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## Consumers' and farmers' characteristics in short food supply chains: an exploratory analysis

A “farmers’ market” identifies a common area where farmers meet periodically to sell food products which do not need to be processed before consumption. Farmers’ markets have recently experienced steady growth mainly due to increasing demand for traditional foods and rising consumers’ interest towards locally produced food products. It is also the case that they provide transparency along the supply chain and decrease information asymmetries. This study attempts to define the farmers and consumers of farmers’ markets in terms of both their socio-demographic and their attitudinal characteristics. Data gathering was performed carrying out face-to-face interviews with sixty farmers and consumers. The study findings show that the majority of consumers purchasing at farmers’ markets are women, with an average age of 49 and with a high level of education. They attach great value to the availability of fresh and organic products with a good value for money. Farmers, by contrast, are mainly male, with an average age of 45 years, a high school degree and several years of experience in farming. They value more the creation of a direct and durable relationship with consumers in order to convey information about the quality and authenticity of their products. The study offers useful implications to policy makers on how to encourage the creation of farmers’ markets as well as spread the shared value created among farmers and consumers.

**Keywords:** Farmers’ market, Food related lifestyle, Edinburgh Farming Attitudes Scale, Consumers, Farmers

**JEL classifications:** Q13, Q18

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### Introduction

Market globalisation, the spread of sustainable production models and the availability of technologies for the production of renewable energy from biomass have together opened up new scenarios for agriculture and rural areas. In this context, opportunities and threats are opposed and the prevalence of sustainable production models is due to i) the level of resilience of rural areas, and ii) the actions that the economic and institutional actors are able to put into place to address the current changes.

In Italian rural areas, growth and development appear to go hand-in-hand with greater risks, as compared to the rest of the European Union. This is because the global dynamics impact on a set of historical structural limits such as the reduced company size, the ageing of employees, organisational weakness and technological delay. Further risk factors for the economic-social balance of Italian farms are price volatility, growing power asymmetry in the agri-food supply chains in favour of large-scale retailers, competition over land use, and the widespread incidence of food scandals and frauds. These issues are undermining the ability of farms to stay on the market and/or their ability to seize the opportunities connected to citizen-consumers turning to agriculture and rural areas in new ways.

Health, climate change and the environment, the degradation of the landscape, the loss of biodiversity and natural resources, and finally, the loss of culture and rural traditions, together are increasingly directing attention to the ways in which agriculture and rural areas may play a crucial role in terms of value creation and sustainable development. The increasing interest of citizen-consumers towards these issues has led them to adopt more responsible food behaviour. This situation is significantly different to the last decades of the last century, because “*the attention for the social quality of good and/or service becomes a determining factor in buy-*

*ing choice, i.e. when considerations about social and ethical costs associated with the good and/or the service in the short and mid-long terms prevail in determining the decision to purchase*” (Nazzaro *et al.*, 2017, 338–339).

Today’s citizen-consumer assumes a lifestyle oriented towards sustainability and environmentally friendly choices. Moreover, they favour brands and products characterized by ethical and social attributes as well as providing information regarding both the origin of the raw material and how distant the place of production is. Recently, this new purchasing and consumption behaviour has led to a reinterpretation of the concept of product quality that assumes a new meaning that also takes into account the social cost of production and the ethical dimension of enterprises (Marotta *et al.*, 2017).

To create an institutional framework that allows agriculture and rural areas to address the needs of society as they arise, the EU has profoundly reformed the Common Agricultural Policy (CAP), redesigning objectives and instruments, which foreshadow a “European Agricultural Model” strongly focused on multi-functionality and diversification of farms’ (Marotta and Nazzaro, 2011). Under this model, the economic and social dimensions of farms express their ability to produce both foods for the market and “public goods” for citizens.

To this extent, farms have become economic-social actors that look to the competitive market together with a complex set of intangible factors highly valued by citizen-consumers such as health and well-being, the appropriate use of natural resources and environmental protection, biodiversity, climate change, and the promotion of traditions and rural cultures (Marotta and Nazzaro, 2011). Accordingly, the paths of farms’ modernisation and resilient adaptation (to external stimuli but without losing the identifying characteristics) have to consider also adopting a production, commercial and organizational strategy that capable of transforming the production of “public goods” (multi-functionality) economically.

