Review of: "Drought Risk in the Mahanadi River Basin: A Multidimensional Approach for Integrated Urban-Rural Drought Management Strategies"

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Potential competing interests: No potential competing interests to declare.

In general, the article looks good; however, it lacks clarity. Here are some comments to improve this manuscript.

Abstract - “According to the findings, 22.01% of the region is vulnerable to extreme drought, and 31.64% of the area is suffering from severe drought.” - Define what extreme drought is and how you define severe drought.

Introduction - Why specifically the Mahanadi River basin? Please add 1-2 lines.

Study area - “The state was hit by very severe droughts in 1866, 1919, 1965, and 2000–2001, with the latest one being the worst.” So the latest drought year is 2001? Are there any drought events since then? Are there any literatures that predict future droughts in this area? This information could be useful in justifying the study area.

Data uses and sources - "The data that was utilised to validate the study's outputs came from relevant peer-reviewed scientific journals." Needs to be cited.

Evaluation of drought risk mapping accuracy - “The frequency of previous drought catastrophes provides insight into the overall number of years experiencing drought between 1970 and 2018.” Was there a drought in the year 2018? Where?

"Based on standards established by the India Meteorological Department (IMD), the number of droughts has been determined. A drought is defined as an epoch in which the deficit of precipitation exceeds 25% of the corresponding mean." - Needs a reference here.

Figure 8: It would be good to see any comments/justifications on why different areas within the basin are prone to different droughts. How different droughts are interconnected or how one kind of drought propagates to another.