

## **INCREASING THE PERFORMANCE OF THE ORGANIC FOOD SECTOR IN THE EUROPEAN UNION BY USING INNOVATIVE INSTRUMENTS**

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### **Abstract**

For the last decades, organic agriculture and the organic food market represent main sectors that have constantly grown across Europe. Developing from a niche market to a global standalone sector, the organic food market has reached more than 80 billion euros worldwide.

The sector's fast evolution is closely linked to the notion of quality and the growing interest that consumers have in food safety and security requirements. In terms of perception, nowadays, quality represents more than the food product itself and its sensory features, the concept being enlarged and applied to production processes, environment and social aspects. In this context, consumers tend to identify a quality product based on multiple factors that are not always easy to recognize. So, how can consumers identify organic food products based on their quality characteristics that are not so easy to identify, even after consumption?

Thus, the present study aims to highlight the importance of innovative instruments in ensuring consumer guarantees, especially for organic food products that involve higher prices in exchange of quality values that cannot be identified only by a visual analysis of the product.

In other words, the research focuses on guarantees and quality-assurance programs as defining innovative instruments that can help consumers in their buying decision. Starting with a literature review regarding the consumer's perception on organic food, the present paper analysis different labelling regulations in the European Union and databases models created to help consumers be informed and be able to identify original products.

### **Keywords**

Organic food, consumer's trust, innovative instruments, organic database, food guarantees

**JEL Classification:** Q13, Q18, Q52, O13,

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### **Introduction**

Organic farming along with organic food products are considered to be one of the most important directions of developing for the global food market and supply chains (Dima, 2005). Thus, unlike large-scale conventional farming, which is considered today to be an energy-intensive system, that involves high costs for the society and potential risks for both the environment and human health, the concepts of organic agriculture and organic food represent a sustainable solution that comes to meet the negative effects caused by the industrialization of the food sector over the years.

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Organic agriculture is a growing sector, that by 2016 was practiced in 178 countries spread over all five continents on an agricultural area of about 57.8 million hectares, by more than 7.8 million producers (FiBL, 2018). In this context, the European Union represents one of the pioneers of organic agriculture and one of the main promoters of the organic food market.

In order to build a common market, the European Union has created a set of regulations on organic farming that aim to provide well documented procedures for the production of organic food, procedures that must be embraced by all member states. Among the main roles of these rules and regulations EU encourages high standards for animal welfare, requires farmers to meet the specific quality standards and satisfies consumers' demand for trustworthy organic products whilst providing a fair marketplace for producers, distributors and marketers (European Commission, 2019).

But despite the growing perspectives of the organic food market in the near future, how innovative is this sector? For 2020, the European Union has as a main objective the creation of bioeconomy, a concept that involves smart, sustainable and inclusive growth, in order to turn innovative ideas into final products and services, by creating new jobs, in terms of sustainability for both the economic sector and the environment.

From the perspective of the organic food market, a constant and sustainable growth cannot be met as the demand of such products on EU territory faces an unequal distribution in terms of consumption, this leading to different hypotheses, from the organic potential of the region, to the climate conditions, but also to the consumer behaviour, that, due to different perspectives or beliefs, does not embrace organic food as a consumption habit (Bobe et al, 2018).

Given these directions, the main objective of the present paper is to identify how can modern innovative instruments influence the consumer's buying decision for food products that conventional consumers do not trust, due to their prescribed quality characteristics that are not identifiable at a first glance, but for which additional costs are required. Therefore, the research is divided into two main parts that provide a better understanding of the subject. The starting point is represented by identifying the current position of organic food in the European Unions policy, but also in the European consumer's perception, based on different contemporary literature perspectives. Thus, the research methodology is based on a literature review that highlights the way in which organic food products are promoted by the EU and seen by consumers, in terms of quality characteristics, guarantees and assurances. Different studies (Bobe et al, 2016; Toma et al, 2017; Popa et al, 2019) indicate multiple patterns regarding the consumer's perception on organic food. One of the main determinant in this context is the level information that consumers have access to: misinformed consumers tend to display higher levels of scepticism, while informed consumers usually buy organic food on a regular basis, due to its benefits (high nutrient levels, environmental benefits etc.).

