



**SDI Review Form 1.6**

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| Journal Name:            | <a href="#">American Journal of Experimental Agriculture</a>                                                 |
| Manuscript Number:       | Ms_AJEA_19866                                                                                                |
| Title of the Manuscript: | Cost efficiency of NERICA producing households in Ghana: a modified non-neutral stochastic frontier analysis |
| Type of the Article      | Original Research Article                                                                                    |

**General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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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) |
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| <b>Compulsory</b> REVISION comments | <p>- Based on the results, author may add main implications in Abstract part.</p> <p>- Could author add more information about NERICA in Introduction part? Such as when did this variety first introduce? When did this project start?</p> <p>- Author should change the format of all table including title as Journal's author guidelines.</p> <p>- Type of citation and reference is not correct as Journal guidelines. Please revise carefully. For example, in the text, citations must be indicated by the reference number in bracket only [8] and should write in the order , for example line 73 can be write as [9] instead of "Battese [9]", lines 77-78 can be write as [10-14], line 86 can be write [6,18-22]. In reference list, ordering number may not need bracket [ ]. There is inconsistency use of upper/lower case letters for the first letter of the main words of the journal titles. For consistency, I recommend revise all such letters to the lower case, except where they are proper noun, such as line 412 can be write "Diako C, Sakyi-Dawson E, Bediako-Amoa B, Saalia FK, Manful JT. Consumer perceptions, knowledge and preference doe aromatic rice types in Ghana. Nature and Science. 2010;8(12):12-19."</p> <p>- Below the tables may need <i>sources</i> and <i>note</i>. I do</p> | <p>Agreed, change effected</p> <p>Agreed, change effected</p> <p>Agreed, changes effected</p> <p>Agreed, changes effected</p>                                                 |



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|  | <p><b>not understand sentences below Table 2 (254), Table 3 (278-279), Table 4 (327-328). Please revise them.</b></p> <p><b>- Table 1 may add columns of variable description, unit, and denotes. Even author wrote definition of some variables in Model Specification part (177-183) but I may think it is not suitable and enough information. Such as how to calculate other cost? Time to calculate? Unit of this variable?</b></p> <p><b>- I may wonder about author's chosen variables in cost inefficiency model. Does author have some explanations, suggestions from other researches? Why did author chose these variables? Did author try to analyse other variables such as membership of some group, extension services (only), credit access?</b></p> <p><b>- How many rice growing systems in study areas? Because in table 2, I saw frequency of 2 system is lower than 159 but the percentage is higher than 100%.</b></p> | <p>Agreed, changes effected<br/>How to calculate other cost is stated in line 207</p> <p>Yes we tried to analyse other variables. Under the NERICA dissemination project, community based technical officers have been trained to provide extension service to farmers in all the communities where NERIC is cultivated and therefore all farmers have received extension service. Extension service is therefore measured in terms of the number of time a particular farm received visits from an extension officer. When it was modelled alone the coefficient estimate was not statistically significant. Also all farmers had access to credit hence was not included in the model. Membership of farmer based organisation was modelled but was not statistically significant and not included in the final model.</p> <p>The study found out that there were three rice growing systems in the study area. Upland rice cultivation, valley bottom and rainfed lowland rice cultivation. Although all the sampled farmers cultivate upland rice, some cultivate local rice under other systems, hence the study tried to find out the second most common rice cultivation system among the sampled farmers, which tend out to be rainfed lowland rice cultivation. There is an</p> |
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|  | <ul style="list-style-type: none"><li>- Why did author wrote that “most of the NERICA farmers were operating farm sizes ranging from half of an arce to one arce” while Table 2 shows that 64% of the respondents had farm size ranging from 0.2 hectares to 0.4 hectares? ( 260- 262)</li><li>- Could author have some discussion and comparison in part 3.2 (297- 316)?</li><li>- The numbers in parenthesis in Table 4 are mostly shown the standard error instead of t-ratio. It is easier for reader if author add significant level for coefficients. If possible, I may want to analyse and check data for results in table 4. I wonder why t- ratio is too high.</li></ul> | <p>error in calculated percentages and has been corrected.</p> <p>Data was originally taken in acres and latter converted to hectares. As you may be aware <math>\frac{1}{2}</math> acre = 0.2 hectares and 1 acre = 0.4 hectares. All measurements in acres have been converted to hectares for uniformity.</p> <p>The values in parentheses are t-ratios and the significant level of all coefficients has been provided. Kindly refer to the instruction under Table 4.</p> |
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| <b><u>Minor</u></b> REVISION comments   | <ul style="list-style-type: none"> <li>- Font style is not consistence, such as from line 7 to line 28, line 49 to line 56.</li> <li>- Could author change number of all sections and table? Such as "2." instead of "2.0"as author guidelines.</li> <li>- Volt Region or Volta Region (94)?</li> <li>- Ref 4 (415) lacked information, the publisher is New Haven not "New" only.</li> <li>- Denotes "DF, DH" in Table 1 are not the same with denotes in Table 4.</li> <li>- "Data was" or "Data were" (94,105)?</li> <li>- Table 5 or Table 4 (330)?</li> <li>- 2.2 (109) may change to Analytical analysis instead of Data analysis?</li> <li>- Please look again equation 8!</li> </ul> | <p>Agreed, changes effected</p> <p>Agreed, changes effected</p> <p>Agreed, change effected</p> <p>Agreed, change effected</p> <p>Agreed, change effected</p> <p>were, change effected</p> <p>Table 4, change effected</p> <p>Disagreed, the previous form maintained</p> <p>Agreed, change effected. Number of farm specific factors changed to 5, interactive terms are 3 and 1 input variable.</p> |
| <b><u>Optional/General</u></b> comments |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                      |