

## Article

# Establishing Communities of Value for Sustainable Localized Food Products: The Case of Mediterranean Olive Oil

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**Abstract:** This case study of the Mediterranean extra virgin olive oil value chain aims to contribute empirical evidence to incorporating the agrobiodiversity concept within mechanisms for value enhancement of origin products, within sustainable local value chains, via building a community around products. The tools and mechanisms for market competitiveness and product differentiation of quality origin products are illustrated, contributing to food systems' transition towards sustainable development. Our analysis provides three stages of community building around the sustainable, local product: 1) The product positioning phase: all the activities chosen by the producer for the agricultural production, processing, and marketing for value enhancement; all the activities performed before the consumer encounters the product. 2) The consumer attraction phase: the moment when the consumer becomes familiarized with the product; the phase where the institutional capital plays an important role, as often the producers enter markets supported by different groups, networks, or institutions with which they partner. 3) Communities of value co-creation: the final stage of consumer engagement with the product. Communities of value connecting individuals through similar values of sustainability, agrobiodiversity, defending and respecting the environment, and tasty, nutritious food, are substantial components for the transition towards more sustainable origin food systems.

**Keywords:** community; geographical indications; biodiversity; value enhancement

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## 1. Introduction

In a recent in-depth reflection about the sustainability of food systems, authors identified the need for “food systems’ transformation” [1]. They envisioned this transformation as a move toward people benefiting from nutritious and healthy food, sustainable agricultural production and food value chains, climate change mitigation, and resilience. At the same time, they also debated the need for a renaissance of rural territories. The increasing interest in pragmatic ways for reaching sustainable solutions in food production has heightened the need for more evidence and examples of innovative approaches in food systems research. For value enhancement of the environment and rural communities, a reference to the eco-economy is suggested [2]. The eco-economy consists of “cumulative and nested ‘webs’ of viable businesses and economic activities”, using the environmental resources in sustainable ways. In 2011, the authors introduced the concepts of communities of place and communities of interest [2–4]. The communities of place are found in rural spaces, embedding ecological goods and services, within the concept of multifunctionality, as agricultural producers contribute not only to their primary function of production of food, but also to environmental functions such as land conservation, preservation of biodiversity [5] and microbial diversity [6], sustainable management of renewable natural resources, and enhancement of socio-economic aspects of rural life. In this conceptual framework, we position the discourse about origin food

schemes (OFSs), and in particular, geographical indications (GIs), which include a series of implications for sustainable rural development, potential preservation of biological diversity, and overall benefit for the territory from environmental, economic, and socio-cultural perspectives.

Much work in the field of GIs analyzes what is happening at the level of the producer organizations (definition of collective rules, strategies) [7,8], or examines institutions and regulations relevant for GIs [9,10]; however, producers' compromise also involves a commitment towards consumers at the individual level.

In this context, the producers of quality products involved in origin food schemes satisfy the needs of consumers in terms of sustainability and environmental conservation. We argue that individual producers involved in origin schemes who aim for value enhancement based on agrobiodiversity protection and more sustainable food systems create stronger engagement with consumers, in particular by constructing a collective or a community around the product, based on trust, real encounters, and coordinated actions. The work on community-building strategies [11] explores how small, independent cooperative food retailers involve and retain customers. The community of values and immediate community are linked together into the concept of a supply chain community. The idea is to create a sustainable business model founded on ethical, social, and environmental values, in the local and global contexts of suppliers [11].

Literature reviews have increasingly paid attention to the roles of different factors that influence the origin food scheme, such as the quality of a product and the perception of the quality by consumers, the OFS's characteristics and its ability to deliver added value to producers and to promote local or territorial development, and the OFS's ability to contribute to a more sustainable food system [12].