The study uses the models and resources that EU has already provided to consumers in order to their trust towards certain quality products, which are distinguished by their specific nutritional characteristics and which add value to the nutrition act. For example, for EU geographical indications food products have a new database, that aims to increase transparency and simplify search, so that consumers can easily identify a certified food product and have a guarantee that the designation has not been used fraudulently.

Also, different visual resources are projected and analysed in order to better understand how innovative instruments, like labelling logos can influence the consumer's behaviour regarding organic food products. The analysis will take into consideration modern consumers' perspectives and emerging demands, like the existence of reliable sources of information, easily access to computerized resources that can ease buying decisions, usage

of modern technologies, like mobile applications or QR code scanning etc. so that the need of understanding the product's destination can be met.

### **1. Organic food products and consumer's perception. A literature review**

Organic food represents the final result of the organic agricultural sector, these food products being obtained by applying specific methods that promote the usage of natural substances and processes. In other words, organic food and its production methods encourage a responsible approach towards the use of energy and natural resources, biodiversity preservation, maintenance of regional ecological balances, water quality and soil fertility, by having a limited impact on the environment.

The organic food market is one of the most important growing sectors at a global level, having a significant impact from both an economic and social point of view because of its increase by almost 90 billion dollars in just two decades, with future growing perspectives still available. In this context, the global demand has also doubled since 2000, but in terms of specific challenges like demand concentration (90% of organic food sales being related to North America and Europe). At a deeper analysis, this demand is by no means proportionately divided among national markets within the European region as well (Jensen, 2011).

The segmentation of the organic food market within the European Union is created by cross-cultural differences. Mainly, different national markets are facing acceptance issues from both producers' and consumers' perspective. The main issue raised involves a compromise and its acceptance: more rigid production standards (from a producer's perspective) and higher prices (from a consumer's perspective) in contrast with faster methods of production and cheaper food products (Bobe et al, 2016).

But the European Union is trying to counteract these trends, so that farmers can understand the benefits that organic farming methods can bring for a sustainable business and consumers can trust that the farmers follow the specific rules on organic production. In this context, the EU uses different resources to maintain a strict control over the productive sector, like legislation, certification processes, labelling requirements, traceability systems etc. Also, in terms of traceability, as the organic sector represents a complex supply food chain, that combines processing stages, distribution and commercial sectors, all phases of the logistic link are subject to multiple checks and EU organic regulations.







In order to build trust in organic farming and organic food products, the European Union follows a four points checklist (European Commission, 2019):

- each EU member appoints 'control bodies or authorities' to inspect operators in the organics food chain. Producers, distributors and marketers of organic products must register with their local control body before they are allowed to market their food as organic;
- after they have been inspected and checked, they will be awarded a certificate to confirm that their products meet organic standards;
- all operators are checked at least once a year to make sure that they are continuing to follow the rules;
- imported organic food is also subject to control procedures to guarantee that they have also been produced and shipped in accordance with organic principles.

Also, in order to help consumers identify more easily an organic food product, specific labelling rules have been adopted. since July 2010. More exactly, all prepacked organic products produced and sold in the European Union must be labelled with the mandatory EU logo (Regulation (EC) No. 834/2007). Besides the EU logo, in many European countries promotes its own organic certification logo, that can be applied voluntarily on the food products obtain in a specific country, based on the national legislation requirements (Table no 1). Thus, it can be observed that the EU promotes a series of sustained efforts in order to

provide an effective legal framework that will help build further consumer confidence in the EU organic food agriculture and system and that will satisfy consumer demand for informational resources and trustworthy organic food products.

**Table no. 1 – The mandatory EU organic food logo and examples of national voluntary organic certification logos**

Country	Organic food logo	Country	Organic food logo	Country	Organic food logo
EU		France		Belgium	
Austria		Germany		Romania	

Source: FiBL country reports, <https://www.organic-europe.net/country-info.html>

Taking into consideration this organizational context, it is important to identify different consumers' perceptions, from different European markets on organic food products, in order to understand the effectiveness of the EU organic food systems (in terms of informational resources, accessibility) in promoting guarantees and assurances for the potential consumers.

