

Review Form 1.7

Journal Name:	International Journal of Environment and Climate Change
Manuscript Number:	Ms_IJECC_106607
Title of the Manuscript:	High-tech farming techniques in fruit crops to secure food demand: a review
Type of the Article	

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PART 1: Review Comments

	Reviewer's comment	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>Compulsory REVISION comments</p> <ol style="list-style-type: none"> 1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript) 2. Is the title of the article suitable? (If not please suggest an alternative title) 3. Is the abstract of the article comprehensive? 4. Are subsections and structure of the manuscript appropriate? 5. Do you think the manuscript is scientifically correct? 6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>General Comments</p> <p>From my point of view, it is a very interesting topic and simultaneously it seems that to the best of my knowledge is an important study aims to show that after China, India is the second-largest fruit producer in the world. India produces a wide range of fruits, the most common of which are mango, banana, citrus, guava, grape, pineapple, and apple. In addition to these, a sizable area is dedicated to the cultivation of fruits such peach, pear, almond, walnut, apricot, and strawberry in the temperate group and papaya, sapota, sapota, annona, phalsa, jackfruit, ber, and pomegranate in the tropical and sub-tropical groups. Despite having the second-largest fruit production in the world, the supply of fruits still falls far short of dietary needs. The demand for horticulture produce is on the rise and is predicted to continue to rise as per capita income rises and the population becomes more health conscious, which will lead to a need for more production. However, the production must be affordable while maintaining a high level of quality. The available potential must therefore be utilised in order to sustain progress. The technologies must increase agricultural output, quality, and yield variability while decreasing post-harvest crop losses. Additionally, actions will be required to guarantee the prompt supply of high-quality seed and planting supplies. So, it is anticipated that technology-driven horticulture would solve issues related to complementary and nutritional security, health care, and ultimately economic development. The paper consists of the sections: Introduction, Impacts of hi-tech farming techniques in fruit crop production, Constraint in adopting hi tech farming and Conclusion.</p> <p>However, I find some recommendations:</p> <ol style="list-style-type: none"> 1. The abstract must contains the main purpose of the paper, the research method used in the research and the main contributions. 2. It would be very useful to add in the "Introduction" section the purpose, objectives and hypothesis of the research. 3. The Literature Review section cannot be missing from the paper. 4. I consider an econometric model will increase the quality of the paper. 5. The research is well based on science and the results are in agreement with the theoretical part. From my point of view, the paper is original and the topic addressed brings added value to the specialized literature regarding regional sector. The paper is well written and easy to read. 6. The research is well based on science and the results are in agreement with the theoretical part. The model applied to the analyzed data is correctly used in the analysis undertaken, it is a strength point of this paper. 7. It is very important for the authors to analyze the descriptive analysis (with Kurtosis test, Jarque Berra test and interpretation, Skewness and Kurtosis interpretation). In the same time the correlation analysis and the VIF test are very important in this research. 8. Obviously, the application of a model must take into account the tests of heteroskedasticity, endogeneity, the Hausman test, etc. These aspects do not emerge from the method and results. In the same time at the Materials and Method section the authors have to apply an econometric method like regression or panel with fixed effect estimation or the random 	

