Review of: "Recent Trends and Techniques in Landslide Hazard Assessment"

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Potential competing interests: No potential competing interests to declare.

Please add line numbers for reviewing conveniently

This study introduces the recent trends and techniques in landslide hazard assessment (LHA). Approaches or techniques depicted in the manuscript can be also utilized to develop landslide hazard assessments in other landslide-prone areas. However, the manuscript is so general and does not have a scientific structure as a review paper. In addition, after reading the whole manuscript, I do not find an explicit framework of landslide hazard assessment or recent developments in landslide hazard assessment. There is a large room for improvement in the structure, contents, and figures of the manuscript. I do not recommend accepting this manuscript for the reasons outlined below:

Abstract

1. The abstract section is so general and does not have a scientific structure as a review paper. The authors should mention the general framework of the manuscript in the abstract section.
2. Please add the keywords below the abstract section.
3. In general, landslide assessment research includes three parts: landslide susceptibility, landslide vulnerability, and landslide risk. The author should review published findings in two decades from these three aspects to make the manuscript more logical.

Introduction

1. In this section, the authors should state demonstrations of landslide susceptibility, landslide vulnerability, and landslide risk in depth.
2. Most of the references listed were published before 2010. The author should review some latest research to introduce developments in landslide hazard assessment in recent years.
3. With the development of artificial intelligence, machine learning has been widely used in landslide hazard assessment and has achieved numerous amazing findings. Please add some content related to applications of machine learning in landslide assessment.

Landslide hazard

1. Fig. 1 demonstrates the number of publications on landslide hazards in India with time. Please statistics the number of publications on landslide hazards in the world. I also suggest that the authors summarize the most important research

interests.

Landslide hazard zonation

1. Page 4. I don't know why the authors describe the landslide hard zones in India in this section, which has little relationship with recent research progress of landslide hazard zonation.

Landslide hazard assessment

1. In this section, the authors should deeply demonstrate what the relationship between landslide hazard zonation and landslide hazard assessment is.
2. Fig. 3 illustrates a framework for landslide risk assessment and management. Based on my research experience, it is not feasible to only use landslide inventory to develop vulnerability assessment. In addition, what are the preparatory factors?
3. In this section, the author should review recent achievements in landslide hazard assessment in decades, not emphasize the research significance of developing landslide hazard assessment repeatedly.

GIS

GIS has been widely used in landslide hazard assessment for over two decades. I suggest the authors delete this section and reorganize the structure of the manuscript.

Conclusions

In the whole manuscript, the authors repeatedly mention the remote sensing technique. However, I cannot find any information or content about remote sensing on landslide hazard assessment. Reviewing recent research articles, GPS, GIS, and RS have been widely used to develop landslide hazard assessment for landslide early warning. Especially, the development of the InSAR technique provides a new means for long-term monitoring of landslides and identification of hidden landslides. The author should add some content about the application of InSAR to landslide hazard assessment.