This is accomplished using the conceptual framework related to community empowerment for food systems' transition towards sustainable development (adapted from [13]). *The individual human capital* consists of knowledge, qualifications, competencies, and individual characteristics which facilitate the creation of personal, social, and economic welfare using the individual capacity for understanding the integration of agrobiodiversity into the production strategy. The *social capital* is constructed within a collective of members and leaders of the group of producers and consumers, based on real acquaintance, trust, systems, and coordinated actions contributing to higher group efficiency towards common acknowledgment of agrobiodiversity as a territorial resource. *Institutional capital* refers to the capacity of formal or informal organizations to interact with other organizations or representatives of public institutions in the territory, with the aim of organizing a structure for enhancing relations between individuals or organizations for recognition of territorial products with embedded agrobiodiversity.

This article, based on case studies of the Mediterranean extra virgin olive oil value chain, seeks to provide empirical evidence on incorporation of the agrobiodiversity concept within mechanisms for value enhancement of origin products and its importance for building communities around products. It illustrates the tools and mechanisms for market competitiveness and product differentiation used by producers of origin products (in particular, GIs), who are considering the importance of agrobiodiversity preservation, contributing to food systems' transition towards sustainable development, and doing so by building communities around their products.

We sought to answer two questions: *What are the operational mechanisms for product community-building used by origin products producers who are preserving biological and cultural diversity?*

*Specifically, how does consumer involvement enhance the empowerment of small-scale producers involved in defending agrobiodiversity through the product community?*

## 2. Materials and Methods

We carried out our investigation on high-quality olive oil, a sector of great importance in the Mediterranean, in order to understand if and how the producers are influenced and make strategic choices based on aspects of agrobiodiversity preservation. The Mediterranean extra virgin olive oil value chain has been selected as a case study for several reasons. Firstly, the territory: the Mediterranean area is challenging in terms of sustainability (climate change, migration, land degrading) [14], is an important biodiversity hot-spot, and is the gene center for several crops, including the olive (*Olea sativa*) [15]. Moreover, the Mediterranean diet is widely recognized as sustainable and healthy, and olive oil is a key ingredient in this diet [16]. Lastly, in the European Union, olive oil is the third most representative product within the quality schemes of geographical indications.

In the first stage, we consulted the documentation regarding the olive oil in the whole Mediterranean area, and later on narrowed the focus to three data collection sites: the Languedoc-Roussillon region in France, Sicily in Italy, and Malta. Then, we focused on actors involved in the olive oil value chain from different territories who engaged in different origin food schemes: Protected Designation of Origin (PDO) Nimes, Territorial Collective brand Sud de France, PDO Monte Etna, PDO Monti Iblei, Slow Food Presidia Oliva Minuta, and private labels. We used documentation related to extra virgin olive oil from the scientific and gray literature, including e-content from various online presentations of experts and practitioners dedicated to the phenomena of extra virgin olive oil. In this stage of our study, we assembled and analyzed secondary literature in order to highlight characteristics, evolution, strengths, and weaknesses of the extra virgin olive oil value chain in the context of origin products and sustainable development.

In the second stage, we triangulated these findings with 20 semi-structured interviews with key informants: olive oil producers and stakeholders involved in the value chain from the South of France, Sicily, and Malta during the period from October 2014 to June 2015. The semi-structured qualitative interview included the following parts: interview opening and presentation of producer and product; agro-technical features of the production; variety and agrobiodiversity; technological process of oil production; marketing and product differentiation; relations with clients; quality signs. We identified the stakeholders through Internet searches for producers of PDO extra virgin olive oil or other relevant quality extra virgin olive oil. The interviews were conducted in French with nine stakeholders in the south of France, in Italian with nine stakeholders in Sicily (Italy), and in English with two producers and mill owners in Malta. Interviews were transcribed and translated to English. To encode interviews, we applied computer-aided content analysis using the software AtlasTI. We additionally used the method of participatory observation [17] with producers and that of participant observation of activities in a specialized territorial food shop from October to November 2017, in Montpellier, France.

## 3. Results

### 3.1. Building Product Communities: A Step by Step Process

Our analysis of the interviews highlighted three main phases of community building around the localized origin product considering local and extra local scales: product positioning phase; consumer attraction phase; community of values co-creation phase.

The **product positioning phase** represents all the activities during agricultural production, processing, and marketing strategy for value enhancement, i.e., all the activities performed before the product encounters the consumer.