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	<p>effect estimation (see for instance, Baltagi (2008), Hsiao (2014) and Andre B et al. (2015)). Besides, the corresponding tests to determine which is the best method of estimation is needed (see the Hausman test, the Breusch and Pagan (1980)´s Lagrange multiplier, the F test for fixed effects to test whether all unobservable individual effects are zero).</p> <p>9. The authors talk about the relationship between these variables, however they do not support the empirical evidence providing panel cointegration tests that are crucial (see for instance Kao (1999) panel data cointegration test, the Pedroni (1999, 2004) panel data cointegration test or the Westerlund (2005) panel data cointegration test, among others).</p> <p>10. In the same time, I consider the literature review section cannot missing from the paper and that is why we consider that the literature is not enough and that is why, we recommend the authors to refer to other recent works indexed in Web of Science, Scopus, Emerald, Cambrige, and of course MDPI Journals. We suggest that the authors cite papers published in MDPI journals and Web of Science Journals, such as:</p> <ol style="list-style-type: none">1. Batrancea I., Batrancea L., Nichita A., Gaban L., Masca E., Fatacean G., Moscviciov A. (2019). „An Econometric Approach on Production, Costs and Profit in Romanian Coal Mining Enterprises”. <i>Economic Research-Ekonomska Istraživanja</i> 32(1), 1019–1063; DOI: 10.1080/1331677X.2019.15950802. Batrancea L., Batrancea I., Moscviciov A. (2009), The Roots of the World Financial Crisis, <i>Annals of Faculty of Economics</i>, 3(1):57-62.3. Moscviciov, A., Bătrâncea, I., Bătrâncea, M., Bătrâncea, L.M. (2010) Financial Ratio Analysis Used In the It Enterprises, <i>Annals of the University of Oradea: Economic Science</i>, 19(2):600-603.4. Batrancea, L., Batrancea, I., Moscviciov, A. (2009) The analysis of the entity’s liquidity—A means of evaluating cash flow, <i>Journal of International Finance and Economics</i>, 9(1):92-98.5. Batrancea, L.M., Batrancea, I., Moscviciov, A. (2009) The Roots of the World Financial Crisis, <i>Annals of Faculty of Economics</i>, 3(1):57-62.6. Batrancea, L., Rathnaswamy, M.K. & Batrancea, I. A Panel Data Analysis on Determinants of Economic Growth in Seven Non-BCBS Countries. <i>J Knowl Econ</i> (2021). https://doi.org/10.1007/s13132-021-00785-y7. Batrancea LM.(2021) An Econometric Approach on Performance, Assets, and Liabilities in a Sample of Banks from Europe, Israel, United States of America, and Canada. <i>Mathematics</i>. 2021; 9(24):3178. https://doi.org/10.3390/math9243178/.8. Batrancea, L. The Nexus between Financial Performance and Equilibrium: Empirical Evidence on Publicly Traded Companies from the Global Financial Crisis Up to the COVID-19 Pandemic. <i>J. Risk Financial Manag.</i> 2021, 14, 218. https://doi.org/10.3390/jrfm140502189. Batrancea, L. Empirical Evidence Regarding the Impact of Economic Growth and Inflation on Economic Sentiment and Household Consumption. <i>J. Risk Financial Manag.</i> 2021, 14, 336. https://doi.org/10.3390/jrfm1407033610. Batrancea, L.; Pop, M.C.; Rathnaswamy, M.M.; Batrancea, I.; Rus, M.-I. An Empirical Investigation on the Transition Process toward a Green Economy. <i>Sustainability</i> 2021, 13, 13151. https://doi.org/10.3390/su13231315111. Batrancea, L.M. (2022) Determinants of Economic Growth across the European Union: A	
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	<p>Panel Data Analysis on Small and Medium Enterprises. <i>Sustainability</i>, 14, 4797. https://doi.org/10.3390/su14084797/Accession NumberWOS:000786368500001/ ISSN: 2071-1050.</p> <p>12. Batrancea, L.M., Rathnaswamy, M.M., Rus, Ml., Tulai H.(2022) Determinants of Economic Growth for the Last Half of Century: A Panel Data Analysis on 50 Countries. <i>J Knowl Econ</i>, Pp.1-25, https://doi.org/10.1007/s13132-022-00944-9.</p> <p>13. Batrancea, L.M. Determinants of Economic Growth across the European Union: A Panel Data Analysis on Small and Medium Enterprises. <i>Sustainability</i> 2022, <i>14</i>, 4797. https://doi.org/10.3390/su14084797</p> <p>14. Batrancea, L.M.; Balci, M.A.; Chermezan, L.; Akgüller, Ö.; Masca, E.S.; Gaban, L. Sources of SMEs Financing and Their Impact on Economic Growth across the European Union: Insights from a Panel Data Study Spanning Sixteen Years. <i>Sustainability</i> 2022, <i>14</i>, 15318. https://doi.org/10.3390/su142215318</p> <p>15. Batrancea, L.M.; Balci, M.A.; Akgüller, Ö.; Gaban, L. What Drives Economic Growth across European Countries? A Multimodal Approach. <i>Mathematics</i> 2022, <i>10</i>, 3660. https://doi.org/10.3390/math10193660</p> <p>16. Batrancea, L.; Rathnaswamy, M.M.; Batrancea, I. (2021) A Panel Data Analysis of Economic Growth Determinants in 34 African Countries. <i>J. Risk Financial Manag.</i> <i>14</i>, 260. https://doi.org/10.3390/jrfm14060260</p> <p>24. Batrancea, L.(2021) Empirical Evidence Regarding the Impact of Economic Growth and Inflation on Economic Sentiment and Household Consumption. <i>J. Risk Financial Manag.</i> <i>14</i>, 336. https://doi.org/10.3390/jrfm14070336.</p> <p>5. We also consider that an important cause that influences GDP is fiscal compliance and therefore even if this variable was not taken into account, the authors should refer to the works published on this topic, namely:</p> <p>17. Batrancea L.M., Nichita R.A., Batrancea I. (2012), Tax Non-Compliance Behavior in the Light of Tax Law Complexity and the Relationship between Authorities and Taxpayers, <i>Annals of the Alexandru Ioan Cuza University-Economics</i>, 59(1), pp.97–106.</p> <p>18. Nichita R.A., Batrancea L.M., (2012), The Implications of Tax Morale on Tax Compliance Behavior, <i>Annals of University of Oradea: Economic Science</i>, 21(1)1, 739–744.</p> <p>7. Another important cause that must be mentioned in the paper is the link between GDP, fiscal compliance and shadow economy, as the independent variables fiscal compliance and shadow economy strongly influence GDP. In this sense, I recommend the authors to quote the paper:</p> <p>19. Batrancea L., Nichita A., Batrancea I., Gaban L. (2018). „The Strenght of the Relationship Between Shadow Economy and Corruption: Evidence from a Worldwide Country-Sample”. <i>Social Indicators Research</i> 138(3), 1119-1143; DOI: 10.1007/s11205-017-1696-z</p> <p>We recommend the authors to number the paragraphs: 1. Introduction; 2.Literature review; 3. Methods and Results, Discussions and Conclusions. In conclusion, the article should be thoroughly rebuilt (changes in structure recommended above). It should also be enhanced with a review of the literature adequate to the subject and a broader interpretation and commentary of the research results.</p>	
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Minor REVISION comments		
1. Is language/English quality of the article suitable for scholarly communications?	Yes	
Optional/General comments	The Manuscript needs careful English proofreading because there are some shortcomings. For instance, the article "the" is sometimes missing in front of nouns, the message in some paragraphs is not clear enough.	

PART 2:

	Reviewer's comment	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)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

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