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Transition Intermediation in the Polish Food System

Abstract. All over the world, we can observe the ongoing transition of agri-food sectors into sustainable food systems. Actors bridging stakeholders and their processes, thereby facilitating transitions, are called intermediaries. The wide variety of their missions, aims, and strategies creates so-called ecologies of intermediation. The main research question was how intermediaries could improve the facilitation of the transition to sustainable food systems in Poland. In order to do so, we analysed five intermediaries, each representing a different level of transition. We focused on organic food production, as organic certificates are commonly regarded as a sign of sustainable production. Understanding the ecologies of intermediation and increased support for activities and the establishment of intermediaries in the Polish food system should become the shared aim in governing the transition to a sustainable food system in Poland. In the public debate, we should highlight the modes, activities, and tasks of systemic, regime, niche, process, and user intermediaries, encouraging new and existing ones to develop, upscale, and intermediate between actors, networks, and institutions.

Keywords: sustainability transition, agri-food sector, Polish economy, food system, intermediaries

JEL Classification: O10, O30, P20, Q01

Introduction

In recent decades, we have been facing both major environmental problems regarding climate change, biodiversity loss, and decreasing natural resources, as well as significant societal problems caused by unsustainable production and consumption in socio-technical systems, like electricity, heat, mobility, and the agri-food sector (Köhler et al., 2019). The solution to these problems lies in a radical shift to a redefined socio-technical system, as neither incremental changes nor technological repairs have solved them (Grin et al., 2010). Such a socio-technical transition includes changes regarding structures, culture, and practices (Lachman, 2013).

In the past, the agri-food sector has faced many transitions, like those connected with mechanisation or robotisation, which contributed to replacing the old system with the new one, not only improving and optimising the existing one. Such new systems are distinguished by changes of both technical and non-technical elements (Köhler et al., 2019). Up to now, the agri-food sector consists of processes related to agricultural raw materials, food production, and utilisation. The most important problems it faces are as follows: intensive use of synthetic chemical fertilisers and pesticides, poor dietary habits causing many health concerns, as well as food insecurity and the degradation of natural resources.

In order to better reply to these challenges, the scope of the agri-food sector was broadened. In the discussion on the boundaries of the food system and pathways for its transition, the Food and Agriculture Organization [FAO], the United Nations [UN], the EC, the OECD, the Science Advice for Policy by European Academics [SAPEA] and many other

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institutions and research bodies participated (FAO, 2018; UN, 2022; Standing Committee on Agricultural Research [SCAR], 2021, 2023; OECD, 2021; SAPEA, 2020).

Currently, scientists taking part in the Horizon Europe project 'Food Systems Science Network' [FoSSNet] (2025) have undertaken the challenge of creating one final definition of a food system, which will ultimately define its boundaries. To the core activities (storing, producing, transporting, consuming, managing waste and surplus food, retailing and food service provisioning, trading, processing and manufacturing) they added three kinds of drivers: environmental conditions (atmosphere, biosphere, geosphere, hydrosphere); social and economic conditions (education, demographics and epidemics, economic development, knowledge systems, geopolitical process and context, ethics and social values, cultural heritage, governance systems and power dynamics); and food system conditions (input prices, science and technology, markets and trade, consumption patterns, policy governance, trust and security, investments, labour skills and availability). Similarly, they added three kinds of outcomes: food system conditions (food price, food quality, animal welfare, antimicrobial resistance); social and economic conditions (food and nutrition security status, equity and fairness status, power relations, livelihoods and economic status, cultural heritage and community building status); and environmental conditions (environmental status), as well as feedback among them.

Because of deep problems and the broadening of the boundaries of food systems, there is also an increase in interest in the food system and its transition, particularly among society, politicians, and non-governmental organisations. The new approach is transdisciplinary and systemic, integrating different kinds of knowledge and many areas of knowledge, such as biology, nutrition, engineering, ethnography, sociology, economics, and law. From the economic point of view, a food system perspective is becoming more and more important, as it constitutes not just a few percent, but a large share in countries' employment and value added. Consequently, the role of agricultural economists increases, and general economists are increasingly interested in joint projects and cooperation.

The inherent element of each transition is intermediation and intermediaries, which facilitate transition by bridging actors and processes (Kanda et al., 2020). Such transition intermediaries were firstly defined by Kivimaa et al. (2019a) as 'actors and platforms that positively influence sustainability transition processes by linking actors and activities, and their related skills and resources, or by connecting transition visions and demands of networks of actors with existing regimes in order to create momentum for socio-technical system change, to create new collaborations within and across niche technologies, ideas and markets, and to disrupt dominant unsustainable socio-technical configurations'.