The **consumer attraction phase** represents the moment when the consumer becomes familiarized with the product. This is the phase where the institutional capital plays an important role, as producers often enter markets supported by different groups, networks or institutions with which they partner.

**Community of values co-creation** represents the final stage of consumer engagement with the product for defending agrobiodiversity.

### 3.1.1. Product Positioning Phase: Sustainable Origin Product with an Environmental Function

Producers involved in the origin and quality schemes (PDO Nimes from France, PDO Monte Etna and PDO Monti Iblei from Sicily, Italy; Slow Food Presidia Oliva Minuta, numerous private labels) which have been interviewed for our study expressed the environmental and territorial component of their products, and artisanal character of know-how and small-scale production (Table 1). Producers we encountered showed high individual human capital: they are educated professionals, with a clear vision to reject industrial production and enter the value enhanced niche markets.

The fact that producers are involved in all stages of olive oil production, shows their diversity of knowledge and ability to acquire new knowledge. Producers involved in origin schemes, producing high quality extra virgin olive oil pay careful attention to the quality in each phase of the value chain. The monitoring of quality of future extra virgin olive oil starts in the field, when choosing the moment of harvest, and by choosing the harvest technique (mechanical or hand-picked olives). A key moment for extra virgin olive oil quality, described by each producer responding to our interviews, is the period between the harvest and processing, which ought to be as short as possible. The most scrupulous practices included processing immediately after harvest, that is, the olives are brought to the mill directly after they are picked. Producers are particularly open to technological innovation for processing and packaging, and they give the highest priority to the oil extraction technique, and the time between harvest and processing. As stated by the producers, the goal is the production of extra virgin olive oil with as little oleic acid as possible, and under packaging conditions that inhibit synthesis of oleic acid as long as possible.

Producers showed a deep understanding of territorial context, and valorization of culture. Olives are an essential part of the Mediterranean ecosystems and agrobiodiversity. Olive oil producers oriented toward origin and quality products tend to implement agroecology, organic production techniques, and sustainable agriculture, even when not certified. In the interpretation of our results, we considered agroecology as a practice as being defined by [18] conservation of natural resources, adapted soil fertility management and conservation of agrobiodiversity. Olives are grown in smaller and diversified plots. In particular, the producers from the South of France grow olives in small and diversified “patchwork-like” plots, following the ancient tradition implemented since the Roman age. Certain producers are likely to have numerous small plots, adjusted to the crop, or even to variety.

Traditionally, olive growing systems are associated with old orchards, commonly on terraces, grown with few or no agrochemicals, with low planting density, small yield, no irrigation, and manual harvest [19]. Our investigation shows also that some producers are using the traditional techniques, contrary to industrial production. According to these growers, these traditional practices are a part of the product’s image and marketing strategy communicated to the consumers. Multicropping and agroforestry are often practiced, especially within the territories with traditional olive groves. In the Mediterranean, olives are traditionally grown in places less suitable for other crops, protecting the soil’s degradation. Another agroecological trait employed is the use of sheep for weed maintenance. Combining traditional and agroecological methods for olive cultivation on the one hand shows the ability of producers to put into practice new knowledge and on the other hand the value enhancement of local culture and understanding of the territory.

In each of the three cases producers are implementing agroecological practices adapted to the territorial contexts, such as sheep breeding combined with olive groves in

the South of France, beekeeping in Sicily, and multicropping with vineyards and fruit orchards in Malta.

**Table 1.** Highlights of the interviews and activities relating to the product-positioning phase (source: authors' interviews, 2014 and 2015 in Italy, France, and Malta).

