

## Review of: "Revitalizing Key Conditions and Integrated Watershed Management Approach to Sustain Water Availability and Agriculture in Semi-Arid Regions"

Zhiwei Cao

Potential competing interests: No potential competing interests to declare.

The article addresses the pressing issue of water scarcity and agricultural challenges in semi-arid regions. The author emphasizes the importance of integrated watershed management (IWSM) as a means to prevent and rehabilitate watersheds while improving the livelihoods of people in these regions. The article explores the constraints and key conditions necessary for the successful implementation of IWSM.

The article provides valuable insights into the importance of integrated watershed management in sustaining water availability and agriculture in semi-arid regions. The author effectively presents the challenges faced by these regions and the significant role of IWSM in addressing them. The identification of constraints and key conditions for successful implementation adds depth to the discussion. Moreover, the article is well-supported by relevant literature and references, indicating a comprehensive review of the topic. The inclusion of statistical data and regional examples strengthens the arguments presented.

There are three suggestions as follows:

- 1.It helps if the author could provide more specific examples and case studies illustrating successful implementation of integrated watershed management. This would further enhance the article's practical applicability and assist readers in understanding the real-world implications of the proposed approach.
- 2. The watershed is a giant system that contains many small subsystems. There are some articles valuable for reference that using system thinking of watershed management about Yellow River Basin, which is also in a similar semi-arid region.
- 3.International cooperation is also helpful to mention since the water-food connection is worldwide.

## Conclusion:

In conclusion, the article sheds light on the challenges faced by semi-arid regions in terms of water availability and agriculture. The proposed integrated watershed management approach, along with the identified key conditions, offers a promising strategy for addressing these challenges. The article serves as a valuable resource for researchers, policymakers, and practitioners working towards sustainable water management and agricultural development in semi-arid regions. Further research and practical implementation of the suggested recommendations will be essential to ensure the long-term well-being of these regions and their communities.

