

More sustainable, resilient, and competitive food systems through the development of intermediate food value chains



PRACTICE ABSTRACT No: 30

Greek CS: environmental impacts of current value chain using MEANS-InOut

Life Cycle Assessment (LCA) was applied, using a cradle-to-grave approach, i.e. from milk production to final use of Feta cheese, including the packaging. One step of LCA is to collect and model a dataset called a Life Cycle Inventory (LCI). Part of the inventory consists of generic data from databases and/or literature. However, facing a lack of representativeness of sheep and goat milk productions in Greece, data from about eight farms provided by Stymfalia SA were used to model and calculate LCI for each farm using MEANS-InOut software (<https://www6.inrae.fr/means>). Results show high variability between farms, related to yields and feed. However, before implementation of the Blockchain-based information system, the most environmentally impactful stage is in all cases the milk production in all impact categories.

When looking at other life cycle stages, significant impacts are related to cheese production (mainly due to the energy used to store the milk and process the Feta) and packaging (especially metal containers).

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End Users

Industry & Retail

Country

Greece



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ABOUT FAIRCHAIN

The FAIRCHAIN project launched in 2020 and coordinated by INRAE, is developing intermediate food value chains in the fruits and vegetable and dairy sectors. Through technological, organizational and social innovations and by developing business models FAIRCHAIN will enable small and mid-size stakeholders to scale up to supply fresh, sustainable and high-quality food products to consumers at a regional level.

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