



An agenda for establishing the Ecological Footprint as communication instrument and indicator for sustainable development in small countries: Case study Luxembourg

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The Ecological Footprint methodology proposed by the Global Footprint Network (GFN) seems to be not entirely appropriate for small countries with less than one million inhabitants [Ewing et al., 2008]. This may be a reason why e.g. results for Luxembourg, a country with 470,000 inhabitants, have never been included into official country Footprint comparisons. Therefore, the methodology needs to be adapted to be used for communication purpose in Luxembourg. This contribution presents Luxembourg's approach for illustrating the national consumption impacts to finally discuss the integration of the Ecological Footprint as an indicator for sustainable development in the national indicator system.

The Ecological Footprint is one possible approach to assess the environmental impacts of national consumption patterns. The statistics taken into account represent all trade flows within a country, covering the resident's consumption as well as the activities of non-residents (e.g. tourists and commuters). In the case of small, highly industrialized countries with a strong economy, the influence of non-residents may be high, but the 2008 National Footprint Accounts do not allow identifying the responsible parties of the consumption impacts.

For Luxembourg, based on statistics from 2005, the per capita Footprint was 12 gha - one of the highest worldwide.

However, this result neither reflects the impact of 121,000 cross-border commuters (equal to one quarter of the population) which worked and consumed in Luxembourg nor quantifies the impacts of road fuel exports. Based on nationally available expenditure statistics, emission models and expert knowledge (Fig. 1), 62% of Luxembourg's total Consumption Footprint can be allocated to the residents, 16% to the commuters and 22% to fuel tourism (Fig. 2).

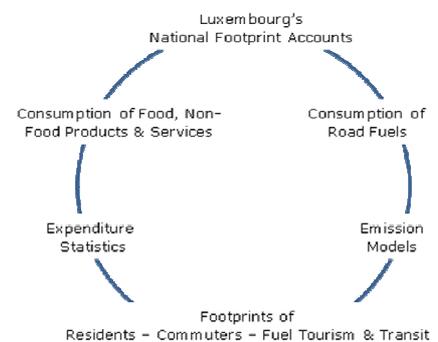


Figure 1: Luxembourg's Footprint Splitting Approach



Figure 2: Luxembourg's Footprint Composition

The Ecological Footprint communicates for developed countries and their citizens how much land is consumed worldwide due to their way of life. It raises the awareness of global resource depletion and the individual responsibility for global problems. Therefore, it is essential to correctly communicate Luxembourg's total consumption Footprint including the allocation to the residents and non-residents without ignoring Luxembourg's responsibility for the impacts of non-residents. National workshops will be organized to satisfy both needs - to transfer technical knowledge on the Ecological Footprint methodology and to provide guidance on how the concept can be used for awareness raising, education and public relations.

As stakeholders and researchers recognize the need for further development of indicators to trace sustainability [Kitzes et al., 2009], the policy application of the Ecological Footprint as an indicator for sustainable development is discussed at national and European levels [Best et al., 2008]. In this context, the Ecological Footprint is discussed to be used as part of a basket of sustainability indicators in Luxembourg. In cooperation with the Government Statistics Service, an agenda will be elaborated to fit the Ecological Footprint to the indicator panel proposed by the Competitiveness Observatory of Luxembourg.

References:

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