

Interactive comment on “Linking soil erosion to onsite financial cost: lessons from watersheds in the Blue Nile basin” by T. Erkossa et al.

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We are grateful to the reviewer for taking time to review and provide pertinent comments and suggestions, which have helped further improve the paper. From the outset, we acknowledge the limitations of this study indicated by the reviewer, including: “that a single year data was used for the analysis” that we focused on only suspended sediment “that sediment source was not dis-aggregated based on land use types” that the feed value of crop residues was not factored in estimating for-gone benefit (cost) However, in view of the severe limitation of data availability on these and other necessary parameters such as on fertilizer use, we have made several assumptions, which we indicated as the limitation of the study. Given the major scientific merit of this paper, which is to demonstrate the methodological approach in linking soil

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erosion and the attendant financial cost, the values reported in this paper are only indicative, and therefore, we believe introducing additional assumptions and calculations to address the above concerns add little value. Regarding the other issues raised such as ‘repetition’ of the discussion section and reference to the suggested work in the area have been addressed together with other errors identified in the text (attached pdf) and as indicated below:

Corrections

Introduction: Page 568, replace the objective statement by: ‘The objective of this study was to quantify the essential nutrients lost due to soil erosion and to estimate the resultant crop yield and household income losses’

Section 3: Results and discussion -The subsections should be corrected as indicated below and in the manuscript

Insert 3.1 Results- after 3. Results and Discussion 3.1.1. Runoff and Sediment load 3.1.2 Suspended sediment export 3.1.3 Nitrogen and Phosphorus export 3.1.4. Effect of N and P loss on crop yield 3.2. Discussion

Reference is made to Haileslassie et al., 2006 in the materials and methods section

Please also note the supplement to this comment:

<http://www.solid-earth-discuss.net/7/C325/2015/sed-7-C325-2015-supplement.pdf>

Interactive comment on Solid Earth Discuss., 7, 565, 2015.

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