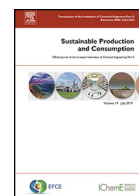




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Consumer renaissance in Alternative Agri-Food Networks between collective action and co-production

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ABSTRACT

In recent years, a dramatic increase in Alternative Agri-Food Networks (AAFNs) has been interpreted by experts of the sector as triggered by innovative food supply chains capable to reconnect producers with consumers. Simultaneously, the worldwide growth of consumers' initiatives towards AAFNs is reducing the distance with producers shortening the supply chain and enhancing its value added. Examples of these consumers' experiences have been reported in Japan, Europe, the USA, and Canada, and differ according to the degree of participants' commitment to the logistics and the management of the initiatives. In general terms, these experiences could represent instances of co-production practices involving thousands of citizens who are seeking quality, sustainable, healthy, and ethical products and services reducing the uncertainty of food credence attributes. In this framework, the overall objective of this paper is to contribute to the scanty literature on food associations and cooperatives co-producing private goods with citizens contributing to marketing services such as procurement, storage, pricing, and quality assurance. Specifically, the focus is on the experience of Camilla, a food consumption cooperative that recently established an outlet to stock and sell food and non-food quality goods in Bologna (Italy). Camilla is the first Italian experience of a shop self-managed by its customers - who are also the owners - who practice critical consumption by supplying organic products at fair and sustainable prices while promoting small local productions as well as Fair Trade productions. A deep, participatory, and immersive ethnographic project was carried out between January and October 2019 to understand the functioning, the motivations and the drivers underpinning the process of citizens' self-organisation in the domain of the food sector. Results provide useful insights on the way in which these innovative AAFNs are organised and on the reasons pushing people to join these initiatives. Key questions emerging from outcomes of the Camilla case study are discussed from an empirical and theoretical point of view.

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1. Introduction

Co-production is a concept that was introduced in the 1970s by Ostrom et al. (1978) and since then has been gaining attention in public economics especially in relation to the analysis of public service delivery and the third sector (Alford, 2009; Pestoff, 2012; Vershuere et al., 2012).

Originally, the notion of co-production was focused on the provision of public services obtained from the collaboration between public agencies and the citizenry. In particular, Ostrom et al. (1978) explained why crime rates rose when the police turned from walking the beat to patrolling in cars. In the

authors' view, the relationship that police developed with citizens and the informal knowledge that they established with people when they walked the beat, were critical in preventing and solving crimes. Thus, they concluded that the police need communities as much as communities need the police and coined this relationship with the word "co-production" to describe a possible solution to the lack of recognition of service users in service delivery.

In 1996, Ostrom revisited this concept defining co-production as "the process through which inputs used to produce a good or service are contributed by individuals who are not "in the same organisation" (Ostrom, 1996, p. 1073). In other words, co-production involves both "regular producers", i.e., individuals who produce goods or services for exchange, and "citizen (or consumer) producers", i.e., people who contribute to the production of goods or ser-

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vices that they usually consume (Kiser and Percy, 1980; Parks et al., 1981). But what exactly prompts citizens to co-produce? Co-production indeed implies collective action, that is voluntary, cooperative, organised action of people (Brudney and England, 1983) willing to improve a particular condition of their life to get an extrinsic reward-motivated by self-interest (i.e., benefits outweighing costs). However, many scholars argued that co-production may also be motivated by intrinsic, social, and normative motivations rooted in social values like altruism and sociality or by the desire to participate in democratic processes (Alford, 2009; Pestoff, 2012; Verschuere et al., 2012).

Co-production research has proliferated in different fields of studies such as public management (cf. Verschuere et al., 2012 and Voorberg et al., 2015 for reviews), health care (Dunston et al., 2009; van Eijk and Steen, 2014; Batalden et al., 2016; Væggemose et al., 2018) and education (Davis and Ostrom, 1991; Porter, 2013; Suslova, 2018). These studies show that the logic orientated towards the co-production of public services is complemented (and not overtaken) by a logic orientated towards the co-production of private goods. Alford (2014: 301) argues that “The original formulation by Ostrom and her colleagues implied that co-production resulted only in public value. But analysis demonstrates that most co-productive activities create a mixture of public and private value, the differing demands of which need to be managed”.

Despite the proliferation of studies on co-production across several disciplines, only a few studies have applied this concept to the analysis of the new tendencies in food production, distribution, and consumption (van Kleef and van Eijk, 2016) with a focus on co-production for school meal service delivery (Galli et al., 2014; Palumbo et al., 2018). This gap in the literature may be explained by the dominant focus on applications of co-produced public services. However, the recent development of Alternative Agri-food Networks (AAFNs) directly reconnecting producers and consumers fits well into the concept of co-production activities creating private value (Goodman, 2002, 2004; Renting et al., 2003; Venn et al., 2006; Holloway et al., 2007; Kneafsey et al., 2008; Lockie, 2009; Miralles et al., 2017).¹ Experiences of these innovative AAFNs could be interpreted as examples of co-production practices involving thousands of citizens who are seeking quality, sustainable, healthy, and ethical products with different levels of engagement (Sacchi, 2018). For example, there are initiatives of collective actions through associations/cooperatives whereby people are committed to devoting a few hours per month to the logistics (e.g., the Solidarity-based Purchasing Groups in Italy) or a higher level of involvement is observed in all marketing functions (e.g., Dans le Diois, France; Park Slope, USA; Bees-Coop, Belgium; The People Supermarket, UK; Camilla, Italy).

To contribute to the scanty literature on food associations and cooperatives with citizens contributing to marketing services such as procurement, transport, and storage, this study focuses on the experience of Camilla, an Italian food consumption cooperative that has recently established an outlet to stock and sell the co-produced goods. Through this case study we wish to apply the concept of co-production in an AAFNs. To this purpose, the analysis of this case study aims at answering to the following research questions:

1. What are the motivations of citizens' participating and engaging in AAFNs?

¹ Examples of these consumers' initiatives spread across the world from Japan (Teikyo) to Europe (Association for the maintenance of peasant agriculture - *Association pour le Maintien d'une Agriculture Paysanne*; Solidarity-based purchasing groups - *Gruppi d'Acquisto Solidale*), and North America (Community Supported Agriculture).

2. How does citizens/consumers collective action work in the private sector?
3. Under which circumstances do people co-produce?
4. Does citizens' co-production lead to better delivery service?

From these premises, the analysis aims at both understanding the motivations and drivers underpinning the process of citizens' self-organisation in AAFNs and discussing the outcomes of their co-production activities and collective action from an empirical and theoretical point of view.

The remainder of this paper is organised as follows. Section two provides a literature review of the three strands of literature that are relevant to analyse the case study, namely co-production, collective action studies and citizens' motivations in participating and engaging in AAFNs. Section three explains what Camilla is and the methodology adopted in this study. Section four discusses the main results emerging from the analysis of this case study. Section five interprets these results answering to the research questions in the light of the theoretical background. Section six concludes the paper providing insights for future research.

2. A review of citizens' co-production, collective action, and motivation in participating in AAFNs

Real-life provides plenty of examples where the received economic wisdom, that assumes a clear separation between producers and consumers, is deficient (Kiser and Percy, 1980; Parks et al., 1981; Brudney and England, 1983; Ostrom, 1996). For instance, everyday millions of citizens contribute to the provision of public services such as education and health care; IKEA is just one example from the business world. This principle is known as “co-production”, that is the mix of activities where “regular producers” (RP) operate as professionals producing services (e.g., public service agents, traders) or goods (e.g., farmers, processors) while “citizen producers” (CP) are individuals and groups providing “voluntary efforts to enhance the quality and/or quantity of the services [or the goods, *Authors' note*] they use” (Pestoff, 2012).² Therefore, the very essence of co-production is a production process in which the consumer plays a vital part (Whitaker, 1980; McGinnis, 2011) and its dimension depends on the boundary definition of this process that, according to an analytically descriptive theory of production (Landesmann and Scazzieri, 2009), can be constituted by a certain sequence of tasks.³

In the next sections the “co-production” and “collective action” perspectives are considered to illustrate their features as possible interpretative framework of current participatory food procurement practices. Subsequently, a literature review on citizens' motivation in participating in AAFNs is also provided.

2.1. Co-production of private services

Literature regarding public management and political science has extensively analysed co-production within the theory of “institutional hybridity and diversity” developed by Vincent and Elinor Ostrom (Osborne, 2010; Aligica and Tarko, 2013). Similarly, the sociological literature has been attracted by co-production's inherent voluntary element with specific reference to social innovation

² This represents a key difference from classical volunteering in that co-production concerns services the volunteers use themselves, i.e., not or not solely produced/provided for the benefit of others (Verschuere et al., 2012; Pestoff, 2012). Narrower definition as opposed to “co-governance” (Brandson and Pestoff, 2006).

³ For example, in the specific case of food, the longest production process can start from the seed and end to the plate. Alternatively, specific co-production effort can be limited to shorter sequences of tasks. For example, co-production would be a wide-spread phenomenon if we ended the process with the plate as many households prepare their meals at home albeit to different degrees.

and third sector analysis (Pestoff, 2012; Bovaird and Loeffler, 2012; Voorberg et al., 2015). The empirical evidence that any group of individuals facing collective problems tries to address these problems in the best way they deem most suitable, has been defined as “polycentricity”⁴ (McGinnis, 1999). This means, for instance, that people can address the issue either through the existing system governance or by establishing a new governance unit such as the one that develops around a co-production activity. At the same time, it has been acknowledged that social innovation in general, and governance innovation in particular, includes new forms of citizen engagement and possibilities for expanding democratic institutions in public services (Osborne, 2010; Wittmayer et al., 2019).

Innovations that promote a more plural and pluralist model of governance and provision of welfare services can include co-production as a way to facilitate greater citizen participation. As more informal and non-traditional organisations enter the public domain, the demand for greater third sector provision of public services and more citizen participation in the provision of such services tend to grow. Similar practices of social innovation are developing also in the private sphere, such as the Italian Districts of Solidarity Economy, that are networks of associations, providers, and consumers that exchange goods and services based on shared principles of solidarity, and the Solidarity-based Purchasing Groups (*Gruppo di Acquisto Solidale*, GAS, in Italian). These are grassroots networks that collectively organise direct provisioning, mostly of food (Renting et al., 2012; Brunori et al., 2012) and other items of everyday use (such as detergents and basic toiletry), but increasingly also of textiles and services such as renewable energy, sustainable tourism, and even dental insurance.

The most relevant issue addressed by these strands of studies refers to questions such as: what is co-production about? How does it work? Why does co-production exist? What are its effects (Vershuere et al., 2012)?

According to the public management literature, co-production is the involvement of individuals or groups of citizens in public service delivery. Co-production differs from mere volunteering since it concerns services the volunteers use themselves. Traditionally, public services entail services usually provided by public bodies, such as education, health care, police, etc. More recently, research extended the analysis to include services that are not necessarily provided by the public administration such as knowledge (Bollier, 2007), quality guarantee (Stefani et al., 2017), and environmental outcomes (Miller and Wyborn, 2018). The assumption is that co-production better responds to the user needs since it provides more better-quality services compared to the mainstream way of service provision (e.g., classical public service provision). From a marketing-orientated perspective, a similar trend was described as value co-creation occurring because customers have unprecedented knowledge, information, and resources, making them becoming equal partner of firm managers in the value creation of products (Prahalad and Ramaswamy, 2004).

⁴ This stems out from a seminal paper by Ostrom et al. (1961) who first advanced the concept of a “polycentric political system”. Typically, a polycentric system of governance spans over many domains allowing for institutional pluralism. According to McGinnis (2011) combines the following characteristics: multi-level (i.e. local, provincial, national, regional, global units of governance), multi-type (i.e. entailing general-purpose nested jurisdictions and specialized cross-jurisdictional political units), multi-sectoral (i.e. public, private, voluntary, community-based and hybrid kinds of organisations), and multi-functional (i.e. incorporating specialized units for provision, production (or co-production), financing, coordination, monitoring, sanctioning, and dispute resolution). Particularly relevant to the topic we discuss here is the multi-sectoral and multi-functional nature of the co-production organisation.

