

Interactive comment on “Towards systematic planning of small-scale hydrological intervention-based research” by K. E. R. Pramana and M. W. Ertsen

Anonymous Referee #1

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Based on three specific case studies, the paper discussed some of the contingencies and constraints involved when implementing simple hydrologic engineering designs in the context of rural communities in developing countries. The paper raises interesting issues on the practical challenges involved in the implementation of hydrological research, which are rarely discussed in the mainline peer reviewed literature.

The authors have addressed the concerns raised in the discussion on the previous submission: Arguments are now well structured, (for the most part) read easily and are well grounded in the literature. In my opinion, the manuscript is acceptable to be published in HESS, provided the following minor comments are addressed:

p8.l.17-18. The sentence appears self-contradictory. Please reformulate.

C1

p8. l.16-21. It would improve on clarity to give an explicit response to the the research questions of the Kenya case here.

p8.l.24-p9,l19: Please provide more details on the measurement campaign. Frequency and duration of observations? How do you “extrapolate” discharge to the whole region, based on what data and assumption? I realize this is perhaps not directly relevant to the main point of the paper, but this short description of the project is rather incomplete as is and does not allow to asses the relevance of the study. A bit more detail, perhaps to the level of case study 1, would be really useful, in particularly given that the characteristics of the measurement campaign are precisely what the expert are requested to evaluate in the interview. (p.18, l 15.)

p11 l21: please describe what [#6] means: perhaps refer to a table if appropriate.

p12 l4 and l17: the referred tables do not exist.

p12 l24: please define the acronym.

Section 5: What's the purpose/added value of 5.3 vs 5.4: perhaps provide an introductory paragraph to 5.3. I can see how 5.4 is important, but 5.3 appears perhaps less relevant and (unless you explicitly state the point you're trying to make) should go in appendix.

Section 5: Although the manuscript is generally understandable and pleasant to read, the quality of writing decreases substantially in section 5. The writing style in sections 5.1 and 5.2 is poor and requires more editing in my opinion, particularly at the following locations, where it impedes understanding:

p14.l18-21

p15.l3-7

p16. l19-21

p17 l13-14

C2

p17 l16 (perhaps "conversely" is the right word?)

p17 l21

p30: Tables 2-4 are cluttered and I fail to see how they illustrate or reinforce and point main in the paper (they are referred to only once and in bulk on p14.l1) I would put them in appendix.

p43: Figure 3 is not referred to in the text

p45: Figures 4 and 5 are redundant: please consolidate

p46 Figure 6 is complex, its take away is not immediately obvious and appropriately described in the text. Please (at least) be more explicit about the figure's main point in the caption.

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