

Emerging Trends in Geo Technologies and Disaster Management

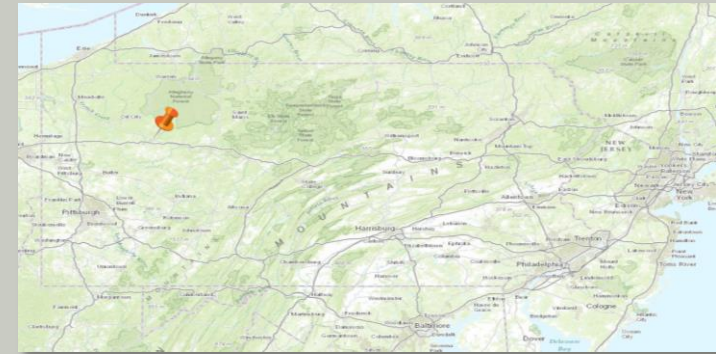
# Focus on Geospatial Education for MENA Region Disaster Preparedness

Yasser Ayad, Ph.D., GISP  
Clarion University of PA



# Background

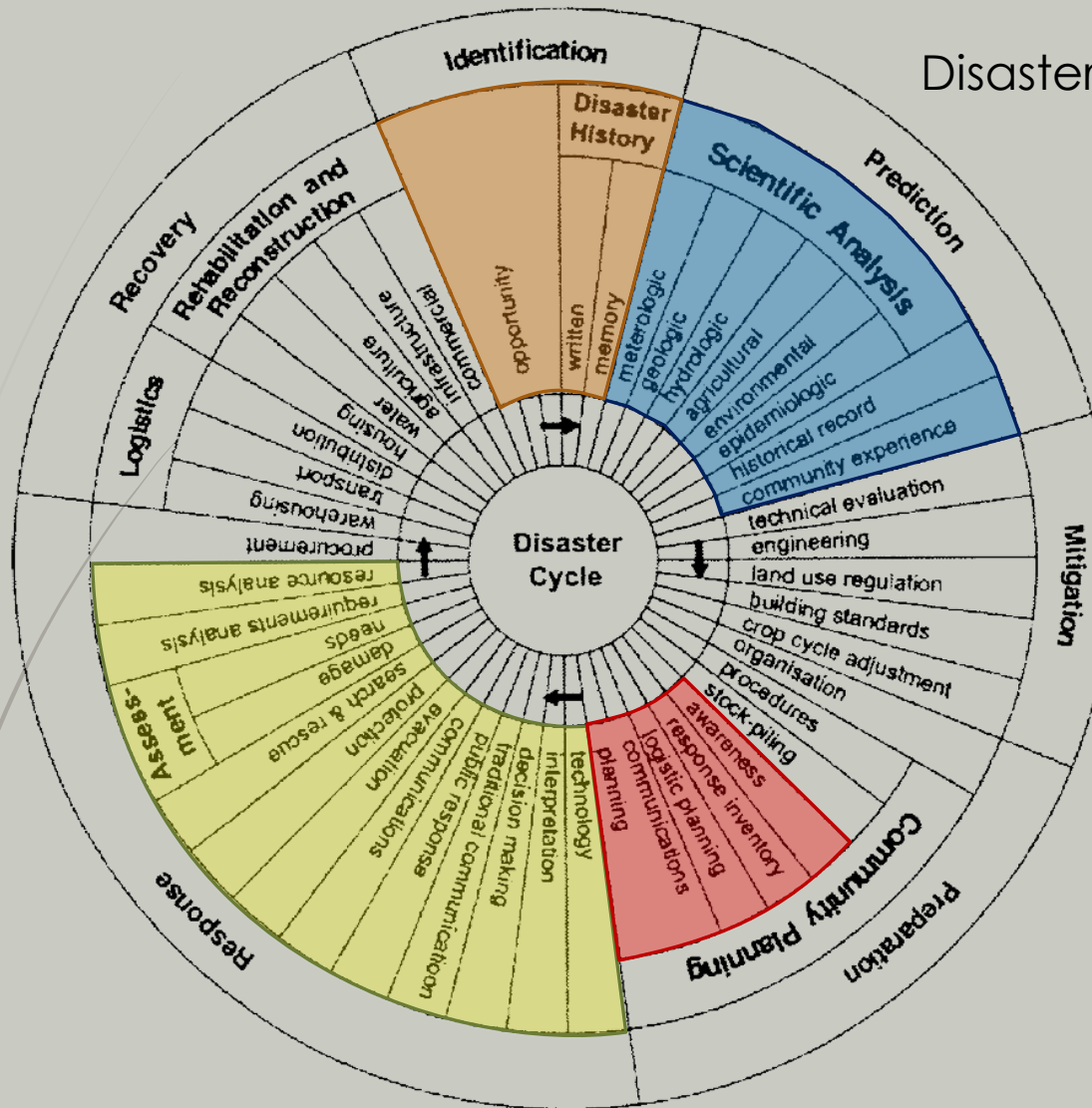
- My Community our Earth (AAG)
  - Tunis, Tunisia (2008)
- Community Geoportal (Geospatial Data/Metadata Standards)
  - Greene County, PA
- Various workshops at the regional & local levels
  - AmericaView (SATELLITE) program (OH & PA) (K-12 teacher education)
  - Summer camps (High schools)
  - Software-specific training