In this context, the objective of the research was to characterise the role of intermediaries in bridging actors, networks, networks of networks, and institutions. The research questions were as follows:

- What roles do different types of transition intermediaries play, taking into account their current phase?
- On which level of intermediation do Polish transition intermediaries concentrate?
- What are the main gaps in the range of activities undertaken by Polish intermediaries?

Our contribution to the literature is that the problem of insufficient intermediaries' involvement in facilitating the transition in Poland is tackled for the first time. The remainder of the paper is structured as follows. After the literature review, we characterise the methodological approach of the study. Then the results are presented. Section 1 enumerates many examples of intermediaries on different levels of the sustainability transition and

characterises the most well-known intermediaries from systemic, regime, and niche levels, as well as process and user intermediaries. Section 2 describes these intermediaries' functions depending on the current phase of transition. Section 3 analyses how intermediaries bridge actors, networks, networks of networks, and institutions in multi-systems while facilitating transition, and Section 4 indicates gaps in four modes of intermediation, activities, and tasks which should be realised by the Polish food system intermediaries.

Literature review

Gottschamer and Walters (2023) distinguished two analytical frameworks in the transition research: top-down and bottom-up. The first one consists of: a multi-level perspective [MLP] (Geels, 2002), strategic niche management (Kemp et al., 1998), transition management (Loorbach, 2010; Kemp et al., 2007), meta-analyses (Wiseman et al., 2013), transition pathway typologies (Geels and Schot, 2007), and innovation system studies (Hekkert and Negro, 2009), while the second consists of in-depth case studies at different territorial scales (Köhler et al., 2019).

Among them, the most widely used analytical framework is MLP, in which transition is performed through processes on three levels: niche, regime, and landscape. The landscape is an exogenous environment, which cannot be influenced by actors from a regime or niches, but it influences them through trends like climate change, population growth, pollution, urbanisation, or shocks like wars, political and economic crises, and accidents. Their changes last many years and are caused by macroeconomics, politics, and deep cultural patterns (Geels et al., 2017). A regime is a set of rules and routines regarding markets, regulations, technologies, and culture, and transition is a change from one regime to another. Niches are protected spaces, where, through experiments, new alternatives are developed. Innovations emerging as unstable socio-technical configurations find a protective incubation space here. Landscape developments put pressure on a regime, creating windows of opportunity, enabling niche innovation to scale up and become a new regime. The whole process is driven by change agents, who negotiate, search, learn, and cooperate.

Intermediaries play a special, often underestimated and unnoticed role in boosting niche-landscape interactions and niche-regime linkages. Through navigating interactions, conflicts, and the complexity of actors, networks, networks of networks, and institutions, they facilitate transitions (Kanda et al., 2020). There are many discussions on intermediary typologies, taking into account their structure, context, spatial scope, levels, or phases of the transition. The first ones to describe the roles of systemic intermediaries in transitions were van Lente et al. (2003). Kivimaa et al. (2019a) distinguished systemic, regime-based, niche (or grassroots), process, and user intermediaries, which differ regarding level of action, emergence, goal of intermediation, and position versus niche and interest. Goals of systemic intermediation are set at a system level in order to disrupt it. Goals of regime-based intermediation are realised through incremental solutions or political aims. Goals of niche intermediation are pursued from a niche perspective. Process intermediaries implement context-specific priorities, whereas user intermediaries act as a facilitator, representative, or end-user.

Kivimaa et al. (2019b) defined what the roles of each kind of these intermediaries should be depending on the phase of transition, which may include destabilisation (which can precede or follow acceleration), pre-development and exploration, acceleration and

embedding, and stabilisation. In other words, they provided a classification of intermediaries' functions and activities based on the level, type, and phase. According to Loorbach and Rootmans (2006), the second phase may also be named a take-off phase.

Kanda et al. (2020) conceptualised three levels within which intermediation occurs, suggesting heterogeneous roles of individual intermediaries at different system levels. At level 0, non-systemic intermediation between individual entities took place. Level 1 concerns intermediation between entities in a network, level 2 is intermediation between networks of different entities, and level 3 is intermediation between actors, their networks, and institutions. Lastly, this categorisation was modified by Soberón et al. (2022), who added a new level 4, concerning intermediation between intermediaries, actors, networks, and institutions.

