



SDI Review Form 1.6

Journal Name:	American Journal of Experimental Agriculture
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)
Compulsory REVISION comments		
Minor REVISION comments	Major concerns. 1. Since the use of NERICA rice is new it could be that any frontier is changing over time. The author needs one or two sentences describing the introduction of the rice and how this might influence their model. For example, Conley and Udry (2010) American Economic Review, 100:1:35-69, <i>Learning about a New Technology: Pineapple in Ghana</i>, looked at pineapple introduction in Ghana and found that it was a long process. The length of adoption time could imply that a technology frontier is not constant over time. This does not invalidate this paper, it just should be described as a limitation. It would not take much to add a sentence or two. In general, the author has done an excellent job of listing limitations. 2. It is up to the editor how much should be rewritten in the Materials and Methods section. Some of the methods description is nearly identical to wording in Onumah and Acquah. I	I agree with the reviewer's comment about the shifting of the technology frontier over time. Technological change do occur over time. However this is a challenge that can be dealt with only by collecting a panel data over time in order to trace the movement of the frontier. This is a cross sectional data context analysis hence the time period is only one. Agreed, change effected as Where $Z_i\delta$ is as defined earlier, Z_i^* is the product of input variables in the frontier function and various farm specific factors (Z_i), δ^* is a vector of unknown parameters. The inefficiency effects defined by (6) is an



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	have attached a copy. I understand the value of consistent notation and the difficulty in rewriting highly technical material where specific words have specific meanings, but the phrasing in this paper is nearly identical to Onumah and Acquah in places, enough so that it would be plausible to consider some of it plagiarism. A judicious rewrite could avoid this criticism. Lesser concerns: 1. I have made some minor editing notes directly on the manuscript. 2. Line 81 – from comments later in the paper I am assuming the authors mean “assumption” to be plural rather than singular. 3. Line 84 and elsewhere – avoid the use of “etc.” If it is important, list the items implied by etc. and if they are not important just don’t mention them. 4. Table 1. Not all of the variables are obvious in column one. For example, what is DF? Explain the variables. 5. Line 120. There are places where a line break or paragraph break should not be present. I have marked them.	implication that variations in the level of efficiency for each farm depends also on the level of input variables whilst the marginal products and elasticities of mean cost also depend on the respective farm specific factors specified in the inefficiency model [34]. Minor editing reviewed and changes effected appropriately Agreed, change effected Agreed, change effected Agreed, change effected Agreed, change effected
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	6. I assume font size problems and paragraph spacing will be dealt with during publication. 7. I would suggest rewriting lines 130-135 so that references are at the end of the sentences rather than numerically included as part of the sentence. The current structure is awkward for unfamiliar readers. 8. Line 177, provide a conversion to US dollars to make it easier for the global reader. 9. Line 189. Is “variables” the correct term here? 10. Line 294. Is this an artifact of the data, extension methods? How close are the regions to each other? 11. Lines 304 onward. The elasticities just seem to reflect the relative proportions of the costs. This is worth an extra sentence or two. 12. Explain what is meant by the stage/production surface phrase. A short but clear explanation would help readers. 13. Line 332 onwards. Men are more commonly involved with cash crops and have better access to credit. I would suggest adding a sentence to list	Agreed, change effected Agreed, exchange rate added below table 1 Agreed, Changed to error term These are districts located within the same region. The base region is Hohoe with Kpando and Kadjabi districts 36 km and 46 km from Hohoe respectively. No change effected. Author believe the elasticities provide enough information on relative effect of each input variable on total cost Agreed, change effected as, implying that a proportionate increase in all inputs will results in more that proportionate increase in output (i.e. doubling all inputs by farmers will results in more that double as much output).
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	these reasons as well. 14. Capitalization is not consistent within the literature section.	Agreed, change effected
<u>Optional/General</u> comments		