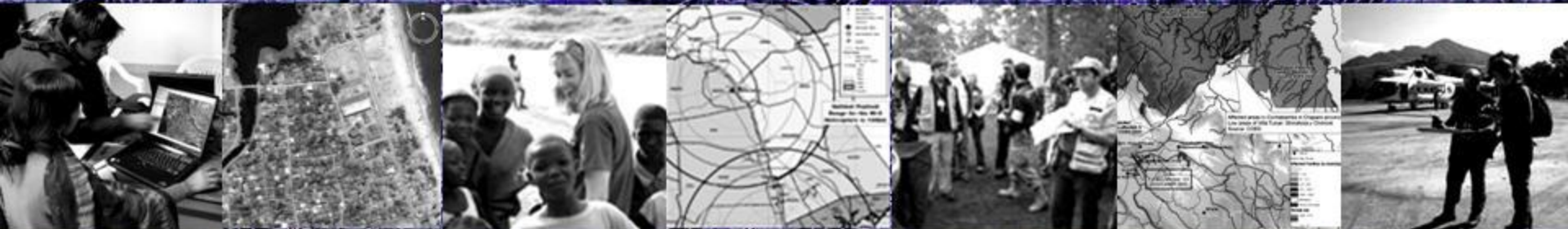




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What does DRR look like?
**Problems of information
readiness 'on the day'**

Nigel Woof



Source: NASA (2002)

