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Journal Name:	**International Journal of Plant & Soil Science**
Manuscript Number:	**2013_IJPSS_6883**
Title of the Manuscript:	**An integrated soil fertility management decision support tool for coffee: model structure and calibration for Northern Tanzania**
Type of the Article	**RESEARCH PAPER**

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:

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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	Lines 2-4: The title does not represent the contents of the paper. The title is better to be "A (development of a) new model…", where the soil and tree properties, and nutrient input should be used. (Abstract) What problem exists in coffee planting in Tanzania, why QUEFTS was used as a basis, and why two more steps were added to the QUEFTS should be clearly and briefly stated. "Steps 1 and 3" should not be used in the Abstract. Concerning modules, "Plant" is vague and should be specific, like tree (wood) property. "Input" was as well, which should be nutrients input. In introduction section, the word of "QUEFTS" did not appear. Since this paper shows a proposal of a new model, QUEFTS and other representative DST models should be introduced with their characteristics. Line 61: What are the empirical constants? This term appeared only here throughout the text. Lines 81-85: The uptake of nutrients was assumed based on PhE, while PhE was derived from literature not from field measurement. How accurate was the uptake of nutrient derived by this method? The authors should show that the method was a precise one by an examination from another angle. Lines 92-97:Table 1 shows a result. This table should be moved to the results and discussion	

	section. Lines 117-119: Table 2 should be moved to the results and discussion section. No. of observations and analytical methods for the values in Table 2 should be mentioned. Line 160: Though "land evaluation" was use in the title of paragraph, the phrase did not appear in the following sentences. How does this paragraph relate to land evaluation? Line 211: Soil depth was 90 cm or more, but this condition was not in accordance with the condition shown in line 19 (coffee prefers deep soils with more than 1.5 m). Lines 197-200:Fig. 5.1 appeared before Fig.3. Renumbering of the figures is necessary. Lines 197-200: In Fig. 5.1, for the module of plant, the tree density only was indicted. Was it ok? According to the line 189, the maximum yield per tree and per ha is an input factor. The yield is difficult to distinguish from the crop yield of an output factor. Lines 191-192: The reason that both organic and inorganic fertilizers were used in the model should be stated somewhere. Lines 197-200: In Fig.5.1, is it possible to show which part is the QUEFTS, i.e. the basic component of the new model? Lines 290-298: In Fig. 3, %value of the left graph was 80 %, and that of the right graph was 100%. These two % values were somewhat different from each other. What is the reason of the difference between the two graphs? Lines 290-298: In Fig. 3, what does the point (or dot) (12 points for the left graph, and 16 points for the right graph) mean? If the point means the site, was the site selected with an appropriate criterion? Lines 302-312: Is the distance scale for Lushoto right? Line 382: Tree (wood) property was missing from the function.	

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Minor REVISION comments	Lines 197-200: This figure is better to be moved to the method section. Lines 209-211: Soil depth and moisture availability were mentioned. Are these conditions the required condition for coffee planting rather than the direct factors to affect coffee yield? Because, these conditions were not used in the proposed model, in spite of the fact that soil depth and water holding capacity were important in coffee planting (lines 19-21). Line 209: Is it possible to show the values of irradiance and moisture availability? Line 221: What kind of tree parameter is the fD? Lines 302-312:Fig. 4 shows that there is a wide difference in soil fertility in a district. It means that coffee yield calculation must be done considering these areal differences. If so, this thing should be stated somewhere. Line 393: Is the word of "additional" appropriate? Because, additional was already used for steps in QUEFTS.	
Optional/General comments	Use of "appendices" is unusual for an academic paper. Please examine if the appendices could be deleted without loss of significant content.	

Note: Anonymous Reviewer