Activities	Case studies	Highlights
Differentiation artisanal from industrial production	South of France	"My oil is typical for the territory. This is not the oil one finds in the supermarket: in the supermarket oils are all of uniform taste, it's some sort of taste that doesn't surprise the consumer." (olive oil producer)
	South of France	"It's evident that the oil one is buying here is produced here. The machine is in the back; the person who makes the oil was harvesting the olives and also putting the oil in the bottle. All these things do not happen in the big retaining places." (olive oil producer and miller)
	South of France PDO Nimes	"It's about the origin of the product. In big retails outlets it is impersonal." (olive oil producer)
Diversified knowledge for integration of all stages of production	South of France	Catherine studied in several professional courses for all stages of production: from agro technical and processing technology to the marketing phase. She invested time and money for specialization in the field. Integration of all activities is an important justification for her professional status (notes from participatory observation)
Innovative projects for packaging	Sicily, Italy	"Oil is tested for acidity after production; however, with time the acidity is rising, and this is lowering the quality. With the packaging we are looking to slow down the process of rising acidity as much as possible." (olive oil producer)
Agroecology adapted to territorial context	South of France	"In our 5-hectare field we have some horticultural production, some aromatic plants, chili peppers, all these cultures accompany the olive." (olive oil producer and miller)
	South of France	"We intentionally brought sheep for maintenance of weeds. This way we avoid the use of chemicals, and sheep are typical element of our landscapes, so the visitors enjoy seeing them among the olives." (olive oil producer)
	Sicily, Italy PDO Monte Etna	"The olives are just one culture grown on the slopes of Etna. There are many other fruits. I for example grow even black mulberry, the beekeepers produce honey, and there is very important production of wine. All is well incorporated with the landscape of the Etna." (olive oil producer)
	Malta	"The island Gozo is very small, but we have olive production, vineyards, prickly pears, other fruits, and

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vegetables, and all is well combined in the territory.”  
(olive oil producer and cooperative representative)

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### 3.1.2. Consumer Attraction Phase: Who Are the Consumers in the Origin Food Schemes and How to Attain Them?

Origin and quality extra virgin olive oil is likely to have a higher price on the market, and earn more revenue for the producers. It is, however, acknowledged that there is an important role of consumers in defining the demand and paying premium prices. Producers invest in consumer attraction and retention, as illustrated in Table 2.

Producers with high human capital, who wish to reach out to niche markets and acquire consumers for their agrobiodiversity valorizing products, include social and institutional capital elements in their marketing. Producers develop partnerships with specialty shops, restaurants, agritourism, or participate in fairs and promotional events, where they can reach out to consumers directly. In a physical encounter between the consumer and the product, a fundamental milestone is represented not only by making the image of the product known, but above all by the possibility of tasting it. Participation in social movements is a way the institutional capital is employed to the advantage of producers seeking for consumers. It is the participation in an institutional framework with legitimacy and stability of organization that give credibility to producers and their products. In the case of producers from Presidium Oliva Minuta (in Sicily, Italy), Slow Food mobilized institutional, collective, and individual human capital to create a favorable framework for such product. It is an olive variety indigenous to Sicily, also known as “half olive” because of the small size of the fruit of this cultivar from which a very special Sicilian extra virgin olive oil is obtained, with a rather pronounced bitter and spicy taste. This rustic cultivar was not once easily appreciated by consumers. It is resistant to climatic adversities, it reaches 3–3.5 grams only and is medium-early ripening with obligation of manual harvesting, from October to November, depending on the degree of ripeness and also on the altitude. Thus, participation in a Presidia scheme, aiming to support a local product by including extra-local stakeholders, places importance on consumer attraction and access to markets, particularly niche markets with premium prices.

**Agritourism is a tool for consumer engagement.** Environmental, economic, and social functions of sustainability are combined in the case of agritourism based on origin and quality products. Agritourism integrates agriculture with tourism in the territory. Origin and quality products attract a premium for several reasons: superior taste, traditional production, and historical connection to the territory, cultural heritage, and events.

