

REVIEWER'S REPORT

Manuscript No.: JNAVES-045

Title: CIRCULAR ECONOMY APPROACHES IN AGRICULTURE: WASTE REDUCTION AND RESOURCE RECOVERY.

Recommendation:

Accept as it is

Accept after minor revision.....

Accept after major revision

Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality		✓		
Techn. Quality		✓		
Clarity	✓			
Significance	✓			

Reviewer Id: JPR-153

Reviewer's Comment for Publication.

The manuscript provides a comprehensive review of circular economy approaches in agriculture and highlights their importance in reducing agricultural waste, recovering valuable resources, and improving environmental sustainability. The topic is highly significant due to increasing concerns regarding resource depletion, climate change, waste management, and sustainable food production. The manuscript effectively discusses agricultural waste sources, resource recovery technologies, environmental benefits, economic advantages, technological innovations, and future opportunities.

The manuscript is clearly written, logically organized, and provides a broad understanding of how circular economy principles can transform agricultural systems from waste-generating models into resource-efficient systems. The discussion of composting, anaerobic digestion, biochar production, nutrient recycling, and precision agriculture adds value to the review.

The manuscript is recommended for publication after the following minor revisions:

1. Strengthen the review methodology by including details about the literature search strategy, databases used, keywords, publication period, and criteria for selecting relevant studies.
2. Expand the critical discussion by comparing the effectiveness, limitations, and practical applications of different circular economy technologies under various agricultural conditions.
3. Include more recent peer-reviewed studies to improve the scientific depth and reflect current advances in circular agriculture and resource recovery systems.
4. Add a summary table showing different agricultural waste sources, conversion technologies, recovered products, and their environmental/economic benefits.
5. Provide a deeper discussion on challenges related to large-scale implementation, including economic feasibility, infrastructure requirements, farmer participation, policy frameworks, and market development.
6. Discuss regional differences in circular agriculture adoption, especially challenges faced by smallholder farmers in developing countries.

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7. Review the manuscript carefully for consistency in formatting, terminology, citation style, and reference presentation.

Overall, the manuscript provides a valuable contribution to understanding the role of circular economy approaches in sustainable agriculture. After addressing the above minor revisions, the manuscript will be suitable for publication.