Enhance Disaster Risk Reduction by Use of Disaster Information

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ABSTRACT :
Many natural disasters occur around the world. Because of technical development, the mortality risk is in decrease but the economic loss is getting bigger every year due to increase of exposure and concentration of property and assets. It is important to use disaster information effectively to enhance disaster risk reduction for every stake holders in the society. The Asian Disaster Reduction Center (ADRC) is aimed at enhancing capacity in disaster preparedness and emergency response by establishing GLobal unique disaster IDEntifier (GLIDE) associated disaster database.
This paper considers the use of GLIDE for enhancement of organizational disaster risk reduction.

KEYWORDS:
Disaster Information, Asian Disaster Reduction Center (ADRC), GLIDE

1. Types of Disaster Information
There are various types of disaster information and the information can be classified by disaster cycle such as prevention, emergency, recovery and reconstruction status.

2. Types of Database
The disaster database EM-DAT managed by CRED which has long history of standardized data compilation, validation and analysis and provides free and open access to its data through its website. EM-DAT provides an objective basis for vulnerability assessment and rational decision-making in disaster situations. For example, it helps policymakers identify disaster types that are most common in a given country and have had significant historical impacts on specific human populations. In addition to providing information on the human impact of disasters, such as the number of people killed, injured or affected, EM-DAT provides disaster-related economic damage estimates and disaster-specific international aid contributions.
In the United Nations, the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) runs Relief Web which has been the leading source for reliable and timely humanitarian information on global crises and disasters since 1996 specialized for humanitarian events.
The Asian Disaster Reduction Center (ADRC) was established in 1998 and proposed a globally common, unique identification scheme for disaster events called GLIDE (Global unique disaster IDEntifier), as a tool for facilitating the sharing of disaster information archived by organizations around the world. The idea was launched as the new initiative, "GLIDE", jointly with organizations such as the OCHA.

3. The Potentiality of the GLIDE
After the Hyogo Framework for action was agreed by most countries in the world, many organizations are interested in building their own disaster databases.
There are many good reasons to develop and maintain such these databases because keeping detailed track of losses and damages of disasters is useful not only to monitor the effectiveness of risk reduction measures, but also to understand risk trends and patterns. Disaster damage and loss data are essential for risk assessments and in general form evidence based knowledge that is crucial to justify investments, prioritize actions and measure the real impact of disasters on development, among many other reasons.
The most important issue is the intention and will of organization to build and maintain these databases. GLIDE was proposed and has been developed by ADRC to contribute to disaster information sharing among different disaster databases owned by different organizations by numbering natural disasters occurring around the world with common and unique disaster numbers, by which GLIDE is ultimately aimed at enhancing disaster management capacity in various organizations. A combination of databases and a connection to a regional hub
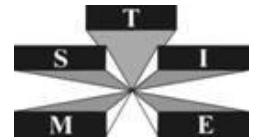
is also highly recommendable as it will give the local governments the ownership, customizability and control they may want for their own data, and at the same time providing the data required for multi-country, cross-border analysis that is required in a regional organization.

Databases with GLIDE number incorporated will have the following advantages:

(1) A parameterized search function allows user organizations easy connection between pieces of disaster information archived by various organizations.

(2) A search engine, developed with the focus on particularly important information for user organizations, allows a one-stop search and display of all the necessary data, eliminating the need for further search of data, which is archived separately by individual organizations.

(3) GLIDE-enabled Disaster databases may aggregate the effects of disasters in a very easy way. This can be seen either in a regional basis (aggregate the effects on multiple countries of the same phenomena) or in national databases where disaggregated data at municipal or lower level can be aggregated to obtain the total effect.

Following is the list of all event codes stored in the GLIDE database. To keep the level of the database, complete understanding and knowledge of these events is extremely important. The consistency of the GLIDE number database depends largely on operators being able to correctly identify and apply the code that corresponds to a specific event.

CW - Cold Wave	MS - Mud Slide
CE - Complex Emergency	OT - Other
DR - Drought	ST - Severe Local Storm
EQ - Earthquake	AV - Snow Avalanche
EP - Epidemic	SS - Storm Surge
EC - Extra-tropical Cyclone	AC - Tech. Disaster
FR - Fire	TO - Tornadoes
FF - Flash Flood	TC - Tropical Cyclone
FL - Flood	TS - Tsunami
HT - Heat Wave	VW - Violent Wind
IN - Insect Infestation	VO - Volcano
LS - Land Slide	WF - Wild fire

4.Conclusion

There are various types of disaster rerated organization and types of data they treat depends on the aim of the organization. If we can collect and analyze these data effectively, by using GLIDE it is beneficial for decision-making of organizations both private and public.