KOBE REPORT draft
Report of Session 2.8, Thematic Cluster 2

Data For Evidence-Based Policy Making

1. Summary of Presentations and Discussions

2.8.0   Opening Comments - Craig Duncan (Relief Web) - Session Chair

Disaster data is fundamental to policy making. This session will focus on disaster data.

2.8.1a   National Disaster Databases: Latin American Region - Andreas Valasquez

Fifteen existing national and local databases were listed and their attributes were described. They contain a total of 22,000 records. Information available in post-disaster databases was also described. Examples of data include: data and maps: homes destroyed and rebuilt, flood and earthquake damage, links to climate change. Conclusions: disasters have different scales; disasters have variable impacts (accumulated vulnerabilities and previous disasters); we need to support Japan Prime Minister's call for data and information sharing.

2.8.1b   National Disaster Databases: Southeast Asia Region - Sujit Mohanty (UNDP)

Objectives: capturing local data to understand local risks and a geo-referenced inventory of disasters. Two processes were examined - capturing and processing data. In India - 30 districts have 32 years of data. Findings: epidemics & cyclones cause most deaths; epidemics are linked to floods but are also independent; floods cause the greatest impacts on livelihood. In Nepal, 33 years of statistics indicate frequent floods, landslides, and earthquakes. GIS maps of disaster locations were produced. Total economic impact is 3 times the GDP.   In Sri Lanka, the disaster data tool has been implemented; data capture is under way; preliminary analysis has been conducted. The tool was used for Tsunami response.   Conclusions: regular data capture is important; method must be customized to fit regional needs.

2.8.2a   EM-DAT and it's Application - Debarati Guha Sapir (CRED)

A key question is how to transform data into information. For example: more than 90% of victims die within 18 hours; indirect deaths are highest in floods and drought; disease outbreaks are rare; dead bodies are not a health threat; psychological counselling has no evidence of impact. The EM-DAT database contains 14,500 records from 184 countries since1900. There are minimum thresholds for including a record (e.g.,10 deaths). The database is: updated daily; publicly accessible; and includes natural and technological disasters. There is mapping capability but the focus is on analysis of trends. Findings: mortality is decreasing, affected people are increasing. Future directions are: economic impacts, restructuring famine and drought data; refining mortality and morbidity data

2.8.2b   The Munich Re NatCat*service* - Thomas Loster (Munich Reinsurance)

There are 700-800 disaster loss events per year. The global database focusses on economic losses; impacts on people, structures and infrastructure. The database is continuously updated. Information overload was discusses along with value added by synthesis. There are multiple data sources, including online databases, media, worldwide contacts, scientific reports, meteorological services, and NGOs. Data entry includes validation. A sample record was shown. Models are used to

estimate economic losses from baseline data. Although the database is internal, data are available on request.

2.8.3 How Completely and Consistently do International Disaster Databases Record Losses? - Maxx Dilley (Columbia University)

Historical databases provide data on assessments for relief and reconstruction as well as disaster risks, outcomes, vulnerability, and loss inventories for development risks. They also support trend analysis and disaster research. The study compared EM-DAT, NatCat, and Sigma. Of 370 events, 60%, 62%, and 44% were recorded in individual databases. There was good consistency for big disasters but poorer for small disasters. There was a 50% difference in economic losses among databases. There were substantial differences in recorded deaths, with greater differences for smaller disasters. However, for smaller countries, differences in small disasters are important. Areas for improvement include reconciling existing databases, developing standardized assessment methods, improving data capture, and increased GLIDE indexing.

2.8.4 Global Unique Disaster Identifier Number (GLIDE) - Masaru Arakida (ADRC)

It is critical to convince policy makers that disaster reduction is critical to development. Disaster losses sometimes exceed the GDP of small countries. Differences in nomenclature make it difficult to share & integrate data. A key problem is multiple identities for the same disaster. A unique disaster identification number with standardized codes was described. The process involves: an event, a GLIDE generator, a GLIDE report, and the GLIDE database. Many partners, including ReliefWeb, are now using GLIDE. There is a need for additional GLIDE operators for some regions not currently covered.

2.8.5 A Global Disaster Information Marketplace - Albert Simard (GDIN)

A business model was presented for an information marketplace that would enhance the exchange of disaster information among providers and users. Four types of providers were described, based on their role in society (governments, businesses, academia, and NGOs). Four groups of users were based on their information needs (policy analysts, businesses, the general public, and practitioners). Examples of simple and complex data and information needs were presented. A cubic framework provides six windows into the global disaster information space: who, what, when, where, why, and how. An demonstration Web site was presented.