Thus, for German consumers organic food is perceived as being environmentally friendly by promoting animal welfare, as being healthier than conventional food because of the production methods used, tastes better and does not contain pesticides (Gottschalk & Leistner, 2013). In terms of price perspectives, Polish consumers are willing to pay 17.4% more for organic products than for their conventional counterparts, while the main barriers in buying organic food in Poland include: limited availability, insufficient knowledge of both retailers and producers and the lack of trust of consumers (Bryła, 2016).

Part of Romanian consumer lack basic knowledge on organic food and on the principles, that determine organic food prices, even if they auto characterize themselves as being familiarized with the concepts related to the organic sector (Bobe et al, 2016). Also, Schleenbecker and Hamm (2013) highlights that European consumers have limited knowledge regarding the organic food labels and their distinctive logos in contrast with the USA, where a label is seen as the main instrument of identifying an organic food product.

Different studies highlight that part of the European consumers do not think perceive organic food as being any better than conventional food from a sensory point of view, so why bother paying more for a food product that they can obtain at a cheaper price (Shafie, 2012). In terms of consumer profiles, the literature review highlights that western EU countries have a better perception on organic food products and are willing to pay more for the added value that they bring, while certain central and eastern EU countries register a low demand regarding organic food, the main barrier in buying organic being consumer's trust and knowledge.

Nevertheless, despite that a limited number of studies have compared the nutritional quality of organic vs conventional food, there are reasons to favour organic food consumption such as less exposure to antibiotic; natural pesticides defence (plant's own phytochemicals); avoiding loss of nutritional value of fresh fruits and vegetables because of a lower shelf life

compared to conventional ones; rigorous standards of certification, reasons that should determine consumers to be interested in and buy organic food (Popa et al, 2019).

## **2. Innovative instruments used to increase the performance of the organic food sector**

Organic farming can be considered itself an innovation in the agricultural sector, as it responds to multiple modern issues like food safety and security, environmental risks, biodiversity etc. But in the context of new ideas and concepts, innovation in the organic food sector depends on the functioning of the system as a whole, from both consumers' and producers' perspective, and in this sense, the organic food sector should start by becoming more widespread within the EU, so that consumers and producers can be better informed.

As multiple studies suggest, the low organic food consuming rates within EU are determined by the consumers' lack of knowledge regarding the organic food sector, that stands as a hypothesis for the disproportional division of the EU organic food market in terms of consumption and production. For example, the organic food productive system represents a dynamic sector in Romania, registering in the past years a fast-ascending evolution, while the internal demand of such products is underdeveloped and Romania is seen as a highly export-oriented country, most of its organic production being sent to other European countries.

Thus, given these general directions, EU must solve one of the major issue that the consumers are facing with: information access and knowledge deficiencies. By having well informed consumers EU can combat other issues like fraud in organic food market and prevent the improper use of the organic logo. Informational resources play an important part for the modern consumer that can have access to multiple platforms via internet and mobile devices.

Even if there is a general EU legislation framework in place, which involves strict rules of certification for organic food products, this aspect is not known by a large number of EU consumers and should be promoted so that any potential consumer can have a guarantee that the product that he is buying is organic and superior from multiple points of view. Also, a very important aspect is represented by the organic food labels and learning how to read them.

Taking as an example the quality schemes promoted by EU in order to protect geographical indications and help consumers better identify these products, the organic sector can learn from these EU policies on how to increase transparency and how to simplify consumer's search. Beside the specific logos (a visual resource already been implemented in the organic food sector) the traditional food sector benefits of a meta-database that contains all traditional food products, in correspondence with their certified designation and much more useful information for the consumer. Thus, with just an internet search away, any consumer can check if a particular food product is listed as a traditional food product within the EU. Moreover, due to the success of the usage of this database, starting 1<sup>st</sup> of April 2019 a new public database called "eAmbrosia - the EU Geographical Indications registers" will give consumers easy access to information on all EU Geographical Indications, including their status (applied, published or registered), their product specification, and a direct link to the legal basis when they are officially protected.