The current way to market products – which is based on a direct relationship between farmers and citizen-consumers, both in the company, in local markets, and through the new forms of collective purchase (ethical purchasing groups and other forms) – has facilitated a reduction in the distance between places of production and consumption. Moreover, it also ensures greater added value to the farms and a fairer and more convenient price to the citizen-consumers, whose informed and responsible purchasing behaviors have allowed them to experience rural life and benefit from “public goods” (localized positive externalities) along with the products and services offered. Therefore, the multi-functional farm assumes a strategic role in strengthening the link between products and traditions, configuring an offer of goods (materials) and values (immaterial) (Marotta and Nazzaro, 2011, 2012; Nazzaro *et al.*, 2017).

This paper aims to analyse short food supply chains, in particular farmers’ markets, as a model enabling the establishment of a relationship of trust, both direct and authentic. Specifically, the study attempts to investigate the socio-demographic and attitudinal characteristics of farmers and consumers of farmers’ markets.

The paper is structured as follows. The next section highlights the background of the study exploring the relevant literature on the topic. The methodology implemented in the study is drawn in the “Methodology” section, while the findings of the analysis are presented and fully discussed in the “Results and discussion” section. Finally, the conclusions and implication of the study are summarised in the last section of the paper.

## Background and rationale

Over the last few years, the short food supply chain (SFSC) has attracted the interest of many scholars. They refer to the SFSC as a set of relationships established between different actors involved in the production, processing, distribution and consumption of food products. Accordingly, the short food supply chain is characterised by the presence of few or no intermediaries.

Recently, the SFSC is gaining momentum, becoming an increasingly important organisational strategy as opposed to the traditional (i.e. long) and globalised food supply chain. Indeed, it represents a more sustainable alternative in terms of socio-economic and environmental benefits, generating ethical impacts on human health and society at large (Ilbery and Maye; 2005). Furthermore, previous studies (Marsden *et al.*, 2000; Renting *et al.*, 2003; Hallett, 2012) have highlighted the ability to re-socialise and re-localise production spaces as primary characteristics of the SFSC, which encourage the creation of closer and more authentic relationship between producers and consumers (Nazzaro *et al.*, 2017).

The farmers’ market is one of the most common models of farming in the SFSC. It identifies a common area where farmers meet periodically to sell food products (e.g. fruit and vegetables) which do not need to be processed before consumption (Martinez *et al.*, 2010). Since the farmers’ market minimises the number of people involved in

the supply chain, farmers become the main player in the chain, establishing a direct relationship with consumers (Giuca, 2012).

Over the last decade, in Europe, farmers’ markets have seen a steady growth mainly due to the increasing demand for traditional foods and the rising consumers’ interest towards local food products (Vecchio, 2009). Further, they provide transparency along the chain and decrease information asymmetries (Feldmann and Hamm, 2015; La Trobe and Acott, 2000).

Farmers’ markets are not suitable for all farms, but they represent a proper channel either for marketing organic products or for traditional local foods produced by small family farms aiming at boosting their business (Kirwan, 2004; Murdoch, 2000; Aguglia 2009). The main driver encouraging small family farms to enter into the SFSC resides in the likelihood to benefit of higher income than traditional supply chain (Brown and Miller, 2008). Indeed, farmers are able to decide by themselves what production to engage in, and how to carry it out (Hinrichs 2000). Moreover, they are not affected by the dynamics of traditional markets, being able to set the prices and markup of their products freely (Cicatiello and Franco, 2008).

The economic benefits arising from farmers’ markets are for consumers, too. Indeed, since the products are purchased directly by farmers, thereby minimising the number of people involved in the supply chain, they are cheaper than retailers (Cassani, 2012; Marotta *et al.*, 2013; Nazzaro *et al.*, 2017). The motivations of consumers to purchase local foods are manifold: i) they have a lower impact on the environment compared to food products from foreign countries; ii) they are considered safer, fresher and tastier than those purchased via conventional retail channels (Zepeda and Deal, 2009; Archer *et al.*, 2003; Teng *et al.*, 2004). The direct relationship between farmers and consumers enables the farmers to convey the attributes and characteristics of food products as well as their connection with the production area (Marsden *et al.*, 2000), a feature which is synonymous with quality for consumers (Lyon *et al.*, 2009).