Gozo Island, in Malta, is an example of an integration of origin quality products in the existing touristic offer through partnership between private entities and the community. Such partnership is becoming strategic for sustainable rural development of the territory. Gozo Cottage is one of the private companies working with the producers’ cooperative to develop a strategy for differentiation and branding of local origin and quality products from Gozo Island. With the objective of using and promoting local products, Gozo Cottage partners with local producers and offers a variety of products to the tourists visiting Gozo Island. The palette of products includes olive oil, wine, marmalades and jams, and sea salt. The marketing strategy of Gozo Cottage is to develop a partnership with the producers’ cooperative, being a member of that same cooperative. This is empowering for small-scale producers, as membership in a cooperative gives them a voice to influence the governance of the partnership, and indirectly to acquire new knowledge for use and promotion of local resources. The partnership is further developed with public bodies such as local authorities, the Office of Tourism, and the national airport (where the products are available). In this context, Gozo Cottage could be considered an example of a territory-based private institution motivating producers’ orientation

towards sustainable origin, quality food production and maintenance of agrobiodiversity. The case of Gozo Cottage is also an example of institutional capital showing a connection with territorial institutions, a diversity of partners, and the ability to mobilize actors for integration of origin and quality products into the existing well-developed pleasure and cultural tourism.

Oleatherm, in the South of France, is an agritourism activity which has become an exemplary model for agrobiodiversity preservation by innovative use of origin and quality products not only as food products, but also as products for cosmetic and wellness use. Olives and vineyards, and the Mediterranean *garrigue* are the basic characteristics of the landscape in the South of France. The allure of this agritouristic destination is the showcasing of the Mediterranean agrobiodiversity. The farm has more than 50 varieties of olives but also pomegranates, hazelnuts, almonds, and peaches. All these species and varieties are intentionally grown on the farm as a sort of open museum of Mediterranean agrobiodiversity. Tourists who come to visit the farm can see the products they are consuming, whether eating or using it in a spa, from the soil to the plant, and throughout the processing facility. The type of activities proposed for tourists are innovative in the context of rural tourism, as they offer wellness activities such as massages, yoga, and musical therapy, but always with a connection to the origin products and the farm. In a certain way, this agritourism teaches healthy and sustainable consumption patterns.

Agritourism activities ensure the maintainance of agricultural and natural landscapes, enables access to additional revenues to producers, and also enhances collective action and producers' cooperation for mutual benefit in the territory. They also represent the interplay of individual, social and institutional capital, and empowered territorial community. Both Gozo Cottage and Oleatherm are private enterprises generating a community of values around a local product; both are examples of successful integration in the local supply chains and contribute to territorial development. Agritourism is also a platform for consumers' inclusion into the community even when they are coming from faraway places, and it is a step towards the creation of an extra-local community of values for localized products.

**Table 2.** Highlights of the interviews and activities consumer attraction phase (source: authors' interviews, 2014 and 2015 in Italy and France).

Activities	Case studies	Highlights
Showing initiative for offering free testing	Sicily, Italy Slow Food Presidia Oliva Minuta	"If I have an order of around 10 liters, I would gladly send 5,6 samples, bottles of 20cl, for people to offer their friends for tasting." (olive oil producer)
Partnership with specialty shops, agritourism	South of France PDO Nimes	"People when they taste my oil they are always surprised with the strong aromas. They really have impression of having an olive in their mouth. I always explain a bit, I offer them a visit, I explain about olive oil, what is always good to know" (olive oil producer and miller)
Partnership with restaurants and chefs	Sicily, Italy	"We are proud to have our oil exhibited in Eataly" (olive oil producer and miller)
	South of France	"Our oil is served in restaurants in the touristic zone of Pont du Gard" (olive oil producer)
Participation in fairs and promotional events	Sicily, Italy Slow Food Presidium Oliva Minuta	Participation at Terra Madre Salone del Gusto, in Turin, Italy

Being part of social movements and international networks	Sicily, Italy Slow Food Presidium Oliva Minuta	Slow Food served as a platform for connecting with consumer groups from different parts of the country, restaurants and chefs, specialty shops.
Cooperation with territorial institutions for tourism development	Sicily, Italy Slow Food Presidium Oliva Minuta	Itinerary of ancient olive trees <i>Il Gattopardo</i>

### 3.1.3. Community of Values Co-creation: Scaling Communities for Local Products

Individual producers are using their products as connecting points for creating sustainable communities around said products. A producers' goal is not to sell as much as possible, but to sell consistently and to the same people every year. These loyal consumers become "co-producers" involved in the sustainable consumption patterns in the way that they consume the product, while enhancing its value in the value chain, and appreciating the environment and the territory. It is important to underline that the community created around localized products is not necessarily in geographical proximity to the product. This co-creation of the extra local community is around common values of defending agrobiodiversity, sustainable development and patrimonialization around origin products.