The key for co-production, instead, is the organisation that makes it occurs and be effective. Many studies showed that the best organisational structures matching reciprocal needs and expectations between clients (i.e., citizen producers) and public service organisations (i.e., regular producers) should be characterized by low centralization (Alford, 2009; Vershuere et al., 2012; Voorberg et al., 2015). For example, the implementation of decentralized decision-making organisational levels allows to make judgments on the spot and facilitate high connectedness and the ability to manage relations with clients and provide answers to clients’ problems. Furthermore, actors in the networks in which regular producers and co-producers are embedded need to be supportive for co-production. The existence of integrative structures, relational capital between the stakeholders (Brown et al., 2012), a high degree of flexibility and a sense of shared responsibility for the provision of a new services (Schlappa, 2012), are all factors that can enhance the effectiveness of a co-production enhancing trust, reciprocity, and shared values (Agranoff, 2007). Here technology can reduce the coordination costs of large scale and dispersed actions (Castells, 1996; Meijer et al., 2012).

The determinants of co-production can be traced back to a plurality of motivations. According to Alford (2009), to prompt citizens to co-produce, they should get something of material, social or normative value in return of the time and effort they contribute whilst co-producing. Public choice theory emphasizes that people are benefit maximisers. Extrinsic rewards – something valuable (monetary or non-monetary) people receive to (more than) compensate the costs they incur in co-producing – play a key role in individual involvement. However, there could be motivations other than self-interest rewards. Indeed, “eliciting co-production is a matter of heightening the value that clients receive from the services by making more explicit their non-material aspects through intrinsic rewards, solidarity incentives or normative appeal” (Alford, 2009: 187). The ease of involvement in co-production, that is the transaction costs in terms of time and effort required for citizens to participate, is a key element and lowering these costs will make it easier for people to get involved. The willingness of individuals to participate is also important (Bovaird and Loeffler, 2012). This depends on the salience of the service provided, namely how the service affects citizens, their life and life chances. As noted by Pestoff (2012: 24), “If and when a person feels that a service is very important for them and/or their loved-ones or vital to their life chances, they will be more highly motivated to get involved in the co-production of services”.

In conclusion, the effect of co-production is twofold (Vershuere et al., 2012): (i) higher efficiency and better quality of service delivery (Warren et al., 1982; Pestoff, 2006) due to cost reductions, services tailored to personal needs, and higher levels of satisfaction due to greater citizens’ ownership; and (ii) expanded opportunities for citizens to participate, which means deeper democracy and higher accountability.

2.2. Collective action

The literature on public management and political science points out that the delivery of public services is characterised by the involvement of single citizen and groups of individuals. As far as groups are concerned, co-production is often the product of some sort of collective action involving cooperation amongst participants.

Problems of coordination and cooperation have been widely investigated especially concerning the use of common-pool resources and the provision of public goods (Ostrom, 1998a). These studies can be grouped into two main areas: (i) the management of natural resources, such as fisheries, pastures, and woodland (Ostrom et al., 2012), and (ii) the production of urban pub-

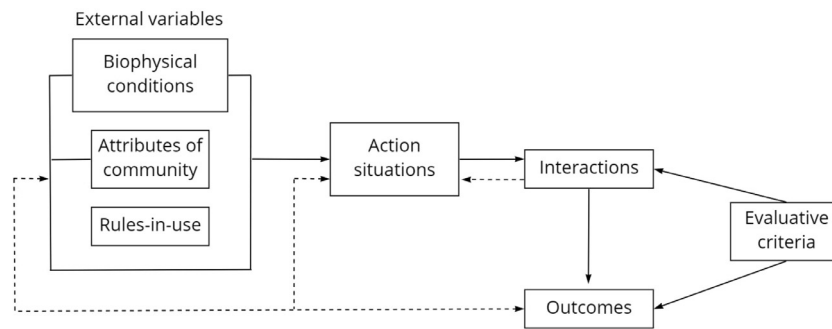


Fig. 1. Ostrom's Institutional Analysis Development Framework, Source: Ostrom (2010).

lic goods by public economies,⁵ such as policing services, waste collection and education (Ostrom, 1998b), which in the previous section were referred to as “public services”. Both areas of application highlight how the management of resources and the production of public goods can rely either on solutions other than the State monopoly or the market with related privatisation of common resources and/or services provision. Communities themselves can define efficient rules for the management of common-pool resources or the provision of public services and setting monitoring mechanisms tailored to the context while maintaining a common property of the resource or a public provision of the public services (Ostrom et al., 2012).

A common feature of the research on collective action is its focus on the institutional arrangements that allow efficient management of the resources or provision of the public goods. Another relevant aspect is the investigation of the characteristics of the context influencing the institutional arrangement and more broadly the arise of cooperative behaviour (Ostrom, 2007).

The investigation of the context in which repeated human interaction takes place is carried out within frameworks that identify the key variables, rules and norms that shape choices and behaviour. In the case of common-pool resources management, the frameworks were initially developed to analyse the successful or unsuccessful management of natural common resources like fisheries and woodlands, which are depletable and rival. For example, in the Institutional Analysis and Development (IAD) framework (Ostrom, 2010), the key concept is the action situation (e.g., the dilemma faced by common pool resource users about the appropriation of the resource, the decision to contribute to the provision of a public service, etc.) influenced by the external variables illustrated in Fig. 1 (Ostrom, 2010). These variables are a) the biophysical conditions or the type of good produced with respect to its rivalry and excludability characteristics; b) the attributes of the community involved such as history of prior interaction, heterogeneity of member, level of social capital; c) the rules in use which “specify common understanding of those involved related to who must, must not, or may take actions affecting others subject to sanctions”. The external variables affect the action situation that in turn generates a pattern of interactions leading to outcomes that are evaluated by participants and feed back into the external variables and the action situation. Later, the same framework was also applied to non-rival human-made resources such as knowledge (Bollier, 2007).

The IAD framework and its variants, such as the socio-ecological system (Ostrom, 2009) shed light on why people decide in the first instance to co-operate in the management of a common pool resource. In addition, several design principles have been devised by

Ostrom to investigate the longevity and the survival of natural resources governance system. This set of best practices are known as design principles and can be summarized as follows: (a) setting boundaries: Who are the users? (b) identifying operational rules: Who is entitled to what? Who contributes what? (c) enforcing decision-making rules: How do members participate? How do they make decisions? (d) enforcing conflict-solving rules: Are there redress and conflict-solving mechanisms? How do they operate?

Design Principles improve the robustness and longevity of governance systems. For example, participants in a system know that others will also stick to the rules because they are monitored; those who are more knowledgeable of the resource and the social context make the rules to regulate themselves; and conflict resolution mechanism are in place to deal with conflicts before they can destroy cooperation (Ostrom et al., 2012). Much research has empirically tested the relationship between design principles and the longevity of resource governance systems (Cox et al., 2010; Baggio et al., 2016) while extension to other contexts beside natural resource management has been acknowledged by Ostrom herself (Antona and Busquet, 2017).

Similarly, the research on public economies has also investigated the context variables, which affect the institutional arrangement underpinning collective action (Ostrom, 1998b). Rather than resource users, collective consumption units such as neighbourhood organisations, condominiums and voluntary associations are involved in this type of collective action. Besides, other key actors are involved such as suppliers, partners, and public sector organisations (Alford, 2014). Again, the production and consumption characteristics of urban public goods and services are investigated to assess the mix of institutional arrangements leading to higher performances.

A central aspect of the arrangements to produce the collective good or services is that they can take any of the following modalities: “(1) establishing and operating its ‘own’ production unit; (2) contracting with a private firm; (3) contracting with another governmental unit; (4) obtaining some services from its production unit and other services from other governmental or private producers; (5) establishing standards of service that must be met by authorized producers and allowing each consumer to select a private vendor and to procure services from an authorized supplier; (6) “issuing vouchers to families and permitting them to purchase service from any authorized supplier” (Ostrom, 1998b, p. 5). Not surprisingly, the public economies framework has been used to investigate forms of collective co-production. Notably, modalities 1. and 4. above are particularly conducive to co-production solutions (Alford, 2014).

Co-production besides delivering strictly private goods (consumed by individual clients) and collective goods (consumed by a collectivity of citizens), may also produce “group” values which are consumed by a group of users of the services (a sort of club) (Alford 2014: 306). It is the nature of the provisioning process in

⁵ Public economies are “composed of collective consumption units of varying sizes that provide services by arranging for their production and regulating access to, the pattern of use, and appropriation of collective goods” (Ostrom, 1998b: 93).

many public services areas that makes the work of Ostrom capable of identifying the challenges of co-production. As the concerned institutions are often self-governed by users “incorporating a role for consumers as co-producers is not a big step to take and analogues of rules concerning consumption could equally plausibly be fashioned to govern co-production” (Alford, 2014: 312).

2.3. Consumers' issues and motivation in participating in AAFNs

The ongoing debate on citizen engagement in the procurement of quality food focuses on consumers behaviour, preferences, and motivation in participating in AAFNs. Some authors investigate the social dimension of food purchase through the lenses of embeddedness and connectedness between consumers and producers while other scholars focus on some critical issues related to consumer constraints in participating in AAFNs (Sacchi et al., 2018).

The main motivations detected by international research are mainly linked to the possibility of purchasing quality food, supporting local farming and “reconnecting” food producers and consumers as well as environmental concerns and food safety issues (Cooley and Lass, 1998; Cox et al., 2008; Schnell, 2013). Bean and Sharp (2011) conducted a literature review on consumers' motivations in purchasing both organic and locally grown/produced food to check their possible coherence/opposition. Evidence about motivations in purchasing organic products shows that consumers are concerned about both the effects of food on health and the state of the environment. Furthermore, issues related to food safety and environmental concerns seem to orientate the choice of purchasing local food products. The choice towards locally grown products has been associated with an attempt to achieve better control of decision-making within a food system perceived as more and more complex and uncertain. The purchase of local products is also often motivated by the desire to support a vital local community. Both organic and local purchasers assign similar importance to traditional drivers of food purchasing (such as price, appearance, taste, and nutritional value).

In the same vein, Smithers et al. (2008) conducted a study across a sample of fifteen farmers markets (FMs) in Canada to analyse how, why, and what expectations and beliefs producers and consumers respond to within these supply chains. The authors seek to engage with “contested notions, divergent beliefs and complex mixed participation strategies that defy easy categorization and illuminate the ways that the FMs embodies (or does not) current notions around local food” (Smithers et al., 2008: 341). The study backs the hypothesis that FM customers are willing to support farmers/producers and farming, investing at least some fraction of their total “food dollar”. Many customers felt that prospects for local agriculture were enhanced by their patronage and that they were creating social and economic value through their decision to shop at the FM. On another perspective, Seyfang (2006) raises the question of when the growing supply of organic and local produce is available in supermarkets this will be a threat to direct marketing and other AAFNs. If consumers settle on a conscious decision to take part in an AAFN when they buy through direct marketing channels bypassing mainstream supermarkets this has political implications on consumer choices and preferences offering potential challenges for AAFNs. Supermarket purchases offer advantages to consumers over direct markets because of higher accessibility, lower prices, and more choice of food products.