Hernberg and Hyysalo (2024) studied the fields of activity of intermediaries, firstly dividing them into four modes (brokering, configuring, structural negotiating, facilitating and capacitating), which have some shared activities (see Table 4), and finally, each activity into several tasks. This framework of intermediation modes is mainly utilised in indicating how intermediaries can intensify their engagement in advancing local bottom-up experimentation. It enables the estimation of gaps in the range of activity undertaken by intermediaries, so that they or decision-makers may compare what has been done and what might be done in order to foster the transition. The authors also highlighted that intermediation requires simultaneous engagement in different modes depending on their competencies and resources.

Although many studies discuss the types, roles, mechanisms, influence, and evolution of intermediaries, and intermediation has received increasing attention in transition studies, there is still much to be done. Firstly, because of increasing uncertainty resulting from the COVID pandemic, the war in Ukraine or AI development, and, secondly, transitions in other areas, like heat or mobility, lead to new interactions and often new conflicts caused by different values and visions or resource competition (Heiber and Truffer, 2022, Rosenbloom et al., 2019). The newest papers in the field highlight that in an increasingly uncertain world, intermediation cannot be delivered by single isolated actors, but we should rather speak about ecologies of intermediation defined as a variety of intermediary actors with different missions, views, strategies, aims, mandates or levels of agency, that connect actors and resources at different scales of socio-technical systems (Barrie and Kanda, 2020, Hyysalo et al., 2022, Soberón et al., 2022). They not only cooperate in bringing together actors in multi-system transitions, but can also hamper them through conflicts, self-interest, or power struggles. Interestingly, Kivimaa et al. (2019b) proved that although systemic and niche intermediaries seem to be the most important intermediary actors in transitions, they need to be complemented by other forms of intermediaries. Because intermediaries in ecologies face conflicts of interest and contestations, their processes and activities need to be shaped through facilitating collaboration and managing competition between them, creating adequate conditions, or helping intermediaries to adapt their roles and types.

Regarding Poland, there is a shortage of articles tackling the subject of transition in the agri-food sector. Kufel (2010) characterised the transition arena model, analysing step by step how to implement transition management in the agri-food sector. In the earlier publication (Kufel, 2009), she presented the transformation policy characteristics and outcomes of its implementation in the Netherlands. The results obtained by Skrzypczyński et al. (2021), analysing different Polish grassroots initiatives active in promoting agroecology and organic farming, showed a diversity of strategies employed by these initiatives, and indicated that replicating them in other contexts should contribute to advancing the transition

in agri-food systems. The latest analysis of transition processes in the Polish agri-food sector stated that it is in the take-off phase, in which rapid and conflicting changes destabilise the system, creating 'windows of opportunity' for new developments (Kufel-Gajda, 2024). There has been no paper directly taking up the topic of intermediaries in the Polish agri-food sector so far. As they are an inherent element of every transition and their role is usually underestimated, our aim was to fill this gap. Analysing their roles and ways to improve their functioning is an important task for institutional economists utilising the transition perspective in their studies.

Data and Methods

In order to analyse the sustainability transition in the Polish food system, we arbitrarily chose one niche and performed the analysis through its lens. It was organic food production, because organic certificates are commonly regarded as signs of sustainable production, and organic farming is one of the most widely known sustainable models of agricultural production (Antczak, 2021). According to Kamel and El Bilali (2022), organic food production is one niche innovation that is eminently a sustainable agri-food system. Dumont et al. (2020) showed that in Belgium, organic agriculture has already become a part of a socio-technical regime. Organic food production is a radical change which contributes to eliminating societal problems. Consequently, it became one of the major tools to make the European agri-food sector more sustainable. The European Commission (EC, 2020), in the Green Deal's Farm to Fork strategy, set the target of cultivating organic farming to at least 25% of the EU agricultural land in 2030.

In the first stage of the analysis, we mapped actors and key players acting as intermediaries on all levels of the sustainability transition. In the second stage, we concentrated on the analysis of selected cases. A literature review and online research were performed in order to answer the research questions. Apart from analysing the thematic reports, mission statements, press releases, and websites of organisations, we based our analysis on the knowledge acquired during many years of experience of one of the authors working in non-governmental organisations in the field. After presenting many examples of intermediaries operating on all levels of the sustainability transition, we chose these most active and well-known on the landscape, regime, and niche levels, respectively, one concentrated on processes and one on users, and performed further analyses on them. Because of difficulties in defining and finding objective comparable data regarding the ecology of intermediation in the organic food system, the selection had to be based on the subjective perception of the authors.

