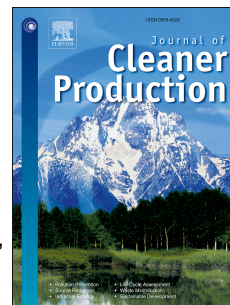


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Comparing the sustainability of local and global food products in Europe

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Highlights

- 14 food products in four sectors were characterized by their degree of localness
- Multi-criteria outranking analysis was based on sustainability indicators
- Local products outperform global products in the majority of rankings
- Global products perform better than local products for climate change and food security

Abstract

In the debate surrounding the sustainable future of food, claims like “buy local” are widespread in publications and the media, supported by the discourse that buying “local food” provides ecological, health and socio-economic benefits. Recognising the lack of scientific evidence for this claim, this paper aims to compare the results of sustainability assessments for 14 local and global food products in four sectors within four European countries. Each sector has been analysed independently using sustainability indicators across five dimensions of sustainability: environmental, economic, social, health and ethics. In order to determine if local products generally perform better, an outranking analysis was conducted to rank the products relative to their sustainability performance. Outranking is a multi-criteria decision aid method that allows comparison of alternatives based on quantitative and qualitative indicators at different scales. Each product is also characterized by a degree of localness in order to relate sustainability and localness. The results are given in the form of phi flows, which are relative preference scores of one product compared to other ones in the same sector. The rankings showed that global products consistently come last in terms of sustainability, even when the preference functions and weighting of the

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