

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.

The paper is interesting and well written. It is well known that in semi-arid areas watersheds are degraded and water scarcity for domestic and irrigation uses are common challenges, hence integrated water shade management(IWSM) activities play a vital role in solving the challenges. The author goes further into IWSM approaches to be followed for combating water scarcity in semi-arid areas. Saying this the author should consider the following minor comments.

- 1. Use up-to-date references? Most of the references used are outdated
- 2. 30-50% of the incoming rainfall is lost as evaporation, what will be the best soil water conservation measures to be recommended to reduce soil evaporation in semi-arid areas? Just mentioned options supposing with literature
- 3. In Q2 have you referred to mulching which might be implemented in areas of having high evaporation? If so add concepts about it
- 4. Add concepts/measures about reducing surface runoff /i.e. measures to increase water availability /groundwater
- 5. What is your view about rainwater harvesting as the solution to increasing water availability /surface and groundwater in SAA? Add concepts by supporting literature about rainwater harvesting and IWSM relations
- 6. It would be better if you add literature about nature-based solutions of reducing flood and drought
- 7. Alley cropping activities are one aspect of IWSM a system of planting different crops together at a time /crop with forest for animal fattening. Would you add some points about cropping system?