While answering the three research questions, we took advantage of the typology of intermediaries developed by Kivimaa et al. (2019a), their characteristics regarding the phase of the transition process described by Kivimaa et al. (2019b), levels of intermediation distinguished by Kanda et al. (2020) and four modes of intermediation distinguished by Hernberg and Hyysalo (2024).

Results

Intermediaries in the Polish food system sustainability transition by types

Table 1 presents examples of systemic, regime-based, niche, process, and user intermediaries in the sustainability transition towards organic food production. The ecology of intermediation seems to be well developed in Poland.

Table 1. Intermediaries in the Polish sustainability transition towards organic food

Category	Examples
Systemic intermediary	Ministry of Agriculture and Rural Development
Regime-based intermediary	Polish Chamber of Organic Food, Institute of Rural Development and Agriculture, Polish Academy of Sciences, RURAll Rural and Urban Research Foundation, Faculty of Human Nutrition (Warsaw University of Life Sciences, Faculty of Food Technology (Warsaw University of Life Sciences), Technology Transfer Centre (Warsaw University of Life Sciences), Development Incubator (University of Warsaw)
Niche (or grassroots) intermediary	Food Rentgen, Dobrze Cooperative, Polish Chamber of Organic Food, Polish Ecological Club, Living Earth Coalition, Organic Agriculture Forum, Polish Agroforestry Association, Heinrich Böll Foundation, Demeter, AgriNatura Foundation, Institute of Civil Affairs, CoopTechHub, MOST Cooperative Urban Farm, Science for Nature
Process intermediary	Heads of ministries, departments, and public entities; agro-environmental advisors in agricultural advisory centres, consultants in public entities (persons dealing with public procurement)
User intermediary	Consumer groups on Facebook, neighbourhood shopping groups, neighbourhood anti-GMO groups, food sovereignty movements of activists gathered in this movement, clients of the Dobrze Cooperative

Sources: Authors' own elaboration.

Table 2 presents details on chosen representatives of each category of intermediaries, which, in our opinion, play the major roles within their categories. Each intermediary contributes to the transition to organic food production in another way.

Table 2. Overview of studied intermediaries

Name of intermediary	Legal form	Year of foundation	Area of activity
Ministry of Agriculture and Rural Development	Public entity, ministry	1918	Development organisation
Warsaw University of Life Sciences	Public university	1816	Cluster organisation
Living Soil Coalition	NGO	2018	Collaborative network
Public procurement managers	Public entities	1995	Procurement in public entities
The 'Good Food Good Farming' movement	NGO	2012	Collaborative network

Source: Authors' own elaboration.

The Ministry of Agriculture and Rural Development plays a key role in the development of organic agriculture in Poland through agricultural policymaking, financial support systems, legal regulations, and promotional activities. Its administration undertakes a number of activities to promote organic farming in Poland, focusing on education, financial support and the promotion of organic products. The ministry developed a comprehensive 'Framework Action Plan for Organic Food and Farming for 2021-2030' to develop organic production at all stages of the food chain. The plan envisages support for farmers, investments in processing, and activities to promote organic products. The ministry conducts educational campaigns targeting consumers, e.g. the campaign #BuyConsciouslyEcologicalProduct aims to raise awareness of the benefits of choosing organic food. It informs farmers and producers about the possibilities and conditions for producing certified organic food, encouraging the transition from conventional to organic methods, as well as runs educational programmes under the slogan 'Where organic products come from', which are aimed at shaping pro-ecological attitudes from an early age. In addition, organic competitions are organised to promote knowledge about organic farming. The ministry participates in trade fairs and promotional events, and controls the whole certification system (MARD, 2025).

Public research units implementing specific projects related to organic transition are an example of a regime-based transition intermediary. Although these units were not set up for this purpose, food system transformation is in their area of scientific interest. An example of such an actor is the Warsaw University of Life Sciences [SGGW], which plays a key role in the development of organic farming in Poland through its educational, scientific, and advisory activities. SGGW offers faculties and specialisations related to organic farming, e.g. within faculties such as environmental protection or agronomy. The university conducts numerous research projects on methods improving the efficiency of organic farming, e.g. in the fields of biopreparations and natural methods of plant protection, the impact of organic farming on biodiversity, improving soil quality in organic systems, and technologies related to chemical-free cultivation. The research results are used by both farmers and institutions involved in organic farming.