However, it seems that the strongest reasonings in choosing direct marketing involve the support of local business, the better quality of food, and the reduction of food miles. Giampietri et al. (2016) investigated the drivers of consumers' food purchasing behaviour in Italian short food supply chains (SF-SCs) and found that attitudes, subjective norms, and perceived be-

havioural control play a crucial role in predicting intention to buy. “Sustainability, convenience and consumers' gratification are the most significant attitudes that predict the intention to buy in SF-SCs” (Giampietri et al., 2016: 626). Giampietri et al. (2018) also demonstrated that the intention of purchasing food in AAFNs instead of mainstream markets is strongly influenced by consumer trust.

Connolly and Klaiber (2014) explored consumer valuations of Community Supported Agriculture (CSA) attributes including various types of organic certification. Results revealed a price premium of approximately 10% for USDA organic certification. The authors did not find any premium price associated with a competing organic certification program, showing that consumers in local food markets are discerning between different types of organic certification. However, the study revealed a statistically significant premium price for the product delivery, longer seasons, and provision of additional products beyond fruits and vegetables.

As regards socialization, Cicatiello et al. (2014) compared the social potential of purchasing at FMs with other shopping outlets. They claim that besides the utilitarian component of the “rational consumer”, who purchase products looking at the best value for money, a hedonic aspect, linked to personal emotions, exists and it orients consumers' purchasing choices. According to the authors, the value of the shopping experience is based on three pillars of cultural and economic context, individual and personal factors, and a social dimension as a driver of consumer satisfaction within the shopping experience. In this context, the dimension of socialization was investigated within different shopping environments as a key component in the analysis of consumer behaviour and consumer preference. As expected, a lower level of socialization was recorded within supermarkets in comparison to greengrocers where most of social interaction were observed, despite few regular customers. These results are corroborated by Hunt (2007) who found that in FMs customers, as well as interacting with the vendors, they can meet people they know. This aspect broadens the potential of enjoying moments of socialization during the food purchasing activities.

These studies show that FMs hold greater social potential compared to the other shopping venues and thus local and AAFNs can help the re-embedding of consumers in the food chain thanks to the relations and social exchanges that take place during the purchasing experience. Similarly, Venn et al. (2006) describe four categories of producers-consumers relationships based on the degree of connectedness between consumers and producers. The strongest ties were found where these two figures coincide, being the production directly consumed by the producer (community gardens, community food cooperatives etc.). The second group includes CSA and all activities where consumers share producers' risk. In both types of initiatives consumers actively participate in the production process, gaining a certain amount of control and agency. Instead, in the other two groups, direct sales initiatives, and specialist retailers, they found less consumer engagement because this is required where only “moments of connection” are experienced by the two parts. Even in this case, however, consumers could gain information about products they were buying, the area and the methods of production.

However, consumers participation in AAFNs can also face difficulties. For instance, Bruce and Som Castellano (2016) analysed both producers and consumer (especially female consumers) constraints in AAFNs. Purchasing at FMs could, to some extent, result in a time-consuming activity since such a consumption mode usually requires a greater amount of time to reach suitable markets, identifying, buying, and cooking desired products. All these time-consuming activities could lead women to prefer conventional and mainstream ways of purchasing and consumption. The authors also identified a consumer socio-economic status constraint since alter-

native food products are usually more expensive than conventional ones: only middle and upper-class consumers seem to be able to buy and consume regularly product purchased in AAFNs.

3. Methodology

3.1. The case study: what is Camilla about

Camilla is the first Italian experience of a food consumption co-operative owning and self-managing a large outlet to sell sustainably produced food at a fair price to members of the collective. In doing this, Camilla also supports local smallholders buying food produced by farmers who meet its expectations in terms of quality and sustainability.

Camilla developed from the previous experience of *Alchemilla*, one of the biggest and oldest GAS established in Bologna (the largest city in the Emilia-Romagna region of Northern Italy) at the end of the 1990s to promote a sustainable and critical collective purchases of food products. *Alchemilla* consisted of some 120–150 members who collectively purchased local organic food products once every two months. The organisation was managed by a small group of members composed of about ten associates who were responsible for the operations of the whole group. The difficulty of involving new people in the group and organising activities other than the mere purchasing were the drivers that pushed the collective to move forwards, from the GAS-type organisation towards a more participatory initiative. Therefore, at the beginning of 2017, some of *Alchemilla*'s members engaged with a local organic smallholders' association – *CampiAperti* – and discussed whether and how to arrange a collective project that went beyond the *Alchemilla* experience. This process eventually led to the establishment of Camilla and the opening of its outlet in February 2019.

Camilla's mission is to allow people to share the same responsible consumption values. Determination to action is strongly influenced by food sovereignty principles, i.e., the right of each person to decide upon the food socio-economic network to whom belongs as well as the right to access healthy, nutritious, culturally adequate, sustainable, and ecologically friendly foods. In more practical terms, Camilla aims to distribute organic food/non-food products, prevent the exploitation of natural resources and the contamination of environmental resources, primarily soil and water. Furthermore, social concerns play a key role: assuring a fair compensation to small farmers and guaranteeing workers' rights are indeed cornerstones of Camilla's action. For this reason, also products derived from Fair Trade practices are sold within the outlet. In very general terms, Camilla's members are interested in purchasing quality food and non-food goods at a reasonable price.

To achieve these objectives, Camilla is organised as a collective effort where its members buy, and somehow process, food and non-food goods; make agreements with producers (primarily small farmers) to meet production and products standards; plan the procurement of goods; provide the services needed to operate Camilla's outlet; organise social and cultural activities.

3.2. Qualitative research tools used to analyse the Camilla case study

Two methodological steps were undertaken as a case study analysis (Stake 1995; Stewart 2014; Yin 2015) to achieve the stated objectives. The first step consisted in collecting secondary information about Camilla's participants and analysing these data to get an insight into its *modus operandi*. The second step was based on ethnographic research to match the information collected in the first step and the theoretical models to assess to what extent Camilla can be interpreted as a co-production case.

Thus, the analysis of this case study was based on the examination of secondary and primary data. Secondary data were gath-

Table 1
Procedure adopted for the analysis of this case study.

Study propositions	Shed light on the current participatory and collective citizens practices within the food sector
Case study	Camilla, community emporium, the first Italian ethical outlet self-managed by consumers
Study questions	<ol style="list-style-type: none"> 1. What are the motivations of citizens' participating and engaging in AAFNs? 2. How does citizens/consumers collective action work in the private sector? 3. Under which circumstances do people co-produce? 4. Does citizens' co-production lead to delivery of a better service?
Ethnographic research questions	<ol style="list-style-type: none"> 1.1 Which values intervene in the choice of participating in a consumers' initiative/ AAFNs? 1.2 Why citizens decide to take part in Camilla experience? <ol style="list-style-type: none"> 2.1 How is Camilla organised? 2.2 What are the key variables that make Camilla effective? 2.3 Which are the coordination processes? 2.4 Which are trust strategies in place? <ol style="list-style-type: none"> 3.1 How trust strategies and reputation enhance co-production activities? 3.2 Is technology an effective tool in managing co-production activities? 4.1 Is product uncertainty about quality, freshness, healthiness, genuineness in Camilla model reduced? <ol style="list-style-type: none"> 4.2 How credence attributes of food products become reliable by direct intervention of citizens?
Ethnographic research procedure	Observation on naturally occurring interactions and conversations among Camilla's members Participant observation on interaction and organization activities of Camilla by also participating in such activities (working hours, working groups, general assemblies, seminars, training activities, etc.) Informal discussions among Camilla's members on their motivation of participation
Timing	January–October 2019

ered from information available in newspaper articles, newsletters and directly from the Camilla cooperative as it was fundamental to understand and describe Camilla's evolution growth. Primary data were collected carrying out an immersive ethnographic research (Crang and Cook, 2007; Angrosino, 2007) from January to October 2019. The ethnographic approach involved the following activities: (i.) the observation of naturally occurring activities, interactions, and conversations amongst members; (ii.) the participatory observation of occurring interaction and organization activities by also participating in such activities (working hours, working groups, seminars, general assemblies, training, etc.); (iii.) informal discussions conducted with members of Camilla to explore their motivation for participating in this experience.

Table 1 shows the research procedure used for this study.

Study questions were inspired by the previous works conducted by Voorberg et al. (2015) and Vershuere et al. (2012) and adjusted to the specific context of the current study.

Ethnographic research has aimed at exploring and understanding both motivations for being part of Camilla community and how

it works. Motivational aspects were explored triggering a discussion around the reasons that pushed citizens to join Camilla. How Camilla works was explored focusing on the observation of participants' responsibility and engagement, learning by doing, and analysis. The same researcher carried out the ethnographic research through participant and immersive observation (Crang and Cook, 2007) by taking part in the cooperative activities as an officially enrolled member. Access to the cooperative as well as the ethnographic research was negotiated with the Camilla's members who were responsible for the management and administrative activities of the cooperative. The same members were active collaborators in sharing data and information about the Camilla establishment. All members interacted with were given a short introduction on the subject and purpose of the research and were asked to refer to their personal experiences to avoid off-topics and stereotypes. Informal discussions referred to normal interaction occurring during working hours, working groups activities, the general assemblies as well as training activities and promotional events. The informal discussions were also audio recorded and lasted between 30 and 45 min.

A cross-referencing system of annotations (Jackson, 2001) and a word-by-word transcription of informal discussions were carried out. This step was followed by a verbal analysis conducted to identify preliminary codes based on words similarity (Bazeley and Jackson, 2013). The identification of co-occurrent items/sentiments revealed topics and subtopics related to participants' motivation as well as to Camilla governance. Data coding and key themes were discussed and approved by members of the research team for the analysis and interpretation of the functioning and motivation behind collective action and co-production activities.

4. Results

4.1. Camilla's profile

The number of members belonging to Camilla's members have been constantly growing since the start of its business operations. In June 2018, 91 members were officially associated with the cooperative, in March 2019, the number of members was quadrupled reaching 447 units and at the end of 2020 there were more than 565 members. The majority of Camilla's members are females (60%) with one-third below the age of 30 and about 53% are aged between 46 and 65 (average age 49 years). Most members live close to the outlet, 11% in other towns or villages surrounding Bologna and 2% in other provinces of the Emilia-Romagna region.

At the end of 2020, the number of Camilla's members accounted for more than four times the size of Alchemilla GAS. Members share the responsibility of operating the outlet, which is a 170 m²s store, located on the outskirts of Bologna nearby the university neighbourhood (Fig. 2a–d).

The outlet is open six days per week for a total of 45 h and each member is required to contribute to Camilla business operations, resulting on average in 2.45 h work every four weeks. In addition to this mandatory labour contribution, members can participate voluntarily in working groups (members, production, communication, administration, team referents, and coordination) responsible for the outlet management.

To help with the protection of natural resources and the empowerment of local communities, food products are purchased from farmers engaged in organic agriculture (even in conversion). Farmers are selected according to direct personal contacts. Often, mutual support between smallholders and members of Camilla dates to the GAS period. As part of the agreements signed by the two parties, smallholder farmers commit themselves to providing goods meeting specific quality standards, both in terms of the fi-

nal product and the production process.⁶ In return, they receive a "fair price" to cover the production costs guaranteeing a fair remuneration for the labour of farmers and other agents involved in agricultural products processing. On top of this, only a mark-up of 24% on processed products and of 30% on fresh products is added to cover the costs of running the outlet. During the first six months of business operations, the average monthly turnover was 35,000,00€ while at the end of 2020 the total yearly revenue from product sales amounted to 487,500,00€ and the total profit margin at approximately 98,000,00€. The average purchasing expenditure per associate per month was 80,6€.

Finally, Camilla's outlet business operations are designed to adopt as many sustainable practices as possible such as selling products in bulk quantities (rather than packaged), exchanges of non-utilized goods amongst members, use of energy from renewable sources and so on.

4.2. Camilla's modus operandi

4.2.1. Rules (study question 2)

Camilla operating rules are based on three main documents:

- the Charter of Principles,
- the Statute, and
- the Regulation of cooperating members.

