



ORGANIC ECOSYSTEM

ORGANIC AGRICULTURE PROSPECTS IN THE MEDITERRANEAN REGION



COUNTRY FOCUS:
JORDAN · LEBANON · ITALY · GREECE · TUNISIA

Deliverable 3.1.4 - Framing Cross Border Strategy and challenges for innovative organic value chain

Editors **Mara Semeraro** · CIHEAM Bari
Simona Giordano · CIHEAM Bari
Luigi Guarrera · CIHEAM Bari
Eduardo Cuoco · IFOAM Organics Europe

Contributor **Tamam Khawalda** · Ministry of Agriculture (Jordan)
Hala Al Twait · Ministry of Agriculture (Jordan)
Said Gedeon · Chamber of Commerce, Industry and Agriculture of Zahle and the Bekaa (Lebanon)
Fady Abou Fayad · Chamber of Commerce, Industry and Agriculture of Zahle and the Bekaa (Lebanon)
Katerina Sotiropoulou · InnoPolis (Greece)
Raja Benzarti · Ministry of Agriculture (Tunisia)
Laura Sauques · IFOAM Organics Europe
Silvia Schmidt · IFOAM Organics Europe
Constantinos Machairas · IFOAM AgriBioMediterraneo

Acknowledgments **Lina Al Bitar** · CIHEAM Bari
A sincere thanks is extended to Lina al Bitar for the valuable contribution given to the production of the present document. As coordinator of MOAN, she strongly dedicated herself to the project as coordinator until 2021..

Editing **ASCAME** (Association of the Mediterranean Chambers of Commerce and Industry)

Disclaimer

This publication has been produced with the financial assistance of the European Union under the ENI CBC Mediterranean Sea Basin Programme. The contents of this document are the sole responsibility of CIHEAM- BARI and can under no circumstances be regarded as reflecting the position of the European Union or the Programme management structures.

The 2014-2020 ENI CBC Mediterranean Sea Basin Programme is a multilateral Cross-Border Cooperation (CBC) initiative funded by the European Neighbourhood Instrument (ENI). The Programme objective is to foster fair, equitable and sustainable economic, social and territorial development, which may advance cross-border integration and valorise participating countries' territories and values. The following 13 countries participate in the Programme: Cyprus, Egypt, France, Greece, Israel, Italy, Jordan, Lebanon, Malta, Palestine, Portugal, Spain, and Tunisia. The Managing Authority (MA) is the Autonomous Region of Sardinia (Italy). Official Programme languages are Arabic, English and French. For more information, please visit: www.enicbcmcd.eu The European Union is made up of 27 Member States who have decided to gradually link together their know-how, resources and destinies. Together, during a period of enlargement of 50 years, they have built a zone of stability, democracy and sustainable development whilst maintaining cultural diversity, tolerance and individual freedoms. The European Union is committed to sharing its achievements and its values with countries and peoples beyond its borders.

CIHEAM Bari, Valenzano, 2022

This publication is freely accessible and usable in compliance with the Creative Commons BY-NC-SA license.

To view a copy of this license, visit <https://www.creativecommons.org/licenses/by-nc-nd/4.0/>

Not for sale edition

Suggested citation: Semeraro M., Giordano S., Guarrera L., Cuoco E. (eds.) (2022). Organic Agriculture Prospects in the Mediterranean Region. Country focus: Greece, Italy, Jordan, Lebanon, Tunisia. Valenzano: CIHEAM Bari. Organic Ecosystem project. Deliverable 3.1.4 - Framing Cross Border Strategy and challenges for innovative organic value chain.

ISBN 978-2-85352-615-9

<https://doi.org/10.48259/bc1961c>

INDEX

Introduction	4
--------------	---

PART A - STATE OF THE ART OF ORGANIC AGRICULTURE

Organic agriculture worldwide	7
Organic agriculture in Europe	12
Organic agriculture in the Mediterranean	23
Organic vision to 2030	26

PART B - METHODOLOGY

Methodology	28
Analysis of organic prospects	31

PART C - ORGANIC PROSPECTS IN PARTNER COUNTRIES

Listening activity and stakeholder analysis	33
Interview analysis	36
Swot analysis	40
Jordan	45
Lebanon	52
Italy	61
Greece	72
Tunisia	83
Conclusions	96



INTRODUCTION

Organic agriculture represents a valuable production method for achieving food safety, as well as sustainability in its various dimensions, encompassing environmental, social, and economic aspects. These dimensions align with the Sustainable Development Goals (SDGs) of the 2030 Agenda, emphasizing the joint challenges associated with sustainable agricultural practices. The pivotal role of organic agriculture in the social and economic development of the region was recognized during the 1st Euro-Med Conference on Agriculture in 2003, where 37 Ministries endorsed its potential as a tool for strengthening the Euro-Mediterranean partnership. Despite the organizational differences among Mediterranean Partner

Countries (MPCs) and the economic downturn in the agriculture sector (Eurostat, 2017), there are common issues that require attention and improvement. These include the formulation of appropriate policies to boost competitiveness, focusing on the specific needs of micro, small, and medium enterprises (MSMEs), transferring knowledge and innovation to MSMEs, and promoting the organic sector by stimulating the aggregation of enterprises in value chains. The Mediterranean region faces multiple shared challenges, such as climate change, pollution, youth unemployment, and social inequality. These challenges affect the well-being of people, irrespective of gender, across the region.

Building upon the aforementioned common issues and emerging challenges and recognizing the fundamental prerequisite of the vast differences among Mediterranean Countries, the present document seeks to outline the potential prospects and future development of the organic agriculture sector. This endeavour is undertaken with a specific focus on each of the countries analysed, namely Greece, Italy, Jordan, Lebanon, and Tunisia.

The present document has been developed as part of the ORGANIC ECOSYSTEM project, entitled “Boosting Cross-Border Organic Ecosystem Through Enhancing Agro-Food Alliances,” which is an ENI-CBC-MED initiative. The primary objective of the project is to facilitate the dialogue and collaboration between various stakeholders and to improve the access of organic MSMEs to agro-food markets, which have become increasingly complex due to the requirements of both quality and trade rules. The ORGANIC ECOSYSTEM project brings together partners from 6 Mediterranean Countries and 5 Competent Authorities (CAs) responsible for the sector’s policy and surveillance, operating within the framework of the MOAN, the Mediterranean Organic Agriculture Network, coordinated by CIHEAM Bari, and connecting all CAs across 24 Euro-Mediterranean Countries.

Partners involved are the following ones: Ministry of Agriculture (Jordan), JEPA (Jordan Exporters and Producers Association for Fruit and Vegetables), CIHEAM Bari - Mediterranean Agronomic Institute of Bari (Italy), Chamber of Commerce, Industry and Agriculture of Zahle and the Bekaa (Lebanon), InnoPolis - Centre for Innovation and Culture (Greece), SYNAGRI - Tunisian farmer’s syndicat (Tunisia) and ASCAME - Association of the Mediterranean Chambers of Commerce and Industry (Spain).

The goal of the MOAN network is to promote organic agriculture as a tool for the socio-political and economic development of the region, enhance the accessibility of local

products to international markets, improve food safety, strengthen the environmental sustainability of agricultural production, and encourage employment and entrepreneurship, with particular attention to youth and women.

The project aims to establish a Cross-Border Organic Ecosystem as an extension of the Mediterranean Organic Agriculture Network (MOAN), capable of connecting Competent Authorities (CAs), private actors, and various stakeholders. Its objective is to encourage productive discussions among actors to develop new alliances and collaborations, including those between public and private entities, and/or private and private entities. The initiative also seeks to promote exchanges not only in a North-South direction but also in a South-South direction, to leverage and disseminate best practices in these countries and to share valuable knowledge.

The present document has been developed through a bottom-up approach that emphasizes the exchange of experiences and people-to-people cooperation. All the information shared in this document has been collected in the framework of the project network, and the aim of this approach is to contribute to enhancing the MOAN’s role at the regional level. The ORGANIC ECOSYSTEM project, through this document, seeks to provide an analysis of the organic sector in partner countries, considering the perspectives of various stakeholders, including the private sector. The ultimate goal is to create a foundation for future discussions that would broaden the scope of this document and ensure the sustainability of the network beyond the project’s conclusion, further strengthening the MOAN’s role.

PART

STATE OF THE ART OF ORGANIC AGRICULTURE

Eduardo Cuoco · Laura Sauques · Silvia Schmidt · Constantinos Machairas



ORGANIC AGRICULTURE WORLDWIDE⁽¹⁾

1.

ORGANIC LAND & PRODUCTION

In 2020, the global organic agricultural land expanded to 74.9 million hectares, representing a 4.1% increase from 2019 with an additional 3 million hectares. Notably, organic agricultural land accounts for 1.6% of the total agricultural land across the world.

The composition of organic agricultural land is predominantly comprised of grassland and grazing areas, representing 66% of the total land, which equates to 51 million hectares. The second largest use of organic agricultural land is for arable land, with 13.1 million hectares, accounting for 18% of the total. Permanent crops make up 7% of the total organic agricultural land, with 5.2 million hectares dedicated to this use.

The global distribution of organic agricultural land reveals that Oceania holds the largest share, accounting for 47.9% of the world's total organic agricultural lands, equivalent to 35.9 million hectares. Australia, which reports the highest number of organic agricultural lands in the region, has 35.69 million hectares of organic agricultural land. Moreover, Australia is the country with the highest number of organic agricultural lands globally, and between 2011 and 2020, it experienced a 200% increase in organic agricultural land. It is estimated that 97% of Australian farmland is used for extensive grazing areas.

Europe is the second-largest region in terms of organic agricultural land, representing a share of 22.8% or 17.1 million hectares. The region has experienced a consistent growth of organic land over the years. Between 2011 and 2020, Europe reported an increase of 62.1% in its organic agricultural land.

Latin America accounts for 13.3% of the world's organic agricultural land or 9.95 million hectares, with two countries ranking among the top three in terms of largest areas of organic land. Argentina boasts 4.45 million hectares while Uruguay has 2.74 million hectares. The region is followed by Asia, which represents 8.2% of the total share of organic agricultural land with 6.15 million hectares. North America has 5% or 3.75 million hectares, and finally, Africa has 2.8% or 2.09 million hectares.

In addition to agricultural land, organic land in the world is also used for various activities such as wild collection areas, beekeeping, aquaculture, forests, and grazing areas on non-agricultural lands. These non-agricultural organic land uses are estimated to comprise 30 million hectares, bringing the total of organic lands in the world to 104.9 million hectares.

It should be noted that caution must be exercised when interpreting this number, as numerous countries do not report non-agricultural organic areas, which suggests that the actual figure may be higher.

(1) The data used below are extracted from the report realized by FIBL and IFOAM Organics International, the World of Organic Agriculture, Statistics and Emerging Trends in 2022 - <https://www.fibl.org/fileadmin/documents/shop/1344-organic-world-2022.pdf>. This report relies on data collected in the year 2020

2.

OPERATORS

As of 2020, the global number of organic producers stands at 3.4 million, representing a notable increase of 7.6% compared to the previous year. A significant proportion of these producers are located in Asia (56%), followed by Africa (24%) and Europe (12%). It is worth noting that these regions collectively account for 90% of the total organic producers worldwide.

Worldwide, the number of organic producers increased by 7.6% from 2019 to 2020, resulting in an additional 240,000 organic producers. The majority of organic producers are located in Asia (56%), Africa (24%), and Europe (12%), with a total of 3.4 million organic producers globally. Specifically, Asia reported the highest increase in the number of organic producers at 13.9%, followed by Latin America with an increase of 20.5%. However, Africa, Europe and Oceania reported a decrease in the number of organic producers in 2020.

The nation with the greatest number of organic producers is India, boasting 1.6 million producers, while Ethiopia comes in second with 219,500 organic producers.

Accurately estimating the number of organic farms on a global scale can be challenging due to the lack of data availability in some countries and the variations in data collection methods across different regions.

Additional operator types are also involved in the organic value chain, such as processors and importers. As of 2020, there are over 112,000 organic processors worldwide, mainly concentrated in Europe. The number of organic importers is estimated at around 7,700. However, due to incomplete reporting by some countries, these figures should be interpreted with caution, as the actual number of processors, exporters, importers, and other operator types may be higher.

3.

MARKET

3.1 THE GLOBAL ORGANIC MARKET

In 2020, the global retail organic sales reached 121 billion euros, showing market growth in all countries with available data.

The United States holds the first place in terms of the value of the organic market, estimated at 49.5 billion euros. Germany follows with 15 billion euros, France with 12.7 billion euros, and China with 10.2 billion euros. It is noteworthy that all countries where data is available experienced growth in their organic market in 2020.

North America and Europe are the largest organic food markets, accounting for 44.5% and 43.2% of the global market respectively. While these two regions combined represent 90% of the sales, the organic market in Asia is rapidly growing. Countries such as China, India, and South Korea are becoming increasingly important markets for organic products, with Asia representing 10.4% of the global market in 2020.

Examining data from previous years provides insights into the remarkable growth of the organic market over the last two decades. In 2000, the global organic market was valued at 18 billion euros, which increased to 59 billion euros in 2010. This represents a growth of more than 200% in just 10 years. The demand for organic products is expected to continue to increase as consumers associate them with good health, nutrition, wellness, and environmental sustainability.