SGGW runs advisory and training programmes for farmers and cooperates with organisations involved in organic production. The university's experts assist in the process of farm certification and the implementation of modern, environmentally friendly technologies. The university actively promotes organic farming through running various research projects and the establishment of cooperation with national and international institutions. These include the research project SCALE-IT: Effective Alternatives to Conventional Inputs in Organic Agriculture, which is carried out with 30 partners, to, among other things, verify the safety of using plant-based feed additives in the prevention and control of livestock diseases (SGGW, 2025). By increasing knowledge and disseminating research results on organic farming, the research institution can play a significant role in transforming the food system in a more sustainable direction.

The Living Soil Coalition is a grassroots organisation representing a number of foundations and associations working for the development of organic agriculture and food system transformation in Poland. It is a typical example of an organisation formed within a niche and can be considered a player developing that niche. It has an expert and advocacy character, and its main focus is on shaping the CAP so that the production, distribution, and consumption of food is more socially just and environmentally responsible. The coalition is made up of both consumers (grouped, for example, in the 'Well' Food Cooperative) and

researchers, as well as farmers and producer organisations, which significantly influence the reach and scale of the organisation (Koalicja Żywa Ziemia, 2025).

The coalition's numerous activities include social campaigns raising awareness of ethical consumption and promoting certified organic food, as well as actions aimed at farmers, whose aim is to raise their knowledge regarding the reduction of the harmful impact of agriculture on the environment, ecological production methods, closed material cycles on the farm, or sustainable water management. Given the broad scope of the coalition's activities and its recognisable position in the food system environment, it should be assumed that its influence on food system transformation is potentially strong. The expert nature of this organisation and above all, the networking of various actors, those from the grassroots and those from high political levels, empowers the coalition to set the tone for the debate on aspects of the agri-food system.

The coalition's publications, such as the 'Pesticide Atlas' and 'Expertise: Water in Agriculture', create a stir in the industry each time, both among farmers themselves and food consumers. One of the cornerstones of this organisation is to ensure exchange and cooperation between farmers and also between farmers and consumers. The creation of new alliances, the exchange of experiences, and the facilitation of these meetings, which are so important from a brokering point of view, have a direct impact on better communication with the community of key stakeholders from the political environment. This positions the coalition as an important actor in the organic farming network.

Procurement specialists are an example of a process intermediary: an actor from outside the niche, acting as a neutral, impartial 'networker' with no agenda of their own in the system transformation process. By introducing ecological criteria in public procurement (Public Procurement Law, 2019) and including requirements for organic certification, such as the EU organic farming label in tenders for the supply of food to schools, hospitals or offices, they can favour the selection of suppliers of food from organic farms. The tools available to procurement professionals are guided by the EC's recommendations in the Green Public Procurement strategy and include, for example: setting procurement conditions so that smaller organic farms can participate (by splitting the contract into smaller parts), preferring organic food over industrially produced and conventionally farmed food, and raising awareness among officials and other network actors about the advantages of organic food. By creating demand for organic food, procurement professionals can significantly raise the profile of organic farmers and producers and thus contribute to the development of the organic market.

One example of a user intermediary - an actor growing directly out of a niche - is the Good Food Good Farming (2025) movement, whose aim is to draw the attention of the EC to the unequal treatment of small and organic farmers under the CAP. Every year, this informal grassroots movement organises a campaign to raise awareness among consumers and decision-makers about the advantages of sustainable agriculture and the harmful environmental impact of industrial agriculture. Over the course of a month, pickets, demonstrations, marches, lectures, and dinners are organised in a number of EU countries. The core of the organisational group is made up of activists and consumers, but farmers and food producers are also involved in the campaign. In this way, the campaigners bring together different stakeholder groups and increase their scope of influence. The potentially low impact on food system change attributed to consumer action is significantly increased through facilitating and capacitating (scaling and networking).

