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PART A:

Journal Name:	American Journal of Experimental Agriculture
Manuscript Number:	2012/AJEA/1448
Title of the Manuscript:	<i>TECHNICAL EFFICIENCY OF RICE PRODUCTION AT THE TONO IRRIGATION SCHEME IN NORTHERN GHANA</i>
Manuscript received on (Date)	
Review comment submitted (Date)	



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PART B: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part and write here 'Corrected'/ if not agreed, give suitable justifications)
General comment:		
Specific comments:		
Title and abstract	Title is compatible with the text and the abstract includes main aim, methods, results and conclusions.	
Introduction	The importance of the research and research area were given in the introduction and follower section. In line 44-45, in the sentence of "... with its corresponding increase in yield per hectare of 2.4 tons/ha, to 2.71 tons/ha, this is still low compared with 6.7 tons/ha in Vietnam", "/ha" should be deleted from the sentence. Abbreviation should be made when something is mentioned at the first time. But in the text abbreviation was not made correctly. For example, technical efficiency is mentioned 12 times in the text and the first abbreviation was made in the 6th of it in line 141. However, it should made first time in the line 10 and after that it should be given as abbreviation. In the line 37, Author gave the share of Africa in rice production for 1991. However, the figure is very old and might be changed during the past 21 year period. Author should give new figures about the research. In line 61-62, the sentence of "<i>it is believed that the region can produce rice to feed the whole country if serious attention is paid to improve upon the efficiency of rice farmers in the region</i>" should be	Corrected Corrected Sentence has been deleted (Corrected) Sentence has been deleted



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	made clear. It should be discussed in the manuscript that whether improving efficiency of rice farmers would be enough to feed the whole country.	
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Review of literature (Heading may differ in the case of review paper)	Related literature was not discussed sufficiently in the manuscript. It is not clear that whether the study could fill a gap and contribute the literature.	Corrected
Materials & methods (Heading may differ in the case of review paper)	Method about choosing the farmers and collecting the data were not mentioned in the method section. It should be added to the method section. The sentences starting with the lines of 120 and 121 should be given in the line 116 before the sentence of “<i>Education, ...</i>”. The formula numbers (Formula 1, ...6) should be given in the brackets and right align. Fertilizer was written as “fertilizer” in the line 166. In the line 157, expression of “<i>a case in point is</i>” is not necessary to give in the brackets. Similarly, in the line 161, expression of “<i>on the one hand</i>” and “<i>on the other hand</i>” should be deleted from the sentence. In the line 166, the quantity of fertilizer was given in bag of 50 kg and used as an explanatory variable in the model. There might be different kind of fertilizers used for rice production in the farms. Because of different kind of fertilizers, fertilizer usage should be given as “nutrient equivalent bases”. Otherwise, the effect of fertilizer use could not be sourced out in the model. The units of explanatory variables of land, seed use, labor cost were not given. The units of these variables should be given in the	Corrected The section has been deleted because upon second thought we feel it is more appropriate at the discussion point and what is there is enough. Corrected Corrected Corrected The inorganic fertilizers referred to here was solid fertilizer measured in kilograms. Corrected



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	brackets as given for output of rice and fertilizer quantity. In the page 7, the explanation of Z_4 was not given in the Formula 6. Corrected. In the re-estimation only 3 Z-variables were used	
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Results & discussion (Heading may differ in the case of review paper)	In the line 275, “P133” in the bracket should be deleted. In the line 275, the unit of the Urea price should be given. In the lines of 275-278, giving prices both in “Gh ₺ 204,158” and “Gh ₺20.42” is confusing. The prices of Urea and NPK should be given in “₺ 204,158” or “Gh ₺ 20.42”. In the line 179, the explanation of “<i>The exchange rate during this period was about 1.50 Gh ₺ to 1.00 US\$</i>” should be given as footnote. The paragraph starting with the lines of 176 and 180 should be given in the title of (1.1.) The Tono Irrigation Project. There are some repetition about information research area and Tono Irrigation Project. Author should avoid from repetitions in the text. See the line 176-179. In the line 248, “the situation for women” should be explained. In the line 288, after the sentence of “<i>The role of education in the development of a country cannot be over-emphasized</i>”, all explanations mentioned the positive effects of education on economic development. Because of the explanations, the sentence should be positive. It could be useful for the readers to give the descriptive statistics of the variables in a table (mean, standard deviation, minimum and maximum). However, “Model estimates of stochastic frontier production” and “factors associated with or sources of inefficiencies” should be separated and given as two tables. The	We have maintained this because since we quoted directly from the source the convention is that the page number should be provided. Corrected Corrected Corrected Corrected Corrected We did not find any contradictions in this sentence. Corrected. With respect to separating the results, we feel that once we used Battese and Coelli’s (1993 & 95) one step estimation, we should present the results also as one. This is the
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	statistics of gamma and log likelihood should be given for the stochastic frontier production model. It is thought that conclusion section does not show all conclusions of research. This section should be enriched with the basic inferences and policy recommendations. Adding "<i>Cobb-Douglas production function</i>" and "<i>stochastic frontier analysis</i>" to the Key Words and deleting "input supply" from the Key Words should be better. It is also thought that a good edit in English would be necessary.	convention, but would not mind if the journal would like to separate them. Corrected Corrected This has been done as much as possible
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Conclusion	Conclusion section does not show important inferences of the research.	
References	The references of "<i>ICOUR, 1995</i>", "<i>Dawson et al, 1991</i>", "<i>Kalirajan and Shand 1986</i>" in the 118 was not given in the reference list. The references of "<i>Daramole (2003)</i>", "<i>Ajibefun, I.A. and A.G. Daramola, 2003</i>", "<i>Bhasin, V.K, 2002</i>", "<i>Coelli, T.J., 1995</i>" and "<i>ISSER, 2002</i>" in the reference list were not mentioned in the text. In the line 118th, the reference year of "<i>Kalirajan and Shand</i>" was given as 1986. However, this reference was given as 1985 in the reference list (in the line 415th). In the line 119, the reference year of "<i>Bravo- Ureta and Pinheiro</i>" was given as 1997, but the same reference was mentioned as 1993 at the reference list in the line 360th. The reference year of "<i>Seyoum et al.</i>" was given as 2000 in the text (the line 294), it was written as 1998 in the reference list (the line 430). In line 387 of the reference list, "<i>FAO Production Year Book (2006)</i>" was given with regard to journal rules. The reference of "<i>Ministry of Food and Agriculture (MoFA)</i>" should be written as "<i>MoFA (Ministry of Food and Agriculture)</i>" in the reference list in the line 421. There are two references of "<i>Coelli (1995)</i>" in the manuscript and these references should be separated from each other by writing the letters of "a" and "b" after the year. Some references (<i>Aigner, Lovell, and Schmidt , (1977)</i>" in the line 110, "<i>Forsund, Lovell, and Schmidt, (1980)</i>" in the line 114, "<i>Binam,</i>	Corrected Corrected Corrected Corrected Corrected Corrected Corrected



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	<i>Gockowski and Nkamleu (2008)</i>” in the line 310) were not given according to the journal rules. All author surnames were given at the text before the reference year. Whereas, the references with more than two authors should be given with the abbreviation of “... et al.” Corrected	
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