3.2 INTERNATIONAL TRADE DATA

The global Covid-19 pandemic had a significant impact on the export of agricultural products, revealing vulnerabilities within international supply chains. Among the most negatively affected were organic food companies and ingredient firms that had established global supply chains. The crisis has further emphasized a gradual trend towards more localized supply chains, as companies have had to adapt to disruptions in transportation and international trade.

Given that the subsequent section will examine international trade data pertaining to the European Union in greater detail, this section will concentrate on other significant players in the worldwide organic market.

Between 2011 and 2019, the US experienced a significant increase in its organic exports, with the total value rising from just over 400 million US dollars to almost 700 million US dollars (566.6 million euros). Canada and Mexico are the main trading partners of the US, representing 75% of total US organic exports on average between 2011 to 2016. The top 10 list for US organic exports also includes Japan, South Korea, Taiwan, the EU, and the United Arab Emirates. The markets of East Asia and the Middle East are becoming increasingly important to the US, as evidenced by the value of organic exports to the United Arab Emirates, which increased from 1.2 million US dollars in 2012 to 14.4 million US dollars in 2015.

From 2013 to 2016, the US organic imports exceeded organic exports, with an average of 1.476 billion US dollars per year. Mexico, Italy, and Peru are the main trading partners for organic imports, accounting for slightly more than 25% of total US imports of organic products⁽²⁾.

Canada, as an important player in the North American region, has experienced a stagnation in its organic exports in recent years. In 2020, Canada's organic exports amounted to more than 416 million euros, while its organic imports amounted to more than 523.2 million euros. There has been a 30% increase in organic imports between 2016 and 2020.

Although Asia accounts for a substantial portion of the world's organic agricultural land, reliable data on the organic market and international trade is not readily available for many countries in the region. Nevertheless, recent estimates indicate that China's organic exports amounted to 805.9 million euros in 2020, while Vietnam's organic exports were valued at 293.3 million euros and the Philippines' at 84.7 million euros. It is worth noting, however, that these figures may not be fully representative of the region's organic trade dynamics due to data limitations. Further research and data collection efforts are needed to better understand the state of organic production and trade in Asia.

(2) OTA Trade Report p31, available [here](#).

In the Oceania region, Australia holds a prominent position in the international trade of organic products. With exports reaching 62 different markets, the total value of Australia’s organic exports amounted to 433.6 million euros. The United States is Australia’s primary trading partner, accounting for 33% of the total organic exports. New Zealand and Singapore also feature prominently among Australia’s trading partners. In addition, China, Japan, and Sweden are significant markets for Australian organic products.

It should be noted that due to the unavailability of international trade data from some countries and regions, as well as differences in data collection methods, a complete and reliable analysis of the global organic market is challenging. Therefore, the figures presented should be interpreted with caution.

4. LEGISLATION AND POLICY SUPPORT

Governments worldwide are increasingly endorsing the implementation of organic and agroecological policies through the development of new initiatives and programs aimed at attaining the established objectives.

Regarding legislation supporting organic agriculture, it is possible to classify it into three categories: fully implemented, partially implemented, and in the drafting stage.

	Legislation fully implemented	Legislation partially implemented	Legislation in drafting stage	Total
Africa	1 country	4 countries	5 countries	10 countries
Asia	11 countries	9 countries	6 countries	26 countries
Europe	42 countries	4 countries	None	46 countries
Latin America and the Caribbean	16 countries	3 countries	2 countries	21 countries
North America	2 countries	None	None	2 countries
Oceania	4 countries	None	None	4 countries

Table 1 - Table summarizing the organic regulations worldwide by region⁽³⁾

Given that the regulation and legislation of Europe will be expounded upon in greater detail in the subsequent section, the present paragraph will shift its focus to other global regions.

Some countries have embraced the concept of 100% organic agriculture in recent years. For instance, Togo’s Ministry of Agriculture, Animal Protection and Fisheries issued a “concept note for the national conversion of the agricultural sector to organic,” which integrates the development of organic and ecological agriculture into the national strategy of the country for the 2020-2030 period. Bhutan and Nepal are also committed to promoting organic farming as the primary agricultural model through various measures such as international partnerships to boost organic exports or initiatives to develop the local organic market.

(3) Table realized using the data compiled in the report realized by FIBL and IFOAM Organics International, the World of Organic Agriculture, Statistics and Emerging Trends in 2022 - <https://www.fibl.org/fileadmin/documents/shop/1344-organic-world-2022.pdf>

The United States has fully implemented legislation for organic agriculture, with dedicated agencies within the US Department of Agriculture (USDA). To further enhance oversight and compliance with organic principles throughout the supply chain, proposed changes to the USDA organic regulation have been put forward for the United States National Organic Program.

Some countries have established a shared market for organic products by forming alliances. In 2021, the members of the Eurasian Economic Union initiated the implementation of their organic regulation. Although the standards may not be identical, the goal is to standardize the organic standards process to enable the free flow of organic products within the Union without barriers.



ORGANIC AGRICULTURE IN EUROPE⁽⁴⁾

1.

ORGANIC LAND PRODUCTION

Europe⁽⁵⁾ boasts a significant portion of the world's organic agricultural lands, with 17.1 million hectares in 2020, reflecting a 3.7% increase from the previous year, and an additional 0.6 million hectares. This equates to approximately 22% of the global organic agricultural land area.

Out of the total 17.1 million hectares of organic agricultural lands in Europe in 2020, almost 90% (14.9 million hectares) are located within the European Union (EU). Within the EU, the area of organic agricultural lands increased by 5.3% between 2019 and 2020, representing an additional 0.75 million hectares. The relatively smaller share of organic agricultural lands outside of the EU can be attributed to a significant decrease of 26.2% in organic agricultural lands in Turkey. Conversely, France experienced a major increase in its organic agricultural lands with an additional 0.31 million hectares between 2019 and 2020, followed by Italy with an increase of 0.10 million hectares and Germany with an increase of 0.09 million hectares.

According to the latest available data, permanent crops make up 11% of the total organic agricultural land in Europe, a percentage that is also reflected in the EU. Arable crops constitute 47% of the organic agricultural land in Europe and 45% in the EU, while permanent grasslands represent 39% of the total organic agricultural land in Europe and 42% in the EU.

The European countries with the largest amount of organic agricultural land are France with 2.5 million hectares, Spain with 2.4 million hectares, Italy with 2.1 million hectares, and Germany with 1.7 million hectares. Together, these four countries account for over 50% of the total organic agricultural land in Europe.

Agricultural land under organic management accounts for 3.4% of the total agricultural land in Europe, while in the European Union it represents 9.2%. Out of the 27 European countries, 14 have a share of organic agricultural land exceeding 10%, of which 12 are part of the EU.

(4) The data used below are extracted from the report realized by FIBL and IFOAM Organics International, the World of Organic Agriculture, Statistics and Emerging Trends in 2022. This report relies on data collected on the year 2020
<https://www.fibl.org/fileadmin/documents/shop/1344-organic-world-2022.pdf>

(5) Europe encompasses the EU27, Member countries of the European Union from 2020 onward: Liechtenstein, Switzerland, Norway, UK, Montenegro, Moldova, Ukraine, Turkey, Serbia, Kosovo, Iceland, North Macedonia, Russia, Bosnia Herzegovina, Belarus, Albania, and Andorra.

Organic Production in the EU-27 (excluding UK)

In the European Union excluding the United Kingdom, the organic agricultural area reached 14.719.036 hectares in 2020, with a total of 334,128 organic producers. Between 2012 and 2020, the organic area increased by 35%, while the number of organic producers increased by 56%, as shown in Figure 1 and Table 2.

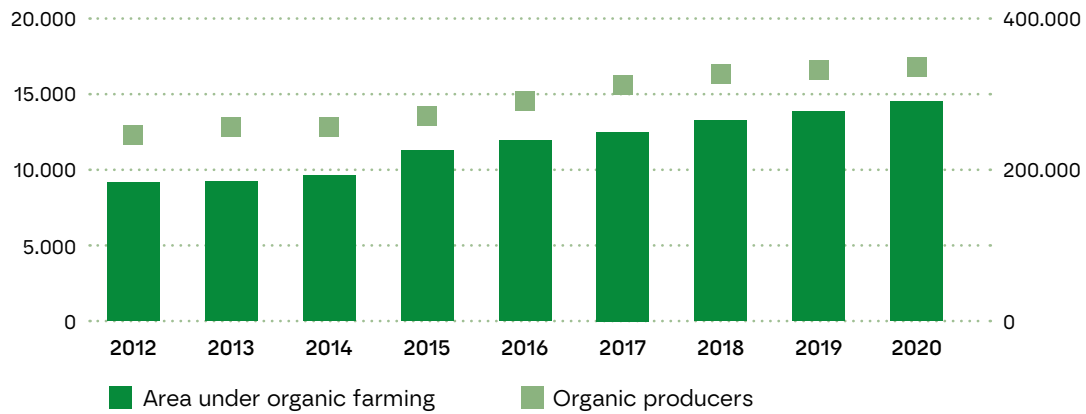


Figure 1 - Organic area and producers (1 000 ha)

Year	Area under organic farming	Organic producers (right axis)
2012	9,458	247,649
2013	9,512	253,215
2014	9,794	254,115
2015	10,610	267,933
2016	11,445	292,191
2017	12,063	308,823
2018	12,987	320,013
2019	13,794	329,275
2020	14,719	334,128
Rate of change	56%	35%

Table 2 - Organic area and producers⁽⁶⁾

(6) <https://agridata.ec.europa.eu/extensions/DashboardIndicators/OrganicProduction.html>

In the European Union excluding the United Kingdom, the proportion of animals held by organic farmers in 2019 was 6% for cattle, 8% for goats, 7% for sheep, and 2% for pigs. Between 2013 and 2019, the share of animals held by organic farmers increased by 2% for cattle, goats, and sheep, and by 1% for pigs, as shown in Figure 2 and Table 3.

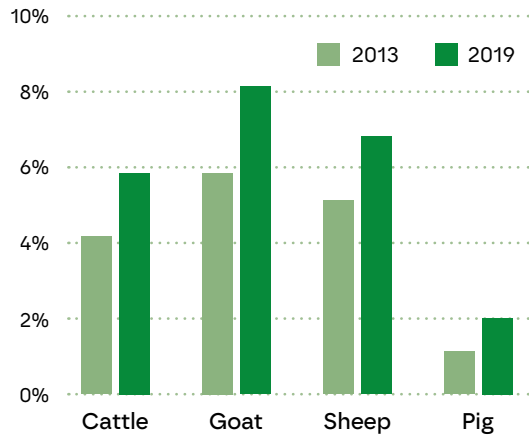


Figure 2 - Share of animals held by organic farmers (%)

Share of animals	2013	2019	Rate of change
Cattle	4%	6%	2%
Goat	6%	8%	2%
Sheep	5%	7%	2%
Pig	1%	2%	1%

Table 3 - Share of animals held by organic farmers (%)⁽⁷⁾

Organic Production and Common Agricultural Policy (CAP) in the EU-27 (excluding UK)

In the European Union excluding the United Kingdom, the portion of organic agricultural land receiving specific support from the Common Agricultural Policy (CAP) in 2020 was 9,063 thousand hectares out of a total of 14,719 thousand hectares. This indicates that the proportion of organic agricultural land receiving specific CAP support was 61.6%. These findings are shown in Figure 3 and Table 4.

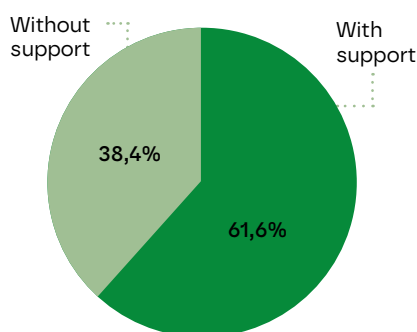


Figure 3 - Share of organic area receiving specific CAP support

Support / No support	1000 ha	Share
With support	9,063	62%
Without support	5,656	38%
Sum	14,719	100%

Table 4 - Share of organic area receiving specific CAP support⁽⁸⁾

(7) (8) <https://agridata.ec.europa.eu/extensions/DashboardIndicators/OrganicProduction.html>

In the European Union excluding the United Kingdom, the organic area which received specific support under the Common Agricultural Policy (CAP) in 2020 was 9,063 thousand hectares in the EU-27 (excluding UK). This represents 61.6% of the total organic area of 14,719 thousand hectares. Notably, between 2015 and 2020, the organic area receiving specific CAP support increased by 73% (Figure 4 and Table 5).