Intermediaries function depending on the phase of transition

The function and activities taken by the different categories of intermediaries also depend on the phase of transition (Kivimaa et al., 2019b). As Polish organic food production is in the take-off phase (Kufel-Gajda, 2024), we can observe that on the niche level, all categories of intermediaries, apart from regime-based, promote experimentation and the coordination of projects. Niche intermediaries form networks, share best practices, and create reliability for organic products. User intermediaries form knowledge sharing networks and articulate demand for niche producers, while producers and resellers configure systems and uses, and qualify claims. On the regime level, systemic intermediaries articulate societal needs for change, increase the visibility of different technological options, and create political and institutional space. Intermediation between the niche and regime levels engages niche, process, regime-based, and systemic intermediaries. While niche intermediaries articulate early expectations, process ones connect regime priorities with local projects. Regime-based and systemic intermediaries look for R&D funds.

Levels of intermediation in the Polish food system

In order to facilitate transition, intermediaries should take on multiple tasks directed to individual entities, networks, and institutions (Kanda et al., 2020). The main tasks for selected intermediaries in relation to such isolated system levels (0-3) are presented in Table 3. It can be noticed that each category of intermediaries in Poland bridges only one certain type of agent, omitting the other types. The role of process intermediaries in Poland is to bridge actors; regime-based intermediaries bridge networks; grassroots and user intermediaries link networks of networks; and systemic intermediaries connect institutions across multiple systems. In order to accelerate transition, intermediaries should become more interested in bridging other agents' configurations. There are definitely too few connections in the system. Only through catalysing multi-actor transition governance processes, intermediaries may contribute to boosting the transition (Klerkx and Leeuwis, 2009; Moss, 2009). Moreover, aiming at increasing the number of actors in the system and interactions between them, intermediaries should be careful that costs need to be offset by the benefits (Kant and Kanda, 2019; Patala et al., 2020).

Table 3. Activity of selected intermediaries in relation to the conceptual system levels of intermediation

Case	Level 0 Non-Systemic Intermediation between individual entities	System Level 1 Intermediation between entities in a network	System Level 2 Intermediation between networks of different entities	System Level 3 Intermediation between actors, networks and institutions
Ministry of Agriculture and Rural Development				X
Warsaw University of Life Sciences		X		
Living Soil Coalition			X	
Public procurement managers	X			
The 'Good Food Good Farming' movement			X	

Source: Authors' own elaboration.

Gaps in a range of activities of Polish intermediaries

Table 4 presents gaps in four modes of intermediation distinguished by Hernberg and Hyysalo (2024). It appeared that the role of process and user intermediaries is very limited in Poland. The analysed regime-based and grassroots intermediaries play a moderate role in intermediation, whereas the highest pressure is put on the systemic intermediaries. Interestingly, the majority of identified intermediaries act locally in the Mazovian Voivodeship. More cooperation with nationwide actors, networks, and institutions while governing the transition is needed. Also, the prevailing opinion that the Ministry of Agriculture and Rural Development should be the leader of changes should be rethought. On the one hand, it might be too overwhelming for one organisation. On the other hand, it pushes away responsibility from other intermediaries. Very rarely is the public sector a main leader of change, and its role should be complemented with strong bottom-up initiatives.

Looking at the modes of intermediation in the Polish food system transition, it becomes evident that intermediaries contribute to transition mainly through facilitating and capacitating, and through brokering, while structural negotiating and configuring require more attention. Intermediaries are focused mainly on developing capacities, facilitating experimentation, and negotiating regulations. In order to accelerate the transition process, intermediaries should pay more attention to the following activities: negotiating operational practices and conventions, technical and spatial configuring, advancing collaboration, marketing and value evidence, and configuring actors and organisational practices.

Table 4. Four modes of intermediation, activities, and tasks in Polish intermediaries (1-5*)

Mode	Activity	Task	IN 1	IN 2	IN 3	IN 4	IN 5
Brokering (33%)	Building networks and partnerships (40%)	Matchmaking	X	X			X
		Introducing new actors into a project	X	X			
		Advocating and representing on behalf of certain groups or actors	X				
		Curating and gatekeeping	X	X			
	Advancing collaboration (20%)	Dividing responsibilities	X				
		Setting local rules	X				
		Communicating and translating	X				
		Co-designing	X	X			
	Building alignment (40%)	Aligning interests and resolving conflicts	X		X		
		Building trust	X		X		
	Connecting actors, resources, and knowledge (40%)	Identifying needs and connecting with supporting actors/resources	X	X			
		Editing information to make it more accessible	X	X			
		Articulating demand from users to incumbent government actors	X	X			
	Marketing and value evidence (20%)	Marketing spaces	X				
		Providing evidence of realised value in local conditions	X				
Configuring (20%)	Technical and spatial configuring (13%)	Configuring technical arrangements regarding ways of eating		X			
		Setting up and managing Internet discussion forums and groups			X		
		Configuring and repurposing ways of eating					