According to these documents, Camilla's mission is to offer its members sustainable and responsible consumption based on co-operation, self-management, and solidarity. In pursuing this mission, Camilla is managed by members' assemblies, a governing board, and a board of auditors, all of them guarantee a democratic decision-making mechanism through the involvement of each member of the cooperative. For instance, all associates, through members' assemblies, have the right of voting on core aspects of Camilla organisation and management rules such as the approval of budgets and regulations; appointing and revoking members of the governing board; designation of the person in charge of the audit and so on.

Concerning agreements between Camilla and its providers of goods and services, these mostly rely on Participatory Guarantee Systems (Sacchi, 2019) of farmers' associations that supply Camilla and on previous knowledge dating back to the Alchemilla GAS period. These relationships are informal and based on mutual trust leading to the development of "planning agreements" rather than signing formal contracts with producers. New providers are identified according to the "Guidelines for choosing providers", that highlight specific requirements according to the type of product. For instance, agricultural products must be obtained by farming practices that follow organic principles, and in general, all products sold in the outlet must respect environmental, economic, and social sustainability. Prices must be fair and transparent for both producers and consumers, allowing the broadest possible access to as many citizens as possible. The "productions" working group also drafted an internal Participatory Guarantee Systems protocol that monitors the quality of producers and their products and the compliance with the underlying principles. This system is currently in the testing stage.

4.2.2. Resources (study questions 2 and 3)

The Camilla outlet is the main asset and point of business operations, but other three crucial tools need to be mentioned. First the

⁶ The reference document is represented by the "Guidelines for choosing providers" which outlines the indications for the procurement of food/non-food products considering all the life cycle, from raw materials to working conditions and management of business relations up to post-consumer disposal.



Fig. 2. Fig. 2a. Camilla outlet entrance Fig. 2b. Fresh products detail. Fig. 2c. Detergents section. Fig. 2d. Bulk products section.

website that, containing general information about Camilla, conveys the aim of the project, news and opportunity for members, details on any provider and the option for applying for membership.

The second tool is the so-called “COSER”, a virtual space which is the main operational application allowing members to easily interact and participate with the Camilla initiative. In this digital space, it is possible to select and manage the job shift by accessing the personal member area; to download Camilla documentation (from the main documents to the minutes of the general assemblies); to access the calendar that reports all scheduled activities, meetings, and assemblies’ calendar, and to visualize the agenda of training and orientation meetings. This tool is managed by a member of the “communication” working group who is also responsible for the ICT and software management.

Finally, the “Producers’ book”, available at the outlet and developed by the “productions” working group provides information to all members about Camilla’s suppliers. This book contains information about the story and products realised by Camilla’s suppliers and, to some extent, bridges the knowledge gap between producers and consumers/members solving, at least in part, problems of asymmetric information.

4.2.3. Outcomes (study question 4)

The first outcome of Camilla business activities is the possibility to access seasonal organic fresh products at affordable prices (like those of CampiAperti markets). Processed foods are also available ranging from dairy products, canned, vegan, and macrobiotic food, beer, wine, etc. Moreover, there are also non-food products ranging from household and personal care products to ecological tissue products (Ecolabel certified) and natural fertilizers for plants and flowers.

Secondly, Article 7 of the statute of Camilla, envisages the organisation of the following parallel initiatives: production and processing of goods; making agreements with producers for production planning, co-production, pre-financing, and risk-sharing; organisation of services, as well as social, cultural, and recreational activities and provision of meals and beverages, including alcoholic beverages. amongst these initiatives, one of the outcomes to be mentioned is represented by *Pomilla*, a tomato sauce produced by Camilla from hand-picked and hand-selected tomatoes from local companies in the provinces of Bologna, Modena, and Ferrara. Camilla negotiated and defined a fair price by paying producers five times more than the average price observed in mainstream distribution channels in 2019. Furthermore, packaging labels on the packaging apply the principle of price transparency, reporting not only ingredients, nutritional and traceability information, but also the price distribution across the different economic agents of this supply chain as illustrated in Fig. 3.

Finally, many educational activities are proposed ranging from the meetings with producers to courses on food product management, waste reduction, and food handling courses.

4.3. Topics emerged from verbal analysis results

Fig. 4 shows the results of the verbal analysis of annotations and informal interviews that were conducted to investigate both the motivations underlying the decision to become a member of Camilla and skills and abilities or other qualities that are necessary for the governance of this innovative AAFN.

The list of items depicted in Fig. 3 is consistent with the findings of previous research addressing citizens’ motivations in participating in consumers’ initiatives (Cooley and Lass 1998; Cox et al., 2008; Bean and Sharp, 2011; Schnell, 2013). These items were or-



Fig. 3. Pomilla tomato sauce on Camilla's shelves and details of Pomilla label.



Fig. 4. Topics emerged from verbal analysis of ethnographic research data analysis.

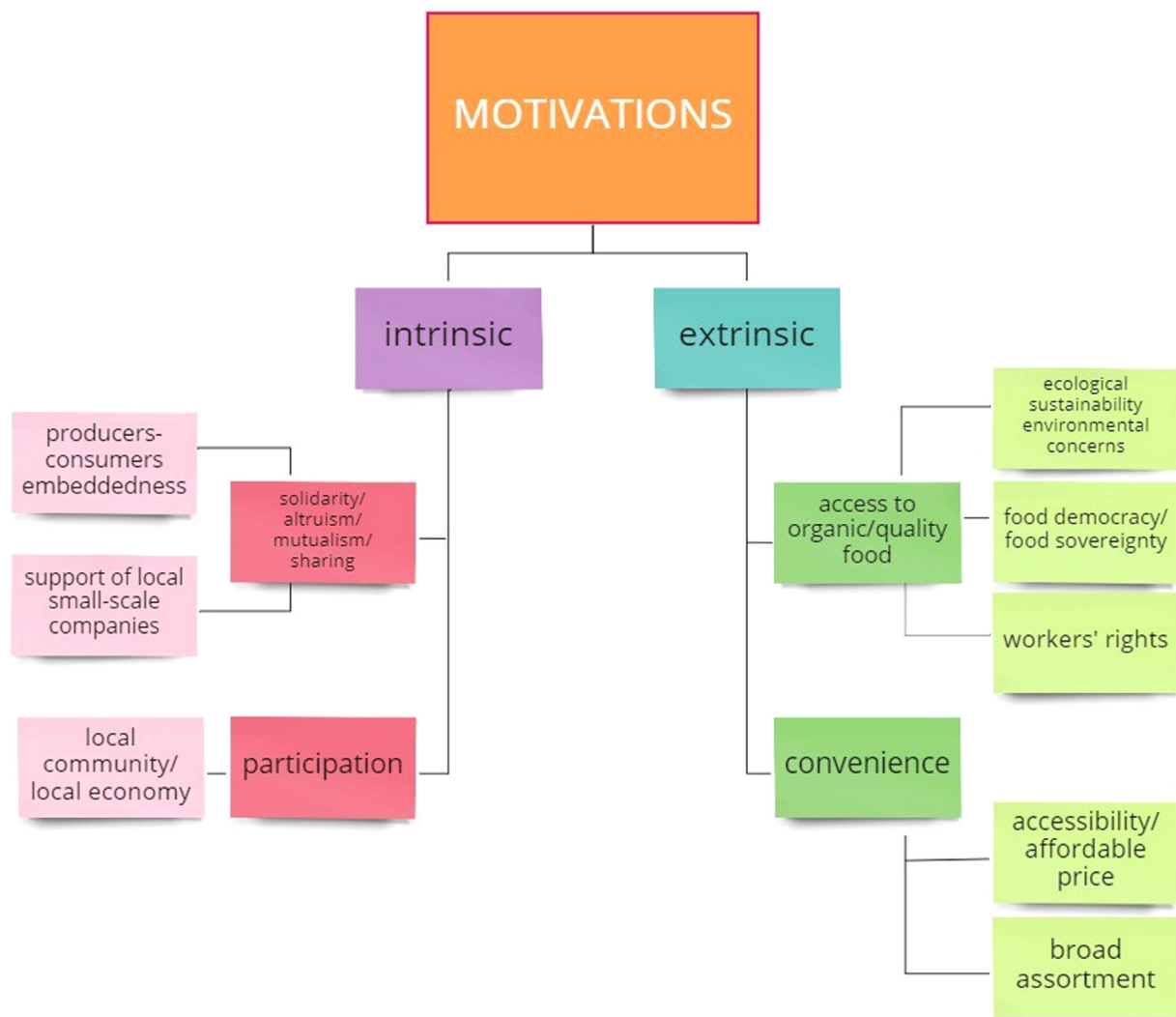


Fig. 5. Synopsis of topics and sub-topics related to the motivations of Camilla's members.

ganised in main topics and sub-topics based on the co-occurrences and reciprocity of the subject examined and further elaborated by motivations and governance as illustrated here after.

4.3.1. Motivations (study question 1)

Fig. 5 shows that there is significant evidence that the list of items presented in Fig. 3 indicates that the participation in Camilla activities is determined by intrinsic and extrinsic motivations. Intrinsic motivations occur when “doing something is inherently interesting or enjoyable”, while extrinsic motivations are linked to the aim of “doing something because it leads to separable outcome” (Ryan and Deci 2000: 56). Intrinsic motivation implies that dimensions of fun or challenge drive the action of people rather than external rewards or pressure. As such, intrinsic motivations are linked to the enjoyment that derives both from being involved in altruism/solidarity-based activities and to be more effective in participation processes at a local level. Being part of a common project involves a return to sociality, a sense of belonging to a community of people who share common values and principles as well as a reciprocity-based on a web of relationships. These participatory activities jointly contribute to revitalizing the local community and its alternative economic model through sharing information, competences, and experiences. As a result, increased participation brings to contextual benefits such as the empowerment of decision-making at community level.

Members of Camilla also mentioned several extrinsic motivations linked to the expectation of an instrumental outcome such as a reward or an approval. In particular, two recurrent topics were emphasized: quality, and convenience. Quality was discussed in relation to the recovery and renaissance of a food culture and the participation in Camilla initiative contributes to raise the consciousness of the food quality that people buy and consume. This was translated into a deeper knowledge of the territory as well as of the environment in which people live. According to Camilla's members, referring to local productions is a way to shorten the supply chain, revitalize the local economy and enhance the value chain. However, the issue of quality was also linked to concern regarding environmental and workers' rights. Members emphasized the necessity of rethinking the industrial supply chain to develop a sustainable model capable of preserving natural resources and strengthening food democracy and democracy *tout court*. Furthermore, it was frequently stressed by interviewees that they could purchase goods from the Camilla outlet that guarantee a fair income to producers without exploiting workers' rights.