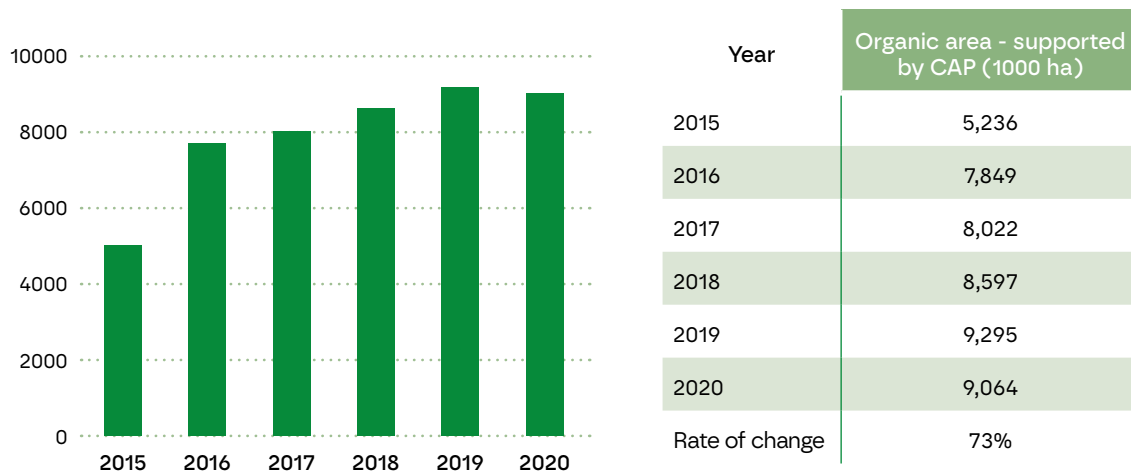


Figure 4 - Organic area receiving specific CAP support

Table 5 - Organic area receiving specific CAP support (1000 ha)⁽⁹⁾

In the European Union excluding the United Kingdom, the average specific Common Agricultural Policy (CAP) support per hectare for organic farming was estimated to be 203 euros in 2020. However, the level of CAP support differs between countries. Notably, Greece and Italy had relatively higher levels of CAP support per hectare, with Greek organic producers receiving 356 euros/ha and Italian producers receiving 288 euros/ha (Figure 5 and Table 6).

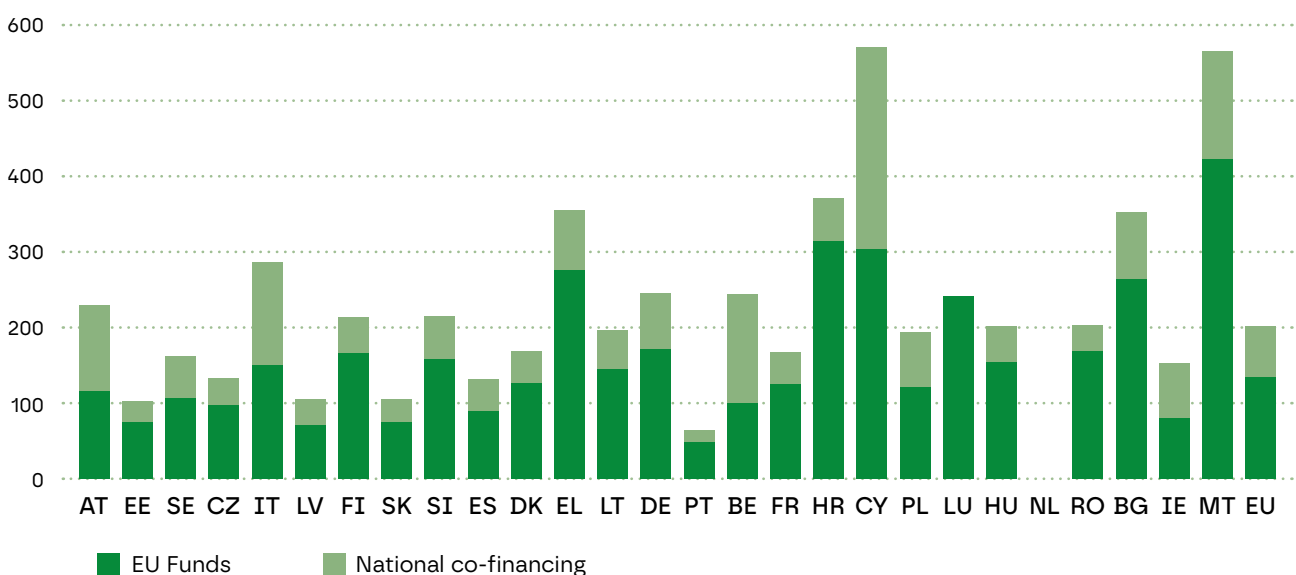


Figure 5 - Average specific CAP support per ha (EUR/ha)

(9) <https://agridata.ec.europa.eu/extensions/DashboardIndicators/OrganicProduction.html>

Member State Code	EU Funds	National co-financing	CAP support (€/ha)
AT	118	113	231
EE	78	26	104
SE	109	56	165
CZ	99	33	133
IT	153	136	288
LV	73	34	107
FI	168	46	214
SK	78	28	105
SI	162	54	216
ES	92	41	133
DK	129	43	172
EL	278	78	356
LT	148	49	197
DE	174	72	246

Member State Code	EU Funds	National co-financing	CAP support (€/ha)
PT	51	14	65
BE	101	146	247
FR	128	42	170
HR	318	56	374
CY	306	268	574
PL	124	71	195
LU	244	0	244
HU	157	45	202
NL	0	0	0
RO	170	34	204
BG	265	88	354
IE	82	72	154
MT	426	142	568
EU	137	67	203

Table 6 - Average specific CAP support per ha (EUR/ha)⁽¹⁰⁾

2. OPERATORS

In Europe, there are currently 417,977 certified organic producers, representing a decrease of 2.5% compared to the previous year. This decline can largely be attributed to a reduction in the number of reported producers in Turkey, where 20,000 fewer farms were recorded. However, when considering the European Union as a whole, the number of organic producers has increased by 3.3% compared to 2019, with almost 350,000 producers reported. The top three European countries with the highest number of organic producers are Italy (71,590), France (53,255), and Turkey (52,590).

In Europe, there are currently 84,799 certified organic processors, representing an increase of 3.8% compared to the previous year. Within the European Union, 78,262 processors are reported, reflecting an increase of 3.4% from the previous year. Italy has the highest number of organic processors with 22,689 reported.

In 2020, the number of organic importers in Europe was approximately 6,800, representing a 5.2% increase compared to the previous year. Within the European Union, the number of organic importers rose by 5.3% to over 5,800. Germany exhibited the highest number of organic importers, accounting for 1,916 of these entities.

⁽¹⁰⁾ <https://agridata.ec.europa.eu/extensions/DashboardIndicators/OrganicProduction.html>

3.

MARKET

3.1 THE EUROPEAN ORGANIC MARKET

The organic market in Europe generated approximately 52 billion euros in retail sales, demonstrating a significant growth rate of 14.9% compared to the previous year's figures. The market witnessed exceptional progress over the decade from 2011 to 2020, displaying a growth rate of 144.2%.

Within the European Union, the organic market generated a substantial revenue of 44.8 billion euros in 2020, indicating an impressive growth rate of 15.1% compared to 2019. The organic market experienced a remarkable surge in the period between 2011 and 2020, with a growth rate of 152.1% in the region. The European Union accounts for 37% of the global organic retail sales, trailing just behind the United States, which holds a share of 41%.

The Covid-19 pandemic precipitated a shift in consumer behaviour as people became more mindful of their health and the environment. Consequently, the sales of organic products surged during this period, outpacing the figures from previous years. Although this trend is anticipated to taper off as the pandemic subsides, experts have projected that the sales of organic products will remain steady, albeit with a slower growth rate.

Germany boasts the most extensive organic market in Europe, with a retail sales figure of 14.99 billion euros, which positions it as the second-largest market globally, as previously noted. The country also exhibited the most robust growth in the European organic market between 2019 and 2020, with a substantial increase of 22.3%. Switzerland takes second place in terms of growth, with an increase of 19.1%, while Austria ranks third with a growth rate of 18%.

In 2020, the per capita consumption of organic products in Europe stood at 63 euros, indicating a growth rate of 12.9% compared to the previous year when it was 55.8 euros. However, the per capita consumption of organic products within the European Union was considerably higher, amounting to 101.8 euros in 2020, exhibiting a remarkable increase of 21.1% from the previous year's figure of 84 euros.

The organic sector accounts for 4.7% of the total market share in the European Union, with significant variations depending on the product category. Organic fruits and vegetables are exceptionally popular among European consumers of organic products. In contrast, certain categories, such as organic beverages (excluding wine) and meat (particularly poultry), typically exhibit lower market shares in numerous countries. This phenomenon can be attributed to the highly processed nature of these products, which are readily available at lower prices in the conventional market. It is worth noting that there is a lack of data available to compare this trend with regions outside of Europe.

Europe accounts for the highest global market share in organic products, with Denmark leading the pack as the country with the most significant market share, amounting to 13% of the total market. Austria ranks second, with a market share of 11.3%, followed by Switzerland (10.8%), Luxembourg (9.1%), and Sweden (8.7%).



3.2 INTERNATIONAL TRADE DATA

In 2020, imports of agri-food products in the European Union amounted to 2.8 million tons, exhibiting a decline of 1.9% from the previous year when imports were 2.85 million tons.

The Netherlands is the largest importer of agri-food products in the European Union, accounting for 31% of the total imports, mainly intended for resale. Germany is the second-largest importer, responsible for 18% of the total imports, followed by Belgium (11%) and France (10%).

Ecuador is the primary trading partner of the European Union, with its organic imports accounting for 11.6% of the total organic imports in the EU. The Dominican Republic is the second-largest trading partner, with a share of 9% in the total imports.

In 2019, China was the largest trading partner of the European Union in terms of organic imports, with 359,057 tons of organic products, accounting for 13.4% of the total EU organic imports. However, in 2020, China's organic exports to the EU decreased by 37%, causing it to become the third-largest trading partner with the EU, exporting 227,669 tons of organic products.

Ecuador, the Dominican Republic, China, Ukraine, Peru, and India collectively account for half of the organic imports of the EU. The most imported category of products is "tropical fruits, nuts and spices", which make up 30% of the total imports, or 0.84 million tons. Between 2019 and 2020, imports of this category increased by 9%. The second most imported category in the EU is oilcakes, accounting for 8% of the total, or 0.23 million tons, although a decrease of 22% was noted between 2019 and 2020. Beet and cane sugar represent 7% of imports, or 0.19 million tons, and vegetables represent 5%, or 0.15 million tons.

4.

LEGISLATION AND POLICY SUPPORT

The European Union (EU) has established a comprehensive legal framework to regulate organic farming practices and ensure compliance with strict standards across a network of member countries. The legislation governing organic agriculture covers various aspects such as soil and water management, biodiversity, animal welfare, and the use of fertilizers and pesticides. Through this legislation, the EU aims to promote sustainable and environmentally friendly farming practices while ensuring the production of high-quality organic products for consumers.

[Regulation 2018/848](#) serves as the fundamental framework for organic farming in the European Union and has been further refined by [Regulation 2020/1693](#). This comprehensive regulation came into effect in January 2022 and encompasses various aspects such as production, processing, control, certification, labelling, as well as equivalency agreements for international trade and imports of organic products. Since 2020, a number of delegated acts have been put in place to supplement and enhance the content of the underlying Regulation, particularly with regard to production, control, certification, and trade. The EU's extensive network of member countries facilitates the implementation of these regulations and their enforcement, ensuring high standards of organic farming practices and product quality.

The Common Agricultural Policy (CAP) is an essential instrument of the European Union for supporting and regulating agriculture, forestry, and rural development. In November 2021, the European Parliament voted on the new CAP regulations, which were followed by the vote of delegated and implemented acts in the first quarter of 2022. These legislative acts will apply from January 2023 to December 2027 and will cover various aspects, such as income support, market measures, and rural development. The new CAP regulations aim to support sustainable agriculture practices, encourage environmentally friendly farming, and promote rural development. They also aim to ensure a fair income for farmers and to address climate change challenges.

The recently voted Common Agricultural Policy (CAP) regulations, covering the period from January 2023 to December 2027, include several measures for organic farming. The main measure is the introduction of eco-schemes, which will make up 25% of the first pillar's budget. Member States will have the responsibility of defining these schemes, although they will be mandatory for the Member States, they will remain voluntary for farmers. This is a less binding approach compared to the previous greening measures of the CAP. Additionally, 35% of the second pillar's budget will be dedicated to agri-environmental and climate measures. At present, national CAP strategies are under discussion and will determine the level of ambition of the CAP.

The Farm to Fork Strategy is a key initiative within the European Commission's broader European Green Deal (EGD), aimed at facilitating a global shift towards equitable, sustainable, and healthful food systems. One of its central goals is to expand the proportion of the EU's agricultural land managed using organic methods to 25% by 2030. Additionally, the EU promotion programme is intended to boost the visibility and appeal of high-quality food products originating within the EU. In accordance with the Farm to Fork Strategy, the European Commission has allocated a significant budget to the promotion of organic products since 2021.

It is worth noting that UAA stands for Utilized Agricultural Area, which refers to the land used for agricultural purposes, including arable land, permanent crops, and grassland. In 2020, Austria has already reached the EGD target of 25% organic farming, while Estonia (22%) and Sweden (20%) are also making significant progress. Italy has a share of 16% of organic farming in total UAA, Greece has a share of almost 10%, and the EU-27 (excluding UK) average is 9.1%. These figures are shown in Figure 6 and Table 7.

