

## ***Interactive comment on “Household water treatment and safe storage – effectiveness and economics” by S. Stubbé et al.***

### **Anonymous Referee #1**

Received and published: 16 December 2015

145 – In 5-10: There is no reference to the formulæ. Formulæ seems to be out of place in this section. Ln 15: why are these 3 techniques promising for the future? Seems to be quite not objective and a choice by the authors.

146: In 2 Removal by tortuosity is strange. Tortuosity is a term for a certain ratio, and only defines the length of a path, not the removal mechanism itself. Describe the mechanism instead of the term.

146: Fig 4 is it correct that biosand filter is same size as ceramic filter? In reality these filters are quite a bit higher and larger. Fig 4 suggest they are the same size as ceramic filter, since authors use the same bucket. Change the schematic figure to give a better impression of the size.

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148: In 4: Van der Laan 2013 is not in reference list

148: Fig 10: why two times reference to Elliot (2008) in the figure, and why is it not one wide bar? It is only one reference in the reference list of Elliot (2008)

150 In 11: "Recent studies" refering to 2009 and 2010. Doesn't seem to be very recent.

151 – Fig 13: Strange to include subsidies into the price? Is that a fair comparison? Of course this might influence the retail price. but it gives an unwanted comparison in the costs. Strong suggestion to leave out subsidies

151 – In 21: Who are K Wagoner, H, Jansen – no reference in ref. list. Why would their personal communication be of value in this article? For the reader it is not clear what their opinion is worth. They could be the neighbor of the authors.

152 – Section 3.1 is a weak part in this article, with a lot of references to personal communication. It is impossible to check the things stated. 152 - line 7: 'Often not included' > reference? What is often? 152: all the personal communication of "Basic Water Needs" requires at least a specific example. Now it is vague and suggestive. 152 - line 15: suggestion about if consumers use it more when they have invested for the purchase is irrelevant in this paragraph.

153 - Table 1: it would help the understanding and enhance the transparency if Table 1 includes the range of total water production which the price per m3 is based on. Now it is hard to distinguish for reader 153 - Table 1: influence of subsidies on the calculated price should be mentioned. This is unclear now. What if 50% of all biosand references have received a subsidy?

153: Fig 14 and 15: Name of Ceramic Filter is missing in figure

155 - last sentence and final conclusion: Wouldn't the authors also conclude that with this clear overview and indication that so many things are unclear and hard to pinpoint, both on effectiveness as on economics, there is a strong need/surge for reproducible,

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reliable research, because basically now there is no where to go when somebody wants to draw conclusions on 'what HWTS shall I invest in?'. A suggestion by the authors in their conclusion for the for reliable research, taken both human behavior and practice, and proper scientific research into account, seem to be natural to add - even though this is only quite a 'soft' suggestion and not a strong scientific conclusion

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Interactive comment on Drink. Water Eng. Sci. Discuss., 8, 143, 2015.