Guidelines for Abstract Writing

An abstract is a concise summary of the full paper. Authors should outline their research works in the abstract as clearly as possible demonstrating the importance and relevance of the papers, particularly by highlighting lessons learnt, technology development, technology transfer, new discoveries and other innovative ideas related to the reconstruction works of 2015 Gorkha, Nepal Earthquake. *Abstracts should be based on completed or on-going works only. Abstracts related to the already published papers will not be accepted.* The abstract should have an appropriate title followed by authors’ names. The abstract should contain the following subsections:

- Background (relevance and importance of the study);
- Research issues/objectives (or research questions);
- Methodology; and
- Key results

Figures, tables, references, etc. should not be included in the abstract. The abstract should be followed by five keywords. Authors’ affiliation and the author’s contact e-mail address should be written in a footnote. The length of the abstract **should not exceed 300 words** (excluding the title, authors’ names and their affiliation, and the authors’ e-mail addresses). A brief CV (Maximum 5 lines) of each author is also to be attached separately with the abstract.

**Abstracts must adhere to the following format:**

- The document should be typed in Microsoft Word;
- Paper size: A4 (21 cm wide by 29 cm long);
- Margin (top, bottom, right and left): 2.5 cm each;
- Font type: Times New Roman
- **Title**: It should be written in font size 14, bold faced and centered with the initial of each word in capital letter;
- **Authors’ names**: They should be written in font size 11 and centered with the first, middle and surname (in sequence) of each author; the names of the authors should be separated by a comma. The corresponding author’s name should be indicated by an asterisk symbol * immediately after such author’s name.
- **Authors’ affiliation**: The position, affiliation, and e-mail of each author should be written in italics with font size 10. This information has to be given as footnotes.
- **Abstract (Main text)**: Font size 12; **Keywords**: Font size 10 points, italics;
- Line spacing: 1.5;
- Do not type anything in the header.
Engineering Geological Approaches Adopted in Identifying Safer Sites for Reconstructing Residential Buildings Damaged by the 2015 Gorkha, Nepal Earthquake

Ram Chandra Bhattarai¹, Sita Devi Kayastha², and Krishna Belbase³

Abstracts

Background (relevance and importance of the study): The Mw 7.8 Gorkha, Nepal Earthquake occurred on 25 April 2015 and its subsequent aftershocks resulted in landslides, rock falls, ground ruptures, severe ground shaking, and liquefaction which severely damaged hundreds of settlements across the 31 most affected districts of Nepal. National Reconstruction Authority (NRA) has made a policy decision that all the vulnerable settlements will be moved to safer sites, where geo-hazards are considered to be manageable by land owner themselves utilizing local resources and expertise. The importance of the study lies in the fact that it will come up with some technical details based on which safer sites for reconstruction works can be delineated. The study is original in the sense that such studies have been proposed for the first time in Nepal to construct residential buildings in community level.

Research issues/objectives (or research questions): The main objective of the study is to propose technical parameters based on which safer sites for residential building construction can be delineated in mid mountain terrain of Nepal. One of the research questions is how far a residential building is to be located from an active landslide?

Methodology: The methodology includes literature reviews and field investigation. The latter was achieved through topographical, geological, engineering geological and hydro-geological studies by a team of experts.

Key results: Results indicate that the grounds having natural slope of less than 20 degrees, and situated at least 500 m away from river and streams are safer for constructing residential buildings. Result also reveals that the south facing slopes are even better than north facing slopes. The reconstruction site should also be as far as twice the height of the nearby active landslides.

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Sample of CV of authors

( It should not exceed five lines with Times New Roman Font, 12 points)

**Ram Chandra Bhattarai:** Holds a bachelor’s degree in science, master’s degree in geology, and a Ph. D in engineering geology. Currently he is serving as a Professor at Department of Geology, Tribhuvan University. His research interest includes engineering geological mapping, soil slope stability analysis, disaster risk reduction, and quality of construction materials.

**Sita Devi Kayastha:** Earned a Bachelor of Engineering in civil engineering, and a master’s degree in structural engineering. Currently she is affiliated to Nepal Development Research Institute (NDRI) as a researcher. Her research interest includes low cost house construction techniques, earthquake resistant physical infrastructure design, and seismic risk zone identification.

**Krishna Belbase:** Holds a bachelor’s degree in science and a master’s degree in geodetic science. Currently he is serving at National Reconstruction Authority (NRA) as a Senior Surveyor. His professional experiences include GPS surveying for various purposes.