A meta-database for the organic food sector can represent a useful resource for the European consumer as each organic food product can be labelled and identified by using a specific certification code, provided by the certification body that authorized the commercialization of the product under an organic label. Using modern technologies like QR scanning codes and mobile applications, consumer could check in just a few second that a food product is or is not organic and that the information mentioned on the label is correct.

Also, well-structured informational programs can be addressed to all consumers in order to help them better understand the organic market's role in both their personal health and

environmental protection, by meeting certain consumers' needs regarding (Bober et al, 2018):

1. general information that can help consumers acknowledge organic food products cost and benefits and the certification and labelling matrix;
2. database check – the possibility to check any organic food products if it's authentic or not (by adding one of its identification items in search area – product name, producer name, certification body cod) or by scanning a QR code listed on the products label;
3. organic food product information – after confirming that the product is genuine, consumers can have access to all the information from the label plus extra information that the producer wasn't able to add on label due to space restrictions;
4. a section where consumers can address questions and queries, where they can highlight problems and add proposals.

Another important aspect for the consumer is to know how to read an organic food label. There are certain mandatory references that each organic food product must have on its label. In the next section, using a set of labels from Ecocert database, 5 standard examples of labels that can contain the word “organic” are presented with the mandatory information highlighted in red. These examples should be acknowledged and understood by all consumers and also applied when differentiating an organic from a conventional food product.

**Example 1** – an organic food product manufactured in the EU (France) with all its ingredients produced in the EU:



**Example 2** – an organic food product manufactured in the EU (France) with ingredients produced both in the EU and a third-party country (Morocco):



**Example 3** – a food product having less than 95% organic ingredients, produced in Turkey organic logos are not used as the product contains more than 5% conventional ingredients:

# Müesli

Honey and cereals

**List of ingredients :** wheat flakes\*, honey\*(15%), oat flakes\*, flaxseed\*, flaked almonds\*,raisins\*, macadamia nut, hazelnuts\*

\*94 % of agricultural ingredients from organic farming

Certified TR-BIO- 154

Corporate name + address of the company



**Example 4** – wild fishing products (70%) and other organic ingredients (30%), manufactured in Ecuador; organic logos are not used as the product contains conventional ingredients:

# TUNA

Certified by ECOCERT SA EC-BIO-154

Corporate name +address of the firm

*With organic olive oil and capers*

**Ingredients :**

Tuna, olive oil\*, capers\*.

\*30% of agricultural ingredients coming from organic farming



**Example 5** –in Tunisia; organic logos are not used as the product has not yet passed the conversion under organic agriculture conversion products, produced and packaged period:

# CARROTS

Under conversion to organic farming

Certified TN-BIO-001

Corporate name + address of the operator

Therefore, consumer’s needs and satisfaction transposed to the industrial and safety requirements must also include educational programs and access to informational resources. Transparency should represent a very important aspect for producers and should be in the center of a company’s strategy, in order to build sustainable businesses in the food industry. Thus, an informed consumer is a responsible consumer, and emerging markets like the organic food market are need better informed consumers in order to evolve and self-promote its products.

## Conclusions

Organic food consumption can bring multiple benefits to both individuals and the environment. Global organic markets tend to be divided as they are driven by the same economic mechanisms as all global good markets, demand and production. Thus, for the organic food sector the biggest demand volumes do not usually come from the same regions that are highly productive in terms of organic agriculture.

The European Union represent a global consumer of organic food products and shares different consumers patterns from country to country. Multiple studies highlight that lack of information regarding the strict rules that regulates the organic food sector results in a general mistrust from consumers' perspective. Therefore, additional guarantees are needed and these can be met only by assuring that the consumers are correctly informed. In this context, innovative resources, like logos, easy to access databases, mobile applications play a very important role, in increasing consumers' knowledge. Nevertheless, the most important resource when identifying an organic food product is the product's label. Reading and understanding correctly label information still represents a barrier for many consumers, although there are 5 basic scenarios that regulate the organic products market in Europe.

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