According to Carpio and Isengildina-Massa (2009), consumers also show a greater willingness to pay for products purchased at farmers’ markets. This premium price may result even greater than the one showed for organic or GMO-free products (Loureiro & Hine; 2002). However, other studies have revealed that only a small proportion of consumers is willing to pay a premium price for local products. This premium price may be due to the importance that consumers assign to the “local” attribute. Indeed, Weatherell *et al.* (2003) revealed that when making their purchasing decisions, consumers consider mostly attributes such as appearance, freshness, taste and availability than the local origin of the products.

Previous scholars have attempted to identify the socio-demographic characteristics of the consumers of the farmers’ market. Although, Zepeda and Li (2006) did not reveal a clear relationship between socio-demographic characteristics and purchasing habits, other scholars, instead, have found it significant. Scholars agree that consumers are mainly women, married, well-educated and with higher income (Wolf *et al.*, 2005; Varner and Otto, 2008; Onianwa *et al.*,

2005; Pascucci *et al.*, 2011; Feldmann and Hamm, 2015). Illichmann and Abdulai (2013) detected a higher willingness to pay in men than women for organic and locally produced foods, while Henseleit *et al.* (2007) revealed that the consumers of the farmers' market are older than those making purchases in a grocery store. The greater presence of elderly consumers in farmers' markets may be due to by the stronger bond that these consumers have with their traditions which may encourage the consumption of locally produced foods (Henseleit *et al.*, 2007).

The effects of residential area type on consumer purchasing habits are contrasting. On the one hand, Chambers *et al.* (2007) did not identify any differences in the behaviour of consumers living in urban or rural areas. On the other hand, scholars have revealed a greater willingness to purchase at farmers' markets on the part of consumers living in rural areas (Stanton *et al.*, 2012; Miroso and Lawson, 2012; Varner and Otto, 2008). The reasons for this may lie in their greater sensitivity and awareness about the socio-economic issues affecting the local food systems. Indeed, consumers living in rural areas are more likely to interact with farmers, becoming aware of the potential issues occurring at all stages of food production. These consumers place great attention to the issues affecting society in their purchasing choices; thus, they are more likely to purchase local foods (Weatherell *et al.*, 2003).

## Methodology

Data gathering was carried out by interviewing both farmers and consumers of farmers' markets. The interviews were carried out in South of Italy in two different provinces of Campania region, namely Benevento and Avellino. Two interviewers were involved in the process, which took approximately three months (from May to July 2018). They were trained to interview farmers early in the morning when they have more time to devote to the questionnaire, while consumers were approached after making purchases before leaving the farmers' market. Participants were introduced to the study by reading a short text stating that the questionnaire was anonymous - to avoid social desirability bias - and that there were no right or wrong answers but what mattered was just their opinion. Since the aim of the study was to carry out an exploratory analysis, overall 60 farmers and consumers took part in the study.

The study aimed at investigating consumers' and farmers' characteristics as well as attitudes towards farmers' market; thus, two different structured questionnaires were administered. The questionnaires were pre-tested with a small group of participants belonging to the same population target, to detect potential misinterpretation of the questions. No adjustment in the adopted wording was required after the pilot test.

