

Review Form 1.8

Journal Name:	Journal of Scientific Research and Reports
Manuscript Number:	Ms_JSRR_120207
Title of the Manuscript:	Advances in Vertical Farming: Opportunities and Challenges
Type of the Article	Review Article

Review Form 1.8

PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<p>Is the manuscript important for scientific community? <i>(Please write few sentences regarding this manuscript to justify your answer)</i></p>	<ul style="list-style-type: none"> Vertical farming is a promising field addressing global food security, sustainability, and urbanization. The document reviews the technological advancements and opportunities presented by vertical farming. The manuscript covers key aspects of vertical farming, including underlying technologies, benefits, and challenges. The document includes detailed comparisons of various vertical farming variants. 	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The title accurately conveys the manuscript's broad scope, encompassing vertical farming technology and its potential for sustainable food production. However, a review title like <i>Advances in Vertical Farming.A Systematic Review of Opportunities and Challenges</i> would be more appropriate</p>	
<p>Is the abstract of the article comprehensive?</p>	<p>Missing elements in the abstract:</p> <ol style="list-style-type: none"> Introduction and background: <ul style="list-style-type: none"> The abstract provides context by highlighting global population growth, urbanization, and food security/sustainability challenges. Clearly explains the rationale for investigating vertical farming as a potential solution. Methods <p>The abstract does not specify the methods used. A systematic literature review or empirical study. What methodology was used for this review? Searched databases and which papers met the final inclusion criteria. If not, is this qualitative thematic analysis research?</p> Results: <ul style="list-style-type: none"> The abstract offers a comprehensive overview of vertical farming technologies, such as hydroponics, aeroponics, and aquaponics. It thoroughly describes hydroponic methods. The abstract highlights vertical farming's benefits, including year-round crop production, reduced water usage, and reduced pesticide usage, aligning with sustainable food production. The abstract highlights vertical farming challenges, such as high initial costs, energy demands, and specialized skills. A balanced perspective guides technology expectations. <p>The abstract includes case studies from Asia and India, demonstrating the practical application and impact of vertical farming.</p> Contribution: The abstract includes case studies from Asia and India, demonstrating the practical application and impact of vertical farming. 	
<p>Are subsections and structure of the manuscript appropriate?</p>	<ul style="list-style-type: none"> Although the manuscript is divided into clear subsections which are coherent these subsections should have a main heading of where they are coming from The methodology section is missing Furthermore, these subheadings should either be under Literature Review, Results, Discussion, Limitations, Conclusions Recommendations and Future Work 	
<p>Do you think the manuscript is scientifically correct? <i>(Please write few sentences regarding this manuscript to justify your answer)</i></p>	<p>Technical descriptions of vertical farming technologies, including hydroponics, aeroponics, and aquaponics, align with current scientific understanding.</p> <ul style="list-style-type: none"> Reliable data and research findings support discussions on vertical farming's benefits and challenges. Asia and India case studies offer verifiable examples of vertical farming implementation. The manuscript presents a balanced and objective view of vertical farming's pros and cons. The article does not appear biased or promote a specific technology or approach. However, the methodology used to ensure scientific accuracy and relevance remains unclear. 	

Review Form 1.8

<p>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p>	<ul style="list-style-type: none"> References are relevant to vertical farming and its aspects, with a mix of journal articles, industry reports, and government publications for a well-rounded set of sources. 1. The manuscript accurately reflects current knowledge and technological advancements in vertical farming by incorporating the latest research and developments in the field, with most references from the past 5-7 years. Opportunities for improvement: <ul style="list-style-type: none"> Enhanced recent publication coverage: Additional relevant publications from the past 2-3 years may strengthen the manuscript. <p> https://sciendo.com/article/10.1515/jlecol-2017-0016 https://www.agritechtomorrow.com/article/2022/11/challenges-and-opportunities-faced-in-vertical-farming/14198 https://capi-icpa.ca/wp-content/uploads/2023/06/2023-06-19-Maria-Carolina-Pereria-Individual-Report-CAPI-EN.pdf https://www.mdpi.com/2073-4395/12/1/2 https://www.mdpi.com/2079-9292/10/12/1422 https://www.mdpi.com/2077-0472/13/8/1593 https://www.tandfonline.com/doi/abs/10.1080/14620316.2022.2141666 https://oarjbp.com/content/vertical-farming-urban-environments-review-architectural-integration-and-food-security https://www.mdpi.com/2218-1989/13/2/247 </p> <ul style="list-style-type: none"> Adding current research and industry insights enhances the information's relevance and comprehensiveness. <p>To improve the manuscript, consider including seminal or landmark references that have shaped vertical farming technologies. These publications can provide context and help readers understand the field's history.</p> 2. Diversify reference sources: <ul style="list-style-type: none"> Currently, the list focuses on academic journal articles and industry reports. Adding reputable news sources, government publications, or industry white papers could broaden perspectives and insights. 	
<p>Minor REVISION comments</p> <p>Is language/English quality of the article suitable for scholarly communications?</p>	<ul style="list-style-type: none"> The writing is clear, concise, and easy to follow, with a logical flow of ideas and well-structured paragraphs. The language used is suitable for scholarly publications, balancing technical terminology and explanation. There are no major grammatical errors, typos, or syntax issues that would hinder the readability and professionalism of the manuscript. The grammar, punctuation, and sentence structure meet scholarly publication standards. 	
<p>Optional/General comments</p>		

PART 2:

	<p>Reviewer's comment</p>	<p>Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</p>
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

Review Form 1.8

Reviewer Details:

Name:	Belinda Ndlovu
Department, University & Country	National University of Science and Technology, Zimbabwe