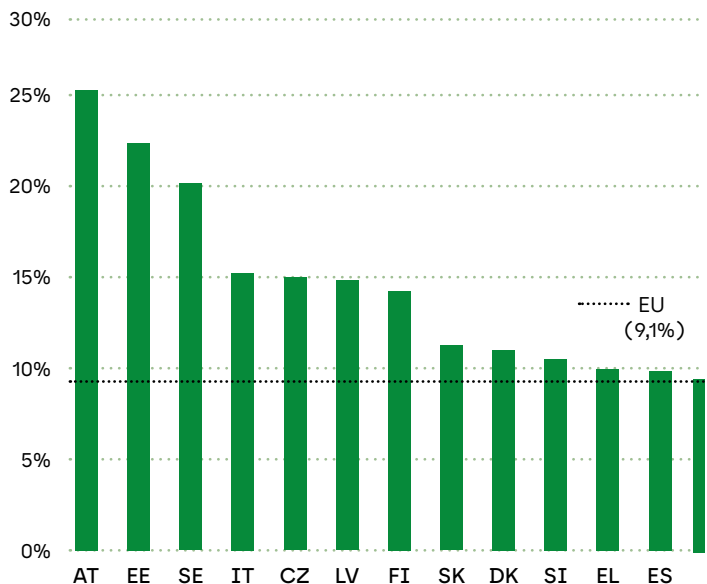


Figure 6 - Share of organic farming in total UAA (Utilised Agricultural Area) by MS

Member State	Share organic
Austria	25%
Estonia	22%
Sweden	20%
Italy	16%
Czechia	15%
Latvia	15%
Finland	14%
Slovakia	12%
Denmark	11%
Slovenia	11%
Greece	10%
Spain	10%
Germany	10%
France	9%
Portugal	8%
Lithuania	8%
Belgium	7%
Croatia	7%
Hungary	6%
Luxembourg	5%
Cyprus	4%
Netherlands	4%
Poland	4%
Romania	3%
Bulgaria	2%
Ireland	2%
Malta	1%

Table 7 - Share of organic farming in total UAA by MS⁽¹¹⁾

(11) <https://agridata.ec.europa.eu/extensions/DashboardIndicators/OrganicProduction.html>

Research plays a crucial role in advancing the field of organic farming, and it is supported through funding from both European and national research programs. Since the 1990s, numerous research projects centered on organic farming have been funded by the Horizon 2020 framework program.

The European Commission published its new Organic Action Plan (OAP) on 25 March 2021, which consists of 23 actions and is divided into three interconnected axes that reflect the structure of the food supply chain and the sustainability objectives of the Green Deal.

The Axis are the following ones:

- **Axis 1:** organic food and products for all: stimulate demand and ensure consumer trust.
- **Axis 2:** on the way to 2030: stimulating conversion and reinforcing the entire value chain.
- **Axis 3:** organics leading by example: improving the contribution of organic farming to sustainability.

Axis 1: organic food and products for all: stimulate demand and ensure consumer trust

EU citizens increasingly value organic products. Retail sales for organic products have increased by over 128% in the last 10 years, from approximately €18 billion in 2009 to €41 billion in 2019. On average, each European spends around €84 per year on organic products.

Boosting the consumption of organic products and reinforcing consumers' confidence in them are crucial to incentivize farmers to shift towards organic farming. In order to sustain the growth and ensure profitability in the organic market, the Commission will take measures to:

- promote organic farming and the EU logo;
- promote organic canteens and increase the use of green public procurement;
- reinforce organic school schemes;
- prevent food fraud and strengthen consumer trust;
- improve traceability;
- facilitate the contribution of the private sector.

Axis 2: on the way to 2030: stimulating conversion and reinforcing the entire value chain

To increase the proportion of land being farmed using organic practices, it is crucial to develop all stages of the supply chain. This includes establishing suitable structures to promote local production and short distribution channels, which will allow farmers to fully benefit from the added value of organic produce.

To continue progress in production and processing, the action plan will:

- encourage conversion, investments and exchanges of best practices;
- develop sector analysis to increase market transparency;
- support the organisation of the food chain;
- reinforce local and small-value processing and foster short trade circuit;
- improve animal nutrition in accordance with organic rules;
- reinforce organic aquaculture.

Axis 3: organics leading by example: improving the contribution of organic farming to sustainability

Organic farming has been shown to promote higher levels of biodiversity than conventional farming practices, with studies suggesting up to a 30% increase in biodiversity on organic farms. This is particularly important for supporting pollinators and other beneficial insects. Organic farming also prohibits the use of chemical pesticides and synthetic fertilisers, as well as genetically modified organisms (GMOs) and ionising radiation. The use of antibiotics is also heavily restricted in organic farming.

The Commission will further improve the organic sector's contribution to sustainability and environmental challenges through actions focused on:

- reducing climate and environmental footprint;
- enhancing genetic biodiversity and increasing yields;
- developing alternatives to contentious inputs and other plant protection products;
- enhancing animal welfare;
- making more efficient use of resources.

ORGANIC AGRICULTURE IN THE MEDITERRANEAN⁽¹²⁾

To analyze the Mediterranean region, the Mediterranean Organic Agriculture Network (MOAN) has adopted a categorization that identifies three distinct areas: the Candidates and Potential Candidates (CPC) countries, the European Union Mediterranean (EU MED) countries, and the Southern and Eastern Mediterranean (SEM) countries⁽¹³⁾.

The CPC countries include Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, Serbia, and Turkey.

The EU MED countries include Croatia, France, Greece, Italy, Malta, Portugal, Spain, and Slovenia.

The SEM countries include Algeria, Egypt, Jordan, Lebanon, Libya, Morocco, Palestine, Syria, and Tunisia.

We will follow this classification and refer to it as such in the following.

1.

STATISTICS ON ORGANIC LAND

According to the Mediterranean Organic Agriculture Network (MOAN), the EU MED countries hold 90.5% of the total agricultural land in the Mediterranean region. France leads with 2.5 million hectares, followed by Spain with 2.4 million hectares, Italy with 2 million hectares, and Greece with 534,629 hectares. The SEM countries represent 4.8% of the total organic agricultural lands in the region, while the CPC countries represent 4.6%. The largest area of organic agricultural land in SEM is Tunisia, with 297,137 hectares, while Turkey is the CPC country with the largest area, with 382,639 hectares. However, Turkey experienced a decrease of 26.2% in its organic agricultural land between 2019 and 2020, possibly due to underreporting by almost 20,000 farmers.

In the EU MED countries, the reported organic land is limited to agricultural lands, whereas in CPC and SEM countries, wild collection lands or forests are also included, significantly increasing their total organic

(12) The data used below are extracted from the report realized by FIBL and IFOAM Organics International, the World of Organic Agriculture, Statistics and Emerging Trends in 2022. This report relies on data collected on the year 2020.

<https://www.fibl.org/fileadmin/documents/shop/1344-organic-world-2022.pdf>

In addition, the information used rely on the following MOAN publications.

MEDITERRANEAN ORGANIC AGRICULTURE, key Features, recent Facts, latest Figures, REPORT 2014, Patrizia Pugliese, Marie Reine Bteich and Lina Al-Bitar (eds.) MOAN, CIHEAM Bari, 2014, Valenzano, available [here](#)

Pugliese P., Al-Bitar L. (eds.) (2008). Organic farming policy in South-East Mediterranean and Western Balkans. Approaches and measures in government support. Valenzano: Ciheam-Iamb. ISBN 2-85352-397-7

Madzagic S., Al Bitar L., Bteich M.R., Pugliese P. (eds.) 2019). Mediterranean Organic Agriculture Network - Report 2019. Valenzano: CIHEAM Bari.

ISBN printed version 978-2-85352-588-6 <https://doi.org/10.48259/bc1957d>

ISBN PDF version 978-2-85352-589-3 <https://doi.org/10.48259/bc1957e>

See also: Al Bitar L. (ed.). Report on organic agriculture in the Mediterranean area Mediterranean Organic Agriculture Network. Valenzano: Iamb, 2002. ISBN 2-85352-251-2 (Options méditerranéennes, B 40).

Al Bitar L. (ed.). Report on organic agriculture in the Mediterranean area Mediterranean Organic Agriculture Network. Valenzano: Iamb, 2004. ISBN 2-85352-302-0 (Options méditerranéennes, B 50).

(13) MEDITERRANEAN ORGANIC AGRICULTURE, key Features, recent Facts, latest Figures, REPORT 2014, Patrizia Pugliese, Marie Reine Bteich and Lina Al-Bitar (eds.) MOAN, CIHEAM Bari, 2014, Valenzano, available [here](#)

land area. This is particularly true for CPC countries. Notably, Kosovo has the largest share of organic wild collection lands in the Mediterranean region and the second-largest share in Europe. Wild collection lands make up 99.9% of Kosovo's total organic land area. Albania, Bosnia and Herzegovina, North Macedonia, and Turkey also have a high share of wild collection lands in their total organic land area.

In the SEM countries, it is notable that Morocco has a larger share of wild collection lands, while Tunisia has a greater proportion of forests under organic management. This suggests that different approaches to organic farming and land use exist within the region.

2.

OPERATORS

It is important to note that the available data on organic operators in the region may not be complete and some information may be outdated, dating back to previous years, starting from 2015. Nonetheless, this data provides valuable insights into the overall trends in the region.

The Mediterranean region counts with nearly 280,000 organic producers, with approximately 77% operating in the EU MED countries, 19.6% in the CPC countries, and 3.5% in the SEM countries. It should be noted that data on organic producers may be incomplete, and for some countries, the information may be outdated. Nonetheless, these figures provide a general overview of the distribution of organic producers in the region.

Italy had the highest number of organic producers in the Mediterranean region in 2020⁽¹⁴⁾, with a count of 71,590. Following Italy, France and Turkey are the other two countries in the region with a significant number of organic producers. Among the CPC countries, Turkey is the only one with a noteworthy number of organic producers. Among the SEM countries, Tunisia is the only country to have a significant number of producers, with a count of 6,525.

The dominance of EU Med countries is also reflected in the distribution of organic processors and importers/exporters. Of the total organic processors, 93.7% are located in EU Med countries, while only 3.9% are in CPC countries and 2.7% in SEM countries. Italy leads in the number of organic processors with 22,689, followed by France with 19,311 and Spain with 5,561. Similarly, 69% of organic importers and exporters are in EU MED countries, while CPC and SEM countries account for 19.1% and 11.9%, respectively. Italy also leads in the number of organic importers and exporters with 1,429, followed by France with 662 and Turkey with 583.

3.

MARKET

It should be noted that the available data on market and trade in the Mediterranean region may be incomplete and further data collection may be necessary to provide a comprehensive overview. Nevertheless, the existing data allows for the identification of general trends in the region's market and trade.

(14) <https://www.fibl.org/fileadmin/documents/shop/1344-organic-world-2022.pdf>

3.1 ORGANIC RETAIL SALES

In 2020, the organic products market in the Mediterranean region was mainly concentrated in the EU MED countries. France reported the highest market value, with over 12,000 million euros, followed by Italy with 3,800 million euros and Spain with 2,500 million euros. However, it is important to note that data on the market for organic products may be incomplete, and not all countries in the region may have reported their data.

It should be noted that data for retail sales of organic products may be incomplete or unavailable for some countries. However, based on the available data, it is observed that the CPC countries reported minimal retail sales of organic products, with the exception of Turkey, which reported 46 million euros in 2020. On the other hand, no retail sales data was reported by the SEM countries.

3.2 INTERNATIONAL TRADE DATA

According to the available data, the organic exports from countries in the Mediterranean region are predominantly from the EU MED countries. Turkey is the only country outside the EU MED region that has reported a notable amount of organic exports, amounting to 182 million euros in 2017. However, it should be noted that the available data may not be complete, and there may be other countries with significant organic exports that are not reported.

4.

LEGISLATION AND POLICY SUPPORT

It should be noted that the EU MED countries, being members of the European Union, have all fully implemented the regulations on organic agriculture outlined by the EU. For more information on these regulations, please refer to the previous section regarding Europe and the European Union.

It is noteworthy that all CPC countries have established regulations on organic agriculture, and nearly all of them have fully implemented this legislation. Only Bosnia and Herzegovina has reported a partial implementation of their regulations pertaining to organic agriculture.

Regarding the SEM countries, it should be noted that the situation regarding organic regulations is heterogeneous. Lebanon⁽¹⁵⁾, Jordan⁽¹⁶⁾, Tunisia, and Morocco have fully implemented regulations on organic agriculture. On the other hand, Egypt and Jordan have regulations that are not fully implemented. Algeria is currently in the process of drafting its legislation, while information is lacking for Libya, Palestine, and Syria.

