

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

Emre Özelkan¹

¹ Canakkale (18th March) University

Potential competing interests: No potential competing interests to declare.

The subject of the study is very important and valuable. The narration is fluent, and the tables and figures are well designed.

My comments are as follows.

The graphic abstract should be revised. Among the topographic parameters, elevation is below hydrological drought, and slope is in agricultural drought. Why is it this way? It would be more accurate if topography were in hydrological drought. Hydrological drought causes agricultural drought. The aspect criterion, which was not taken into account in the study, is very effective in agriculture.

How drought starts, its types, and the relationship between these types are not sufficiently explained in the introduction.

Methods are too intertwined. Drought indices and decision-making methods cannot be explained in the same class. You can write about their integration.

Only average climate values are not enough to understand the study area. We must also know the maximum and minimum values for temperature, precipitation, humidity, and wind. The hottest and coldest months, etc., are needed.

What is the vegetation, geology, and hydrology of the study area? This information is also important for understanding the area.

Giving the weight values of the criteria and sub-criteria in Table 2 provides a better understanding of the modeling and assessment made in the study.