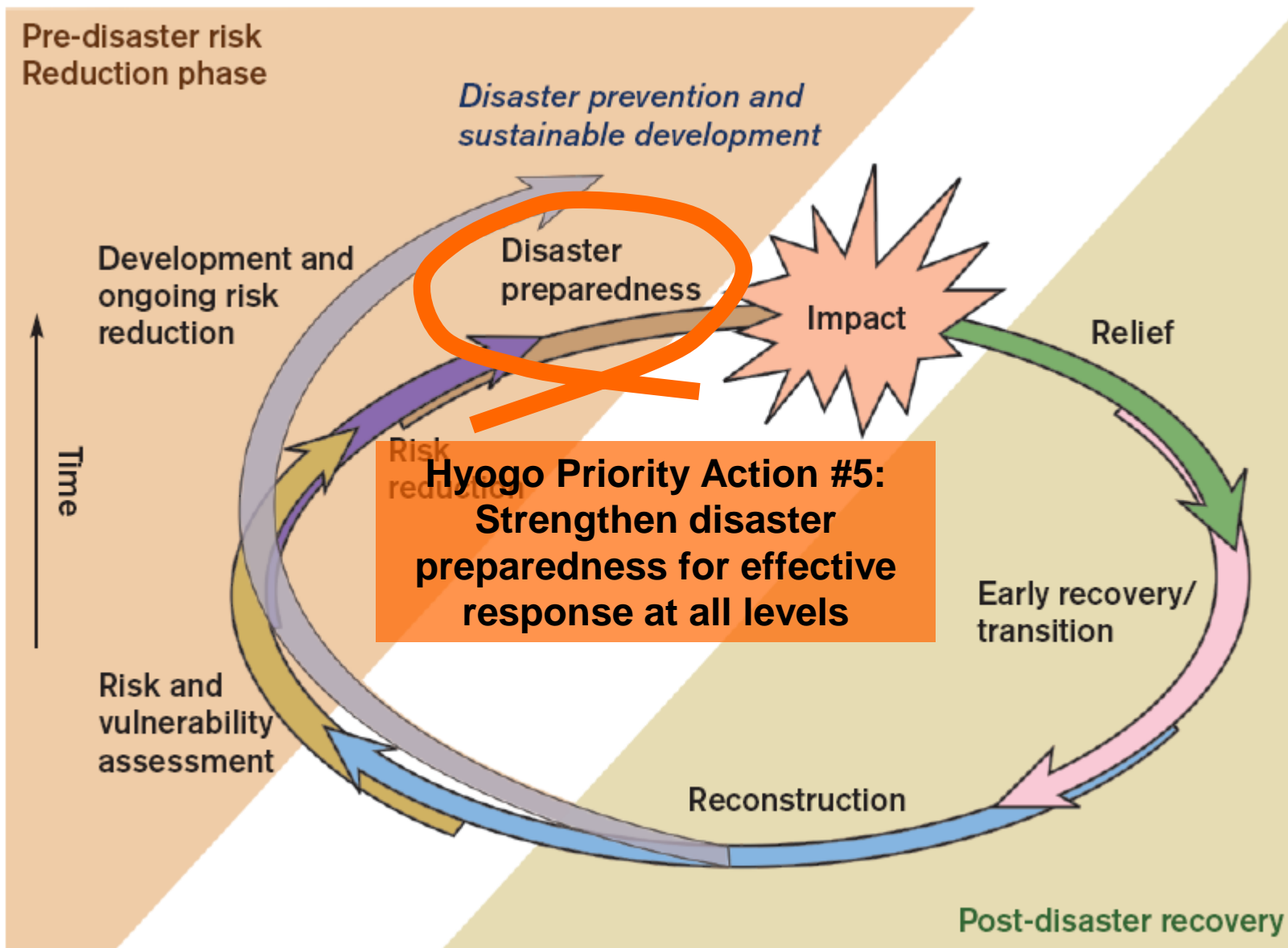


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Don't forget disaster preparedness



Assertions...and a question



- Disaster preparedness still vital within the DRR cycle
- (Spatial) information readiness is essential for effective concerted response at all levels
