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"Solidarity in a competing world — fair use of resources"

Carbon Neutral Certified Coffee as an Innovation for Solidarity with Future Generations

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Abstract

Climate certifications are on the rise, but they have been doubted for their positive impact on the environment. This paper investigates the pioneer case of a Costa Rican coffee cooperative that produces the world's first coffee certified as carbon neutral by the independent international standard for demonstrating carbon neutrality, PAS 2060. It analyses on the one hand whether carbon neutral coffee is indeed more sustainable as expected by consumers. On the other hand, since pioneers often are successful where policies fail, this case-study considers the underlying success factors on Coopedota's way to carbon neutrality. The success factors are analysed not only qualitatively but also quantitatively using Social Network Analysis (SNA) and the Net-Map tool, a new way of visualising social networks. This paper finds that despite remaining challenges carbon neutral coffee can be more sustainable if the focus is placed on emission reduction instead of emission compensation. In this case, climate certification has the potential to mitigate climate change, motivate productivity and resource use efficiency and promote sustainability and solidarity with future generations at the same time. Past achievements in Coopedota's sustainability policy and strong actors that performed all necessary network functions were found as the most important success factor. Additionally we identified a success factor which has not been content of SNA in innovation systems so far: 'double linkages', meaning the provision of two different services between actors e.g. funding and advice. However the robustness and resilience of the innovation project might be threatened by the strong centrality structure of the network.

Keywords: Carbon neutral, coffee, Costa Rica, innovation systems, life cycle assessment, pioneer, social network analysis

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