

**E-Forum on Full-Cost Accounting of Food Wastage**  
**Summary of Discussions of Week 4**  
**(11 to 17 November 2013)**

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The fourth week of the E-forum was an opportunity for the participants to reflect on food wastage impacts on land use (i.e. occupation and degradation) within the Full Cost Accounting (FCA) framework. The objective of this fourth week was to discuss the evaluation and monetization of land use impacts arising from food wastage. This week discussion level was not as high as for the previous weeks, as indeed, the valuation of land use and degradation has not been the object of many studies. The key points of the week discussions are presented below.

**Land occupation.** The land occupation approach, evaluating the number of hectares of land used to produce food which ends-up lost or wasted, is similar to the one used in studies such as Liu J. *et al.* (2013), which looks at the water and land implication of food wastage in China. This approach, also used in other scientific publications, was therefore considered as a valid one. Proposals for different land use valuation, including opportunity cost, rental cost, possible production value, etc. were not commented on.

**Land degradation.** Food wastage and land degradation potential were assessed in relation to crops, as it is possible to assign crops production areas, wastage quantity and land degradation potential on a per-country basis. Regional aggregates are derived from national estimations. The draft methodology presented for estimating the land degradation value gives a wide range of possible values from USD 10 to 130 billion; the challenge will now be to narrow down this range to something meaningful. In order to achieve this, additional data on erosion rates in different countries could be used to derive better estimates.

**Relevant references and initiatives**

- Liu, J., Lundqvist, J., Weinberg, J. and Gustafsson, J. 2013. Food Losses and Waste in China and Their Implication for Water and Land. *Environmental Sciences & Technology*.
- The Economics of Land Degradation (ELD) is an initiative for a global study on the economic benefits of land and land based ecosystems; a report will be produced in 2014 and 2015. This initiative highlights the value of sustainable land management and provides a global approach for analysis of the economics of land degradation. It aims to make economics of land degradation an integral part of policy strategies and decision making by increasing the political and public awareness of the costs and benefits of land and land-based ecosystems.