



SDI Review Form 1.6

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Title of the Manuscript:	ADOPTION OF FERTILIZER BY URBAN CROP FARMERS IN NIGER DELTA REGION, NIGERIA
Type of the Article	Original Research Article

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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.

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PART 1: Review Comments

	Reviewer's comment	Author's comment <i>(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)</i>
Compulsory REVISION comments	Line 16-21: The theoretical implications of these findings should be highlighted briefly before moving on their policy implications. To what extent are the findings congruent with the theoretical justification of the influence of age on adoption of fertilizer or agricultural technology in general? Previous researches indicate that age is rather a controversial explanatory variable, depending on the technology. The finding of this paper rather confirms the theory according to which adoption rate of a technology that requires high cost of procurement increases with age in relation with wealth accumulation (savings, farm equipment, livestock, family labor) overtime. In addition, a technology like fertilizer is multidimensional in terms of knowledge and would require many years of experience before it is fully mastered and adopted. In such a perspective, actually it is not age that matter but rather the <i>number of years of experience</i>. Thereby, "enhancing human capital" of young farmers through early training on, and practice of fertilizer use would have been well justified. Finally, the policy implication of adoption trend of large farms vs. small farms should be clarified? Line 30-50: Author should also cite publications specific to fertilizer adoption. E.g. many papers in "Agricultural Economics" by Baidu-Forson J., and elsewhere by Tshibaka T.B., Ayuk E., Debrah S.K., Honfoga B.G. and many other authors.	.This has been highlighted.. . I had stated in this study that age indexes experience and serves as evidence for human capital. .I have done that.See Chirma,2005;Chianu and Tsujii,2004,etc



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	Line 51-54: Do not say “agricultural systems” in general, because not all agricultural systems that directly depend on soil health. E.g., animal husbandry or fish farming systems are such agricultural systems. [13] was certainly referring to cropping systems, and not all agricultural systems. Line 90-95: Author should indicate the study area’s natural and economic potential for fertilizer use. There is debate: should fertilizer be used in rainforest (rich soils) zones? How to account for high nutrient losses (though leaching, nitrification, etc.) in such humid zones? (read Smaling E.M.A., Breman H., etc.). With reference to the concepts of “low external input agriculture” (ILEA, the Netherlands), “integrated soil fertility management” (IFDC, Alabama USA) and “precision agriculture” (FAO), the use of chemical fertilizers should be rationalized, taking into account initial soil fertility status of the land. Hence using adoption rate (% farmers adopting... at least once whatever the dose per ha) as an indicator of fertilizer use may be misleading. Line 96-97: I don’t think a random sampling was needed at that stage. There is no meaningfulness of randomly selecting 3 out of 6 zones. If random selection leads to getting zones where there is no or little fertilizer adoption, what then would be the purpose or usefulness of the survey? It would be better if author rather says purposive zone selection have been made, combining low, moderate and high fertilizer use zones. Line 130-142: Author should say on the ground of which assumptions (relevant to the study area) those explanatory variables were brought into the model. Variables referring to the local fertilizer market (fertilizer	.Correction effected .Included. .Correction effected .X6 in this study, refer to walking time to
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	price, distance to fertilizer selling point, density of fertilizer selling points) should have been included. It is not clear how variable X_6 refer to these variables... Line 146-148: I don't agree that average farm size of 0.9 ha means "subsistence farming" in an urban context. Urban farms (vegetable farms, horticulture farms, etc.) are typically small in land size and are market-oriented because there is a very high demand for their products, compared to rural farms with traditional crops such as cereals and tubers. Therefore, they cannot be treated as "subsistence farms". Read Kouvonou et al. (1999) in IDRC publications. Line 219: Significance level of variable X_6 is low because the variable has been wrongly specified, as it addresses the nearest market place in general and not nearest fertilizer selling point, which is one the main determinant of fertilizer adoption in Sub-Saharan Africa, in relation with physical accessibility and procurement (transportation) cost. Author should highlight this weakness in the model specification. On the opposite, results with variables X_8 and X_9 are very interesting as they are in agreement with common sense and meet the predictions in most of previous research. Line 220-228: The conclusion of the paper is weak. Policy implications are not well documented, especially regarding critical variables which can be influenced by policy. Cf. comments on line 16-21.	nearest fertilizer selling point ie market .The word subsistence farming Has been replaced. .This has been highlighted in the model. .Conclusion has been strengthened.
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<u>Minor</u> REVISION comments	Line 14-15: write instead "60 farmers were selected and interviewed with the aid of questionnaire". Author should be reminded that a questionnaire is not a tool for sample selection. Line 38: write instead "education facilitates". Line 156: write instead "family labour".	
<u>Optional/General</u> comments	The paper is interesting and well written. It can be published if the corrections are made.	