

Dear authors,

I appreciate the work you describe in the manuscript, as I consider TDR very important and it is crucial to reflect on these processes. I find it extremely useful that you align flood risk research components with practical TDR advice. Moreover, the article made me very curious about the project; it seems you have had a privileged opportunity to conduct TDR research. However, I do have some concerns that I believe need to be resolved prior to publication.

First, reporting and reflecting on a transdisciplinary research project in Ghana without involving Ghanaian partners in these reflections (co-authorship) seems inappropriate given the pluralism and inclusiveness prerogative of knowledge co-production.

Second, I miss a clear research gap identified in the introduction that highlights the concrete contribution of the paper vis-à-vis the literature you describe. You write that you expand upon a research area aiming to address three objectives, but those, in comparison with the brief state of the art, are not indicative of the relevance of your contribution.

Third, the rationale of the state of the art remains unclear to me vis-à-vis the reflections you promise. You spend a lot of space on the characteristics of flood research and North–South collaboration, but barely introduce your key component of reflections later—the impact mediators.

Similarly, you barely focus on the framework you introduce (Figure 1), even though you propose this to be an innovation that could be used in similar work. (This leads back to the lack of introducing a research gap and reviewing other TDR frameworks.)

Fourth, in your reflections you describe the methods you use in the project vis-à-vis ensuring the impact. Given that your aim is to reflect on TDR and knowledge co-production, I would like to see much more detail about how you actually managed the equal partnership, the trust-building, and ongoing reflections. I am missing this throughout. E.g., you mention that you organized exchanges between countries and people at different levels, and joint field visits that created mutual understanding at eye level, or you mention a TD team at some point, and community discussions elsewhere. All of this sounds great but does not tell us how you made sure that this actually created trust and a feeling of equality, and how it enhanced learning. Reading about a TDR project, continuous reflection is crucial, but there is little to no information about this in the manuscript at the moment.

- I really liked where you mention that experiencing each other's work environment increased mutual understanding; this goes in the direction I am speaking of.

All of this information is crucial to better understand power imbalances and cultural differences you might have encountered and addressed—two of the characteristics for TDR you mentioned in Table Two that are probably the most distinguishing factors for North–South collaboration.

Within the state-of-the-art sections, there are a couple of things that I think could be improved, apart from dedicating more space to TDR and impact mechanisms:

First, you spend much space on the characteristics of flood risk research and only at the end provide a table that links it to TDR. This link is crucial and should be highlighted and built into the text. Indeed, the

links seem to be drawn out of nowhere in the table (lacking references) and a better introduction of what TDR is. In a way, you do this in the next section on North–South collaboration, but not systematically.

Second, the section on North–South collaboration to me reads a bit strange—in a way as if TDR research is fundamentally different in North–South collaboration. While I agree that there are differences such as those presented by Pärli, some formulations in your text I stumble across. For example, only in the first sentence do you say TD projects, later you always speak of research projects, and I think it would help to stick with TDR, as this is what the research you cited focused on as well. Also, it would help if you stuck with comparative language: e.g., writing “North–South projects have a strong focus on the practical applicability of results...” implies that other research projects do not, which is not true. Similarly, when you write “North–South research projects offer opportunities for mutual learning.” Sure, this is true—but also for other TDR projects. Finally, I think Table Two highlights a list of characteristics for all TDR projects, where some aspects will be more critical for North–South collaboration. I would appreciate it if you changed the tone a bit.

Inconsistencies and lack of clarity here and there:

- **e.g., Table Three:** You have a column of TD methods where you list hazard modelling and surveys among others, which are certainly not TD methods—unless you redesign them or embed them in a process and facilitation that enables co-production. This is also the case in places in the text, where only in some instances you show how you created a TD setup for the implementation of the method. Actually, in the cell next to it you write the co-production leads to more equitable and informed decision-making—which is a very bold claim that I do not think you can substantiate with the paper as is.
- **e.g., in paragraph 355:** You all of a sudden write “we thus recommend...”. First, I find that strange to have a single recommendation at this point and one that is not particularly new at all. Also, I do not agree that just engaging throughout will lead to learning—could you be more specific here? And finally, you mention here that this requires space for the discussion of previous results with stakeholders, as described above (but I could not find any reference to that).

Overall, I had a hard time reading the article, and I have to admit, given time constraints, I was not able to carefully read the discussion and conclusions section, which is also why my comments do not include that section. I wrote the review by myself, but will, before I finish, use AI to fix typos and check for any illegible sentences, which sometimes happen when I write fast under time pressure. I hope this will help you read my comments.

I really believe that you did some excellent work, but I think for TDR and knowledge co-production reflections the content needs to be shifted a bit—maybe with some more illustrative examples—to actually show what it takes to make FR research transdisciplinary. I know it’s not an easy feat, when the article is already quite long.

