Balancing Carbon Emissions and Conviviality in Local Food Supply Networks

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Abstract

Over the past sixty years, the supply chains that form the basis of the global food system have become increasingly extended across time and space. More recently, a counter-trend has emerged in the developed world where locally-based networks of food production and distribution are providing an increasing number of consumers with food grown closer to the point of final sale. In this paper, we estimate the carbon footprints of various local food supply network configurations. Bearing in mind that ecological impact indicators like carbon do not paint a full picture of food system of sustainability, this paper also undertakes a qualitative analysis of the social dynamics intrinsic to various local food supply network configurations. From a combined quantitative environmental footprint and qualitative social learning perspective, we suggest that local food supply network configurations may exist that minimize carbon impact and optimize social interaction for a more sustainable food supply.