Dear reviewer,

We would first like to thank all valuable feedback that will undoubtedly improve the quality of our work. We respond to the different issues that were raised by reviewer in a reaction below. You will find our responses in red.

Best regards,
Thi Dieu Linh Nguyen, Bart DeFloor, Brent Bleys and Stijn Speelman

Comment 1: The authors did not reveal the meaning of setting the problem of adapting management methods to environmental changes. The design of the study of farmers' adaptive behavior is clear. But the environmental consequences of this behavior are not shown.

Response 1: We agree with this comment. As mentioned in the paper (line 107-113, line 752-759), evaluating the problem of adapting management methods to environmental changes is impossible for the study due to the lack of data. This is also a limitation of our study. More explanation of this point has been added in introduction (line 80-84)

Comment 2: Formal models are described in great detail. It would be possible to slightly reduce the descriptive statistics, expanding the summary part. Not all models used provide high-quality results. Perhaps the trial portion of the study should be shortened.

Response 2: We agree with this comment. Descriptive statistics tables have been shorterned and summary part has been expanded. Two descriptive statistics table have been replaced in Appendix part. More summury parts have been added in the text.

Comment 3: Important conclusions describing the summary part of the study are not fully justified by the calculation part. It appears that some conclusions contradict the calculated data. For example, the significance of the impact on social indicators is low. The economic returns of new management methods cannot be justified with such low samples that the study allows us to obtain.

Response 3: Thank you for pointing this out. I/We agree with this comment. The limitation related to size sample has been introduced in conclusion part (line 746-747). However, the impact on economic indicators are almost statistically significant and the impact on social indicators is low but still statistically significant (Table 3 and Table 5), meaning that the results of our study still can be the reference for the policy implications. We have revised the text that only focus on the statically significant indicators.

Comment 4: The authors mention a focus group study, but the descriptive part does not contain its results and results.

Response 4: We agree with this comment. The descriptive part contain the results of FGDs is added in appendix part.