- But: institutional complexities make this hard to deliver
- *Question:* could info readiness be better integrated into other DRR programmes?



Recurring information needs for effective concerted disaster response

What's the extent of the affected area?

Where are the secondary hazards?

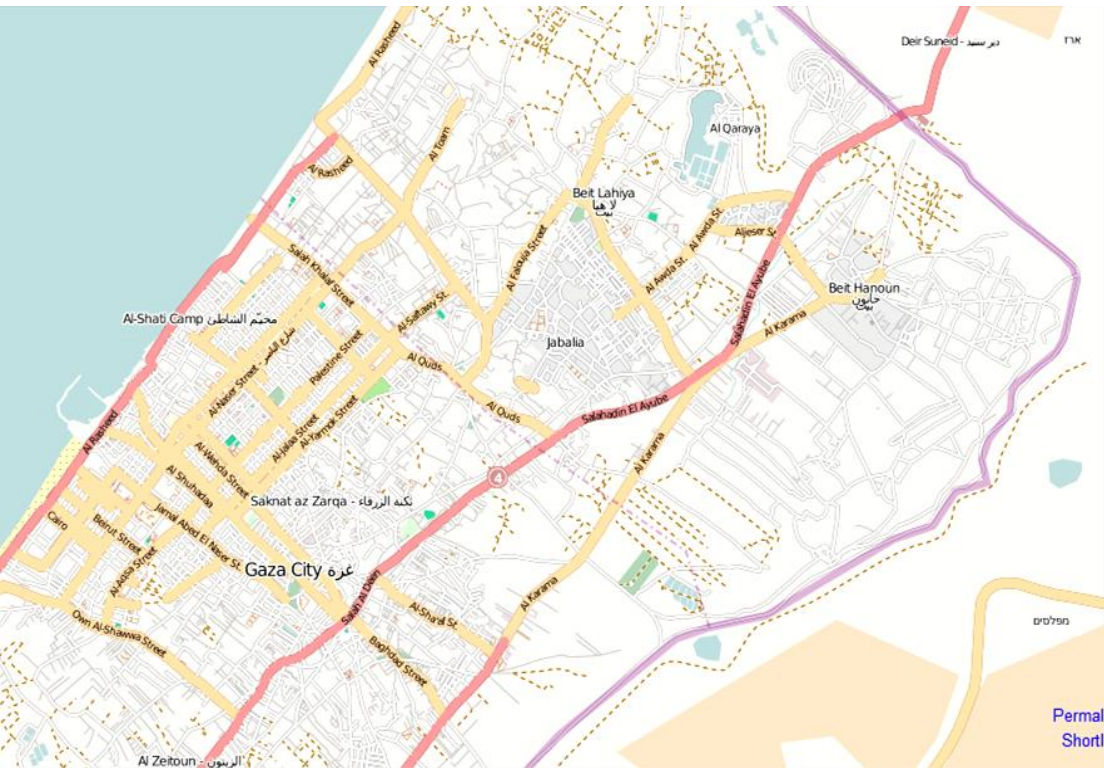
Where are the affected people?

