

Building a Sustainable Seafood Sector Through Collaboration: Insight from a Dialogue Between Stakeholders of the Scottish Value Chain

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Abstract

Among the food waste drivers identified by the FUSIONS project (Canali et al., 2014), those related to 'social dynamics' are particularly difficult to address. Indeed, they pertain to interactions between stakeholders with potentially contrasting objectives, primarily financial and ecological sustainability, which may result in suboptimal resource use or externalisation of waste. Addressing these drivers requires mutual understanding and long-lasting collaboration, and is especially relevant for highly perishable products. Thus, within an EU-level project, we develop a social innovation consisting in a whole supply chain dialogue, and apply it to the case of fishing in Scotland, a country where this sector plays a key socio-economic role and the legislation is undergoing rapid evolution following Brexit. We hypothesise that suboptimal coordination results in resource loss, and more efficient allocation can be achieved by promoting discussions among industry stakeholders and between them and researchers, innovators and policymakers. This is demonstrated by sectorial clusters like the Icelandic Ocean Cluster, where fishing companies and innovators are working to achieve 100% use of the catch. In this paper, we illustrate the rationale of our innovation, the challenges of implementation, and some preliminary results and recommendations. Our dialogue has four goals: develop an in-depth overview of waste hotspots; identify gaps and opportunities with existing policy and innovations addressing waste; promote awareness of innovative solutions with a potential to reduce waste; and favour adoption by creating new relationships or strengthening existing ones. To achieve these goals, we have been contacting industry stakeholders via their associations and using a range of methods (emails, phone calls, letters, in-person visits) followed by snowballing. We offer them the opportunity to build new connections for exchanging ideas as well as fish products and by-products. We gathered data through interviews and surveys and organised networking events. A detailed protocol has been elaborated and refined along the process. Involving stakeholders proved challenging, raising the issues of trust between industry and researchers, and whether the latter have enough to offer in terms of connections and financial or reputational gains. Nevertheless, we managed to build some mutual understanding, involving more than twenty stakeholders dealing with fish for human and

non-human consumption: fishermen's and processors' associations, primary and secondary processors, retail companies, by-products users, policymakers, and research and innovation institutions. We found that due to the high value of seafood products, the supply chain is efficient in allocating them to the most profitable and sustainable use along the waste pyramid, 'waste' being barely mentioned. Nevertheless, some mismatches between stakeholders' economic and environmental objectives remain, and waste quantification is poor. Issues such as the offshore disposal of unwanted catch remain difficult to discuss and assess. Furthermore, fragmentation and spatial dispersal of companies make the transportation of by-products towards potential users unprofitable in many instances, even more when these innovative users are located overseas. Successful cooperation requires to build trust between industry and researchers, and to avoid blaming small actors for their allegedly unsustainable practices, which are often the only choice to preserve economic viability given the current power asymmetries.

Keywords: food loss and waste, social innovation, fish, supply chain, EU project

References

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