

Nat. Hazards Earth Syst. Sci. Discuss., referee comment RC1 https://doi.org/10.5194/nhess-2021-39-RC1, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

Comment on nhess-2021-39

Anonymous Referee #1

Referee comment on "Invited perspectives: Landslide populations – can they be predicted?" by Fausto Guzzetti, Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2021-39-RC1, 2021

The manuscript "Invited perspectives: Landslide populations - can they be predicted?" provides a very interesting concise review about what approaches and data is available for predicting hazard and risk of populations of landslides. The manuscript is very well structured into the individual questions: where? when or how frequently? how many and how large? Consequences?

From my point of view this is valuable, however, with adding some more information and particularly ideas for perspective and the way forward, this manuscript can become significantly more interesting for the scientific community. Thus, I suggest the following:

For each of the tackled questions knowledge gaps are presented. It would be great to put this somehow in order in respect to the urgency they should be closed. Please add some more information on which problems are important to solve (and maybe which are not so important but scientifically interesting). Please add one paragraph on what is the most pressing knowledge gap or challenge in respect to landslide predictions. Elaborate why it is important to solve this problem, if possible link this to practical problems of civil protection.

Since this is an invited perspective, I suggest to elaborate more about the next steps and the way forward, 1) in respect to what is needed from science, what scientific suggestions do you have, what approaches should be followed, which studies should be undertaken. At the end "convergence research" is mentioned, please elaborate more on how this could look like in respect to landslide prediction, what would be necessary to undertake convergence research of landslide prediction, etc. and 2) what are practical solutions, what can be done by practitioners in respect to landslide prediction, what are practical steps forward.

It would be interesting to know what this all means for practice, e.g. the Italian Civil Protection. How severe is the landslide risk in Italy? What are the main challenges and problems Italian Civil Protection is facing in respect to landslides? How do they approach the landslide risk and what are they planning to do about it in the future? Please add at least one paragraph about these practical aspects.