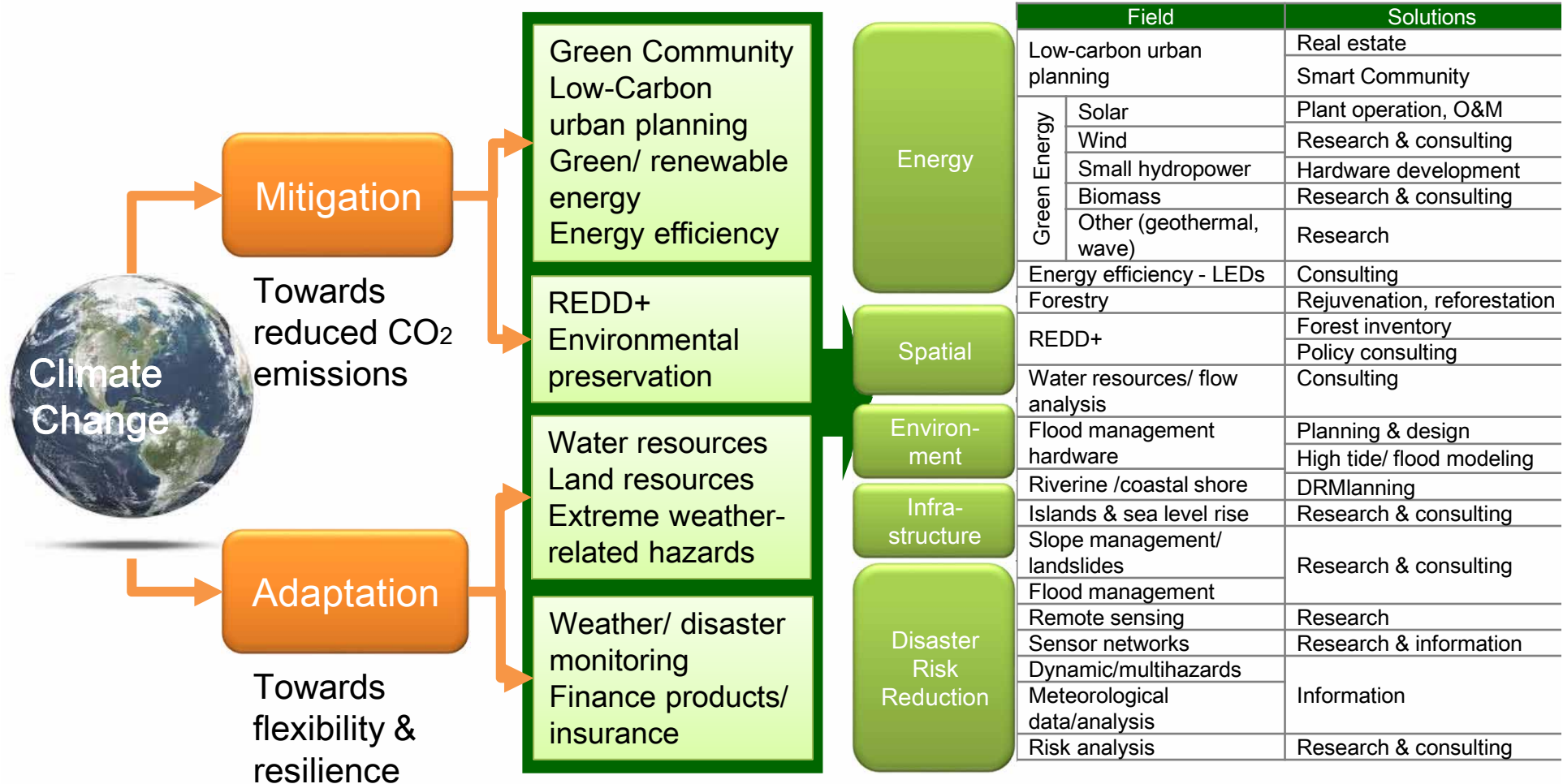
JAG Mission

“Save the Earth, Make Communities Green”



Towards a CC-compatible strategy

Climate Change action requires our core strengths - **disaster risk reduction, environmental protection, green energy, and so on**