Both questionnaires administered consisted of three sections. The consumers' questionnaire addressed in the first section: i) the frequency of consumers' purchases from the farmers' market and directly from producers on a five points semantic scale for frequency (1 = rarely, 2 = once a month, 3 = two times a month, 4 = three times a month, 5 = five times a month); ii) whether they have previously purchased

foods certified with different sustainability certifications (i.e. Carbon footprint, Fair trade, Organic); iii) the degree of importance of four sustainability aspects when making their purchasing decisions. Specifically, participants were asked to express their perceived degree of importance towards environmental protection, local community support, labour rights, and fair remuneration for local producers, on a seven-point semantic scale ranging from 1 (not at all important) to 7 (extremely important). The second section assessed consumers' attitudes towards farmers' markets by implementing the Food-Related Lifestyle (FRL) scale first implemented by Brunsø and Grunert (1995) and subsequently applied by many other scholars (e.g. Hoek *et al.*, 2004; O'Sullivan *et al.*, 2005; Cembalo *et al.*, 2015). FRLs is based on means-end chain theory. It assumes that individual's behaviour is related to personal abstract values which help to explain real food behaviour (Cembalo *et al.*, 2015). The study implemented an adapted version of FRLs consisting of 30 items which underpin 10 dimensions of individual preferences (i.e. price/quality relationship, organic product, convenience, the price criterion, interest in cooking, freshness, health, importance of product information, novelty, and specialty shops). Respondents had to rate their level of agreement with each item on a seven-points Likert scale, where 1 signifies "totally disagree" and 7 "totally agree". The 10 dimensions are then generated as being the mean of each group of three questions by adding up the scores assigned to each item. Accordingly, the price/quality relation dimension is described by "It is important for me to know that I get quality for all my money"; organic product by "I make a point of using natural or ecological food products"; convenience by "On weekdays, we use a lot of ready-to-eat foods in our household"; the price criterion by "I notice when products I buy regularly change in price"; interest in cooking by "I like to have ample time in the kitchen"; freshness by "I prefer fresh products to processed food products"; health by "I try to avoid food products with additives"; importance of product information by "To me product information is of high importance. I need to know what the product contains"; novelty by "I love to try recipes from foreign countries"; specialty shops by "I like buying food products in specialty stores where I can get expert advice". The last section of the questionnaire detected consumers' socio-demographic characteristics (i.e. age, gender, household's size, education, occupation, family monthly income).

As for farmers, the first section of the questionnaire collected farms' characteristics (e.g. used agricultural area, number of employees, turnover, percentage of turnover coming from direct selling, the adoption of production process with low environmental impact, the production of alternative energy). The second one detected farmers' attitude towards agriculture by implementing a modified version of the Edinburgh Farming Attitudes Scale (EFAS) (Migliore *et al.*, 2014). Respondents were asked to express their level of agreement with 33 items on a seven-points Likert scale with endpoints ranging from 1 (strongly disagree) to 7 (strongly agree). The items capture seven attitudes of farmers, namely: 1) Embeddedness (eleven items), 2) Financial risk (three items), 3) Policy and legislation (four items), 4) Openness in farming (three items), 5) Achievement in farm-

**Table 1:** Consumers descriptive statistics (N = 60).

Variable name	Description	Mean	Frequency	Standard deviation	Min	Max
Gender	Female		63.33%			
	Male		36.67%			
Age	Respondent's age	49.20		14.83	20	75
Household	Household size	3.70		0.88	1	6
Education level	Education level classes					
	Primary school		1.67%			
	Secondary school		18.33%			
	High school		55.00%			
	University degree		25.00%			
Occupation	Above university degree		0.00%			
	Occupation status					
	Employed		33.33%			
	Self-employed		18.33%			
	Student		10.00%			
	Housewife/husband		20.00%			
	Retired		18.33%			
Family income	Unemployed		0.00%			
	Family monthly income					
	Below €2.500		70.00%			
	Between €2.500-4.500		23.33%			
	Above €4.500		6.67%			

Source: own composition

ing (three items), 6) Pessimism about farming (four items), 7) Success in farming (five items). Embeddedness describes the relationship between farmers and consumers to improve their offer, i.e. "Talking directly with consumers helps me to improve my offer", as well as farmers' attitude toward the environment, i.e. "It is important to reduce nitrogen application by using nonchemical methods". Financial risk summarises farmers' attitudes to take financial risk and contract a debt to successfully work in agriculture, i.e. "To farm successfully one must be in debt"; while policy and legislation shows farmers' concerns about a clear agricultural policy, i.e. "There is no clear overall strategy in agricultural policy". Openness in farming and achievement in farming consists both of three items capturing openness towards innovation, i.e. "It is important to read about new farming practices" and goal realisation in farming, i.e. "Farm production is the thing to take most pride in". Pessimism about farming emphasises a negative perspective about the future in farming, i.e. "Other employment would be better than farming". Lastly, the dimension success in farming underlines the attitude of farmers towards success by running their business efficiently and planning production carefully, i.e. "A farm is a business to be run efficiently". The third section of the questionnaire collected farmers' characteristics (i.e. age, gender, education, years of activity in farming).

