

Interactive comment on “Soil Conservation in the 21st Century: Why we need Smart Intensification” by Gerard Govers et al.

Anonymous Referee #1

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At first I want to congratulate the authors for putting together such an important piece of work. Although the manuscript is quite long (particularly the Introduction and “The status of soil conservation”) it was a pleasure for me to read it. It gives a well written summary of the problem we have to solve and a vision how to further proceed. It addresses often ignored relationships between natural and socio-economic processes. I have just some minor suggestions to further improve this manuscript:

I would highly appreciate to have a summarizing figure about the different aspects of smart intensification as described in the manuscript including the most important measures of such a smart intensification. Particularly the latter is weakly developed in the whole paper. Is there any option to include organic management in such a strategy of smart intensification?

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I like Figure 1 very much to illustrate the benefits of smart intensification. However, I miss the quantitative base of this figure – where do the numbers come from?

Table 2 summarizes very well the C sequestration rates under agroforestry. If these numbers have been already published in the cited reference (please check the list – it is mentioned 2 times) I would not spend 1,5 pages to support one sentence in the manuscript. Instead, I would highly appreciate an overview of erosion rates, rates of soil formation and tolerable levels of soil erosion including a brief discussion about the concept of tolerable levels of soil erosion.

The paper might profit from a short explanation of the contradiction between the severe soil degradation on the one hand and almost no direct economic benefit from soil conservation on the other hand.

Some detailed comments: Abstract: Please add some details about the concept of smart intensification and some reasons for the predicted positive effects. Line 137: Please check Line 486, line 512: Dot is missing

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