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

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Potential competing interests: No potential competing interests to declare.

Comments and suggestions to the author

Overview of the Article:

The author focus on Integrated Watershed Management (IWSM) in the context of semiarid regions, addressing key conditions for successful implementation. It explores four key conditions: institutional, legal, and policy support; proper soil and water resource management; integration of agricultural inputs; and a watershed-based scientific and technological platform. The article draws on a variety of examples and case studies to illustrate the application of these conditions, providing insights into sustainable water management in dryland areas.

The idea of IWSM in semiarid regions is innovative, offering a comprehensive approach to address water availability and agriculture sustainability. The application of key conditions, including institutional support, soil and water management, agricultural input integration, and scientific platforms, aligns with sustainable development goals. It's a very interesting methodology.

The manuscript provides a valuable exploration of IWSM in semiarid regions. Strengthening the connection between key conditions, incorporating more diverse examples, and enhancing the practical applications will further elevate the manuscript's impact. Ensure a cohesive flow between chapters, reinforcing the holistic approach of IWSM.

General Comments (Chapter by Chapter):

Chapter 1: Provides a clear introduction to the importance of IWSM in semiarid regions. Consider incorporating a concise overview of the key conditions introduced in later chapters.

Chapter 2: Offers a comprehensive exploration of institutional, legal, and policy support. Ensure clarity on how these elements contribute to IWSM success. Consider linking this chapter more explicitly with subsequent ones.

Chapter 3: Explores the significance of proper soil and water resource management. Strengthen connections between soil conservation measures and sustainable agricultural practices. Include more diverse examples for a global perspective with new references.

Chapter 4: Discusses the integration of agricultural inputs and the establishment of scientific and technological platforms. Provide more detailed examples and case studies to illustrate successful implementations. Strengthen the connection between scientific tools and real-world applications.

Specific Comments (Chapter by Chapter):

Chapter 1: Consider expanding on the global context of semiarid regions to emphasize the broader implications of IWSM. Provide a concise preview of the key conditions for clarity.

Chapter 2: Elaborate on how institutional support translates into effective watershed management. Include examples demonstrating successful policy implementation. Strengthen the chapter's connection with subsequent content.

Chapter 3: Enhance the discussion on soil and water conservation measures by providing more context-specific examples. Address potential challenges associated with certain practices. Ensure a smooth transition to the next chapter.

Chapter 4: Augment the chapter with more specific examples and case studies. Highlight the practical implications of integrating agricultural inputs and scientific tools. Emphasize the interconnectedness of the key conditions.

Conclusion to Improve the Manuscript:

Summarize the key insights from each chapter and their collective impact on IWSM. Emphasize the interconnected nature of the proposed conditions. Consider outlining potential future research directions and practical applications to encourage further engagement with the topic.