	Configuring actors (20%)	Configuring consumers' needs and requirements and estimating the types of consumers and their engagements	X	X			
		Estimating the types of users and user engagement with organic production					
		Configuring the goals, expectations, and priorities of other actors	X				
		Configuring new actor roles and introducing new actor configurations in order to fill gaps in the ecology of intermediation	X				
	Configuring organisational practices (20%)	Reconfiguring operational or business models				X	
		Reconfiguring contract terms and conditions				X	
	Configuring content (40%)	Articulating project briefs or implementation plans	X			X	
Structural negotiating (27%)	Negotiating strategies and visions (40%)	Negotiating and aligning visions	X		X		
		Advocating policy development	X		X		
		Linking bottom-up engagement to larger-scale or longer-term urban development	X		X		
	Negotiating regulations (50%)	Negotiating exemptions from regulations or creative solutions within the existing regulatory framework	X		X	X	
		Identifying incentives for alternatives	X		X		
	Negotiating operational practices and conventions (5%)	Negotiating models (e.g. operational or business models)					
		Negotiating contract terms and conditions					
		Providing evidence that counterbalances model-based assumptions of new technologies					
		Contributing to a shift in the perception of new technologies	X				
Facilitating and capacitating (51%)	Developing capacities (57%)	Creating space for searching and gaining knowledge	X	X			X
		Providing advice and instructions	X	X	X		
		Providing peer support	X	X	X		
		Encouraging consumers to take the initiative and responsibility	X		X		
		Creating a space for dialogue and learning between different actors/groups	X		X		X
		Gathering and disseminating knowledge	X	X	X		
	Creating space for dialogue and participation (40%)	Creating a space for voicing concerns and articulating critique			X		X
		Organising participatory activities			X		X
		Engaging in a dialogue with residents or local actors			X		X
	Facilitating experimentation (50%)	Enabling experimentation	X	X			
		Facilitating learning by doing	X	X	X		
SUM			33	15	17	4	6

Source: Author's computation, 2025.

Conclusions

The ecology of intermediation in the transition to sustainable food systems in Poland is underdeveloped and needs more attention. In particular, the activity of niche and user intermediaries should be supported and broadened in regard to the number and variety of connections and territorial scope. The role of transition intermediaries is to speed up the transition through connecting actor groups, such as technology suppliers and adopters, disconnected consumers, new entrants and incumbents, but also through building and managing networks supporting transition. Intermediaries should be encouraged to advocate new technologies and policy goals, translate information between different actors, as well as aggregate and advocate different interests. In order for the acceleration phase to happen, they should provide knowledge and links between organic food suppliers, adopters and users (innovation diffusion), as well as engage users, attract companies, and change policy (new market creation). They should try to better manage conflicts and tensions between stakeholders and strive to create common expectations and coherence between different activities. Organic food production may be included in the current regime only if intermediaries engage more in configurational and structural negotiation activities. The efforts in this direction should not be abandoned, because organic certification seems to be more promising compared to other sustainable niche innovations, like agroecology, for example, taking into account food safety and international expansion possibilities.

The major conclusion is that in order for the transition in the Polish agri-food sector to be better governed, intermediary activity and establishment should be supported. We recommend tackling actions aiming at intensifying the functioning of both private and public intermediaries. In the public debate, we should highlight the modes, activities, and tasks of systemic, regime, niche, process, and user intermediaries, encouraging new and existing ones to develop.

Answering the three research questions embracing the whole broad picture of intermediation in the Polish food system proved to be quite difficult and needed simplification. Therefore, our research has a few limitations, giving opportunities for further research. First, a comprehensive analysis of interactions and dynamics among a much wider range of entities based on available online sources to accurately map the ecology of intermediation seems to be a promising future research direction. The method of social network analysis may be used for this purpose. Second, instead of making generalisations based on single and separate examples of intermediaries, in the future, we would like to take advantage of ethnographic observation during workshops and meetings. Third, it would be worthwhile to include intermediaries facilitating a broader range of niche innovations, not only organic food production. Fourth, in order to indicate factors hindering and accelerating the intermediation processes in Poland, semi-structured interviews with different stakeholders of the Polish food system would be necessary.

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