What are the priority needs?

Who is doing what, where? (3W)



What are the minimum data we need to be ready for a disaster event?

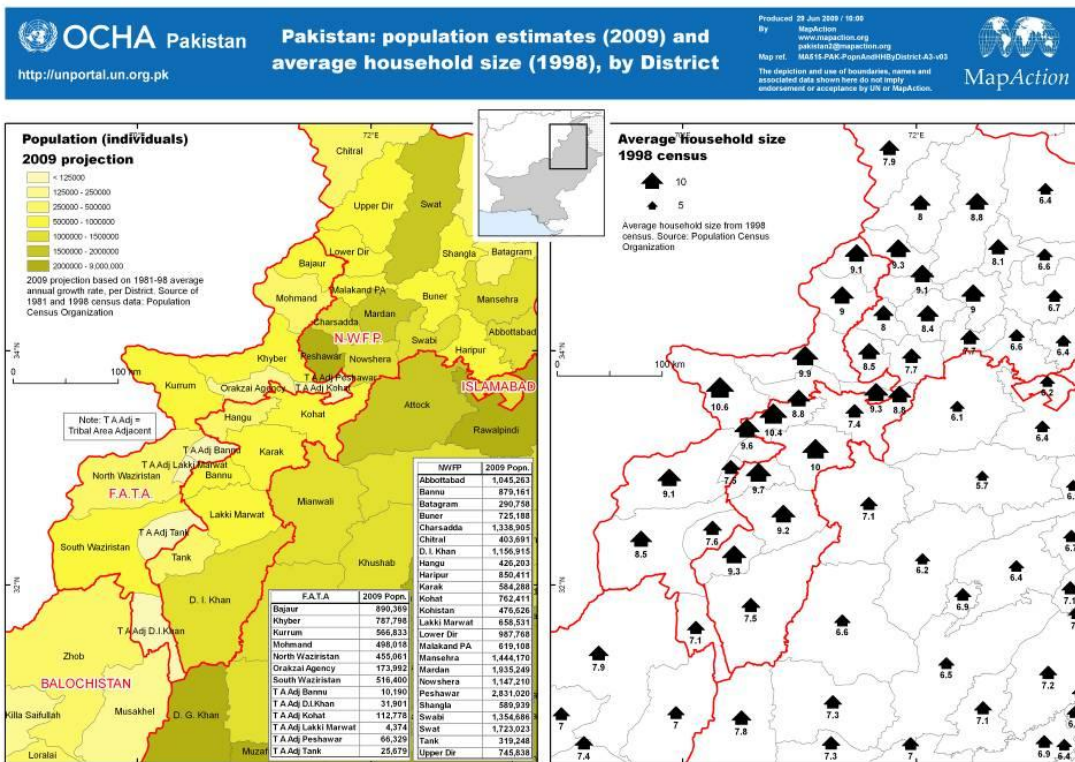


Source: OpenStreetMap

- **Physical geography (base maps, archived images, GIS data layers)**



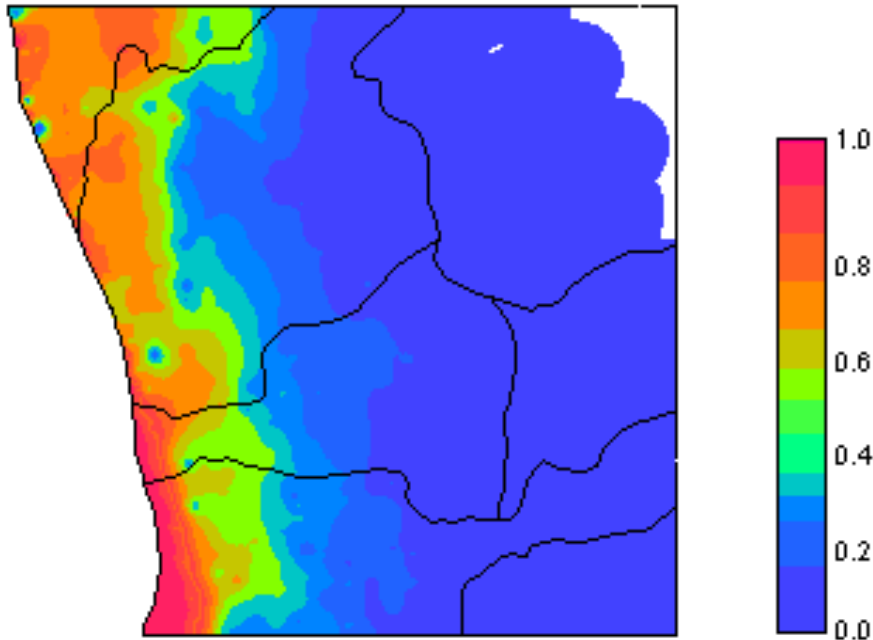
What are the minimum data we need to be ready for a disaster event?



- Physical geography (base maps, archived images, GIS data layers)
- Population baselines

What are the minimum data we need to be ready for a disaster event?

Degree (from 0.0 to 1.0) of people that will be killed for surge height of 510cm.



- Physical geography (base maps, archived images, GIS data layers)
- Population baselines
- **Assessed vulnerabilities**

Source: ITC



What are the minimum data we need to be ready for a disaster event?