(15) <https://leap.unep.org/countries/lb/national-legislation/organic-production-regulation-law-no-158-2020>

(16) Organic Farming in Jordan is regulated by Bylaw No. (29) issued in 2011 and updated by Bylaw No. (133) of 2016 (<https://moa.gov.jo/AR/List/%D8%A7%D9%84%D8%A7%D9%86%D8%B8%D9%85%D8%A9>). The bylaw is complemented by Instructions No. (K5 – page #7) issued in 2017 (<https://moa.gov.jo/AR/List/%D8%A7%D9%84%D8%AA%D8%B9%D9%84%D9%8A%D9%85%D8%A7%D8%AA>)

ORGANIC VISION TO 2030

The evolution of the organic movement has been a significant process since its inception at the turn of the 20th century. It was initiated by visionary pioneers who identified the dire need for a revolutionary change in the agricultural sector. This period, termed as Organic 1.0, was succeeded by Organic 2.0 in the 1970s. During this era, the principles and agricultural techniques developed by the pioneers were systematized into standards and eventually, into legally enforced regulatory systems.

Organic 3.0 marks a new phase in the evolution of the organic movement, with a vision that redefines its role and position towards global issues in the food systems. The concept positions organic agriculture as a significant contributor towards the achievement of the Sustainable Development Goals (SDGs). The overarching goal of Organic 3.0 is to facilitate the adoption of genuinely sustainable farming systems and markets based on organic principles on a large scale. Organic agriculture is considered an integral part of the solution for the transition towards truly sustainable agriculture and food systems. Hence, it must be inclusive enough to enable the implementation of these solutions globally.

Organic 3.0 presents a paradigm shift in the organic movement by providing more opportunities for participation and positioning organic agriculture as a cutting-edge, innovative farming system that fully integrates local and regional contexts. It emphasizes the importance of resource regeneration, responsible production, sustainable consumption, and the ethical development of human values, practices, and habits. These concepts are fundamental to the development of the organic culture and can drive societal progress towards sustainability.

In Organic 3.0, the approach is descriptive rather than prescriptive. Rather than mandating a set of minimum rules to achieve a final static outcome, this concept is based on an outcome-based approach that can be continuously adapted to suit local contexts.

In Europe, the Organic 3.0 vision has been translated into a strategy that outlines the necessary developments to facilitate its implementation in the near future. IFOAM Organics Europe has developed a European vision for food and farming⁽¹⁸⁾ that aims to create a fair, environmentally conscious, healthy, and caring system that is widely adopted throughout Europe. The European organic movement aims to continue leading change by ensuring that more than half of Europe's agricultural land is managed according to organic principles of health, fairness, ecology, and care by 2030. This will involve providing fresh, seasonal, fairly priced, and minimally and carefully processed organic food to every European home, workplace, and institution. The vision also aims to encourage and reward further development of organic systems, improving the resilience and environmental performance of organic production systems. Organic agriculture will serve as a model for sustainable farming and food systems by supporting a culture of innovation based on holistic principles, leading to more resilient and productive farming systems, greater biodiversity, better food quality, more appropriate processing, and fairer supply chains.

(18) <https://www.organicseurope.bio/about-us/vision/>

PART



METHODOLOGY

Mara Semeraro, Simona Giordano



METHODOLOGY

The methodology used for the development of this document is based on two models: the scenario model and the issues-based model. The scenario model was used to identify strategic issues and goals, while the issues-based model was used to develop recommendations for achieving these goals. This methodology was shared by all partners involved in the development of the document. In summary, the methodology used involved a collaborative and structured approach that enabled the identification of strategic issues, the setting of goals, and the development of practical recommendations for achieving these goals.

1.

LISTENING ACTIVITY AND STAKEHOLDER ANALYSIS

The process commences with a critical “listening” activity, comprising three key dimensions: sensing, evaluating, and responding. During this phase, the team takes detailed How Might We (HMW) notes, effectively transforming problems into opportunities (Knapp et al., 2016). These HMW notes facilitate the creation of a comprehensive needs map, from which the team can identify and select priority targets.

A stakeholder analysis is a preliminary step that is taken to identify key stakeholders based on a shared approach. Key stakeholders are those who possess the most influence, power, or are deemed critical to the success of the project. Additionally, stakeholders with a high interest but low power should also be considered, as these stakeholders can potentially align themselves with high-power, low-interest groups, thereby transforming themselves into key stakeholders.

The applied methodology has foreseen the following phases:

- Phase 1** The reasons behind stakeholder engagement: why the stakeholder engagement is important? What are the most important goals that stakeholder engagement should help to achieve?
- Phase 2** Main topics having relevance to the project: topics correspond with project outcomes
- Phase 3** Key stakeholder groups: stakeholders have to be mapped through defined criteria and an identified classification, as follows:

A Definition of criteria for stakeholders' identification

There is no generic list of stakeholders that is good for every occasion. Several variables can be taken into consideration to identify stakeholders. Below there is a non-exhaustive example:

- By liability
 - By influence
 - By proximity
 - By representation
- B Classification of stakeholders in different groups**
 - C Stakeholders' identification and list**
 - D Prioritization of key stakeholder groups**
 - E Key stakeholder map**
 - At the end of the analysis, a final list of key stakeholders will be realized, underlining:
 - What kind of involvement in the project could be required to each stakeholder
 - What are the interests and expectations of stakeholders
 - how their presence affects the impacts generated by the project

2.

INTERVIEWS

To elaborate further, the stakeholder engagement process involved conducting 10 interviews with key stakeholders by each partner. The interviewers were trained by the partners to ensure they were well-equipped to achieve the desired goals and outputs. The interviews were conducted either in written or verbal form, following the structure outlined in Annex 1 - Interview Guidelines. The insights gathered from the listening activity and interviews were compiled into an aggregate report, which serves as a basis for the subsequent phases of the project.

3.

SWOT ANALYSIS

During the workshop, partners conducted a SWOT analysis on each of the topics to identify their strengths, weaknesses, opportunities, and threats. This analysis helped to develop brief descriptions of options and related actions that could be taken to effectively respond to the needs of the organic sector in different countries. The workshop focused on the following topics:

- ✓ **Organic surfaces, crops, and methods of production:** this topic examined the strengths and weaknesses of current organic farming practices and identified opportunities for improving production methods and increasing organic surfaces and crops.
- ✓ **Certification and control systems:** partners discussed the strengths and weaknesses of existing certification and control systems for organic agriculture and explored opportunities for improving these systems to ensure their effectiveness and efficiency.

- ✓ **National legislation:** this topic focused on the strengths and weaknesses of national legislation related to organic agriculture and identified opportunities for improving legislation to better support the organic sector.
- ✓ **Vision of organic agriculture up to 2030:** partners discussed the strengths and weaknesses of the current vision for organic agriculture up to 2030 and explored opportunities for developing a more comprehensive and effective vision.
- ✓ **Market:** this topic examined the strengths and weaknesses of the organic market and identified opportunities for expanding the market and increasing demand for organic products.
- ✓ **Organization of value chains:** partners discussed the strengths and weaknesses of value chains in the organic sector and identified opportunities for improving the organization of value chains to better support organic farmers and increase profitability.
- ✓ **Research and innovation:** this topic explored the strengths and weaknesses of current research and innovation practices in the organic sector and identified opportunities for increasing investment in research and innovation to support the growth and development of the sector.

4.

COUNTRY REPORTS

The listening activity is complemented by the production of single Country Reports (CRs), which consist of a comprehensive desk study on the current state of organic farming at the country level. The importance of these reports lies in their ability to provide a snapshot of the sector, covering topics such as legislation, crop production, operators, and market conditions. This serves as a starting point for identifying both the strengths and weaknesses of the sector. The CRs were developed through collaboration between partners and the national Certification Bodies (CBs) in Greece, Italy, Tunisia, Jordan, and Lebanon.

ANALYSIS OF ORGANIC PROSPECTS

The analysis endeavors to delineate the comprehensive picture of the organic sector in partner countries, while taking into account the perspective of a wide range of stakeholders, including the private sector. The ultimate objective is to establish a foundation for future discourse, with the aforementioned aspiration of expanding the scope of the same document and contributing to fortifying the role of the MOAN, even beyond the culmination of the project. Organic prospects and recommendations are disseminated among partners and formulated at the country level, grounded in prior literature, particularly:

- A** Statistics on organic land, operators, and market (comprising retail sales and international trade data)
- B** Legislation and policy support (Action Plans)
- C** Interviews
- D** SWOT analysis.



PART

ORGANIC PROSPECTS IN PARTNER COUNTRIES



LISTENING ACTIVITY AND STAKEHOLDER ANALYSIS

Mara Semeraro, Simona Giordano

In response to the Country-level survey, each partner hosted a pair of national round tables, one dedicated to MSMEs and the other to institutions, aimed at deliberating the survey outcomes and assessing the efficacy of existing measures and initiatives in bolstering the organic sector.

Thus, in line with the Organic Ecosystem approach, this section seeks to present the stakeholder analysis that was conducted in all Partner Countries. Each analysis reflects the unique characteristics of the respective national scenario, as outlined in the following paragraphs. While there are commonalities across the various analyses in terms of the stakeholders identified, there are also specific features that distinguish each national panorama.

Based on the findings of the stakeholder analyses conducted in all partner countries, it is evident that the two primary stakeholder groups with high levels of both interest and influence are national and/or local decision-makers, and organic operators such as farmers, processors, and retailers. These key actors have been identified as holding the most significant degree of influence and power in terms of project outcomes. Additionally, they are pivotal to the success of the project, given their proactive and robust involvement and vital approach to the initiative. Therefore, these stakeholders have been prioritized and will be engaged in the project's various stages to achieve the desired results effectively.

To effectively engage all relevant stakeholders in the project, it is important to consider the groups with high interest and low power, as well as those with high power and low interest, who can become key stakeholders through alliances with other groups. Active participation from all stakeholders is necessary for the success of the project. However, the level of involvement may vary among partner countries due to their unique national contexts, as depicted in Figure 7 below.



Figure 7: Power-interest matrix

The figure presented below (Figure 8) illustrates the distinctive characteristics of national scenarios previously mentioned. As previously stated, each Partner Country conducted a stakeholder analysis based on a unified methodology and subsequent phases. Consequently, the identification of stakeholder groups, according to specific criteria, varies across national contexts, thus underscoring the significance of performing a comprehensive overall analysis. This is crucial to gaining a deep understanding of the degree of engagement required from each stakeholder, the diverse expectations of all actors, and the potential impact of their involvement on the project.

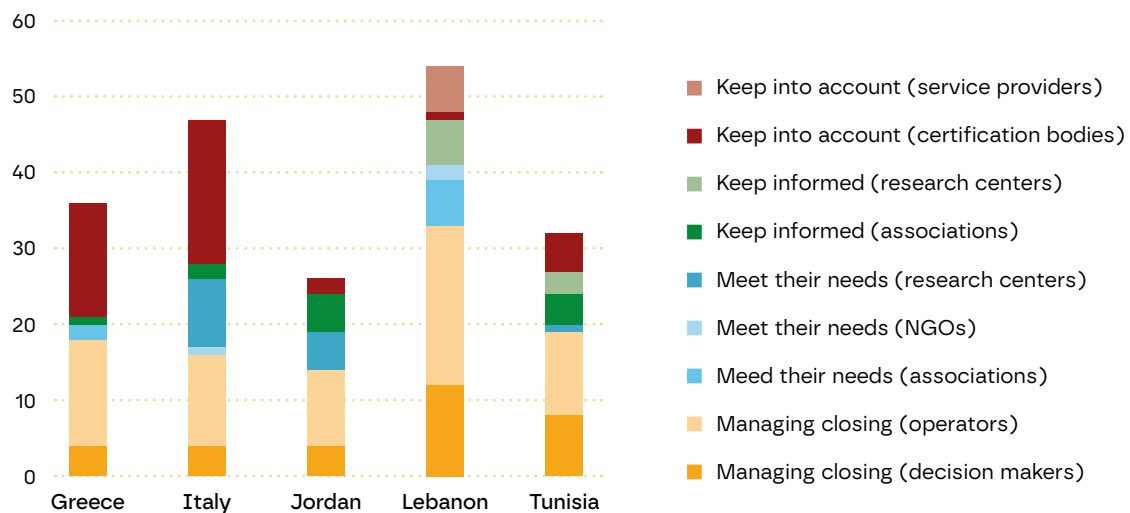


Figure 8: Stakeholder engaged in the organic sector at country level

The subsequent table delineates, for each stakeholder category and in a joint perspective among all Partner Countries, the interrelation between project activities, the mode of involvement in the same activities carried out and targeted at enhancing the organic sector, as well as the interests and expectations of the various scrutinized stakeholder groups.