As far as convenience is concerned, Camilla develops an economic model based on a closer relationship between consumers and producers that by-passes many intermediaries enabling many consumers to access quality and ethical goods at reasonable prices. Prices are indeed cheaper compared to those of the same prod-

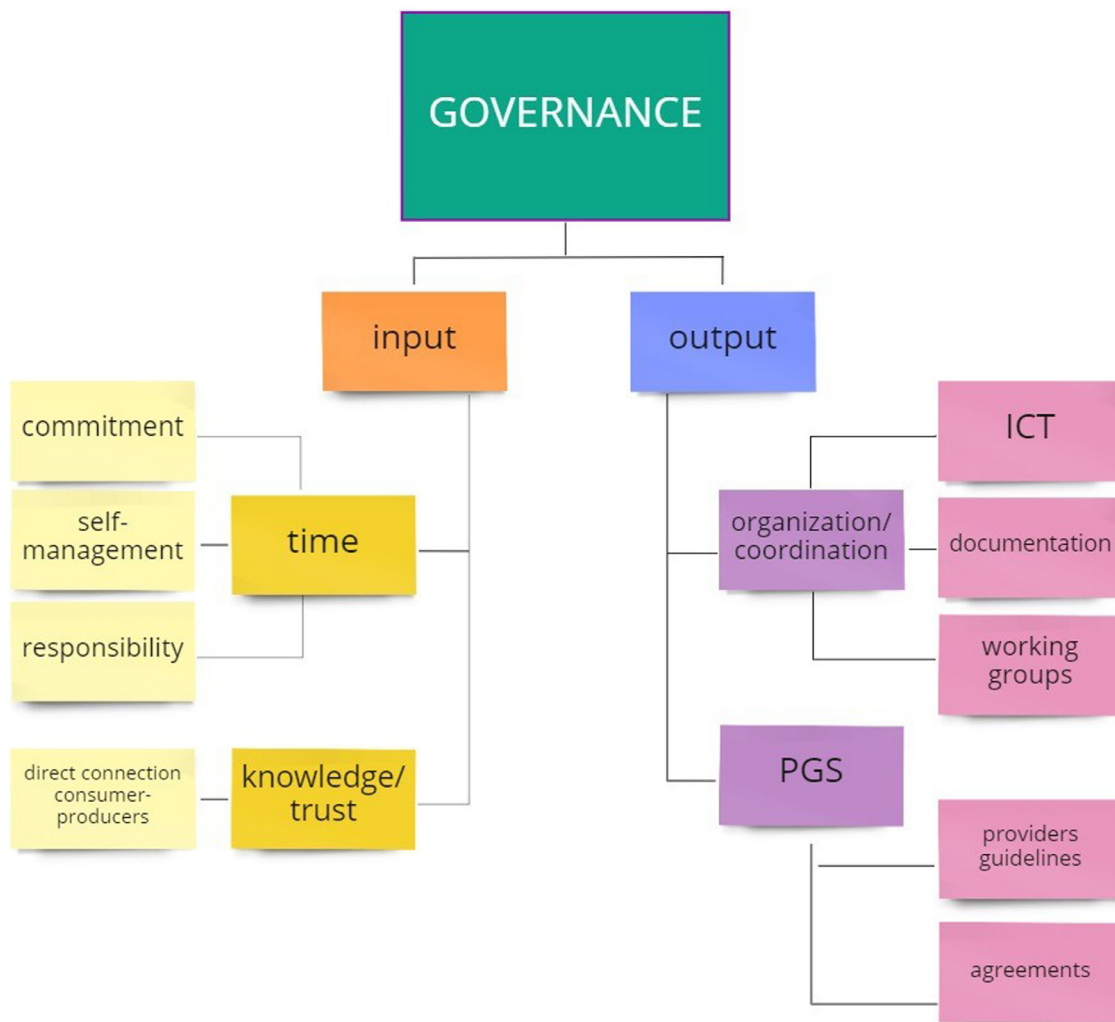


Fig. 6. Synopsis of topics and sub-topics related to the governance model of Camilla.

ucts available in large scale distribution channels and specialized shops. This is because Camilla applies an average mark-up of 24% on the processed products and 30% on the fresh products resulting in a cheaper price on the final good compared to the same products distributed in conventional channels and specialized stores. Furthermore, Camilla is currently developing supply chain agreements that have increased the number of bulk products that have resulted in a basket of products at even cheaper prices. Planning agreements with producers reduce their supply costs further (procurement cost) having eventually a positive impact on consumers' prices. Finally, Camilla's members also enjoy accessing a broad basket of sustainable products compared to those of farmers markets. Product assortment at the outlet simplifies shopping and requires less time in the procurement of sustainable food and non-food items.

4.3.2. Governance (study question 2 and 3)

Fig. 6 illustrates that the governance of Camilla is based on the use of inputs identified in the knowledge and skills of members who have time to dedicate to this innovative AAFN and whose use and activities lead to managerial outputs. The goods supplied by regular producers (e.g., local farmers and certified suppliers) are a key input of Camilla model and accessing quality products is a strategic option to meet members' expectations. However, these goods are procured only thanks to the marketing services provided by Camilla's members skills, knowledge, and time they have

to devote to these transactions. Camilla can rely upon many skills and competencies that members make available during activities such as seminars and workshops for the benefit of all. Time is important not only in terms of working but also in terms of extra activities that some members offer to Camilla (e.g., participation in working groups). As emphasized by one member, beyond their role in the governance system time spent on Camilla also leads to intrinsic gratification: "the time you spend for Camilla acquires value, it is not time wasted since you gain in social relations, you don't feel that you are working, you gain time of sociality that is quality time". Camilla operations rely on many activities constituting the collective action of group members. Trust represents the precondition and the lubricant strengthening the social bonds amongst Camilla's members and reducing the transaction costs of Camilla's procedures. Liaison amongst different actors, especially members and producers, rely on previous knowledge trustworthy relationships. These activities generate working rules that are clearly stated in key documents and build upon constitutional principles such as transparency (e.g. all documents are made available to all members through website, all members have access to the information about other members' contribution to Camilla's activities, etc.), democracy (e.g. clearly stated majority rules identified for different decision-making processes, clear redressal mechanisms, etc.), and participation (e.g. all members are entitled to participate in decision-making, all members are stimu-

lated to participate to working groups and other social activities, etc.). All members share the responsibility for the proper functioning of Camilla and are equally responsible, even if they donate just a minimum working time to Camilla. The massive use of ICT (website, COSER) contributes to making the working procedure smooth and effective. As underlined previously, technology represents a tool of paramount importance for simplifying co-production activities by reducing coordination costs and organization efforts (Castells, 1996; Meijer et al., 2012).

5. A discussion on the stylized facts emerging from Camilla case study

The results of the analysis of Camilla case study are discussed in the next sections considering both the co-production and collective action theoretical frameworks and the research results dealing with consumer motivation in participating in AAFN. Answers to the study questions are provided accordingly below.

5.1. What are the motivations of citizens' participating and engaging in AAFNs?

As discussed in the results section, it is possible to consider two types of motivations amongst Camilla's members that can be traced back to both extrinsic and intrinsic rewards (cf. Section 4.3.1).

Extrinsic motivations refer essentially to individual incentives, which are rewards in return for being a member of Camilla, namely:

- monetary rewards related to convenience, e.g., cheaper prices compared to food/non-food items of comparable characteristics in the market, accessibility to a convenient outlet in terms of distance, opening hours, retailing assortment;
- non-monetary rewards, e.g., having access to better goods that would otherwise not be produced/provided, and thus solving a problem of market failure/incompleteness.

Instead, intrinsic motivations refer primarily to psychological/behavioural reasons, related to the following social and normative values:

- altruism/solidarity, e.g., supporting the local economy/community, enjoying interacting with others;
- sense of belonging, e.g., feeling better in belonging to a community of practice, enjoying the approval from other people sharing similar values, strengthening local community ties (mutuality, reciprocity);
- participation, e.g., strengthening democracy and influence political decisions at a local level.

As such, convenience aspects linked to the accessibility to a broad assortment of quality products at affordable price seem to make Camilla a successful model able to solve the problematic issues identified in academic literature dealing with consumers motivation and accessibility to AAFNs (Seyfang, 2006; Connolly and Klaiber, 2014; Bruce and Som Castellano, 2016). This evidence is confirmed by the establishment in Emilia Romagna and in other Italian Regions of four food coops (Stadera, OLTREFood Coop, Mesa Noa Food Coop, Le Vie dell'Orto) inspired on Camilla experience.

Overall, there are contextual factors that favoured Camilla's birth and success such as the pre-existence of Alchemilla Solidarity-based Purchasing Group and CampiAperti local organic smallholders' association as well as the broader civic traditions of the city of Bologna. This qualifies the cultural traits of Camilla's members-to-be as "conditional co-operators" (Ostrom, 2000), meaning that they were more favourably disposed to cooperate

than other agents.⁷ As a result, people belonging to this cultural environment and featuring this set of values are willing to sacrifice their short-term personal interest for the sake of the long-term individual and group benefits stemming from collective action, that is to pursue a "cooperative gambit" (Pestoff, 2012). Cooperative gambit and small-group control may explain the birth and growth of the Camilla co-production experience.

5.2. How does citizens/consumers collective action work in the private sector?

To discuss the effectiveness of Camilla's organisational/governance, it is necessary to contrast Camilla's organisational structure with Ostrom's IAD framework (Ostrom, 2010) (cf. Section 2.2) as well as with work on public policies and using Ostrom's (1990) principles for sustainable management of common-pool resources.

The biophysical system deals with the physical attribute of the resource or with its rival and or excludability characteristics. In the Camilla case study, people co-operate to set up and manage a peculiar outlet where quality assurance and other marketing functions are produced directly by the outlet users. This is a typical case of human-made common (Hess and Ostrom, 2007) as the outlet provides a specific market tailored to the needs and values of its customer. The outlet itself may become rival if overcrowded and the exclusion of non-contributors should be carefully designed. Differently from the typical natural resource which are characterized by rivalry in consumptions and over exploitation if not regulated, here free riding arises notably when people do not contribute (or under contribute) to the maintenance of the common thus leading to the failure of the initiative. The regulation in use or the governance is represented by the set of rules (written or unwritten), social norms and property rights, governing the management of the resource such as the "Charter of principles", the "Statute", the "Regulation of co-operating members", and the "Guidelines for choosing providers", all institutions providing incentives against free riding. Notably, the monitoring and exclusion of suppliers who no longer meet or satisfy the original selection criteria is provided first by the productions group and afterwards by the general assembly. Finally, the attributes of the community are characterised by a relatively small number of members (at least with respect to consumer cooperatives such a coop Italia well represented in the Bologna area), different values, needs and abilities to contribute to the resource management. In the case of the outlet, values are an important part of motivations to co-produce together with the monetary rewards discussed in the previous section. The action situation is one where participants face the free rider dilemma, but the rules that have so far been devised have assured a widespread compliance with the internal rules of contribution (work) and appropriation of the benefits (the right to use the outlet). The outcomes of the whole process are Camilla's outputs and ultimately self-consumption of the co-produced goods by members.⁸

⁷ Extensive research in experimental psychology shows that, in addition to "rational egoists" that are the agents pursuing their self-interest, there are two other types of players in collective action situations (Ostrom, 2000), namely: "conditional cooperators", who are willing to initiate or join collective action when they estimate that others will reciprocate and they will continue such actions as long as others demonstrate similar behaviour, and "willing punishers", who rely more heavily on social control and punishment as the basis for collective action. Research shows that many people combine both these traits and, more importantly, both groups are prone to pursue cooperative gambit, especially when certain institutional forms exist (Pestoff, 2012).

⁸ This reflects the current situation. There is a provision in the Statute (art. 7.a) that gives the possibility to consider selling Camilla's coproduced goods also to non-members "according to specific regulations" to be drafted, should Camilla decide to open to third parties.

The process of collective action is embedded in the socio-economic and political environment with its institutional constraints (e.g., marketing regulations, fiscal regulations and so on) and political arenas (for instance, urban food initiatives at municipality level). Notably, the cultural environment in which the collective action takes place with its system of values, salient discourses on the object of collective action and so on in the case of Camilla is informed by the civic traditions of the city of Bologna (Putnam et al., 1993).⁹

From the analysis above we can see that Ostrom's main principles for sustainable management of common-pool resources are met. Indeed, clear group boundaries are set (membership) to determine who uses the outlet and who does not (first principle). This also defines who is in principle entitled to participate in the process of co-production and clear mechanisms (i.e., the web application to fill the work calendar; the surveys on member skills, willingness to contribute, and buying habits; etc.), set by the Regulations of cooperative members, are in place to identify how members could contribute time and effort (second principle). The right of members to influence decisions concerning the management of the resource are democratically ensured through Camilla's General assembly and the rules for the election and dismissal of the Executive Boards and Auditors (third principle). The same tools are also used as redress and conflict-solving mechanisms specifically identified in the Statute (fourth principle). Therefore, we can qualify Camilla as a highly self-governing group.