## Results and discussion

The descriptive statistics of consumers interviewed are shown in Table 1. The sample of consumers is overrepresented by women (63% of the sample) in an age between 20 and 75 years (mean age 49.20,  $\pm 14.83$ ). Respondents interviewed are well educated with the majority holding a high school degree (55% of the sample) while a quarter have a university degree (25%). Further, one out of three of consumers is employed (33% of the sample) and live in

families consisting of three members ( $\pm 0.88$ ) and with an average monthly income less than €2.500 (70% of the sample). Previous scholars' work supports the profile elicited by the study which identifies a consumer that is mainly female, married and with a high educational level (Wolf *et al.*, 2005; Feldmann and Hamm, 2015).

Since the study aims to explore the characteristics of consumers of farmers' market, the questionnaire addressed also their purchasing habits (Table 2). The majority of respondents are regular consumers purchasing at farmers' market on a weekly basis (41% of the sample stated that they purchase at a farmers' market 4 times a month). While consumers were shown to favour a direct relationship with farmers, they seem to be unwilling to go directly to the farmers for their purchase of food products. Indeed, more than half of respondents interviewed stated that they purchase rarely (51% of the sample) through direct selling. Moreover, consumers at farmers' markets have often previously purchased certified organic foods (83%) and attach great importance to all social dimensions investigated when making their purchasing decisions: environmental protection (mean 6.16,  $\pm 0.97$ ), local community support (mean 6.30,  $\pm 0.90$ ), labour rights (mean 6.65,  $\pm 0.51$ ), and fair remuneration of local producers (mean 6.68,  $\pm 0.50$ ). The high scores attached highlight that consumers perceive sustainability as a multidimensional concept in which all the different dimensions are perceived as important and have to be pursued simultaneously.

To assess consumers' attitudes towards farmers' markets, the FRL scale was implemented in the study. Respondents performed an adapted version of FRLs consisting of 30 items outlining 10 lifestyle dimensions. The latter were generated as the mean of groups of three questions by adding up the scores assigned to each item<sup>1</sup>. Since the medium scores can range from 3 to 21, scores ranging between 3 and 9 show a lack of consumer congruence with the FRL dimension,

<sup>1</sup> For the reversed items, the values were generated by subtracting the score from number 8.

**Table 2:** Consumers' purchasing habits.

Variable name	Description	Mean	Frequency	Standard deviation	Min	Max
Farmers' market	Frequency of purchase at farmers' market					
	4 times a month		41.67%			
	3 times a month		16.67%			
	2 times a month		18.33%			
	Once a month		10.00%			
Direct selling	Frequency of purchase through direct selling					
	4 times a month		8.33%			
	3 times a month		13.33%			
	2 times a month		20.00%			
	Once a month		6.67%			
Certified products	Previous purchase of certified products					
	Carbon footprint		0.00%			
	Fair trade		3.33%			
	Organic		83.33%			
Sustainability	Importance of different sustainability aspects					
	Environmental protection	6.16		0.97	3	7
	Local community support	6.30		0.90	3	7
	Labour rights	6.65		0.51	5	7
	Fair remuneration of local producers	6.68		0.50	5	7