ACTORS	ACTIVITIES	INVOLVEMENT	INTERESTS AND EXPECTATIONS
National and local decision-makers	<ul style="list-style-type: none"> Digitalization of organic data Monitoring and surveillance Sharing information at Mediterranean level 	<ul style="list-style-type: none"> Communication on regulatory updates Improving and updating procedures for monitoring and surveillance Improving discussion with organic stakeholder by the Organic Ecosystem network 	<ul style="list-style-type: none"> Enhancing the role of Public Institutions on organic policies Improving governance and management of regulation, monitoring and surveillance Carrying out statistical analyses real-time on the national organic sector Improving a direct interaction with organic operators Promoting a fruitful exchange above all at South-South level Attending the Organic Ecosystem network

ACTORS	ACTIVITIES	INVOLVEMENT	INTERESTS AND EXPECTATIONS
Operators (farms, processors, retailers)	<ul style="list-style-type: none"> • Digitalization of organic data • Improving organic value-chain • Increasing business alliances • Improving discussion with Competent authorities 	<ul style="list-style-type: none"> • Participation to innovation processes (local labs, cross-border labs, training courses), use the technical assistance available by the Organic Ecosystem platform • Improving discussion with organic stakeholders by the Organic Ecosystem network 	<ul style="list-style-type: none"> • Improving a direct interaction with competent authorities and other stakeholders • Creation of national and cross-border business alliances • Increasing knowledge, skills and awareness on innovative value chains • Attending the Organic Ecosystem network
Organic research centers	<ul style="list-style-type: none"> • Participating in the innovation process of the organic sector • Transfer of research results 	<ul style="list-style-type: none"> • Strengthening cooperation with organic farms and companies through local labs and innovation processes • Transfer of research results to solve specific issues of operators • Improving discussion with organic stakeholder by the Organic Ecosystem network 	<ul style="list-style-type: none"> • Cooperate to the improvement of the Organic Ecosystem network • Cooperate in sharing information and knowledge useful for the development of organic agriculture and the innovative value chain • Attending the Organic Ecosystem network
Associations and NGOs	<ul style="list-style-type: none"> • Improving cross border cooperation and increasing business alliances • Sharing information with consumers on benefits of organic products 	<ul style="list-style-type: none"> • Transfer of know-how, regulatory updates, etc. to operators • Improving discussion with organic stakeholder by the Organic Ecosystem network 	<ul style="list-style-type: none"> • Enhancing their role in defining organic policies at national and regional level • Raising operators' awareness on organic value-chains • Cooperate in sharing information and knowledge useful for the organic agriculture innovation • Attending the Organic Ecosystem network • Raising consumers' awareness on benefits of organic products
Certification Bodies	<ul style="list-style-type: none"> • Improving the monitoring and control process and the dialogue with public and private bodies 	<ul style="list-style-type: none"> • Improving discussion with organic stakeholder by the Organic Ecosystem network 	<ul style="list-style-type: none"> • Cooperation in sharing organic data • Improve their role in the certification pathway • Attending the Organic Ecosystem network
Service provider / technical assistance	<ul style="list-style-type: none"> • Knowledge transfer to organic operators 	<ul style="list-style-type: none"> • Improving discussion with organic stakeholder by the Organic Ecosystem network 	<ul style="list-style-type: none"> • Increasing knowledge, skills and awareness on innovative value chains and of organic operators in general • Attending the Organic Ecosystem network

INTERVIEW ANALYSIS

Mara Semeraro, Simona Giordano

1.

INTERVIEWS REPORT – MAIN RESULTS

In the context of this document, it is considered essential to “listen to the voice” of operators, as they are the ones who engage in daily activities and experience the related challenges. All Project Partners (PPs) conducted a series of interviews with local stakeholders selected from the list resulting from the individual stakeholder analysis, using various modes of communication such as email, phone calls, and physical presence. These interviews, conducted at the national level, contributed to the development of a comprehensive overview of the current status of the organic sector in society. The perspective of key actors involved is of utmost importance, as they have the potential to influence the sector through their daily activities and decision-making power.

Upon receiving the reports from all Project Partners, CIHEAM Bari took the initiative to draft a comprehensive summary of the results, with the objective of identifying key commonalities and significant differences between the various countries. This represents an essential step in reflecting on the current state of the organic sector and its existing and potential challenges.

Based on the vision foreseen by interviewed operators, it is noteworthy that all stakeholders express a positive outlook towards the organic sector, albeit with varying degrees. Main common issues that need to be addressed mainly revolve around the following areas:

- Production costs, which are related to the small size of operators and their challenges in benefiting from scale economies. This factor is strongly linked to the expressed need for effective cooperation among operators to facilitate sharing of production assets.
- Awareness of the quality and unique characteristics of organic products, in order to enhance consumers' trust and consequently, create new marketing opportunities. This issue is particularly crucial for Jordan and Lebanon, where the organic sector is small at the national level. Therefore, both countries emphasize the importance of cross-border collaboration to boost marketing opportunities.

Greece, Tunisia, and Italy recognize the pressing need to address climate change and the significant role that organic agriculture can play in mitigating its impact. They also emphasize the importance of designing tailored training programs to support operators in improving their daily practices. In Lebanon, a crucial challenge is the necessity to enhance sectorial legislation, which operators perceive as fundamental for the coherent development of the organic sector. Tunisian operators identify forest certification as a potent factor in expanding the organic agricultural area.

Greece, Tunisia, and Italy acknowledge the imperative of addressing climate change and recognize the pivotal role that organic agriculture can play in mitigating its impacts. They emphasize the necessity of tailored training programs to bolster operators' proficiency in enhancing their daily activities. Lebanon emphasizes the need for fortified sectorial legislation to ensure the coherent development of the organic sector, whereas Tunisia underscores the significant influence of forest certification in extending the organic agricultural area.

In response to questioning, stakeholders at both national and Mediterranean levels emphasized the pressing need to reinforce lucid regulations concerning production inputs and marketing aspects, which they regard as two-fold crucial. Firstly, stakeholders call for support in improving the application of novel technologies associated with soil and water management, renewable energies, and smart agriculture tools to curtail production costs. Secondly, they acknowledge that these aspects possess the potential to foster consumer confidence and augment markets for organic products.

Italy, Tunisia, and Greece emphasize the need to prioritize tailored training programs for organic farmers to overcome inadequate professionalization among operators. Meanwhile, Jordan highlights the lack of coordination between supply and demand, which is primarily due to the small size of the sector at the national level. This issue creates difficulties in the availability of perishable products during certain seasons and results in a loss of marketing opportunities. When asked to identify the most significant barriers to the development of the organic sector, Lebanon and Jordan underscore the importance of effective regulations to protect both operators and consumers from fraud and false claims. Lebanon and Tunisia also highlight the need to update national norms to better support the current development of the sector. Moreover, Lebanon stresses the importance of support from authorities, including financing and the provision of reliable data and statistics related to the sector.

Almost all countries interviewed, except for Lebanon, express a common barrier related to the lack of consumer awareness, which impedes marketing opportunities for organic products. Lebanon also highlights the need to establish a specialized trading system that goes beyond fair trade features and adequately compensates operators.

In addition, Tunisia emphasizes the challenge of safeguarding consumer health through healthy and sustainable food.

It is noteworthy to highlight the responses of the interviewed operators regarding the potential impact of the challenges and barriers on their daily activities. Many operators emphasize the necessity to establish productive partnerships with public authorities for receiving tailored support and engaging in advocacy efforts to enhance the visibility and bargaining power of the sector. Both Lebanon and Italy stress the importance of collaborating with other Mediterranean countries to foster synergies.

Jordan has highlighted the issue of the seasonal nature of national production, resulting in perishable products not being adequately marketed and a shortage of supply and demand depending on the season. Italy has expressed concerns about the potential "conventionalization" of the organic sector towards large distribution sales channels, which could have negative consequences for local communities, biodiversity, and food quality related to typical and local products. Control bodies and producers call for an internalization of externalities in the formulation of the final price, so as to give adequate remuneration to environmental aspects.

Greece emphasizes the importance of creating lifelong learning and training programs in different forms to increase knowledge regarding issues related to organic production, such as environment protection and climate change. This issue is particularly significant when connected with the risk of rural areas being abandoned, as highlighted by different Greek operators.

Overall, almost all operators express the need for effective cooperation with public authorities, lobbying between stakeholders, and coordination efforts at the Mediterranean level to develop synergies.

As for Tunisia, stakeholders express the need to strengthen cooperation between public and private actors, in order to develop and implement effective policies and strategies that can support the growth of the sector. This is particularly relevant in light of the increasing demand for organic products both in national and international markets.

In general, the interviewed stakeholders agree on the importance of innovation and technological advancement for the future of the organic sector. They advocate for the development of new and more efficient production techniques, as well as for the use of digital tools to improve marketing and distribution channels. At the same time, they stress the need to preserve the authenticity and the local characteristics of organic products, in order to guarantee their quality and their value for consumers.

Finally, it is worth mentioning the importance that all stakeholders give to the role of consumers in shaping the future of the organic sector. They stress the need to increase awareness and education on the benefits of organic products, in order to stimulate demand and create new market opportunities. At the same time, they recognize the potential of consumers' preferences and choices in driving the development of more sustainable and ethical food systems.

The ranking of the factors that are perceived as worrisome for the future of the organic sector and each value chain is relatively uniform, as follows:

- ① Policy ② Sector governance ③ Regulations ④ Market

The issue of market ranking first is solely considered by Jordan, attributable to the relatively small size of the national organic sector. However, it is important to highlight key factors that are deemed essential to cultivate consumer confidence in the organic market. Lebanon emphasizes the establishment of a dependable control system, as the presence of only one certification body at the national level undermines consumer trust, rendering the certification process ineffective and financially unsound. Meanwhile, Tunisian stakeholders acknowledge that climate change, characterized by water scarcity, fluctuating temperatures, and the emergence of new plant pests, poses a significant threat to biodiversity, soil fertility, and the environment. The resultant unstable organic crop yields in both quantity and quality prove to be major impediments to the growth of the organic farming industry.

All stakeholders, interviewed at Mediterranean level, agree that increasing consumers' awareness is vital for the development of marketing opportunities and represents a fundamental issue to address. Jordan and Lebanon particularly emphasize the importance of connecting organic products with reliable and clear health claims to gain consumers' trust. Notably, Greece presents two unique aspects: firstly, the correlation between the development of the organic sector and the protection of local products through ad hoc Geographical Indications (GIs), and secondly, the potential opportunities arising from the simultaneous development of the tourism sector.

In addition, regarding the factors related to policy and regulations that are considered crucial to promote the organic sector, it is noteworthy that all countries surveyed identify the following factors as important: firstly, reducing bureaucracy and the associated burden of certification and documentation, to facilitate the transition period and incentivize operators to shift towards organic production. Operators also emphasize the importance of receiving targeted incentives such as tax reductions, subsidies, and privileged access to credit and financial resources. Secondly, the interviewed actors highlight the need to improve technical assistance in various aspects of daily activities, from farming to storing, processing, and sales. Lebanon expresses a strong interest in establishing international partnerships to enhance collaboration and marketing opportunities, while Greece emphasizes the importance of effectively supporting applied research to assist operators in their daily activities. Furthermore, Tunisia suggests developing a marketing plan for organic products to ensure a continuous supply and distribution of fresh and processed products in the market, as well as the establishment of niche markets for the sale of organic products.

In terms of significant events that have impacted the development of the organic sector, Italian operators highlight the annual organic fair SANA, which serves as a national and international forum for all stakeholders in the sector, including public institutions. In Lebanon, the integration of organic courses in top universities, the Souk El Tayyeb consumer event, and the establishment of the Day of Organic Farming are cited as important occasions for stakeholders to gather and exchange information. In Jordan, the presence of organic farmers markets and exhibitions such as the olive festival are noted, but the small size of the sector limits the potential for effective development of such initiatives. These events provide valuable lessons for future initiatives aimed at promoting the organic sector.



SWOT ANALYSIS⁽¹⁹⁾

Mara Semeraro, Simona Giordano

Consistent with the data presented in each Country Report and the findings derived from the conducted interviews, the ensuing section encompasses the SWOT analysis conducted by all project partners. A SWOT analysis is instrumental in the formulation of future recommendations for the target sector by scrutinizing both negative and positive aspects (threats and opportunities) and identifying resources that can be utilized (strengths) or improved (weaknesses). A comprehensive assessment of diverse factors is considered to attain a heightened degree of awareness of potential solutions and subsequent measures to be taken in order to effectively address the requirements of the sector in all partner countries.

STRENGTHS

Organic surfaces, crops and methods of production

- ✓ Increase in organic Utilized Agricultural Area (UAA) (e.g. 10% in Greece and 30% in Puglia region) and high levels of percentage of organically cultivated land in Europe (Italy and Greece).
- ✓ Upward trends in the number of organic operators (e.g., from 22,736 in 2010¹ to 33,600 in 2020, in Greece).
- ✓ Availability of “virgin” agricultural land that can be used for organic agriculture and presence of particular conditions relative to microclimate, soil and a terrain (geography) that favour biodiversity and polyculture farming methods (all Countries, especially mentioned by Lebanon and Jordan).
- ✓ Organic operators are becoming better connected with the creation of an Organic Agriculture Association (Lebanon).
- ✓ Increase in the adoption of locally or on-farm produced inputs (important in Lebanon).
- ✓ Compatibility of the basic techniques of organic agriculture with the basic techniques of traditional agriculture, in terms of the presence of experiences, techniques.
- ✓ Development of “Bio Territories” through the identification of pilot areas representing the different bioclimatic stages (Tunisia).
- ✓ Presence of know-how compatible with agroecology, and with production at MSMEs scale.

Certification and control systems

- ✓ Presence of a Tunisian organic label, ad hoc devoted also to foster exports (Tunisia).
- ✓ Presence of a comprehensive regulatory framework, of a reliable monitoring and control system for traceability, and of a dedicated public institution at national level, all capable of guaranteeing dialogue with the EU (Tunisia).
- ✓ Increasing attention devoted by Regione Puglia to this issue, with the tasks carried out in the framework of the Piorab Biobank project.
- ✓ Presence of a comprehensive legislation (e.g. in Jordan, it includes the Organic Agriculture Bylaw, Regulations for Organic Agriculture, and the Jordanian standard for organically produced foods).

