

Interactive comment on “A Conceptual framework for web-based Nepalese landslide information system” by Sansar Raj Meena et al.

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This paper discusses a conceptual framework of landslide information system for preparing, maintaining and upgrading landslide database in Nepal. The authors also discussed the data providers, end users of the landslide information and nodal agencies to regulate the database. This paper attempts to fill in the knowledge gaps regarding landslide information in a developing country like Nepal, where there are limited comprehensive and dedicated landslide database. However, there are several issues identified in the paper. I recommend that this paper be accepted after major revision. Major comments – Figure 2 clearly outlines the process of landslide inventory preparation. But the text in the workflow section is confusing and does not clearly articulate the process and steps taken to prepare the landslide inventory framework (Figure 2).

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â€œ For identifying stakeholders, the administrative structure of Nepal is discussed in paragraph starting with line 122 and is depicted in Figure 1. This administrative structure is old. I suggest replacing with new system. At present, a new administrative structure is enforced following the federalization in 2015: Local government (rural/urban municipalities), Provincial government and federal/central government. â€œ In Line 64 the authors have discussed the efforts of landslide inventory in European countries, Britain, New Zealand, China and USA. But they have not presented the landslide database management efforts in developing countries e.g. India. Considering the efforts underway in developed countries is critical to learn from them. But it is also necessary to take into account situation of landslide database in developing countries. This would help the authors to contextualize the framework in the context of Nepal. â€œ In Line 51, the authors have mentioned that institutions like Tribhuvan University and ICIMOD have landslide database. But they have not included the Nepal Disaster Risk Reduction Portal, Ministry of Home Affairs, Nepal (<http://drportal.gov.np/>). This portal has been established since 2010 and includes information on landslides. There are global and regional databases (e.g. EM DAT and DesInventar) that include inventory of landslides from 1970 to date, which are not discussed. â€œ Para starting with line 161 discusses about different organisations involved in landslide management. However, National Disaster Risk Reduction and Management Authority (NDRRMA)-which is responsible to act as a nodal agency for coordinating and managing disasters in Nepal. In Nepal, NDRRMA and Ministry of Home Affairs is the focal institution at the central government for managing disasters. While at the local level, there are Climate change/disaster focal persons at the Municipalities for coordinating at the local level to various sectoral offices. This information is missing. Without clearly presenting the institutions working for disasters in Nepal, it is not useful to suggest a nodal agency.

Minor comments â€œ Poor organisation and lack of coherence between sentences and paragraphs o Introduction para open up with Line 28, which starts with landslide risk in Himalayas. This line ends with one sentence and then in the next section the situation of Nepal is presented. o Line 55 begins with a comprehensive landslide inventory.

This section presents the techniques of landslide inventory preparation. o Line 64 global efforts of landslide inventory is discussed o Line 82 web-based landslide inventory provides vital information about landslide areas. o Line 88 in our case study of Nepal. â€” I suggest reorganizing the introduction section from general to specific: provide the landslide risk in the world, Himalayas and then Nepal. Then discuss landslide inventory (what is it, why is it important) and techniques of landslide inventory preparation. Following this, discuss the efforts of landslide database preparation as discussed in line 64 and add the information about developing countries. Then include information about Nepal.

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