When building relationships with consumers, who eventually become "co-producers", the key concepts mentioned in the interviews are trust and "word of mouth". In order to build a community around the product, trust is the basic requirement. Consumers become engaged once they are repeat purchasers and provide "word of mouth" recommendations to others in their own communities. By recommending the products, they co-create the product community. Table 3 presents the highlights of the interviews of producers about the activities for consumer retention and community co-creation.

**Table 3.** Highlights of the interviews and activities related to the consumer retention and community co-creation (Source: authors' interviews, 2014 and 2015 in Italy and France).

Activities	Case studies	Highlights
Maintenance of values (agrobiodiversity, local cultural heritage)	South of France	"Biodiversity is important: for me it is the respect of all that is a living being, and we are part of it. We have to respect the natural equilibrium. We transform it. Let's be real, agriculture transforms nature. With the olives, we have to respect the terroir." (olive producer and miller)
Authenticity and integrity	Sicily, Italy Slow Food Presidium Oliva Minuta	"This variety is not cultivated anywhere else. Trees are centuries old. They make the land-scape spectacular." (olive oil producer)
Trust	South of France	"Many producers sell olives and oil from Spain. They mix everything and then sell the oil, and they never run out of oil. Even if they do not produce many olives, they have oil all year round. Last year, we ran out of oil for three months, as we finished selling our stock of the oil. This is why clients have confidence and they come to buy their oil here. We sell them a product that is expensive, but do not offer it, but it is the product from this country, they are sure to have the oil from the Gard, olives from the countryside. This is important." (olive oil producer)



	South of France AOP Nimes	"People know me, and they tell me to bring them 6 liters of oil. Then, when I bring it to them, someone else says: "ah, but you make oil, can you bring me some?" My wife knows a lot of people." (olive oil producer)
"Word of mouth", inviting others to join the community	South of France	"Well, the marketing is performed by "word of mouth", through internet a lot. I have certain clientele, and as soon as I have the oil, I send it to all my clients "The oil has arrived!" then I give them the prices. Additionally, then they order directly" (olive oil producer)
Sharing spaces with consumers/co-producers	South of France	"This villa is from the 17th century; it has been in our family since then. There is an authentic kitchen that we from time to time open for our clients, inviting them for a sharing event. This is the moment to taste the oil, and get to know each other" (olive oil producer)

### 3.2. Creating a Community of Values

We applied a conceptualized theoretical framework for producer/consumer interplay for protecting agrobiodiversity via community empowerment. We considered the three pillars of people and community empowerment: individual human capital, social capital and institutional capital. We compared the theoretical framework with the findings of our empirical research of the extra virgin olive oil origin schemes. Community of values co-creation (Figure 1) represents the final stage of consumer engagement with the product. Empowered producers, supported by networks and institutions, each create a value-enhanced origin product embedded in territorial agrobiodiversity and patrimony, and of superior taste. Producers offer their product to their own personal network, to hospitality structures (restaurants, hotels), and to different purchasing groups. They also enter extended short supply chains, in which they have one loyal distributor for foreign markets. Involvement in agritourism brings visitors, who could be from nearby urban areas, or faraway places. Visitors often buy products, and some of them repeat the purchase in the following years. These people become part of the product community. They talk about the product, using "word of mouth", to bring more clients from their own spheres. The involved consumers co-create the product community. Figure 1 shows the elements of a product's community of values, representing the two categorizations of elements: producer-specific elements and consumer-specific elements; and the essential elements and additional elements. As seen in the Figure 1, the essential elements for product community of values creation, as observed in all three cases are: taste, trust, "word of mouth", and product story. Table 4 provides examples from the empirical data about the elements for product community of values creation.



