

## Linking soil erosion to onsite financial cost: lessons from watersheds in the Blue Nile Basin

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### General comments

The manuscript describes a research carried out to estimate the onsite cost of soil erosion on a productivity basis, relating crop reductions with nutrients (N and P) lost in sediments and runoff in absence of fertilization. Although this is a hypothetical situation, results may help to understand the financial cost of soil erosion. Although some minor changes are necessary, the objectives, the experimental design and the relevance of results make this manuscript a solid candidate for publication in SE.

Some issues need to be clarified by authors, namely:

Why only one-year data set? In my opinion, more data should help to better understand the problem, out of short-term irregularities. But long-term data are probably unavailable. I think this problem may be easily solved if authors clearly state it in the title and objectives (the year should be included in the title, for example).

Organization of the manuscript:

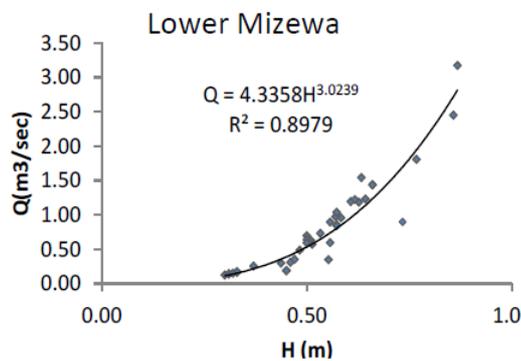
- There are two sections titled “Results and discussion” and “discussion”. I suggest leaving only results in section 3 and moving all discussion to section 4.
- A “Conclusions” section is missing. It looks like part of conclusions are included in section 4, but I think this problem requires reorganizing the text more reasonably.

### Detailed comments:

Page 7, lines 8-9	Insert spaces in species names.
Page 8, line 2	What hours?
Page 11, line 19	Use “l” or “L” for liters.
Page 11, line 20	Insert a space between “4” and units.
Page 12, line 1	Use “N” and “P”. Also in page 18, line 3.
Page 12, line 6	Delete “was”.
Page 12, lines 10-12	“Nu”, alone, is not in the equation, delete it. Used subscripts: $Nu_{sed}$ and $Nu_{runoff}$ .
Page 12, eq. 5 and 6	Revise: $Nu_{sed}$ and $Nu_{runoff}$ .
Page 12, line 16	Delete the space between “Q” and “di”.
Page 12, line 17	What is “gm”? If grams, “g”. Check the exponent: $g\ m^{-3}$ .
Page 13, line 4	Avoid the use of the first-person (“we”).
Page 13, line 5	Insert a space between “1” and “USD”.
Page 14, lines 1 and 2	Here and in other parts of the text, avoid the excessive use of capitals: “Results and discussion”, “Runoff and sediment load”.
Page 20	Re-write: “Discussion”. But check general comments on the organization of the manuscript.

## Figures

- Figure 1. the north arrow is too small. Try to use homogeneous font sizes.
- Figure 2. Tables and figures must be completely understood in the absence of the rest of text. So: are these one-year data or average data? If average, for what period? In my opinion, you should remove symbols and use only lines (continuous line, point line and dashed line, for example). If text from labels of the X-axis is too long (“Au...”), use numbers (adding “month” in the title of the axis) or initials (J, F, M, A, M, J, J, A ...). Explain in the caption that rainfall data for Fogera are only for the August-December period.
- Figure 3. This is not necessary. Remove it.
- Figure 4. I suggest adding this information to figure 1 and delete this. Just a suggestion. However, use the same symbols for the north arrow and scale in both cases. Font size and symbols are too small.
- Figure 5. DELETE ALL BORDER LINES. Graphs must be displayed as this:



- Check all graphs in this figure and revise the homogeneous font size, homogeneous symbol size and color, the use of bold fonts. Some graphs look like deformed vertically, try to design them properly.
- Figure 6. Maps and legends are illegible. Use larger sizes.
- The figure in page 16 should be Figure 7, not 6. Check the numbers of figures and citation sin the text.

## Tables

- Table 1. Arrange all text horizontally and in the upper part of each cell, not in the middle. Pay attention to capitals at the beginning of sentences. Move the footline (source...) to the caption.
- Table 3. Remove the grey shadow. Move the footline to the caption. Use “N” and “P”.
- Table 4. Check “noff” in the first row, fourth column. “M3”?
- Table 5. Check first row: “due to...”??? Use homogenous font size in all tables and in each table. Move the footline to the caption.