Source: own composition

whereas those in the range 10-12 exhibit disinterest towards the dimension, and scores in the range 13-21 exhibit congruence with the dimension. Accordingly, as shown in table 3, consumers at farmers' markets lack congruence with the convenience (mean score 7.13,  $\pm 4.78$ ) and novelty (mean score 9.40,  $\pm 4.68$ ) dimensions, and are disinterested towards the interest in cooking (mean score 12.06,  $\pm 4.83$ ) and specialty shop (mean score 12.67,  $\pm 3.06$ ) dimensions. To this extent, the convenience dimension is related to the consumption of ready-to-eat foods, while novelty relates to consumers' openness to trying new foods or foods from other countries. Consumers' lack of support for these dimensions is in accordance with the ideology of farmers' markets which are built on traditional, fresh and unprocessed foods. By contrast, consumers show congruence with FRL dimensions such as the price/quality relationship (mean score 17.18,  $\pm 3.14$ ), organic product (mean score 16.18,  $\pm 3.98$ ), the price criterion (mean score 14.01,  $\pm 5.31$ ), freshness (mean score 19.33,  $\pm 2.54$ ), health (mean score 18.50,  $\pm 2.91$ ) and, the importance of product information (mean score 16.50,  $\pm 4.01$ ). These dimensions show that consumers of farmers' market are more inclined to purchase natural (without additives) and fresh foods, which are mostly organic, and provide good value for money. These results are in accordance with previous studies that identify product quality and taste, food safety, good value for money, freshness and, environmental protection as factors to purchase at farmers' market (Conner *et al.*, 2010; Pascucci *et al.*, 2011; Feldmann and Hamm, 2015).

As for farmers and farms' characteristics (Table 4), the sample is composed mainly of males (63% of the sample) with an average age of 45 years ( $\pm 10.52$ ) and more than twenty years of activity in farming (mean year 21.91,  $\pm 11.49$ ). Farmers hold mostly a high school diploma (50% of the sample) or a secondary school diploma (41% of the sample). The average size of farm surface is 19 hectares ( $\pm 38.11$ ), while the majority of respondents have a turnover of up to €70,000 (50% of the sample), this coming predominantly from direct

**Table 3:** Attitudes of farmers' market consumers.

Food related lifestyles dimension	Mean	Standard deviation	Min	Max
Price/quality relationship	17.18	3.14	9	21
Organic product	16.18	3.98	5	21
Convenience	7.13	4.78	3	25
The price criterion	14.01	5.31	3	21
Interest in cooking	12.06	4.83	3	21
Freshness	19.33	2.54	11	21
Health	18.50	2.91	10	21
Importance of product information	16.50	4.01	6	21
Novelty	9.40	4.68	3	20
Specialty shop	12.67	3.06	3	21

Source: own composition

selling for roughly half of the sample (45% of the sample has more than 60% of its turnover from direct selling). The sample is equally distributed among those adopting organic (43% of the sample) or integrated (45% of the sample) production techniques for pest management. Lastly, more than a third of the sample has a plant for clean energy production such as a solar photovoltaic system (35% of the sample) or a biomass plant (5% of the sample).

Farmers' attitude towards agriculture was detected implementing the EFAS which consists of 33 items outlining seven attitudes of farmers. The attitude metrics have been generated as the mean of the scores attached to the items associated with each EFAS dimension (i.e. embeddedness, financial risks, policy and legislation, openness in farming, achievement in farming, pessimism about farming, success in farming). Farmers participating in farmers' markets show positive attitudes in terms of success in farming (mean score 6.87,  $\pm 0.37$ ), openness in farming (mean score 6.53,  $\pm 0.75$ ) and embeddedness (mean score 5.89,  $\pm 0.54$ ) (Table 5). More significantly, farmers attach great importance to having a direct relationship with consumers in order to convey the quality and authenticity of food products as well as to estab-

**Table 4:** Farmers and farms descriptive statistics ( $N = 60$ ).

Variable name	Description	Mean	Frequency	Standard deviation	Min	Max
Gender	Female		36.67%			
	Male		63.33%			
Age	Respondent's age	45.45		10.52	24	65
Education level	Education level classes					
	Primary school		3.33%			
	Secondary school		41.67%			
	High school		50.00%			
Years of activity	Years of experience in farm activities	21.91		11.49	2	50
Farm	Farm surface (hectares)	19.73		38.11	3	300
Turnover	Farm turnover classes					
	Below €70.000		50.00%			
	Between €70.001-90.000		18.33%			
	Between €90.001-110.000		20.00%			
	Between 110.001-130.000		6.67%			
Turnover direct selling	Percentage of turnover from direct selling					
Environmentally friendly techniques	Adoption of environmentally friendly techniques*					
	Biodynamic agriculture		1.67%			
	Organic agriculture		43.33%			
	Integrated agriculture		45.00%			
	Use of alternative energy	Use of alternative energy**				
	Biomass plant		5.00%			
	Solar photovoltaic system		35.00%			
	Small scale wind turbine		0.00%			

\* 10% stated that they have adopted conventional production process.

