

Interactive comment on “Water footprints of cities – indicators for sustainable consumption and production” by H. Hoff et al.

Anonymous Referee #2

Received and published: 19 July 2013

This is a very interesting paper, may be the first paper which looks into the water footprint of cities. The paper raises a concern of increasing water footprints in the growing urban cities; and it is relevant as most of consumptions and production decisions are not taken together in the spatial context in today's globalized world, and (both decisions) do not reflect the scarcity of natural resources in terms of prices. The latter, however, holds because of different kinds of distortion in the factor markets, and in such case over emphasis of scarcity conditions of resource and it link to the consumption centers only may distract the countries from taking the tractable responses to improve resource condition and ensuring food security for its own people. Saying it, it is also true that urban centers are not consumption centers only. They produce services and goods (not agriculture obviously) using huge domestic water consumption and extract-

C3282

ing groundwater resource (may not be true in Berlin, but very much true in Delhi). Because of higher density of The paper talks about a subject of water footprints of cities without any scope of drawing any responses within the urban context to reduce such increasing footprints as the focus was primarily on agriculture sector, with production decision taken far away from consumption centers. Hence the usual carbon footprint stories of urban cities are quite different from the water footprint stories presented in this paper.

Other comments-

Pg 2603-Line 3 The argument is too general. The authors need to specify the gap between net importing and exporting countries are increasing in terms of what? Is it only food?

Pg 2606 line 4 second assumption too bold. In this context, I want to say that quality also matters.in urban centers of developing countries, one can observe consumptions of better quality agricultural goods (say rice) but in lesser quantity.

Pg 2606 line 25- Bilateral trade framework assumption is also too restrictive in accounting total water usage and also to take indirect water consumption.

Pg 2610. I find comparison of relative prices of goods(as basis of trade) missing while explaining table 1.

Pg 2612 The author should consider other factors like labor, which may influence the terms of trade. One cannot just look at one resource only. . . .

Pg 2624 line 17.. There are obvious constraints for cities to grow, may be water, land. Saying that, I find the authors projections about growing cities are quite unrealistic.

Pg 2615 line 10- The authors talks about consumption of luxurious agr goods (diets), and gave no justification using income elasticities.

Pg 2616 line 17. I wonder if green and blue water scarcity conditions could be related,

C3283

and what will be its implications in the context.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 10, 2601, 2013.

C3284