# League of Arab States

- ▶ The Arab Strategy for Disaster Risk Reduction (Resolution #345, Dec. 2010)
  - ▶ 3.3.3. Build resilience through knowledge, advocacy, research and trainings
    - ▶ Data availability at all levels
    - ▶ Updated educational materials
    - ▶ Promote public awareness
    - ▶ Establish training opportunities for administrators, decision makers and community
    - ▶ Secure resources for scientific research
    - ▶ Develop standardized progress tracking tools for risk reduction

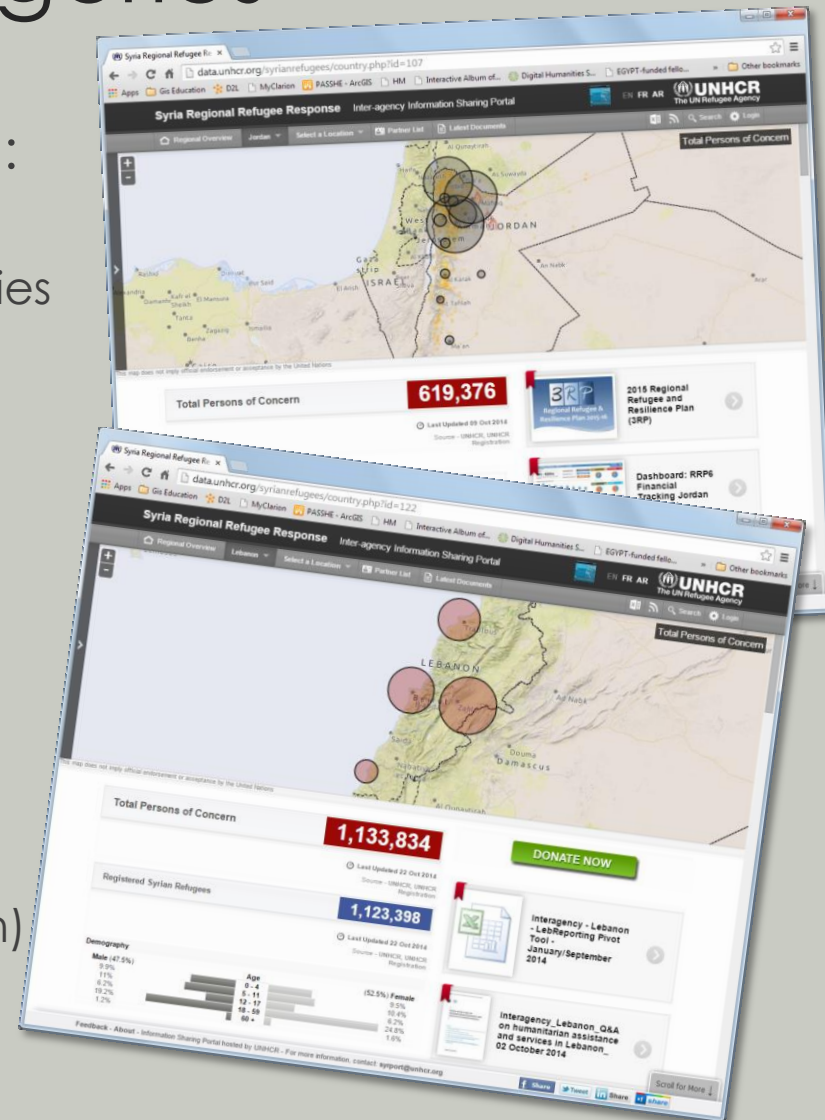
## Disaster Preparedness Phases



- Identification
  - Assets as well as Resources
- Prediction
- Mitigation
  - Plans and actions to minimize impacts
- Preparation
- Response
  - Real time actions
- Recovery
  - Restoration of services and rebuilding

# Educational Categories

- Answer to Survey Question #1: Training for Decision Makers
  - Value of geospatial technologies (importance)
  - Breadth of applications (need)
- Stakeholders
  - Benefits of data sharing
  - Return on Investment
  - Data standards
- Data Users/Public Awareness
  - Limitations (Accuracy/Precision)
  - Participatory GIS?



# Materials & Methods

- ▶ Training
  - ▶ Online (Live/Recorded)
  - ▶ In-Class (Lectures/hands-on)
- ▶ Documentation
  - ▶ Metadata standards
  - ▶ Help/Online assistance (e.g. Q&A)
    - ▶ E.g. On-Demand assistance/support
- ▶ Forums and discussion groups
- ▶ Formal geospatial education
  - ▶ Coordination with educational institutions on depth and breadth of geospatial knowledge
  - ▶ Spatial thinking
- ▶ Answer to Survey Question #3: Formal research initiatives
  - ▶ Collaboration/Creation of research institutions
  - ▶ Data Analysis

# Questions?