**Figure 1.** Schematization of existing flows and relationships in the co-creation of a community of values. WOM= word of mouth; SFSC= short food supply chains. Source: authors' creation

**Table 4.** Elements for product community building (source: authors' interviews, 2014 and 2015 in Italy and France).

Elements for product community building		
Consumer specific	Producer specific	Example from empirical data
<b>Taste</b> (individual preference for taste, exclusion criteria for decision making about the product)	<b>Taste</b> (agro-technical and technological process)	"I have the same clientele every year. Additionally, this is increasing progressively, because of "from mouth to ear" that is to say, "I taste your oil, its good", and voila. The start is to present my oil, so, to discuss with people in meetings, or among friends to use the "from mouth to ear". That is to say, I make oil, if you want to taste, if you find it good take one bottle. They might offer to other people to taste, and those will see my name. I sell a little bit everywhere."
<b>Essential</b>	<b>Product story</b> (presentation of the product with inclusion of agrobiodiversity preservation and environmental sustainability features)	"The clients come here to buy their oil, because of trust. As I am the producer."
	<b>"Word of mouth"</b> (specific value of personal recommendations)	"I think that the people are looking for authenticity. We are a mill, you enter here, and you are a neighbor. It is almost evident that the oil you will buy here is performed here, the machine is just behind, I think that people look to see that the person selling oil is the one that harvested the olives, the one who performed the oil, and put it into the bottle."

Additional	<b>Tourism</b> (role of tourist consumers)	<b>Tourism</b> (on farm tourism activities & partnership with tourism stakeholders)	“Visiting the farm is important, as the person not only remembers the product but also the picture and atmosphere! It is so much different than tasting in a fair where maybe there is (only) a picture to see.”
			“When we sell directly to clients, we are sure of the storage process and the transport. In the value chain, this is unreliable. More than that, the olive oil needs proper storage, and I am not sure that in the distribution chain this is provided. However, when the product comes to the final consumer, what he sees is the producer, not others in the value chain.”

#### 4. Discussion

In recent years, the number of papers in the field of economics focusing on environmental factors of geographical indications and origin products has increased noticeably [5,7,12]. More and more authors are discussing the evolution of geographical indications towards more sustainable and environmentally responsible food systems [7,12]. With the exception of the seminal papers, which deal with the heterogeneity of groups within GIs [20,21], there are, few studies that have investigated individual producers within origin schemes and geographical indications and their particular mechanisms and strategies adopted to incorporate agrobiodiversity within production. The conclusion is that heterogeneity, due to the multiple and diversified mechanisms within geographical indications, does display a negative effect on the sense of trust towards the consortium as an institution [21]. Our findings show that the producers might anticipate that the consortium could be perceived heterogenous as a whole; hence, they are creating stronger ties with their own consumers. However, careful articulation between such individual acts towards community creation, and collective actions involving all territorial stakeholders are crucial for positive outputs and the success of everyone.

The producers involved in geographical indication systems act according to the rules mutually developed and described in the Product Specification. The empirical results show that when the producers individually decide to be more exigent in terms of implementing practices of environmental responsibility and agrobiodiversity, they reach outside the original group of the origin scheme. Small producers use innovative tools and strategies for value enhancement based on agrobiodiversity and connection to the consumers. Producers who decide to implement environmental sustainability within their territories often are empowered and in turn empower other individuals who transmit their mission of transition towards more sustainable systems.

The analysis of olive oil origin schemes showed that empowered producers determined to valorize the protection of agrobiodiversity of origin products go through different phases to penetrate niche markets, often with institutional help, and consumer acquisition and retention, and finally co-create extra-local communities of values around their products.

Implementing environmentally responsible practices is market-driven, due to explicit demands of the consumers for organic and environmentally sustainable products [22,23]. Environmental responsibility in some cases within our study was a potential exclusion criterion for being present in the market.

Origin extra virgin olive oil producers involved in collective territorial branding (whether by participating in origin schemes, or simply by being active in the territory) create their own strategies for their origin products. The independence of each individual producer helps them safeguard quality within their own communities created around the products. The consumers come from the immediate proximity, but also from distant territories, attracted by the value offered by the product.