National legislation

- ✓ Presence of specific subsidies for organic sector, differently from other African Countries (Tunisia).
- ✓ Ad hoc system, Piorab Biobank, from Regione Puglia (Italy).
- ✓ Recent issuance of ad hoc organic law which helps in protecting the operators (Lebanon).

Market

- ✓ Positive trend in organic market, with reference to internal and external markets (Greece and Italy), both EU and non-EU.
- ✓ Increasing demand for local and typical products, as well as for farmers markets (Italy, Greece, and Lebanon).

(19) In the table below, each topic is indicated with the Country/Countries to which it refers between brackets.

- ✓ Increase in organic aquaculture production (Greece and Italy), with positive outcome in the integration between green and blue economy.
 - ✓ Recognition of equivalence for organic plant products by the EU, Switzerland, and the UK (Tunisia).
 - ✓ Strong reputation of national production as to quality (Greece and Italy) on an international scale.
 - ✓ High-quality product traceability and high levels of standard for certifications (for all Countries, with different shades).
 - ✓ Good positioning of Tunisia in Africa, the Mediterranean and on a global scale, as to organic production and trade (Tunisia).
- Research and innovation**
- ✓ Attention to the connection with the local communities and to safeguarding the environment (Italy).
 - ✓ Financing of research in organic farming (allocated by the Ministry of Agriculture, Food Sovereignty and Forests - Masaf) (Italy).
 - ✓ MSMEs experience special needs with relation to innovation, know-how and training.
 - ✓ Network devoted to research in agriculture, constituted by public institutions, e.g. Universities, research centers and so on, and private actors, mainly start-ups (Italy and Greece).
 - ✓ Availability of organic projects (e.g. Organic Ecosystem) that is helping operators in different ways, the most relevant one is the organic technical assistance platform (Lebanon and Jordan).

WEAKNESSES

Organic surfaces, crops and methods of production

- ↔ Need to enrich the organic method with relevant aspects related to post harvest processes and to waste reduction, as well as to the carbon and water footprints of production.
- ↔ Lack of knowledge related to organic farming methods, thus favouring the adoption of conventional agriculture, easier to deal with (Greece). The lack of specialized personnel is expressed by Jordan, as well.
- ↔ Scarce identification and full utilization of the country's water resources, for the expansion of irrigated areas, and scarce creation of new improved varieties of plants and breeds of animals with higher yields, greater disease and insect resistance (Greece).
- ↔ Scarce availability of production inputs for organic farming, like seeds, fertilizers, specialized plant protection products, organic fodder and organic hatching eggs, due to the low demand for them and resulting in high costs of production (Jordan and Lebanon).
- ↔ Lack of resources, human and material, at the Ministry of Agriculture to support local operators (in Lebanon, the organic Department is not created yet. And recently staff are either on strike, or operating on a rotation basis, with the lack of the minimal needs for conducting regular operations).
- ↔ Rising water stress and increasing water use competition. Water resources are under

increasing pressure because of climate change and population growth (all Countries). In addition, a severe electricity shortage affects the cost of water for irrigation in addition to water availability (Lebanon).

Certification and control systems

- ↔ Bureaucracy that is perceived as being too heavy and complicated, both in terms of costs and of time spent.
- ↔ Existence of only one local certification body, which reduces the competition. This causes, as well, a decrease of cultivated organic areas and organic operators due to the inability to afford certification fees, which are to be paid in foreign currency (Lebanon).

National legislation

- ↔ Actors involved in the sector at stake express a strong need to receive continuous training regarding legislation, as it evolves and affects daily operations.
- ↔ Despite official legislation, financing and funding opportunities to certified operators are perceived as being scarce (almost all countries, especially Lebanon).

Market

- ↔ Scarce or absent local network of producers capable of strengthening cooperation and exchange of best practices (Italy).
- ↔ Due to higher prices, the volume of sales of organic products tends to be smaller and not enough remunerative of the work carried on

by producers. There is the need for a more accurate price of organic products compared to conventional ones (Greece).

- ↔ Lack of consumers awareness of the benefits and importance of organic products in terms of health and environment, with the need to create ad hoc campaigns (Greece, Jordan).
- ↔ Loss of a significant amount of purchasing power and continuous price increases of the products. Therefore, it is expected that consumers will choose conventional products (almost all Countries).
- ↔ Few shops selling exclusively organic products in the market. At the same time, the stores that also sell conventionally have a small sales area for organic products, as they do not benefit from the price (Greece, Jordan).
- ↔ Scarce level of internationalization of MSMEs,

with consequent loss of marketing opportunities. Actors express the need to be supported with regard to this aspect (almost all Countries).

Organization of value chains

- ↔ Scarce level of integration throughout the value chain. MSMEs express the need to be accompanied by public institutions in a sound path of coordination at regional level.
- ↔ Inadequate logistics with relation to organic production, that needs more specific features with particular regard to perishable products.
- ↔ Lack of collaboration/clustering between value chain actors via associations and groups (Tunisia, Lebanon and Italy).
- ↔ Weak post-harvest infrastructure and organization (in Lebanon, post-harvest practices are below international standards).

OPPORTUNITIES

Organic surfaces, crops and methods of production

- ⊙ MSMEs experience special needs with relation to innovation, know-how and training. Strengthening local supply chains with skilled people, modern technology, as well as an appropriate marketing strategy can contribute to the increase in sales of organic products (all Countries).
- ⊙ Integration between green and blue economy to foster the cross-sector contamination of best practices (e.g. organic aquaculture) and positive synergies, in Italy organic aquaculture farms amount at 59 in 2019, compared to 53 in 2018 (Italy).
- ⊙ Foster the application of renewable energies, through ad hoc policies and incentives to encourage operators in the cited direction. As above, it is important to foster the adoption of smart agriculture tools (Italy, Greece, Lebanon).

Certification and control systems

- ⊙ Increasing attention devoted by Regione Puglia to this issue, with the tasks carried out in the framework of the Piorab Biobank project (Italy).
- ⊙ MSMEs express the strong need to receive ad hoc consultancy with regard to all the aspects related to certification, legislation and control (Italy, Lebanon).

National legislation

- ⊙ Increasing attention from policy makers, e.g.

upcoming new legislation on organic farming from EU, with relevant innovation aspects that represent a strong opportunity for the sector at stake (Reg. EU No 2018/848) (all Countries).

- ⊙ Geographical proximity to the EU, to capitalize for trade (Tunisia).
- ⊙ Newly created African market - FTAA/COME (Tunisia).
- ⊙ Presence of a regulatory framework for Public/Private partnerships (Tunisia, Italy, Greece).

Vision of organic agriculture up to 2030

- ⊙ Possibility of positioning organic agriculture/ animal husbandry as a unique, leading sector of entrepreneurship, based on quality and healthy goods (Greece, Jordan).
- ⊙ Capitalizing on the organic sector to foster sustainable economy as an important pillar, if not the main one, in the cultural strategy of governments (all Countries).

Market

- ⊙ Geographical proximity to the EU, to capitalize for trade (Tunisia).
- ⊙ Newly created African market - FTAA/COME (Tunisia).
- ⊙ Niche products demand growth, with health, food safety and environmental concerns, organic farming is one of the fastest growing food segment, in the world. It is driven by an exponentially growing consumers demand (all Countries). It is evident the increasing attention

towards a healthier way of eating and healthier food products stemming from the desire to improve immune systems and lifestyle.

- ⊙ Higher selling prices of organic products compared with regular prices. This provides the operator with a better profit margin compared to conventional crops (Jordan).
- ⊙ Presence of an increasing demand for local and typical products, as well as for farmers markets. It is important to foster consumers awareness with regard to organic production and increase their trust, through ad hoc campaigns. Moreover, the presentation of organic products in international exhibitions contributes to the strengthening of exports and the economic exchange of each Country (Greece, Lebanon and Italy), and to inform consumers about the benefits of organic products (all Countries).
- ⊙ Opportunities derive from the increasing attention devoted to the use of organic products in public/private canteens, e.g. schools, offices (Italy).
- ⊙ Involve the large organized distribution in a revision of logistics and purchasing contracts in order to guarantee a fair price to operators (Italy, Greece).

Organization of value chains

- ⊙ Actors express the need to create a local

network of producers capable of strengthening cooperation and exchange of best practices (all Countries).

- ⊙ Possibility to equip distribution networks with modern information systems, as well as with modern technology for their best operation. In addition, these should be staffed with well qualified people, especially in market requirements, with the aim of investigating possible problems and better organizing the distribution networks in the interest of the actors involved (all Countries).

Research and innovation

- ⊙ Funding of projects at different levels. The network of actors devoted to R&D expresses the need to be supported by financial resources deriving from public funding (e.g. EU and national/regional programmes) (Lebanon, Greece, Italy).
- ⊙ Funding from public authorities devoted to the organic sector (in EU, the new CAP represents a precious opportunity in this direction) (Greece, Italy, Jordan).
- ⊙ Donor support to organic sector (Tunisia).
- ⊙ Presence of a dedicated climate change fund (Tunisia).

THREATS

Organic surfaces, crops and methods of production

- ▲ Failure to provide adequate quantities for inputs of organic farming, e.g., there is no wide range of organic fertilizers or plant protection products (Jordan).
- ▲ Need to address the issue of water management and soil degradation, due to conventional and industrial farming practices (all Countries).
Production cost, often connected with current legislation and binding rules, as well as to a scarce level of cooperation among operators. This last factor hinders a possible and effective sharing of production assets, so as to reduce costs and overcome the small size of business (all Countries).
- ▲ Lack of infrastructure with particular reference to the lack of roads maintenance, which has a direct effect on transportation. Moreover, severe electricity cuts and increased reliability on the private generators couples with the high diesel prices, affecting the cost of production (Lebanon).

Certification and control systems

- ▲ Additional costs, often high, to obtain the organic agriculture certification (all Countries).
- ▲ High certification cost due to monopole in certification bodies, with many farmers quitting organic due to the high relative certification cost (Lebanon).

National legislation

- ▲ Weak activation of some articles of the bylaw and regulations of Organic agriculture at national level (Jordan).
- ▲ Weak regulatory role on counterfeit “forged” products/cheating in displaying organic agricultural products (Jordan).

Vision of organic agriculture up to 2030

- ▲ Instability at socio-political level (Tunisia).
- ▲ Pandemic crisis with consequent impact on economy at global scale. As to the increase in unemployment, the pandemic crisis has caused a strong reduction of citizens’ disposable income and purchasing power (all Countries).

- ▲ Slower growth in key target market economies, due to the aforementioned pandemic crisis and to the war in Ukraine, with related higher costs of fuel and energy and, therefore, of production costs in general (all Countries).
- ▲ The tendency of people, especially young, to move to work in the big urban cities, contributes to the desertification of the countryside, by extension to the significant reduction in the primary production sector, including organic agriculture and animal husbandry (Greece).
- ▲ Impact of industrial organic agriculture, in order to avoid applying the industrial mentality to organic production and, instead, rediscover the contribution of MSMEs (Greece, Italy).
- ▲ Climate change challenges which may result in decreasing the production at farms level (all Countries).
- ▲ High price compared to the conventional food (because externalities are not accounted for, therefore conventional prices are too low) (all Countries).
- ▲ Need to improve organic markets and create new opportunities to broaden business opportunities (all Countries).
- ▲ Strong economic, political and social crisis in Lebanon resulting in reducing the importing capacity of local producers in terms of inputs, in addition to the devaluation of the purchasing capacity of Lebanese consumers (Lebanon).

Organization of value chains

- ▲ Financial resources and assistance from public authorities, as a necessary condition to enhance the economic sustainability of organic production and prompt operators to invest in their business (Italy, Lebanon).

Research and innovation

- ▲ Weakness of the extension and research role related to organic agriculture at national level (Jordan).

Market

- ▲ Scarce level of internationalization of MSMEs, with consequent loss of marketing opportunities. Actors express the need to be supported with regard to this aspect (Jordan, Italy and Lebanon).



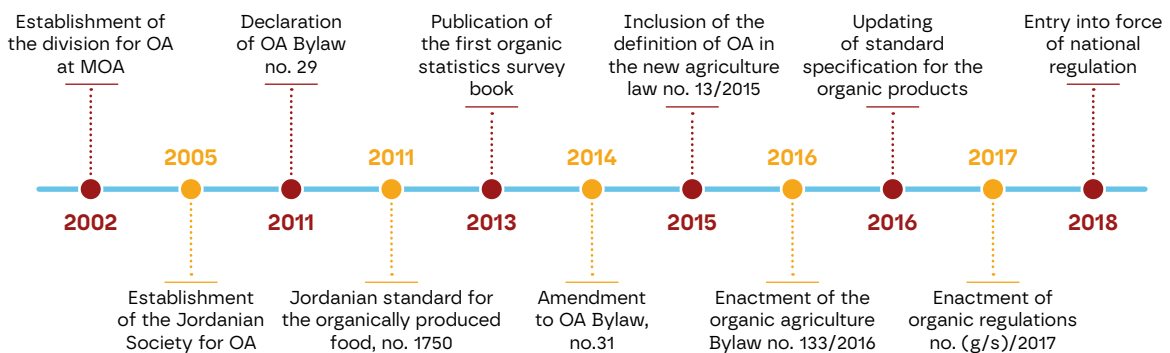
JORDAN

Tamam Khawalda, Hala Al Twait



1.