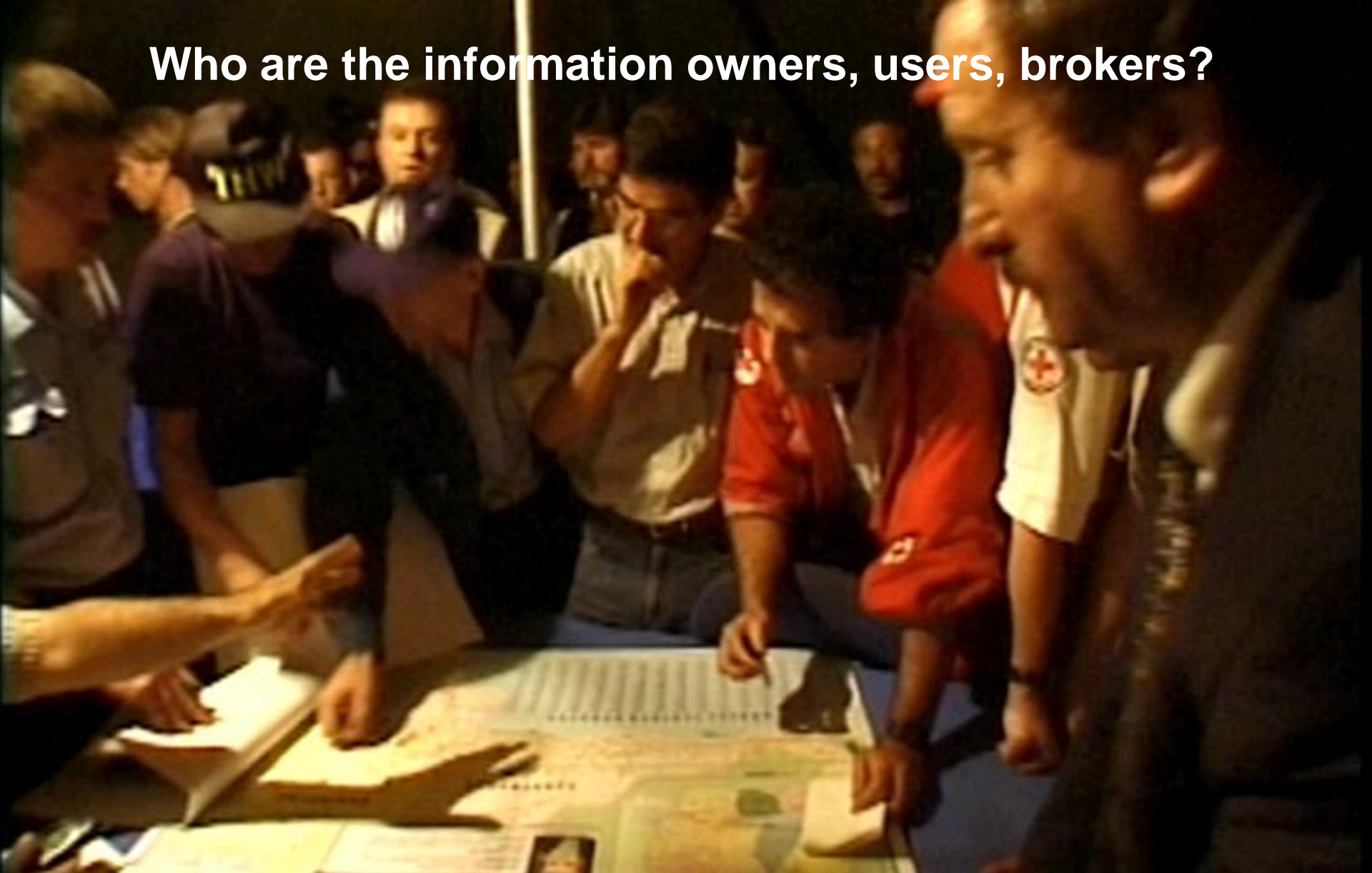


- Physical geography (base maps, archived images, GIS data layers)
- Population baselines
- Assessed vulnerabilities
- Administrative geography

Source: MapAction



Who are the information owners, users, brokers?



Who are the information owners, users, brokers? (an incomplete picture)

INTERNATIONAL RESPONDERS

Bilateral donors (disaster relief)
International agencies
International Red Cross movement
INGOs (disaster relief)
International SAR teams
Satellite/RS platforms

Humanitarian
Clusters
x9

NATIONAL GOVERNMENT

Military and civil defence
National government ministries
Info agencies (NMA, NSO)
Public utilities
NDMA
LEMA
District and provincial government

IN-SITU NON-GOVERNMENTAL

International funders (dev & DRR)
Regional institutions
National academic institutions
INGOs (development & DRR progs)
Businesses
National Red Cross society
Local and national NGOs

**Vulnerable/affected
communities**

Recurring challenges

- **Absence of prescribed data assets in preparedness plans**
- **Vulnerability data, when available, is fragmentary and/or not linked to baseline data sets**
- **Problems of data discovery and sharing between diversity of actors 'on the day'**
- **Remote sensing: over-emphasis on technical virtuosity**



Recent example (1): Philippines

- Maps as tools for situational information exchange
- Defence ministry had (initially) sole access to critical data
- ‘Crowd sourced’ street map data: ‘best on the day’
- Google versus institutional mechanisms
- National mapping agency: partnerships, but no rehearsed procedures



Picture: ECHO/Maria Olsen

Recent example (2): Sumatra EQ



Picture: Reuters Alertnet

- Large demand for mapped information from all actors
- Google to the rescue (again)
- Administrative geography: good work by UNOCHA but still problems with baseline data sets
- Inconsistent procedures for collecting/collating damage data
- Humanitarian clusters lacked IM readiness

Some initiatives

- Minimum country data sets (IASC/OCHA)
- Standardisation programmes (eg UNGIWG)
- Open-source projects
- But...most DRR projects remain disconnected, and don't address institutional information linkages



Tentative conclusions

- Data readiness is a simple concept but hard to implement
- Institutional/system barriers
- Problems of data standards (but 'planet Earth' is a good framework)
- Can data preparedness be linked to other domains in DRR?





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www.mapaction.org

nwoof@mapaction.org

