

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

Thomas M. Missimer¹

¹ Florida Gulf Coast University

Potential competing interests: No potential competing interests to declare.

Review of "Revitalizing key conditions and integrated watershed management approach to sustain water availability and agriculture in semi-arid regions" by Habtu

This paper concerns the management of water resources in semi-arid areas of the world to avoid desertification. It concentrates on the use of integrated water management techniques and is a review of methods used in the past.

There are many statements made in the paper that appear to be stated as facts, but no references are given to support the statements. An example is "These problems can be avoided by intensifying agricultural production and safeguarding pastoral mobility." How can this be accomplished in a semi-arid region? No successful examples are given. This is an issue throughout the paper. For a review water, the referencing is too sparse and the author should understand that many authors disagree with some of the approaches described in the text. The paper lacks balance on many

Another key issue in the implementation of integrated watershed management programs is the necessity to obtain funding and the reality of piecemeal investigations to show agencies, local and global, the need for action. The author has not integrated the reality of the economics into the paper.

The author seems to indicate that dryland farming can be implemented without irrigation based on capture of sparse rainfall. Adding soil amendments, as suggested, may reduce ET loss but does not capture water. Also, dryland farming without irrigation reduces crop yields to the degree that it is not economic to buy seeds and maintain the croplands. Again, the value of the crops must justify the water management practices being implemented.

To make this paper ready for publication will require a considerable rewrite, the addition of references, and use of tables to show various alternatives based on true water availability and the ability to finance development of plans and their implementation.

I cannot recommend the current draft of the paper for publication.

Note that the lack of line numbers makes it virtually impossible to get to specific issues in a review.

