



EGUsphere, referee comment RC1  
<https://doi.org/10.5194/egusphere-2022-604-RC1>, 2022  
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## **Comment on egusphere-2022-604**

Anonymous Referee #1

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Referee comment on "Review article: Potential of nature-based solutions to mitigate hydro-meteorological risks in sub-Saharan Africa" by Kirk B. Enu et al., EGU sphere, <https://doi.org/10.5194/egusphere-2022-604-RC1>, 2022

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The manuscript provides a review of urban NBS in the SSA countries. The authors have filtered out 45 papers from a screening process and analysed what are the most common NBS used and for which types of hydrometeorological hazards, by comparing them with those used in the Global North. Discussions on the ecosystem services are also provided, together with some considerations for policy makers regarding NBS uptake. The article is well written and structured, so I recommend it for a publication on this journal prior some minor revisions, especially regarding terms and definitions of NBS.

Page 2 lines 17-26 - Before even the term NBS was born, other approaches for hydrometeorological risk reduction were adopted both without or in combination with conventional engineering measures. These were the so called soft engineering measures, which were more environmentally friendly. The authors should put more efforts in contextualizing the concept of NBS with prior similar terminologies, such as Ecological Engineering or Soil and Water Bioengineering, which have many aims and applications in common with NBS and recent studies have compared terms and definitions of these with NBS.

Page 3 line 1- typo, it should be "locals" instead of "locales"

Page 3 line 8 - please remove the bold font for "protect, conserve"

Page 4 line 19 - other sister projects of the H2020 projects mentioned should be also nominated (e.g. Operandum, Reconnect etc)

Page 5 line 1 - maybe I was distracted but I think that the first time I see that we are talking about "urban" NBS is here. Please mention that you are talking about urban areas also in the introduction. And also, if urban NBS is the focus, why is not present in the selection criteria shown in Figure 1?

Table 1: I think that here again Ecological Engineering or Soil and Water bioengineering, as well as urban forestry should be mentioned.

Paragraph 2.5. Study Limitation - The authors have checked also possible projects implemented by humanitarian associations or Engineers without borders, who might have worked in these countries in the past with works related to Soil and Water Bioengineering,

Figure 2 - this figure would be more complete, if you can add also the location of the cities where you found NBS are implemented, being this a review on urban NBS

Page 10 lines 6-9 - you found 45 papers but how many NBS? this is not specified.

Figure 5 - Maybe try to make the markers smaller.

Table 2 - you have classified the NBS in three types: blue, green and hybrid approaches. Can you please explain how you have grouped them and on what is based your classification?

Figure 7 Please specify the numbers after each term, where they come from?

Page 24 lines 20-21- can you please explain how these species created opportunities to upscale livelihood benefits?

Table 3 - maybe you can optimize this table and keep only one column with the country, so it's easier to make comparisons.

Page 29 lines 16-17 - This last sentence is not clear to me. Can you please explain this concept further?