Interactive comment on “Soil nutrient content in relation to women’s agricultural knowledge in the urban gardens of Kisumu, Kenya” by Nicolette Tamara R. J. M. Jonkman et al.

Anonymous Referee #2

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General Comment: The paper aims at combining soil nutrient analysis with women’s agricultural knowledge and their management decisions. While in general this is an important question, the paper is lacking theoretical and empirical (data) depth.

Specific Comments:

1. Does the paper address relevant scientific questions within the scope of SOIL? yes
2. Does the paper present novel concepts, ideas, tools, or data? New data, but too little to be of real relevance.
3. Does the paper address soils within a multidisciplinary context? Yes
4. Is the paper of broad international interest? Theoretically yes, this paper could be of interest. In practice, however the data are too limited in scope and the outlined research question is not really thoroughly addressed (one option might be to reformulate the research question, depending on the data that is available)

5. Are clear objectives and/or hypotheses put forward? While a clear objective is set “understanding how women’s knowledge influences soil management and thereby the soil nutrient status”, it is not clearly answered. E.g. has any effort been put into understanding whether intercropping or not is influenced by knowledge? Or what the role of knowledge is in the decision to plough manure into the soil, or not?

6. Are the scientific methods valid and clear outlined to be reproduced? The methods as such seem to be okay, but the data presented is insufficient. Information of the history of soil is missing (how long have they been cultivated with the different method). . . ., quantitative estimation about the amount of manure applied is also missing, Sampling on only four fields is not really representative. . . . It is unclear how the sampling plots have been chosen. . . . The interview results should be presented in more depth.

9. Are the presented results sufficient to support the interpretations and associated discussion?

I would say the presented results are sometimes unclear or even contradictory. e.g. 5 the paper states that people have limited technical knowledge just to continue a few lines letter saying that the “women spoke of a variety of agricultural meetings”. The difference to the knowledge of men is not made clear. In general the difference between male and female knowledge should be made clear. And it should also be shown how the techniques of men and women differ because of differences in knowledge.

Another example: Some statements like "no fallow periods because of a lack of land" could be analysed more deeply in order to understand how knowledge is influencing this statement.
11. Are accurate conclusions reached based on the presented results and discussion? From what I can see the main difference in the soils might come from a higher SOM on the plots where no intercropping is made (SOM as important for CEC). The interesting question would however by, why there is more manure on the plots without intercropping. This might help to understand the reasons behind the different outcomes more clearly. Related to this it could be discussed, whether people should know about the difference (in case the difference is influenced by management practices).

15. Is the overall presentation well structured? The paper is well structured. However the introduction is not really introducing the state of the art with regards to (female) soil knowledge and management practices. ... The general truths for overall agriculture in Kenya, might be good to justify the research, however they are not really relevant in answering the question and are a bit too general.