2.8.6 Disaster Data Consortium Plan - Andrew Maskrey (UNDP)

Having quality data is fundamental to disaster management. We can't do anything without good data. The issues of scale and resolution are important, with increasing detail needed at decreasing levels. Data needs of different users are different. As the amount of data increases, access to and finding information becomes increasingly difficult. Working Group efforts have advanced beyond the capacities of a Working Group. A Provention Consortium of agencies is proposing a Disaster Risk Management Assessment Program. Several tasks and questions will be addressed by this program to develop ways to make data more accessible.

2. Discussion

- Disaster data is a baseline for everything else; participants in this session represent a strong commitment to this idea; hopefully there will be strong donor support.
- Differences between databases are not all that important; it depends on the target group; global databases do not reflect small-scale data.
- Many datasets are available but free access is decreasing. How can we insure access for humanitarian and disaster purposes? EM-DAT is freely available. Organizations have found that it costs money to maintain databases and have limited funds.
- Millions of Web sites are out there. It is necessary to be pro-active in promoting sites. Support is needed for good database sites.
- Agencies could release aggregate data for free and charge for detailed data.

- There is a need for a generic data model for countries that want to start databases. A keyword for today is interoperability. There isn't much difference among data models.
- There is a gap in information available for relief workers. Relief workers need but can't get maps in the field.

3. Primary Issues

1. Evidence-based policymaking stems from a value chain of sequential elements: data (carrier of information), information (meaning within a context), knowledge (understanding relationships) and wisdom (judgment and experience).
2. Capturing and organizing content (data, information, and knowledge) about the social, economic, and environmental impacts of disasters is essential to demonstrating the cost-effectiveness of disaster reduction to policy makers.
3. Sharing and disseminating disaster content among providers and users around the world will increase awareness of issues, diversity of inputs, participation in disaster decision making, and policy development.
4. Integrating and mobilizing disaster content will enable analysis, synthesis, and understanding of evolving and increasingly complex disaster-related issues.
5. Developing and implementing infrastructures, processes, organizations, and human interfaces, such as a Global Unique Disaster Identifier, a Disaster Risk Management Assessment Program, and a Global Disaster Information Marketplace will substantially enhance and facilitate evidence-based policy making in the 21st century.

4 a). Targets and Indicators

Evaluation of indicators would begin with global benchmarking to establish a current baseline which would be compared with post-implementation evaluations. Indicators would be grouped into four criteria – one for each disaster information function.

- **Capturing and organizing:** percent of content captured; content attributes, such as: breadth and depth, completeness, accuracy, reliability, and timeliness; extent of use of standard metadata and indexing methods...
- **Sharing and dissemination:** percent of content provided; percent of successful user searches; percent of affected populations warned of impending disasters...
- **Integrating and mobilizing:** percent of analyses and syntheses based on multiple sources; diversity of input sources; time and effort required to mobilize content from multiple sources...
- **Decision and policy making:** number of data, information, and knowledge management systems implemented; extent of use of decision-support systems; extent of evidence-based policy making...

4b. Existing Indicators

Formal benchmarking studies have not yet been conducted. There are, however, numerous ad-hoc indicators that demonstrate more lack than existence of current capacity to support evidence-based policy making.
- Although order is beginning to emerge, there are no generally accepted standards for capturing and organizing disaster content. Standards are more prevalent within individual domains (hurricanes, earthquakes, forest fires, etc.) but they are often not universal.
- Disaster information made available by a provider often cannot be disseminated to or accessed by a user in time to make appropriate decisions (e.g., Indian Ocean Tsunami).
- Internet searches can yield millions of links to Web sites, whereas only a handful of sites contain the desired content.
- Data is typically fragmented and compiled in a variety of formats and standards, making integration, mobilization, and synthesis difficult, if not impossible.

5. Partnerships

A number of partnerships currently exist that pre-date the WCDR..

6 a). Presenters and Presentations

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2.8.4   Global Unique Disaster Identifier Number (GLIDE) - Masaru Arakida (ADRC)

2.8.5   A Global Disaster Information Marketplace - Albert Simard (GDIN)

2.8.6   Disaster Data Consortium Proposal - Andrew Maskrey (UNDP)

6 b). Session Rapporteur

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