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Editorial: Law, policy and the governance of sustainable food systems

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Editorial on the Research Topic

Law, policy and the governance of sustainable food systems

Introduction

There are myriad challenges facing local to national to global food systems. The Russia-Ukraine war is just one recent example demonstrating the "underlying rigidities, vulnerabilities, and inefficiencies in global food systems" (Hassen and Bilali, 2022) with impacts not only on the ability of meeting consumers' needs in food-importing countries, but also on the ability of international agencies, such as the World Food Programme, to provide food aid and on the risks of food shortages on additional human displacements and geopolitical conflicts (Behnassi and Haiba, 2022). Other challenges include climate change affecting soil fertility, water availability, reduced food yield, reduced food nutrient concentration, etc. (e.g., Owino et al., 2022); the nutrition crisis as a result of low-quality diets (e.g., Haddad et al., 2016); and unsustainable levels of food waste with farms alone producing 1.2 billion tons of food waste annually, which is enough to feed the 870 million undernourished four times over (WWF-UK, 2021). There is increased attention on these critical issues, with Sustainable Development Goal (SDG) 2 aimed at ending hunger, achieving food security and improved nutrition, and promoting sustainable agriculture with its impacts on climate change, and SDG 12.3 targeting to halve per capita global food waste and reducing food losses across production and supply chains (United Nations, 2015).

This Research Topic focuses on the role of law, policy, and other governance mechanisms in contributing to possible effective responses and solutions to these numerous food challenges. Some dimensions of food are still emerging (e.g., the global system of food law-van der Meulen, 2010), though not all. In the UK, for example, food law has been an individually separate topic for a long time and certainly since reforms of the nineteenth century around weights, measures, and misdescriptions. Food law is not a distinct area but instead combines and transgresses various areas of law, including public and private law, international law, administrative law, environmental law etc. (van der Meulen, 2018; Urazbaeva et al., 2019; van der Meulen and Wernaart, 2019), with food waste law an additional area arguably "largely outwith" food law (Bradshaw, 2018). Food governance is even broader and understood as the "architecture of food systems" that has interactions vertically (i.e., across international, regional, national, etc. levels) as well as horizontally Steenmans and Malcolm 10.3389/fsufs.2023.1304004

(i.e., involving diverse stakeholders at each level) (Berry, 2019; del Valle et al., 2022). Similarly to law and policy, food governance "is key to both ensure the sustainability of food systems performance and to avoid crises that could lead to threatening progress related to food and nutrition security" (del Valle et al., 2022). Moreover, it is also critical to balancing power, decision-making, and access to information across food systems (del Valle et al., 2022).

Overarching questions addressed within this Research Topic examining law, policy, and governance dimensions of sustainable food systems include: What are the challenges and opportunities for promoting the role of law and policy for enhancing sustainable food systems? What are design considerations for governance mechanisms of sustainable food systems? What are the roles of various actors in the management of sustainable food systems?

Overview of contributions

The articles within this Research Topic cover a broad range of topics, including diverse sector case studies, different governance levels, the role of various stakeholders, and particular laws, policies, and other governance mechanisms.

Kaur et al. focus on the challenges that huge amounts of data pose to the agricultural sector. In particular, this paper draws on anecdotal evidence of global best practices to provide recommendations for farmers, agriculture technology providers, governments and policy-makers, and other supply chain stakeholders on how to protect privacy and confidentiality of farm data

The other articles focus on specific national and sub-national sectoral case studies to examine particular dimensions of law, policy, and governance of sustainable food systems. Fahmid et al. examine the Indonesian cocoa industry. Specifically, the focus is on the impact of certain policies on the competitiveness of this industry within the global market. Policies affecting the seed sector in Malawi is covered by Hunga et al.. They use policy process theory to explain events and identify key actors impacting the development of the policies in order to set out lessons learnt and recommendations to develop the seed sector as well as other economic sectors more broadly. Hidaru et al. similarly also focus on the role of different actors, but in relation to responding to disparities in infrastructure impacting social vulnerability to household food security between two Ethiopian neighboring weredas: Raya Alamata in Tigray and Raya Kobo in Amhara regional states.

Windfeld and Lhermie, Klebl et al., and Heyl et al. analyse case studies located in the Global North. Windfeld and Lhermie synthesize state of knowledge about true value of agricultural industries to the Canadian economy and identify knowledge gaps that need to be addressed, which is needed to inform policymaking. Heyl et al. also focus on the agricultural sector, but in relation to examining how the EU's Common Agricultural Policy is implemented in Germany in relation to the nutrient objective of the Farm to Fork Strategy and within the wider international context of the Paris Agreement and Convention on Biological Diversity. Finally, Klebl et al. calculate the optimal number of food hubs and their optimal spatial location within Berlin, and the implications for current policies in Berlin and recommendations based on those.

Conclusion

The contributions to this Research Topic demonstrate the diversity and complexity of sustainable food systems. They only scratch the surface with many topics, including opportunities, perspectives, case studies, and stakeholder perspectives, still left to explore. Some recommended areas for further research include:

- Both public and private law and policy measures for fostering sustainable food systems (e.g., labeling; voluntary or mandatory reporting requirements on food waste; standards and certifications for sustainable food production or consumption);
- Regulatory opportunities and challenges for promoting sustainable circular economy approaches within food production and supply chains (including end-of-life);
- Justice and equity issues related to the governance of sustainable food systems;
- Design considerations of governance mechanisms for sustainable food systems;
- Law and policy incentives and barriers to prevent food waste before it is even produced, as well as those to reduce the "wasting" of any produced food waste;
- The role of technological innovations (e.g., Internet of Things; Artificial Intelligence; smart labels) in supporting the governance of sustainable food systems; and
- The role of food and agriculture in international trade agreements.

Other areas are also highlighted within each of the articles within this Research Topic. In general, further research is needed to develop the landscape of existing and possible governance (including law and policy) options to enhance sustainable food systems.

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