

Eye on Earth

Environmental and Social Data for Sustainable Development



*John Wertman Presentation to CENDI
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Eye on Earth History

- Launched at WSSD in Johannesburg (2002) as Type II partnership between EAD (Environment Agency, Abu Dhabi) and UNEP
- Impetus was low international ranking of the UAE for sustainability
- Currently led by Eye on Earth Alliance: Abu Dhabi Global Environmental Data Initiative (AGEDI); UNEP; Group on Earth Observations (GEO); World Resources Institute (WRI); International Union for Conservation of Nature (IUCN)

Eye on Earth: The Problem

- Flood of data but inaccessible
- Missing data
- Incompatible standards
- Bureaucratic hurdles
- Unsuitable operating procedures
- Lack of open access
- Mere ignorance of its existence

SI Community

- There are eight Eye on Earth Special Initiatives, which bring together over 150 global organizations (the stakeholder community)
- Foundational SIs: Access for All; Environmental Education; Global Network of Network
- Thematic SIs: Biodiversity; Community Sustainability and Resilience; Disaster Management; Oceans and Blue Carbon; Water Security

Disaster Management SI

- I am serving as Chair
- The formal kickoff meeting for the SI occurred in Geneva in November 2013
- Two DM projects are being seed funded by AGEDI: FALCON; and SIEM

The FALCON Project

- Being led by AAG
- Focused on the MENA (Middle East-North Africa) region
- Involves Critical Systems Review; Stakeholder Survey; FALCON Workshop

Stakeholder Survey

- 3 open-ended questions
 - What are the greatest needs regarding geospatial data availability and use for addressing disaster management and risk reduction in the MENA region?
 - What do you consider to be the most important sources of geospatial data for disaster management and risk reduction for the MENA region?
 - What positive trends or best practices are in place or in development in the MENA region that can contribute to more effective disaster management and risk reduction?

Preliminary Results

Survey Respondents:

40% based in MENA region

Government Agencies/Ministries:

Iraq Ministry of Science & Technology
Jordan Seismological Observatory
Morocco Ministry of Agriculture
National Geospatial Advisory Committee
North Carolina Geodetic Survey

Universities:

American University of Beirut
Arab Academy for Science, Technology &
Maritime Transport
Arabian Gulf University
Arizona State University
Colorado School of Mines
The American University of Ras Al Khaimah
University of Casablanca
University of Manchester
University of Texas at El Paso

Nonprofit / Relief Organizations / Foundations:

Arab Red Crescent and Red Cross
European Association of Geographers
Food and Agriculture Organization of the United
Nations - Jerusalem
International Center for Agricultural Research in
Dry Areas
International Federation of Red Cross & Red
Crescent
Moroccan Red Crescent Society
Secure World Foundation
Yemen Red Crescent

Private companies:

Digital Globe
Esri
Gaia GeoSystems
Spatial Law Center

Preliminary Results

1) What are the greatest needs regarding geospatial data availability and use for addressing disaster management and risk reduction in the MENA region?

- **23%** of respondents mentioned remote sensing data / satellite imagery
- “Acquisition of satellite imagery has proved to be an expensive venture.”
- “There is a considerable lack of basic, governmental data on urban development across the MENA region.”
- “Census data is very hard to get in many MENA countries, but access to census data could help in a number of disaster management and risk reduction ways.”

Preliminary Results

1) What are the greatest needs regarding geospatial data availability and use for addressing disaster management and risk reduction in the MENA region?

- “Bi- and multilateral cooperation between governmental institutions and national agencies for the exchange of data and harmonizing data exchange protocols”
- “Training for decision makers on the needs and importance of availability”
- “Too much emphasis is being put on the IT infrastructure instead of content. As a result of this, the geospatial data being produced is very often not standardized, out-of-date and/or incomplete.”

Preliminary Results

2) What do you consider to be the most important sources of geospatial data for disaster management and risk reduction for the MENA region?

- Remote Sensing / Satellite Imagery: **32.5%**
- Government sources: **17.5%**
- Open Source: **15%**
- Local Data: **12.5%**
- Crowd-sourcing / VGI: **5%**



Preliminary Results

2) What do you consider to be the most important sources of geospatial data for disaster management and risk reduction for the MENA region?

- “The most important source should be the government as they are the only one having the authority to validate the data. Unfortunately, data sharing issues as well as the lack of coordination among governmental entities very often lead to low quality, incompatible datasets and therefore the use of other sources.”

Preliminary Results

3) What positive trends or best practices are in place or in development in the MENA region that can contribute to more effective disaster management and risk reduction?

- **33%** of respondents mention new policies, initiatives, approaches, and/or research programs related to disaster management
- **25%** of respondents mention activities related to open source data, data sharing, and or data coordination
- **10%** of respondents indicated improved use of geospatial technology

Preliminary Results

3) What positive trends or best practices are in place or in development in the MENA region that can contribute to more effective disaster management and risk reduction?

- **Water Scarcity Initiative for the MENA Region (FAO)**
- **Regional Initiative for the Assessment of the Impact of Climate Change on Water Resources and Socio-Economic Vulnerability in the Arab Region (UN-ESCWA, League of Arab States)**
- **Initiative for establishing the National Disaster Management Center in Iraq is currently under development**
- **The Oman Mountain Project, headed by the Office of the Advisor to His Majesty The Sultan on Economic Planning Affairs: an effort to map physical, cultural, and natural resources across all of Oman's mountains.**

Preliminary Results

Additional Comments:

- “Cooperation in data analysis is less advanced than is sharing of data itself.”
- “Disaster management and risk reduction must not become a separate issue in itself. It should be rather integrated in a wider intergovernmental process and environmental data and information exchange mechanism.”



Thank you!
Questions? Comments?

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