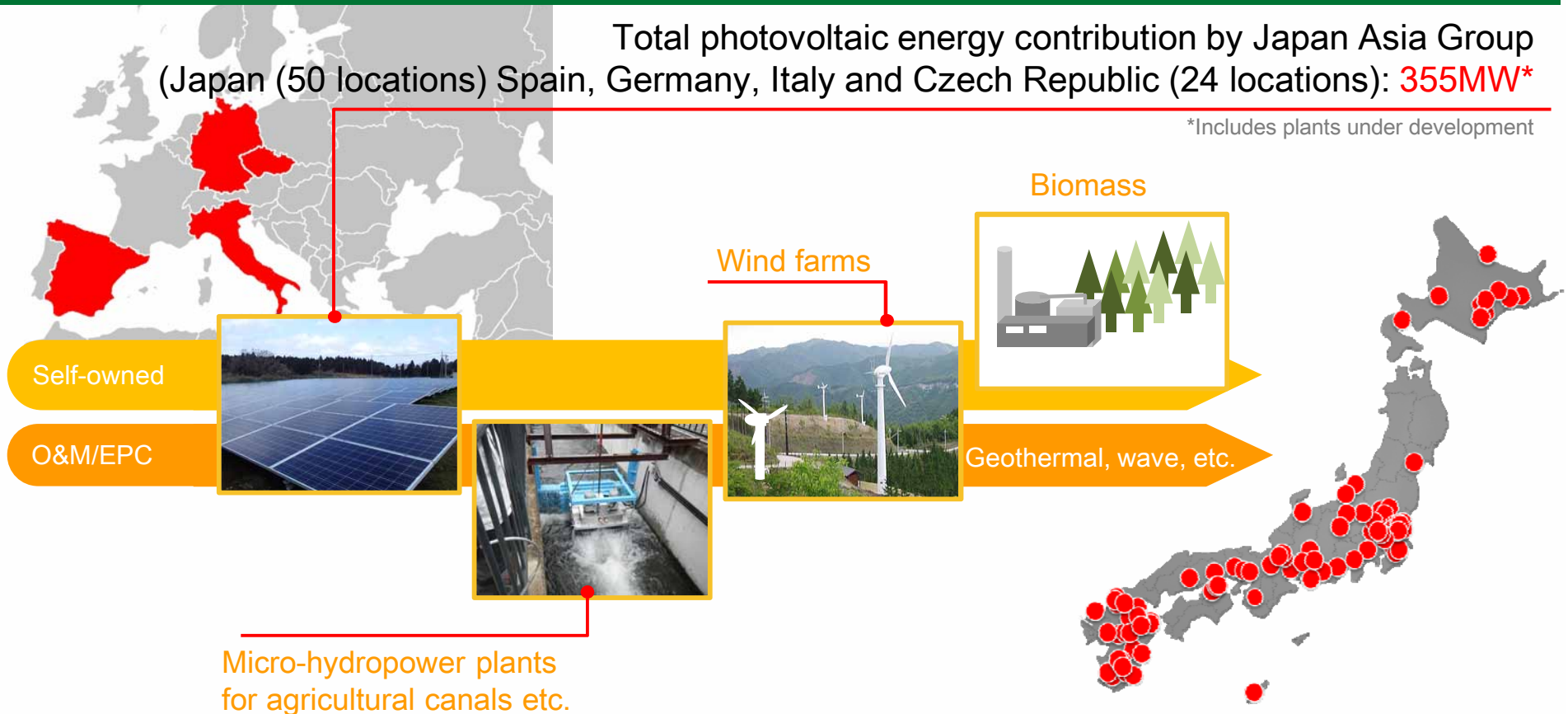
Geospatial information for CC Action

Geospatial information as bridge between information and user:

- ✓ Identifying potential and directing self- and client investment to CCM
- ✓ Early warning and prediction as CCA

Total photovoltaic energy contribution by Japan Asia Group
(Japan (50 locations) Spain, Germany, Italy and Czech Republic (24 locations): **355MW***