\*\* 60% farms do not have an alternative energy plant.

Source: own composition

lish a steady connection capable of internalising consumers' beliefs about the environment and food safety. Moreover, farmers are conscious that to be successful in agriculture, having a careful plan of business activities together with a product offer of high quality is of crucial importance. Lastly, the findings reveal a clear openness of farmers towards new techniques. By contrast, low level of pessimism are observed among farmers (mean score 2.82,  $\pm 1.22$ ). These attitudes are representative of farmers selling produce in farmers' markets. Farmers, in fact, seek to establish long-term relationship with consumers and focus on product quality.

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**Table 5:** Farmers' attitude towards agriculture.

EFAS	Mean	Standard deviation	Min	Max
Embeddedness	5.89	0.54	4.45	7.00
Financial risks	3.73	1.39	1.00	7.00
Policy and legislation	4.89	1.67	2.00	7.00
Openness in farming	6.53	0.75	3.00	7.00
Achievement in farming	5.31	0.98	2.00	7.00
Pessimism about farming	2.82	1.22	1.00	6.50
Success in farming	6.87	0.37	4.60	7.00

Source: own composition

quality and authenticity of food products as well as to establish a steady connection capable of internalising consumers' beliefs about the environment and food safety. Moreover, farmers are conscious that to be successful in agriculture, having a careful plan of business activities together with a product offer of high quality is of crucial importance. Lastly, the findings reveal a clear openness of farmers towards new techniques. By contrast, low level of pessimism are observed among farmers (mean score 2.82,  $\pm 1.22$ ). These attitudes are representative of farmers selling produce in farmers' markets. Farmers, in fact, seek to establish long-term relationship with consumers and focus on product quality.

## Conclusions

The short food supply chain represents a strategy for sharing value creation between farmers and citizen-consumers through which the former (i.e. farmers) establish a direct relationship with citizen-consumers, as well as take advantage from a higher remuneration from the products sold. In their turn, consumers, have their concerns regarding product quality, environmental protection and food safety met. The study focused on a specific model of short food supply chain (i.e. farmers' market), and attempted to define farmers and citizen-consumers in terms of both socio-demographic and attitudinal characteristics.

As for citizen-consumers, the study findings show that the majority of those purchasing at farmers' market are women, with an average age of 49 and with a high level of education. The success of farmers' market is due to the availability of fresh and organic products with a good value for money. Farmers participating at farmers' market are mainly male, with an average age of 45 years, a high school degree and several years of experience in farming. The farmers attach great importance to the creation of a direct and durable relationship with citizen-consumers in order to convey information about the quality and authenticity of their products. Further, they are open to the adoption of new production techniques in farming.

The study findings are powerful drivers for the promotion of the short food supply chain. Indeed, the socio-demographic and attitudinal characteristics of farmers and consumers involved in the farmers' market play a crucial role in the process of valorisation of short food supply chain. Accordingly, the results can be useful for policy makers in order to plan and implement policies supporting the short food supply chain successfully.

Although the study offers useful suggestions, a few limitations arise mainly due to the exploratory nature of the manuscript. More specifically, the study limitations apply to the representativeness of the sample, the psychographic scales implemented and the analysis carried out. Accordingly, future research should extend the analysis to a representative sample of farmers and citizen-consumers of farmers' markets, and in addition, it should implement psychographic scales enabling scholars to better define their characteristics. Lastly, any new analysis should apply statistical analysis in order to be able to assess the involvement of farmers and citizen-consumers in farmers' markets as well as their attitudes.

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