

## Letter to the Editor

**Cite this article:** Motlagh ME, Farrokhi M, Ahmadi-Mazhin S, Khankeh H. Advantages of Iran loss and damage disaster database compared with regional and global databases. *Disaster Med Public Health Prep.* 17(e564), 1–2. doi: <https://doi.org/10.1017/dmp.2023.27>.

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# Advantages of Iran Loss and Damage Disaster Database Compared With Regional and Global Databases

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The growing trend of natural and man-made disasters, and their widespread consequences show the need for societies to be more resilient in the face of disasters. After the adoption of the Sendai Framework, databases were considered a tool to monitor disaster casualty and damage data. Disaster databases are a basic tool for analyzing the characteristics and the trends of accidents and disasters on a global or national scale, and these databases can play an effective role to reduce the risk of disasters. However, the quality of information, consistency, and comprehensiveness of disaster databases are highly variable.<sup>1</sup>

To compensate for present deficiencies in the field of collecting and recording data related to accidents and disasters in the country, emphasize national and international documents, develop the science of risk management of accidents and disasters, and future needs of the country to carefully plan to face accidents and disasters, the Iran Loss and Damage Disaster Database (ILD) was designed.

Comparing mentioned database with other regional and global disaster registration databases, we can list the advantages of this database. Taking an “all hazard approach” into account, the ILD records all risks (natural and technological).

For the structure of database in the data collection section (the first module of database), relative advantages can be listed. It is very important to have infrastructures, such as Emergency Operations Center (EOC) and **Medical** Care Monitoring Center (MCMC) systems of Ministry of Health, which have online access to all data of accidents and disasters in the pre-hospital and hospital areas. Many other sources, including the data of Forensic Medicine Organization, Crisis Management Organization, Environmental Organization, non-governmental organizations, the media, etc., were considered to access information.<sup>2,3</sup>

For evaluating the data sources (the second module of database), the data source validation method of the NatCatSERVICE database (Munich Re) was selected. This method is one of the most reliable methods to validate data sources in the world. Another strong point of this part of database is the leveling of incidents and disasters using nationally approved guidelines for leveling disasters. Some disaster databases, such as EM-DAT, Sigma, and NatCat-SERVICE databases, use internal experts to control the quality of their data sets, and some of them, such as DesInventar database, are controlled by the government.<sup>4</sup> In the ILD, in addition to using official data to increase the validity of data, other unofficial sources are used to control the quality of data.

Among the databases to register disaster losses and damages in the world, the criteria of the EM-DAT database for disaster data registration are clearer than other databases. The EM-DAT database is the main source of epidemiological information on disasters. The criteria to register information in the ILD are very similar to the criteria of this database (the third module of database).

One of the limitations of the EM-DAT database is the lack of recording of data related to armed conflicts and terrorism. Mortality data reported in EM-DAT, and other global disaster databases are not available disaggregated for children, adults, and the elderly.<sup>5</sup> The registration of data related to armed conflicts, classification based on age, type of medical diagnosis and injury for the dead and injured people is considered in the ILD (the fourth module of the database).

Finally, data management plays an important role to increase the effectiveness of disaster risk management efforts. In this regard, it is necessary to complete global, transnational, and national databases. It requires capacity building and support in developing countries.

**Supplementary material.** To view supplementary material for this article, please visit <https://doi.org/10.1017/dmp.2023.27>

**Author contributions.** All authors contributed to this article.

**Funding statement.** This study is in line with the research project of Tehran University of Rehabilitation Sciences and Social Health, Iran with code of ethics (IR.USWR.REC.1399.074).

**Competing interests.** All authors declare no conflicts of interest.

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