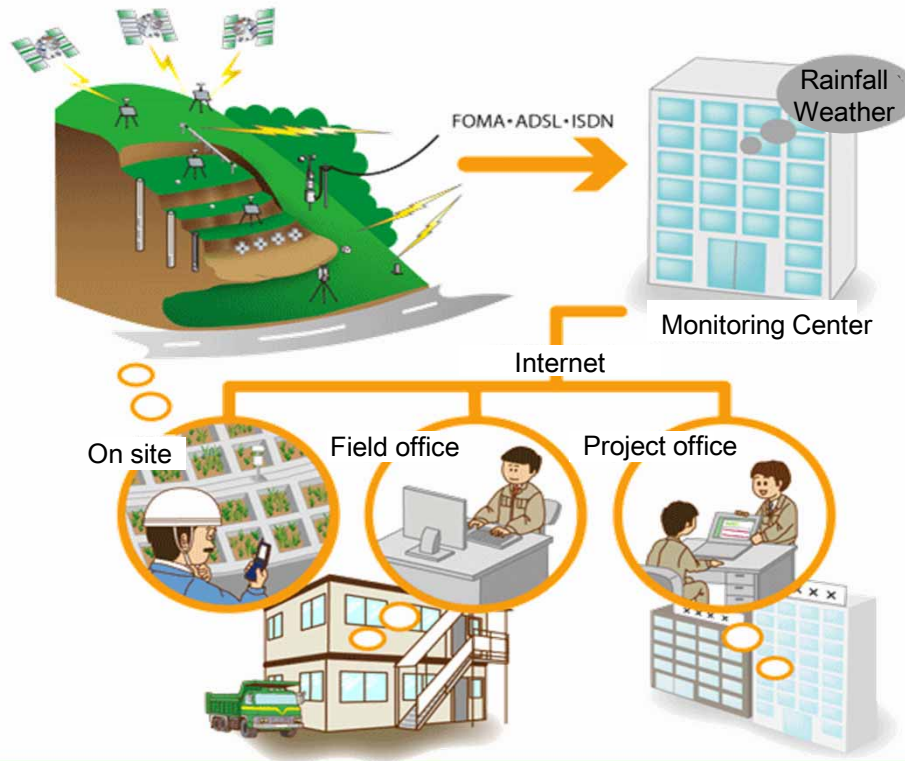
*Includes plants under development



Real-time warning systems - e.g. landslides

For 'known risk' zones

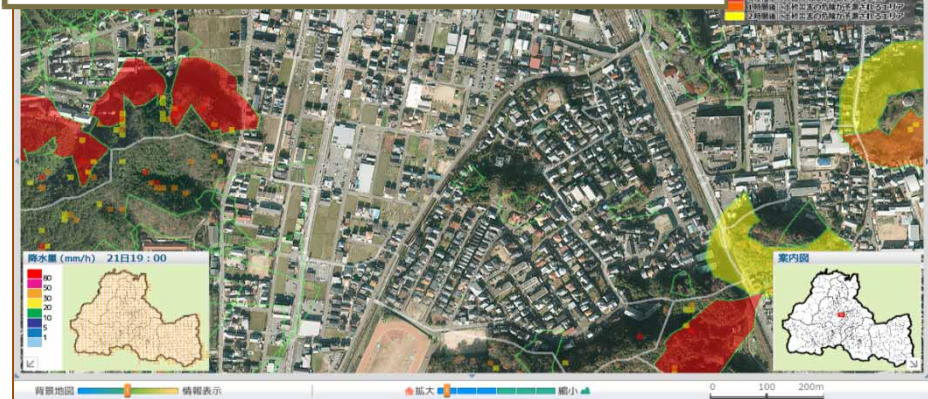
High-tech monitoring using GPS sensors, automatic millimeter-level XYZ displacement detection, technicians monitoring 24/7



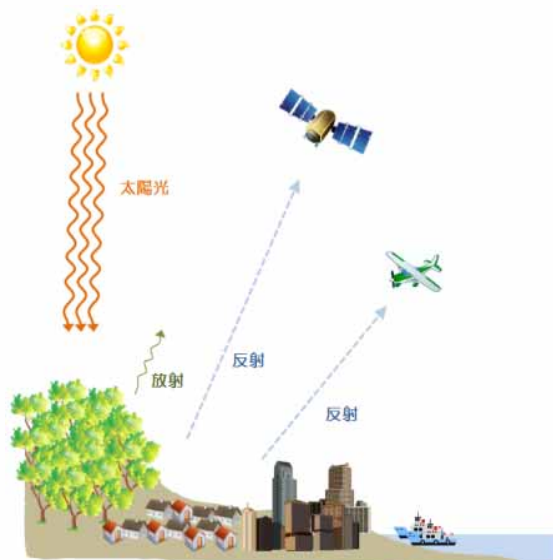
For 'unforeseen' risks

Prediction and early warning of landslides, even in historically 'safe' zones; based on analysis of underground water flow using real-time/predictive rainfall data plus GIS geology/topology layers