The community is created around the product due to specific values and interests and is neither geographically specific nor limited to territorial proximity. Geographical indications' and localized agrifood systems literature often provides evidence of collective action among producers who jointly defend their product [24]. Our findings suggest that each of the producers co-creates a community of values with the consumers of their product with the product as a central figure; hence, the collective action happens through the interrelation of producers and consumers.

Individual producers, even when involved within consortia created around GIs or other types of origin schemes, develop their own communities with different types of clients, many of whom are final consumers, who eventually become co-producers in the sense of co-creation of their value chains. This is aligned with the description of "*prosumer* based participatory culture" [25] referring to emerging small artisanal producers of food, fashion and design products as transformative. Such consumer goods are a foundation for creating communities and conceive the connection between farmers and citizen-consumers as a possibility for sharing the value creation within short food supply chains, establishing direct relationships between producers and consumers [26].

In the context of product communities of values, the focus of governance moves from the producers' group towards directions of each individual producer, who co-creates community with its consumer co-producers. These co-producers may not belong to the same geographic territory, but belong to the community of values. As explained by McEachern and Warnaby [11] the community-led retailing goes beyond the local customers and beyond geographical space, and from the immediate community around the retailer, it is further expanded: 1) community of shared values, embedded in values-led market orientation; 2) supply chain community, referring to sustainable business based on ethical, social, and environmental values.

Principally, it seems that origin products, especially when linked with agritourism activities, are bringing in outside visitors to enjoy the well-being, the agrobiodiversity and the diversity of taste. Crescenzi et al. [27] identified tourism as one sector shifting rural areas towards more development and advanced structures, referring also to intersectoral spillovers of GIs as an effective contribution to local rural economies. It is motivating for local producers to preserve these aspects of their environment, in terms of its landscape beauty, authentic and diverse taste of local products, and cultural heritage. The motivation is economic, as visitors generate higher revenues, and also pride and joy for those safeguarding the environment. Being a guardian of agrobiodiversity of a landscape, but also of particular races and varieties, know-how about traditional flavors and cuisines becomes an incentive for producers to engage in agrobiodiversity preservation.

Origin products are embedded in the territorial food system, and together with the established agritourism represent a platform for showcasing the image and story of the territory. When the stakeholders' goal is defending agrobiodiversity, an empirically proven mechanism is the interconnection of the origin products, agritourism and the territory as a platform for attracting co-producers interested in the same values of agrobiodiversity preservation. Agritourism initiatives, such as culinary festivals, can be considered a transformative tool for local economic development, and an instrument which empowers communities to preserve the local heritage, biodiversity, and environment [28].

In the framework of rural renaissance and empowering people, we think that communities of values via connections between individuals gathering around similar values of agrobiodiversity defending, respecting environments, and tasty nutritious food, are a strong component for a transition towards more sustainable origin food systems.

## 5. Conclusions

In conclusion, our study on extra virgin olive oil provides a piece of empirical evidence for the concept of communities in marketing research, and significant managerial implications for practitioners.

From academic and research standpoints, we alter the common perception based on human, social, and institutional capital for building communities of territorially anchored groups of producers. Instead, we suggest that each individual producer, while existing within the territorial food system, individually co-creates a community of values with the consumers, who likely are the end users of the product. The relationship between producers and consumers is both local and extra-local, and is embedded in common values. A community of values is a relational platform for producers and consumers, and as it alters and shortens the supply chain, it essentially fits in the eco-economic paradigm [2].

The community of values approach can be beneficial for producers through its practical managerial implications. Producers with high quality products in rather small quantities, and likely prices that are too high to compete in the conventional market, could apply a community of values approach for engaging with and retaining consumers. If we consider producers of high-quality food products artisans, or even artists in the sense of providing very particular and highly differentiated, almost unique niche products (in terms of taste, agrobiodiversity and individual story) we can evoke the argument that an artist needs “1000 true fans” in the fine arts community in order to provide a living wage [29]. This resembles our finding of extra virgin olive oil producers building their own communities of sustainability values, who basically are their “true fans”.

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