Finally, recalling the risk of failure of voluntary organisations in the pursuit of public interest (Olson 1971), primarily due to the costs of collective action and free riding, Camilla is a small-scale group that allows individual members to survive and control the efforts and contributions of others. Moreover, the members' strong homogeneity in terms of shared social norms further decreases the likelihood of free riding at Camilla.

5.3. Under which circumstances do people co-produce?

The fundamental question about why people should co-produce within an institution like Camilla can be answered contrasting the association performance with that of alternative arrangements related to the market and State mechanisms of agri-food governance (Renting and Wiskerke, 2010).

The first option is the standard private response to the issue of providing a high-quality food item demanded by (some) consumers. This solution is prevented because of the credence nature of Camilla's goods: high risk and asymmetric information determine too high transaction costs to disclose information and assure quality and eventually translate into market incompleteness/failure. On the other hand, the purely public response (through regulation) seems to be prevented because of the limited budget that public administration can allocate to this purpose and the limited market (i.e., small size of potential consumers) of these high-quality foods.

The co-production response represents a third way of solving the above problems akin of the civil society mechanism of agri-food governance by Renting and Wiskerke (2010). Participants individually enjoy a higher utility and, at the same time, generate the best social outcome because of both lower transaction costs

⁹ Bologna has a strong and long-lasting tradition of civic engagement, political equality, solidarity, tolerance, and a robust social fabric of associations that lead to a strong "civic community" (Putnam et al., 1993, especially chapter 4). This tradition is continuously evolving. As stated by Michele D'Alena, Director of the Civic Imagination Office of the Municipality of Bologna in a recent interview, in Bologna "Bologna municipality has begun to design different instruments. One of the most famous is the 'regulation on public collaboration between citizens and the city for care and regeneration of urban commons', the co-operation pact between citizen and communities." (Hopkins, 2019).

and intrinsic rewards which may offset the opportunity costs of the time and resources put into the process (Fig. 7). The utility function of Camilla's consumers is characterised by (i) a structure of preference that positively values some quality traits of the co-produced good (i.e. they show a higher willingness to pay for sustainability, ethical production/provision standards, etc.), and (ii) altruism and solidarity, meaning that they positively value intrinsic rewards such as supporting the local economy/community, enjoying interacting with others, participating and influencing democratic processes at local level, etc.

These two features determine the willingness to contribute time and effort (on its turn dependant on the opportunity cost of time) to have provided a better-quality food item and the willingness of being engaged in collective action with other trustful agents to solve the issue of food market incompleteness/failure. The collective action contributes to increase participants' utility through two effects: via co-production intrinsic rewards, and by lowering the transaction costs thanks to the exploitation of economies of scale and scope as compared to the pre-existing Solidarity-based Purchasing Group. Reputational mechanisms such as the participatory guaranteed scheme, repeated exchange with selected food providers such as CampiAperti organic farmers and other trustful groups of suppliers, also contribute to lower the number of middlemen.

In short, the co-production seems to be a solution capable of guaranteeing an increase in individual utility gain because of both efficiency gains (solving market incompleteness/failure) and intrinsic rewards.

The utilitarian point of view presented above is based on trade-type interactions and individualistic rationality. This aspect may be complemented by an alternative one based on community interactions dominated by norms and rules of reciprocity and forms of social rationality (Vatn, 2015, pp. 139–142). From a trade point of view a key issue is represented by the cost benefit balance of the coproduction effort i.e., when resources (money and time) devoted to the collective action are repaid by the outcome. As stated above, this depends on the structure of consumers' preferences (which may include altruism), their time opportunity cost and degree of abatement of transaction costs created through the coproduction process. The extent to which the resource issue can act as a constraint is likely to depend on the ratio between the time devoted to Camilla and the overall participants' potential working time. Currently co-operators are engaged 2.5 h a month, that is less than 2% of the potential working time of a white-collar worker (36 h per week).¹⁰ In this context socio economic characteristics of Camilla's members such as income, employment and education are likely to play a key role.

From a community point of view, norms of appropriate behaviour and forms of social rationality based on what is good for the community, rather than for the self, will inform co-producers' behaviour and determine the degree of attainment of collective goals defined through some sort of deliberative processes (the assembly of the cooperative and the working groups). Socio-cultural characteristics of participants and the degree they share common values and norms (the homogeneity of the group) are key factors of success of the collective action (Ostrom, 2010).

5.4. Does citizens' co-production lead to delivery of a better service?

Co-production schemes in place within Camilla do lead to delivery of a better service according to the wishes of its members. In fact, Camilla's main result is a food/non-food item customized

¹⁰ This figure compares with an average share of Italian households' food expenditure of 18% in 2019 (ISTAT 2020: <https://www.istat.it/it/files//2020/06/Household-consumption-expenditure-2019-1.pdf>)

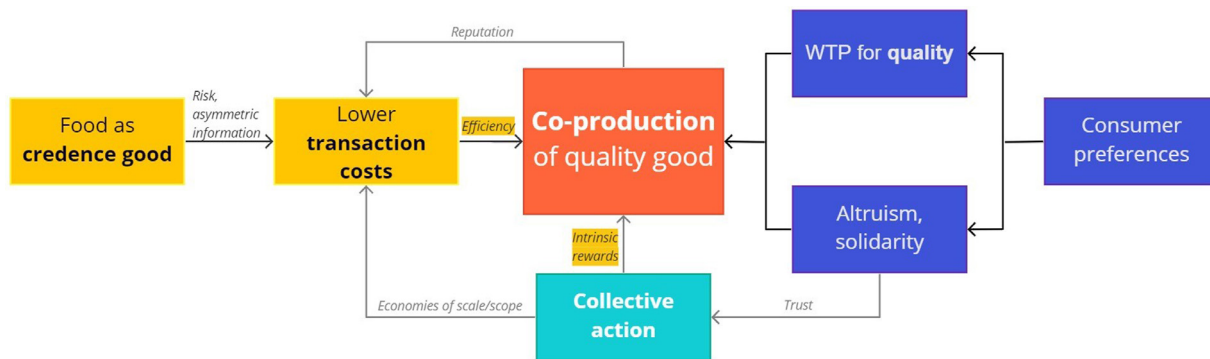


Fig. 7. A conceptual framework for the analysis of Camilla co-production case.

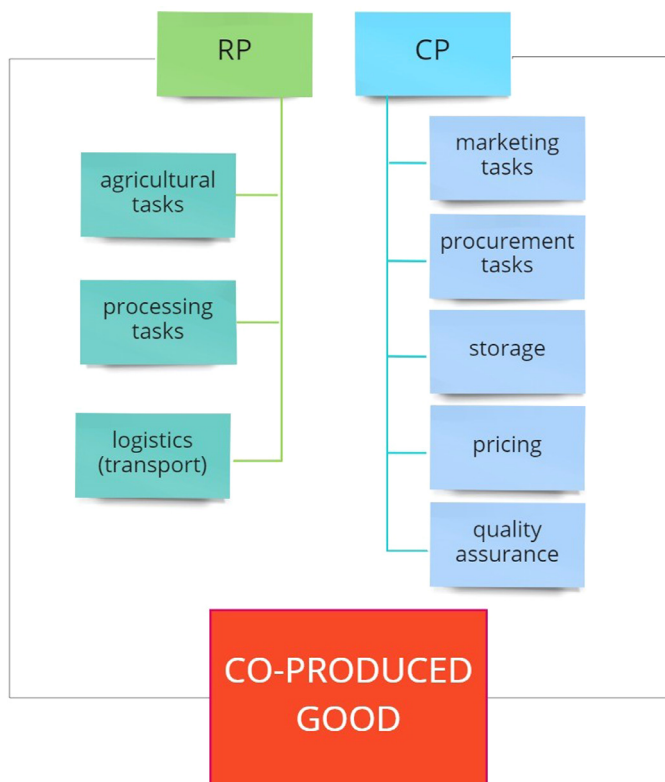


Fig. 8. The process leading to the co-produced good.

to the needs/expectations of its associates. This customized item can be defined as the “co-produced good”. Indeed, along the production processes that led to this customized item, including the agricultural and transformation tasks to produce processed good (oil, wine, or Pomilla) as well as the marketing tasks such as transportation, product procurement, assembling and storage, quality assurance etc., some tasks are performed by regular producers (RP), other by consumer producers (CP) as graphically shown in Fig. 8.

This process leads to a practice of co-production that includes some characteristics/services in a standard food/non-food item that bring members to perceive the good as “augmented” in ethical and sustainable terms. In other words, the co-produced good is a product that derives from a differentiation process resulting in higher quality compared to conventional counterparts. As such, the co-produced item is a “credence good” (Ford et al., 1988) whose market production and provision could result in market failures because of asymmetric information and risk.

Furthermore, although Camilla’s members operate almost at the final consumption stage in the value chain, the co-produced goods incorporate all upstream stages in the supply chain according to the boundaries of the production process. More precisely, to guarantee the quality of goods provided by Camilla, some quality standards need to be guaranteed not only at the co-production stage (provision) but also at farming, processing, and distribution stages. In other words, Camilla’s co-produced items are made by food/non-food items, which are the product of the regular producers for the agri-food tasks, plus some services tasks (e.g., marketing services) directly contributed by the consumer producers (e.g., Camilla’s members) and some other services (quality guarantee certification) indirectly induced by the consumer producers whom regular producers must comply with.

Therefore, quality control and information disclosure are key for the co-production of Camilla’s output. To achieve this, Camilla organises training activities to enhance members competencies in terms of food quality assurance and adopts various guarantee assurance tools such as the “Guidelines for choosing providers”. As seen, Camilla is developing also an internal Participatory Guarantee System. As long as it is applied to Camilla’s food this system is only one more tool for quality assurance within the co-production organisation.

6. Concluding remarks

The Camilla case study contributes to the recent literature on AAFNs presenting an example of consumers’ co-production in food chain through collective action. The research has highlighted how civil society is driving a change in the food chain towards more sustainable production systems in line with what is known in the literature as food citizenship and food democracy which drive passive consumers to a transition towards active citizens both improving the democratic process and leading to a better control on the food choice (Lang and Heasman, 2004). Noticeably, in these initiatives, attention to the sustainability of agricultural techniques comes along with an emphasis on sustainable practices in later stages on the chain and deals with issues such as recycling and food waste reduction. In this way, the values underpinning the initiative become anchored in everyday practices of consumption (Bui et al., 2016). Although not exclusively territorially based, the Camilla initiative draws on a network of locally based actors along the food chain who have activated learning processes (they consider the initiative in term of a laboratory) on both technical and organisational issues. Trust relationships lower transaction costs thus allowing the emporium to practice affordable food prices to its members. Results of the present study shed light on an initiative of consumption that can be considered a valuable example of co-production activity leading to better management of customized food procurement by also promoting a renewed sense of

belonging and community amongst its members. From a critical perspective we are aware of the risk of idealise the rhetoric about alternative food systems as a panacea for the problematic issues linked to the access of food quality. Many authors have underlined the elitist and “whiteness” aspects of AAFNs which, in many cases, privilege white and middle-class citizens in accessing sustainable instead of industrialized food products (Hinrichs, 2003; Slocum, 2007; Edwards, 2019). Furthermore, “wealthier, better educated and non-minority citizens may be more willing and able to engage in co-production activities” (Rosentraub and Sharp, 1981, p. 517). In this sense, the inability to serve all social classes and the risk of creating an elite group can threaten the social justice values behind the foundation of an experience such that of Camilla.

