Comment on hess-2021-177
Anonymous Referee #3

Referee comment on "Using Multi-Criteria Decision Analysis for transdisciplinary co-design of the FANFAR flood forecasting and alert system in West Africa" by Judit Lienert et al., Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2021-177-RC3, 2021

The paper reports on the FANFAR project and its opportunities and challenges of developing a reliable and useable flood forecast system in West and Central Africa. It discusses the opportunities and challenges of integrating stakeholder knowledge and producing both scientific reliable and useful information (more about this in Lemos and Morehouse 2005). In section 1.3 MCDA is presented as a remedy for all transdisciplinary projects supported with the enumeration of six central lines of argumentation. In sum, the paper is rather descriptive than analytic. However, this is a very common problem of reporting about transdisciplinary projects, which is depended on transparent and thick descriptions about how processes of knowledge integration haven been implemented, how “data” from non-scientific experts is included and so on. The paper handles this endeavor with sufficient accuracy. In addition, a comprehensive annex is provided with helpful tables and feedback derived from stakeholder surveys.

The paper has a lot of merits of getting published, but I have also three critical comments:

The paper starts by defining transdisciplinarity using a for the context very appropriate definition of Lang et al. 2012. However, the discussion about the aims and obstacles of transdisciplinary research is almost exclusively referencing this source (and not others). This is far away of being a comprehensive literature review adequate for a journal publication. In addition, please explain (briefly) the “ordinary” challenges of transdisciplinary research in a transnational context already at the beginning and not only in the discussion.

I would suggest reducing some of the more biased assumptions like “lively workshops”, “FANFAR project is unique“, “unique practice and outcome oriented project”, “producing a good flood forecast and alert system”... to prevent the impression of reading a project proposal or advertisement and not a scientific paper. If you want to judge your own project, you would have better stick to an evaluation of the project by other researchers or at least to a survey among participants.

My third point questions parts of the structure. In the methods section I would suggest focusing on methods and tools of conducting and writing the paper and not on how the FANFAR project and its transdisciplinary methods were implemented. I would rather add
another main section called “Processes of transdisciplinarity” (or something similar), where the main project’s undertakings are described.