- Zone under danger of imminent landslide
- Zone under danger of landslide in 1 hour
- Zone under danger of landslide in 2 hours



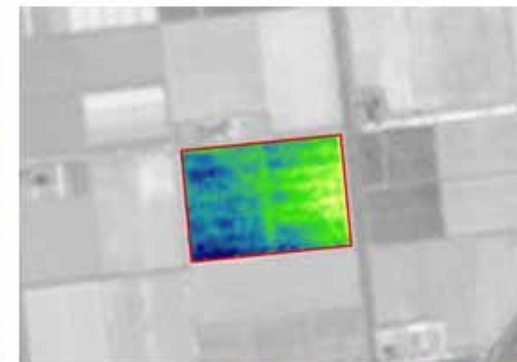
Remote Sensing and GIS for Agriculture



Satellite, aerial, and drone imagery are used to monitor and analyze field conditions real-time, enhance agriculture under extreme weather conditions, improve quality and yield, reduce labor and costs



Satellite imagery



Growth analysis Poor  Good

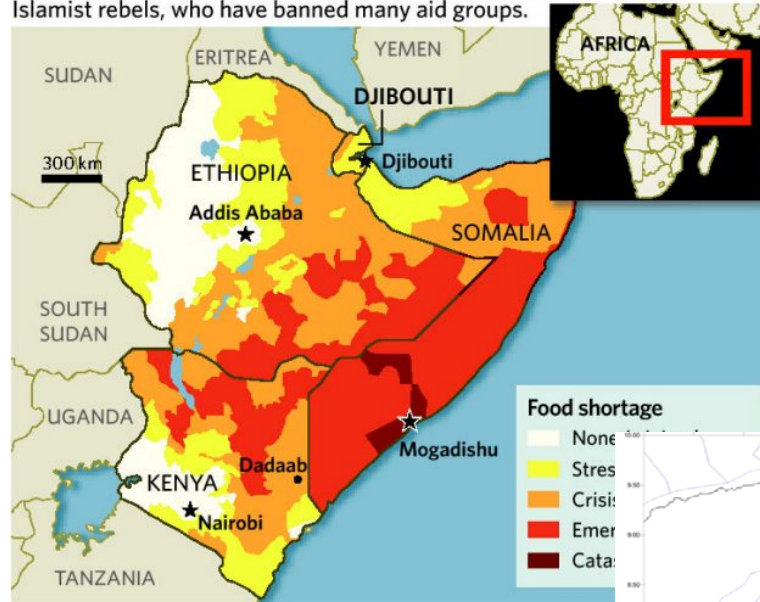
Our role and challenge:

- ✓ Innovating towards affordable geospatial information-based solutions without sacrificing quality and accuracy
- ✓ Identifying and addressing gaps in our line-up of solutions

Water resource – drought-prone areas

Somalia facing famine crisis

The drought in the Horn of Africa has created a triangle of famine where the borders of Ethiopia, Kenya and Somalia meet. The UN believes tens of thousands already have died in Somalia in areas held by Al Qaeda-linked Islamist rebels, who have banned many aid groups.



SOURCES: USAID, United Nations Food and Agriculture Organization

2011 Somalia faced worst drought in 60 years; many refugee camps appeared in Ethiopia and Kenya

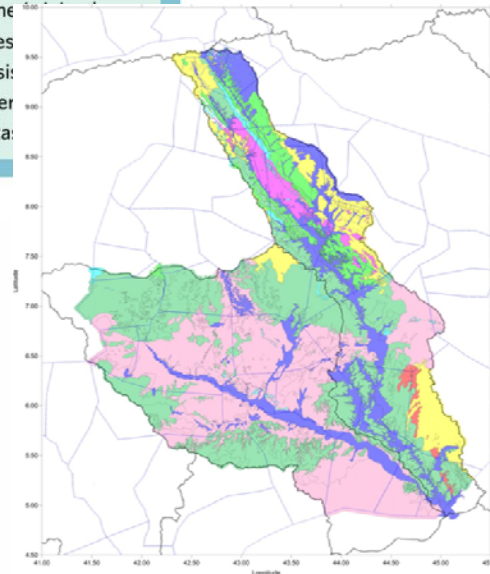
Project identified and developed groundwater source >500 meters deep for use by community and refugee camps

New groundwater well



Groundwater potential map

Blue and green show higher potential of groundwater existence





Thank you!