In this framework, the analysis of a single case study presents some limitations in solving and answering to several open questions. For instance, further research could compare Camilla with other consumers’ initiatives to understand whether they can genuinely be considered inclusive experiences. Simplifying access, in both economic and logistic terms, to quality food even for low-income households would pursue social justice goals which have been considered so important in the evolution of AAFNs (Lamine et al., 2019). By doing so, it would also be possible to understand if co-production in the food sector is able to solve the “food desert” problematic issue (Kato and McKinny, 2015) affecting the healthy food purchasing behaviour of the most vulnerable groups of consumers. Future research is also necessary to overcome the defensive localism approach and escape from the local food trap which considers “local” inherently desirable (Born and Purcell, 2006; Sonnino, 2010) and assess whether these consumers initiatives could represent successful strategies in reshaping the global food system. Finally, the comparison of different co-production experiences making connections to city-level, as well as those of national/regional policy frameworks, can both explain the mechanisms that are at play better and identify key elements able to broaden the access to food quality promoting sustainable initiatives like Camilla.

Despite Camilla’s potential limitations, this initiative is still an example of a new and emerging alternative to conventional grocery stores that responds to sustainable social demand of food quality and sense of community. Whether the Camilla prototype will lead to a wider social movement capable of affecting the dominant system or becoming conventionalised as other consumer co-operatives did in the past (Van der Ploeg, 2016) remains an open question that cannot be answered in the short run.

Declaration of Competing Interest

The authors declare no conflict of interests/competing interests.

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References

Agranoff, R., 2007. *Managing Within Networks: Adding Value to Public Organizations*. Georgetown University Press.

Alford, J., 2009. Engaging Public Sector Clients: From Service-Delivery to Co-Production. Palgrave Macmillan: UK <https://www.palgrave.com/gp/book/9780230223769>.

Alford, J., 2014. The multiple facets of co-production: building on the work of Elinor Ostrom. *Public Manag. Rev.* 16 (3), 299–316.

Aligica, P.D., Tarko, V., 2013. Co-production, polycentricity, and value heterogeneity: the Ostroms’ public choice institutionalism revisited. *Am. Polit. Sci. Rev.* 107 (4), 726–741. doi:10.1017/S0003055413000427.

Angrosino, M., 2007. *Doing Ethnographic and Observational Research*. Sage doi:10.4135/9781849208932.

Antona, M., Bousquet, F., 2017. *Une troisième voie entre l’État et le marché*. Éditions Quae, Versailles, FR.

Baggio, J.A., Barnett, A.J., Perez-Ibarra, I., Brady, U., Ratajczyk, E., Rollins, et al., 2016. Explaining success and failure in the commons: the configural nature of Ostrom’s institutional design principles. *Int. J. Commons* 10 (2), 417–439. doi:10.18352/ijc.634.

Bazeley, P., Jackson, K., 2013. *Qualitative Data Analysis With NVivo*. SAGE Publications Ltd, Los Angeles London New Delhi Second edition.

Bean, M., Sharp, J.S., 2011. Profiling alternative food system supporters: the personal and social basis of local and organic food support. *Renew. Agric. Food Syst.* 26 (3), 243–254. doi:10.1017/S1742170511000032.

Bollier, D., 2007. The growth of the commons paradigm. In: *Understanding Knowledge as a Commons*. The MIT Press, pp. 27–40. doi:10.2307/j.ctt5hhdf6.5 edited by Charlotte Hess and Elinor Ostrom From Theory to Practice.

Born, B., Purcell, M., 2006. Avoiding the local trap: scale and food systems in planning research. *J. Plan. Educ. Res.* 26 (2), 195–207. doi:10.1177/0739456X06291389.

Bovaird, T., Loeffler, E., 2012. From engagement to co-production: the contribution of users and communities to outcomes and public value. *Volunt. Int. J. Volunt. Nonprofit Organ.* 23 (4), 1119–1138. doi:10.1007/s11266-012-9309-6.

Brandtsen, T., Pestoff, V., 2006. Co-production, the third sector and the delivery of public services. *Public Manag. Rev.* 8 (4), 493–501. doi:10.1080/14719030601022874.

Brown, K., Keast, R., Waterhouse, J., Murphy, G., Mandell, M., 2012. *Co-Management to Solve Homelessness: Wicked Solutions for Wicked Problems*. New Public Governance, the Third Sector and Co-Production, pp. 211–226 January.

Bruce, A.B., Som Castellano, R.L., 2016. Labor and alternative food networks: challenges for farmers and consumers. *Renew. Agric. Food Syst.* 32 (5), 403–416.

Brudney, J.L., England, R.E., 1983. Toward a definition of the coproduction concept. *Public Adm. Rev.* 43 (1), 59–65. doi:10.2307/975300.

Brunori, G., Rossi, A., Guidi, F., 2012. On the new social relations around and beyond food. Analysing consumers’ role and action in Gruppi Di Acquisto Solidale (solidarity purchasing groups). *Sociol. Ruralis* 52 (1), 1–30. doi:10.1111/j.1467-9523.2011.00552.x.

Bui, S., Cardona, A., Lamine, C., Cerf, M., 2016. Sustainability transitions: insights on processes of niche-regime interaction and regime reconfiguration in Agri-Food Systems. *J. Rural Stud.* 48, 92–103. doi:10.1016/j.jrurstud.2016.10.003, December.

Castells, Manuel., 1996. *The Rise of The Network Society: The Information Age: Economy, Society and Culture*. Wiley Blackwell.

Cicatiello, C., Pancino, B., Pascucci, S., Franco, S., 2014. Relationship patterns in food purchase: observing social interactions in different shopping environments. *J. Agric. Environ. Ethics* 28, 21–42. doi:10.1007/s10806-014-9516-9.

Connolly, C., Klaiber, H.A., 2014. Does organic command a premium when the food is already local? *Am. J. Agric. Econ.* 96 (4), 1102–1116. doi:10.1093/ajae/aa030.

Cooley, J.P., Lass, D.A., 1998. Consumer benefits from community supported agriculture membership. *Rev. Agric. Econ.* 20 (1), 227–237. doi:10.2307/1349547.

Cox, R., Holloway, L., Venn, L., Dowler, L., Ricketts Hein, J., Kneafsey, M., Tuomainen, H., 2008. Common ground? Motivations for participation in a community-supported agriculture scheme. *Local Environ.* 13 (3), 203–218. doi:10.1080/13549830701669153.

Crang, M., Cook, I., 2007. *Doing Ethnographies*. Sage doi:10.4135/9781849208949.

Davis, G., Ostrom, E., 1991. A public economy approach to education: choice and co-production. *Int. Polit. Sci. Rev.* 12 (4), 313–335. doi:10.1177/019251219101200405.

Dunston, R., Lee, A., Boud, D., Brodie, P., Chiarella, M., 2009. Co-Production and health system reform—from Re-imagining to Re-making. *Aust. J. Public Adm.* 68 (1), 39–52. doi:10.1111/j.1467-8500.2008.00608.x.

Edwards, F., 2019. *Alternative food networks*. *Encyclopedia of Food and Agricultural Ethics* In: Kaplan D.M. (eds). Springer, Dordrecht doi:10.1007/978-94-024-1179-9_513.

Ford, G.T., Smith, D.B., Swasy, J.L., 1988. An empirical test of the search, experience and credence attributes framework. *ACR N. Am. Adv. NA* 15. <https://www.acrwebsite.org/volumes/6817/volumes/v15/NA-15>.

Galli, F., Brunori, G., Di Iacovo, F., Innocenti, S., 2014. Co-producing sustainability: involving parents and civil society in the governance of school meal services. A case study from Pisa, Italy. *Sustainability* 6, 1643–1666. doi:10.3390/su6041643.

Giampietri, E., Finco, A., Del Giudice, T., 2016. Exploring consumers’ behaviour towards short food supply chains. *Br. Food J.* 118 (3), 618–631. doi:10.1108/BFJ-04-2015-0168.

Giampietri, E., Verneau, F., Del Giudice, T., Carfora, V., Finco, A., 2018. A theory of planned behaviour perspective for investigating the role of trust in consumer purchasing decision related to short food supply chains. *Food Qual. Prefer.* 64, 160–166. doi:10.1016/j.foodqual.2017.09.012.

Goodman, D., 2002. Rethinking food production–consumption: integrative perspectives. *Sociol. Ruralis* 42 (4), 271–277. doi:10.1111/1467-9523.00216.

Goodman, D., 2004. Rural Europe Redux? Reflections on alternative agro-food networks and paradigm change. *Sociol. Ruralis* 44 (1), 3–16. doi:10.1111/j.1467-9523.2004.00258.x.

Hess, C., Ostrom, E., 2007. *Understanding Knowledge as a Commons. From Theory to Practice*. The MIT Press, Cambridge, MA.

Hinrichs, C.C., 2003. The practice and politics of food system localization. *J. Rural Stud.* 19, 33–45. doi:10.1016/S0743-0167(02)00040-2.

- Holloway, L., Kneafsey, M., Venn, L., et al., 2007. Possible food economies: a methodological framework for exploring food production–consumption relationships. *Sociol. Ruralis* 47 (1), 1–19. doi:10.1111/j.1467-9523.2007.00427.x.
- Hopkins, R. (2019). Bologna, the City with a 'Civic Imagination Office'. Interview to Michele D'Alena, Director of the civic imagination office of the municipality of Bologna. Available at <https://www.resilience.org/stories/2019-03-07/bologna-the-city-with-a-civic-imagination-office/> Accessed: 17/06/2021
- Hunt, A.R., 2007. Consumer interactions and influences on farmers' market vendors. *Renew. Agric. Food Syst.* 22 (1), 54–66. doi:10.1017/S1742170507001597.
- Jackson, P., 2001. Making sense of qualitative data. In: *Qualitative Methodologies for Geographers: Issues and Debates*. London: Arnold, pp. 199–214.
- Kato, Y., McKinney, L., 2015. Bringing food desert residents to an alternative food market: a semi-experimental study of impediments to food access. *Agric. Hum. Values* 32 (2), 215–227. doi:10.1007/s10460-014-9541-3.
- Kiser, L.L., Percy, S.L., 1980. The concept of coproduction and its implications for public service delivery. In: *Proceedings of the Annual Meeting of the American Society for Public Administration*, San Francisco, pp. 13–16.
- Kneafsey, M., Holloway, L., Cox, R., Venn, L., Dowler, E., 2008. *Reconnecting Consumers, Producers and Food: Exploring Alternatives*. Berg Publishers.
- Lamine, C., Garçon, L., Brunori, G., 2019. Territorial agrifood systems: a Franco-Italian contribution to the debates over alternative food networks in Rural Areas. *J. Rural Stud.* 68, 159–170. doi:10.1016/j.jrurstud.2018.11.007.
- Landesmann, M.A., Scazzieri, R., 2009. *Production and Economic Dynamics*. Cambridge University Press.
- Lang, T., Heasman, M., 2004. *Food wars: the Global Battle For mouths, Minds and Markets*. Earthscan, London.
- Lockie, S., 2009. Responsibility and agency within alternative food networks: assembling the "citizen consumer. *Agric. Hum. Values* 26 (3), 193–201. doi:10.1007/s10460-008-9155-8.
- McGinnis, M.D., 1999. *Polycentricity and Local Public Economies: Readings from the Workshop in Political Theory and Policy Analysis*. University of Michigan Press.
- McGinnis, M.D., 2011. An introduction to IAD and the language of the Ostrom workshop: a simple guide to a complex framework. *Policy Stud. J.* 39 (1), 169–183. doi:10.1111/j.1541-0072.2010.00401.x.
- Meijer, A.J., Curtin, D., Hillebrandt, M., 2012. Open government: connecting vision and voice. *Int. Rev. Adm. Sci.* 78 (1), 10–29. doi:10.1177/0020852311429533.
- Miller, C.A., Wyborn, C., 2018. Co-Production in Global Sustainability: histories and Theories. *Environ. Sci. Policy* doi:10.1016/j.envsci.2018.01.016, February.
- Miralles, I., Dentoni, D., Pascucci, S., 2017. Understanding the organisation of sharing economy in agri-food systems: evidence from alternative food networks in Valencia. *Agric. Hum. Values* 34 (4), 833–854. doi:10.1007/s10460-017-9778-8.
- Olson, M., 1971. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Harvard University Press.
- Osborne, S.P., 2010. *The New Public Governance: Emerging Perspectives On the Theory and Practice of Public Governance*. Routledge.
- Ostrom, E., 1996. Crossing the great divide: coproduction, synergy, and development. *World Dev.* 24 (6), 1073–1087. doi:10.1016/0305-750X(96)00023-X.
- Ostrom, E., 1998a. Scales, Polycentricity, and Incentives: designing Complexity to Govern Complexity. In: *Protection of Global Biodiversity: Converging Strategies*. Duke University Press, Raleigh, pp. 149–167 eds. di Lakshman D. Guruswamy, and Jeffrey A. McNeely.
- Ostrom, E., 1998b. The comparative study of public economies. *Am. Econ.* 42 (1), 3–17.
- Ostrom, E., 2000. Collective action and the evolution of social norms. *Jo. Econ. Perspect.* 14 (3), 137–158. doi:10.1257/jep.14.3.137.
- Ostrom, E., 2007. Collective action and local development processes. *Sociologica* 1 (3), 1–31. doi:10.2383/25950.
- Ostrom, E., 2009. A general framework for analyzing sustainability of social-ecological systems. *Science* 325 (5939), 419–422. doi:10.1126/science.1172133.
- Ostrom, E., 2010. Beyond markets and states: polycentric governance of complex economic systems. *Am. Econ. Rev.* 100 (3), 641–672. <https://www.aeaweb.org/articles?id=10.1257/aer.100.3.641>.
- Ostrom, E., Chang, C., Pennington, M., Tarko, V., 2012. *The Future of the Commons - Beyond Market Failure and Government Regulation*. SSRN Scholarly Paper ID 2267381. Social Science Research Network, Rochester, NY <https://papers.ssrn.com/abstract=2267381>.
- Ostrom, E., Parks, R.B., Whitaker, G.P., Percy, S.L., 1978. The public service production process: a framework for analyzing police services. *Policy Stud. J.* 7 (s1). doi:10.1111/j.1541-0072.1978.tb01782.x, 381–381.
- Ostrom, V., Tiebout, C.M., Warren, R., 1961. The organization of government in metropolitan areas: a theoretical inquiry. *Am. Polit. Sci. Rev.* 55 (4), 831–842. doi:10.2307/1952530.
- Palumbo, R., Vezzosi, S., Piccioli, P., Landini, A., Annarumma, C., Manna, R., 2018. Fostering organizational change through co-production. Insights from an Italian experience. *Int. Rev. Public Nonprofit Market.* 15 (3), 371–391. doi:10.1007/s12208-018-0205-7.
- Parks, R.B., Baker, P.C., Kiser, L., Oakerson, R., Ostrom, E., Ostrom, V., Percy, S.L., Vandivort, M.B., Whitaker, G.P., Wilson, R., 1981. Consumers as coproducers of public services: some economic and institutional considerations. *Policy Stud. J.* 9 (7), 1001–1011. doi:10.1111/j.1541-0072.1981.tb01208.x.
- Pestoff, V., 2006. Citizens and co-production of welfare services. *Public Manag. Rev.* 8 (4), 503–519. doi:10.1080/14719030601022882.
- Pestoff, V., 2012. Co-production and third sector social services in Europe: some concepts and evidence. *Volunt. Int. J. Volunt. Nonprofit Organ.* 23 (4), 1102–1118. doi:10.1007/s11266-012-9308-7.
- Porter, D.O., 2013. Co-production and network structures in public education. In: *New Public Governance, the Third Sector and Co-Production*. Routledge, pp. 145–168. doi:10.4324/9780203152294 Victor Pestoff, Taco Brandsen, Bram Verschuere (Eds.).
- Prahalad, C.K., Ramaswamy, V., 2004. *The Future of Competition: Co-Creating Unique Value with Customers*. Harvard Business School Press, Boston USA.
- Putnam, R.D., 1993. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton University Press, Princeton.
- Renting, H., Wiskerke, J.S.C., 2010. New emerging roles for public institutions and civil society in the promotion of sustainable local agro-food systems. In: *Proceedings of the Paper presented at 9th European IFSA Symposium*. Vienna, Austria.
- Renting, H., Marsden, T.K., Banks, J., 2003. Understanding alternative food networks: exploring the role of short food supply chains in rural development. *Environ. Plan. A Econ. Space* 35 (3), 393–411. doi:10.1068/a3510.
- Renting, H., Schermer, M., Rossi, A., 2012. Building food democracy: exploring civic food networks and newly emerging forms of food citizenship. *Int. J. Sociol. Agric. Food* 19 (3), 289–307.
- Rosentraub, M.S., Sharp, E.B., 1981. Consumers as producers of social services: coproduction and the level of social services. *South. Rev. Public Adm.* 4, 502–539.
- Sacchi, G., 2018. The ethics and politics of food purchasing choices in Italian consumers' collective action. *J. Agric. Environ. Ethics* 31 (1), 73–91. doi:10.1007/s10806-018-9710-2.
- Sacchi, G., Cei, L., Stefani, G., Lombardi, G.V., Rocchi, B., Belletti, G., Gagliardi, E., Nocella, G., Mikkola, M., Zimoch, U., Macken-Walsh, A., Hyland, J., Henchion, M., Bocci, R., Bussi, B., De Santis, G., Rodriguez y Hurtado, I., De Kochko, P., Riviere, R., Carrascosa, M., González, M., Pearce, B., Lampkin, N., Padel, P., Sellars, A., Vindras, C., Rey, F., Chable, V., Cormery, A., Vasvari, G., 2018. A multi-actor literature review on alternative and sustainable food systems for the promotion of cereal biodiversity. *Agriculture* 8 (11), 173. doi:10.3390/agriculture8110173.
- Sacchi, G., 2019. Social innovation matters: the adoption of participatory guarantee systems within Italian alternative agri-food networks. *Strateg. Change* 28 (4), 241–248. doi:10.1002/jsc.2265.
- Schlappa, H., 2012. Co-management in Urban regeneration: new perspectives on transferable collaborative practice. In: *New Public Governance, The Third Sector and Co-production*. Routledge, New York, pp. 227–244 eds. Victor Pestoff, Taco Brandsen, & Bram Verschuere.
- Schnell, S.M., 2013. Food miles, local eating, and community supported agriculture: putting local food in its place. *Agric. Hum. Values* 30 (4), 615–628. doi:10.1007/s10460-013-9436-8.
- Seyfang, G. (2006). *Conscious consumer resistance? Local organic food networks versus the supermarkets*. CSERGE Working Paper EDM No. 06-14. Available at <http://hdl.handle.net/10419/80292> Accessed: 17/06/2021
- Slocum, R., 2007. Whiteness, space and alternative food practice. *Geoforum* 38, 520–533. doi:10.1016/j.geoforum.2006.10.006.
- Smithers, J., Lamarche, J., Joseph, A.E., 2008. Unpacking the terms of engagement with local food at the Farmers' Market: insights from Ontario. *J. Rural Stud.* 24 (3), 337–350. doi:10.1016/j.jrurstud.2007.12.009.
- Sonnino, R., 2010. Escaping the local trap: insights on Re-localization from school food reform. *J. Environ. Policy Plan.* 12 (1), 23–40. doi:10.1080/15239080903220120.
- Stake, R.E., 1995. *The Art of Case Study Research*. SAGE, Thousand Oaks.
- Stefani, G., Lombardi, G.V., Romano, D., Cei, L., 2017. Grass root collective action for territorially integrated food supply chains: a case study from Tuscany. *Int. J. Food Syst. Dyn.* 8 (4), 347–362. doi:10.18461/ijfsd.v8i4.847.
- Stewart, A., 2014. *Case study*. *Qual. Methodol. A Pract. Guide* 145–159.
- Suslova, S., 2018. The determinants of collective coproduction: the case of secondary schools in Russia. *Int. J. Public Adm.* 41 (5–6), 401–413. doi:10.1080/01900692.2018.1426013.
- Væggemose, U., Ankersen, P.V., Aagaard, J., Burau, V., 2018. Co-production of community mental health services: organising the interplay between public services and civil society in Denmark. *Health Social Care Commun.* 26, 122–130. doi:10.1111/hsc.12468.
- Van der Ploeg, J.D., 2016. Theorizing agri-food economies. *Agriculture* 6 (3), 30. doi:10.3390/agriculture6030030.
- van Kleef, D., van Eijk, C.J.A., 2016. In or out: developing a categorization of different types of co-production by using the critical case of dutch food. *Saf. Serv. Int. J. Public Adm.* 39 (13), 1044–1055. doi:10.1080/01900692.2016.1177837.
- van Eijk, C.J.A., Steen, T.P.S., 2014. Why people co-produce: analysing citizens' perceptions on co-planning engagement in health care services. *Public Manag. Rev.* 16 (3), 358–382. doi:10.1080/14719037.2013.841458.
- Vatn, A., 2015. *Environmental Governance: Institutions, Policies and Actions*. Edgar Elgar, Cheltenham (UK).
- Venn, L., Kneafsey, M., Holloway, L., et al., 2006. Researching European "Alternative" food networks: some methodological considerations. *Area* 38 (3), 248–258. doi:10.1111/j.1475-4762.2006.00694.x.

- Verschuere, B., Brandsen, T., Pestoff, V., 2012. Co-production: the state of the art in research and the future Agenda. *Volunt. Int. J. Volunt. Nonprofit Organ.* 23 (4), 1083–1101. doi:[10.1007/s11266-012-9307-8](https://doi.org/10.1007/s11266-012-9307-8).
- Voorberg, W.H., Bekkers, V.J.J.M., Tummers, L.G., 2015. A systematic review of co-creation and co-production: embarking on the social innovation journey. *Public Manag. Rev.* 17 (9), 1333–1357. doi:[10.1080/14719037.2014.930505](https://doi.org/10.1080/14719037.2014.930505).
- Warren, R., Harlow, K.S., Rosentraub, M.S., 1982. Citizen participation in services: methodological and policy issues in co-production research. *Southwest. Rev. Manag. Econ.* 2, 41–55.
- Whitaker, G.P., 1980. Coproduction: citizen participation in service delivery. *Public Adm. Rev.* 40 (3), 240–246. doi:[10.2307/975377](https://doi.org/10.2307/975377).
- Wittmayer, J.M., Backhaus, J., Avelino, F., Pel, B., Strasser, T., Kunze, I., Zuijderwijk, L., 2019. Narratives of change: how social innovation initiatives construct societal transformation. *Futures* 112, 102433. doi:[10.1016/j.futures.2019.06.005](https://doi.org/10.1016/j.futures.2019.06.005).

Yin, R.K., 2015. *Qualitative Research from Start to Finish*, 2nd Edition Guilford Publications, New York-London.

Further reading

- Batalden, M., Batalden, P., Margolis, P., et al., 2016. Coproduction of healthcare service. *BMJ Quality & Safety* 25, 509–517. doi:[10.1136/bmjqs-2015-004315](https://doi.org/10.1136/bmjqs-2015-004315).
- Cox, M., Arnold, G., Tomás, S. V., 2010. A Review of Design Principles for Community-Based Natural Resource Management. *Ecology and Society* 15 (4), 38. doi:[10.5751/ES-03704-150438](https://doi.org/10.5751/ES-03704-150438).
- Ostrom, E., 1990. *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge University Press, UK.