HISTORICAL BACKGROUND AND LEGISLATIVE CONTEXT OF THE JORDAN ORGANIC SECTOR



ORGANIZATIONAL FRAMEWORK

- Organic Agricultural Division was established in the Plant Production Directorate in 2002, and became Organic agricultural products Department in 2018.
The main procedures in establishing the Legislation Environment for transformation to organic agriculture .
- The definition of organic agriculture is included in the new Agriculture Law No. 13/2015 as (An integrated agricultural system promotes organic agricultural production within economical, social, and environmental frameworks, without using manufactured chemical compounds).
- Issuance of the organic farming Bylaw No. (133) /2016 under Articles (7) and (71) of the Agriculture Law No. (13)/2015, and the Organic regulations no. (GK/5/2017 under Article (10), Article (23) and Article (24) of the Organic Farming bylaw no. (133)/2016.
- Both bylaw and regulations were translated to English and can be accessed from the Ministry homepage www.moa.gov.jo. The main contents are:
 - ① Terms and conditions necessary to register the certification body and operator in the Ministry of Agriculture.
 - ② Labeling requirements.
 - ③ Requirements for organic agricultural production.
 - ④ Requirements for organic agricultural production units.
 - ⑤ Requirements for imported organic agricultural products and raw materials for organic agricultural production.
 - ⑥ The requirements of the general rules and conditions that govern organic livestock production.
 - ⑦ Violations and penalties for the certification body and operator.
 - ⑧ (5) annexes for the materials authorized to be used in organic production include:
 - Authorized additives of agriculture and non-agriculture origin.
 - Manufacturing aids used in preparing products of agriculture origin
 - Authorized substances for soil fertilization.
 - Authorized substances for pest control
 - Authorized substances in bees pest control
 - Updating and implementing the National Action Plan of Organic Agriculture (2018-2022):

GENERAL OBJECTIVE

The plan aims to develop practical and sustainable scientific procedures for the adoption of organic agriculture by producers and consumers at the domestic level. It aims to transform at least 150 organic agriculture farms and facilities by 2022, and promote the adoption of organic agriculture vertically and horizontally, involving farmers, traders, and consumers.

SUB-OBJECTIVES

- Development of the Jordanian organic agriculture sector in terms of cultivated area, diversity, number of producers, market size, scientific and practical knowledge of organic agriculture benefits.

- Improving the living conditions of Jordanian farmers in terms of economic, environmental, social and health aspects.
- Providing a healthy, safe and high quality product to all types of consumers.
- Not to drain Jordanian agricultural and environmental resources.
- Providing local skills and expertise in various organic agriculture fields.
- Finding marketing horizons for Jordanian products in the global, regional and local markets.

PRACTICAL SCIENTIFIC PROCEDURES TO ACHIEVE THE OVERALL PLAN OBJECTIVE

The practical scientific procedures included in the National Action Plan for Organic agriculture matrix come in the form of activities followed by performance indicators and means of verification based on assumptions and risks followed by identification of partners, responsible bodies and expected results:

- Procedure no. (1): follow-up the preparation of the legal and regulatory framework for organic agriculture, taking into consideration the international regulations and standards and the conditions of Jordan.
- Procedure no. (2): Adopting a government policy that encourages organic agriculture through providing financial and moral support and overcoming obstacles especially transforming into organic production
- Procedure no. (3): Preparation and development of a national program for instruction and awareness on organic agriculture and its social, economic, environmental, health and other benefits and promotion for them.
- Procedure no. (4): Preparation and Development of marketing plans and programs and opening markets for Jordanian organic products nationally internationally.
- Procedure no. (5): Development and Research Program for Helping Operators to overcome Technical Obstacles of Adopting Organic Agriculture
- Procedure no. (6): International and regional cooperation

THE MOST IMPORTANT CHALLENGES IN THE SECTOR

- The existence of one national certification body – The Jordan Standards and Metrology organization (JSMO).
- Lack of sufficient scientific and practical knowledge of organic agriculture production, in addition the lack of consumer knowledge about the benefits and value of organic products and its location.
- Lack of alternatives in the local market for the inputs of chemical production used in production, whether to control pests or to improve the soil and the need to import them, which increases production costs.
- Lack of a clear policy to provide material and moral support to the organic agriculture sector and overcome obstacles, especially for the transitional period.

Forming database on organic agriculture in Jordan

- 2013- 1st survey in Jordan for organic agriculture
- 2015 – issued a booklet based on the survey data

Organic agricultural products Department update data on yearly basis.

2.

STATISTICS ON ORGANIC LAND, OPERATORS AND MARKET

RETAIL SALES AND INTERNATIONAL TRADE DATA

The total organic agricultural area in Jordan in 2021 was 1,478 hectares, with the majority located in the governorate of Zarqa and the least in the governorate of Madaba. Consistent with national agricultural patterns, organic production predominantly centers around four main crop types: vegetables, fruits, dates, and olives.

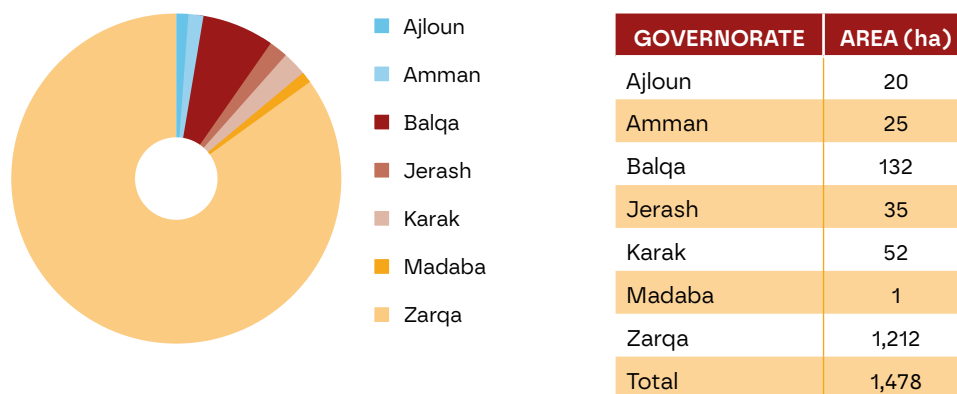
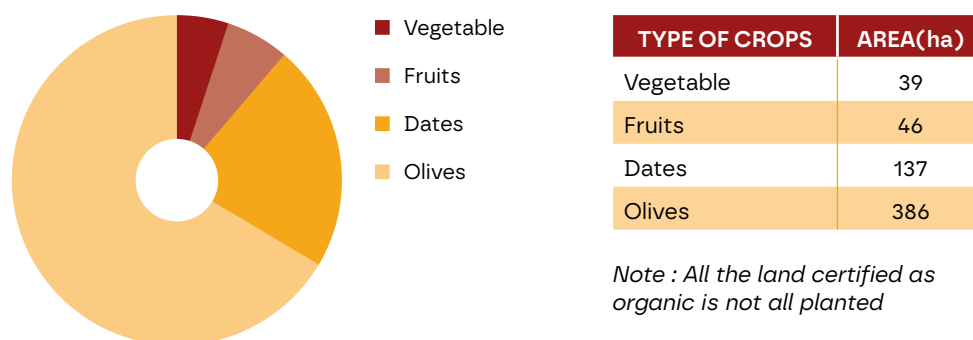


Table 28 - Figure 47: Organic surface in Jordanian Governorate

In Jordan, the primary organic crops include olives, dates, vegetables, and fruits, with the highest emphasis on olive trees, occupying an area of 386 hectares, followed by dates at 137 hectares, and approximately 85 hectares for fruits and vegetables.



Note : All the land certified as organic is not all planted

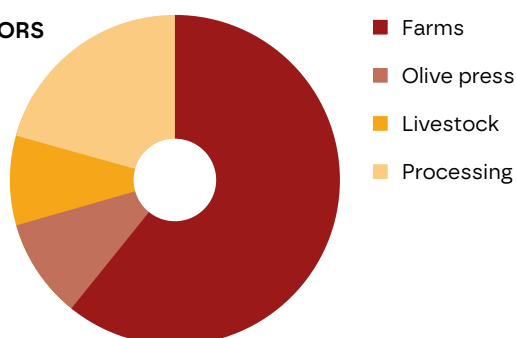
Table 29 - Figure 48: Main organic crops

3.

ORGANIC OPERATORS

In 2021, there were 27 certified organic operators in Jordan, comprising of 16 farms located in Balqa, Jerash, Amman, Karak, Madaba, Ajloun and Zarqa. In addition, there were 3 organic olive presses situated in Karak, Madaba, and Zarqa, 2 livestock farms specializing in chicken egg and chicken meat production respectively, located in Amman and Madaba. Furthermore, there were 6 processing operators engaged in the production of organic cosmetics, dates, coffee, and food processing, located in Jerash, Madaba, and Amman.

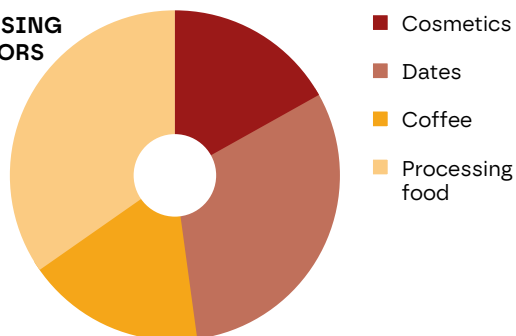
OPERATORS



OPERATOR	NUMBER
Farms	16
Olive press	3
Livestock	2
Processing	6
Total	27

In addition we have organic input factories one for organic pesticide and one for organic fertilizers.

PROCESSING OPERATORS

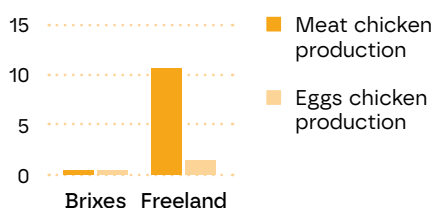


PROCESSING OPERATOR	NUMBER
Cosmetics	1
Dates	2
Coffee	1
Processing food	2
Total	6

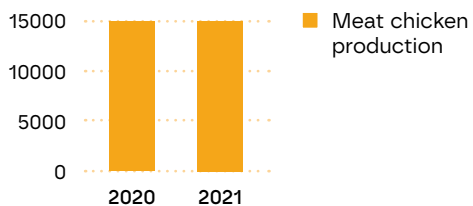
4.

ORGANIC LIVESTOCK AND AQUACULTURE

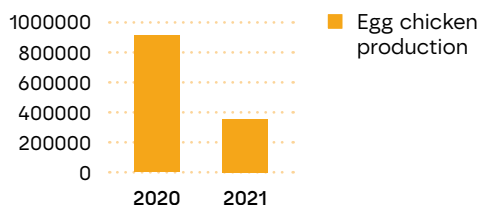
The sector is new in Jordan from 2019 for poultry only (meat & egg) for local marketing; there is one farm for meat production and other one for egg production.



TYPE	AREA	
	Brixes (ha)	Freeland (ha)
Meat chicken production	0.15	10.4
Egg chicken production	0.1	1.5



TYPE	Production (2020)	Production (2021)
Meat chicken production	15000	15000



TYPE	Production (2020)	Production (2021)
Egg chicken production	926000	386000

*** Note: the production decreased in 2021 due to COVID-19, and problems in importing organic feed from abroad*

5.

IMPORTS AND INTERNATIONAL MARKETS

We import various processed products such as canned goods, cereals, pasta, chips, and grains, among others. Additionally, we also import inputs for organic production such as corn and soybeans for poultry production.

6.

THE LOCAL MARKET

There are several local markets, including permanent, seasonal, and weekly markets, which offer fresh and processed organic products. In addition to these markets, there are various points of sale for both local and imported organic products available in supermarkets, malls, and charities.

7.

OUTLOOK ON FUTURE STRATEGIES

As to the most important projects, they are the following:

FIRST / THE PERMACULTURE PROJECT (2004 - 2007)

In 2004, the Organic Agriculture Division of the Ministry in cooperation with Japan International Cooperation Organization for Local Community Development (NICCOD) implemented the “Sustainable Agriculture (Organic Agriculture)” project in the Berma region in Jerash Governorate, which was funded by the Japan International Cooperation Agency (JICA). The project was completed in 2007. The project achieved the following outcomes:



- JAZ organic certification was granted to participating farmers.
- Limited quantities of olive oil were exported to the Japanese market.
- Olive oil was marketed to the local market.
- Increased knowledge of organic farming techniques was spread among Jordanian farmers.

SECOND / THE ORGANIC AGRICULTURE DEVELOPMENT PROGRAM IN JORDAN (BIOJORDAN)
(2009 - 2014)

In 2009, the Royal Hashemite Court initiated a program called BioJordan, aimed at developing organic agriculture in Jordan. This program was supported by the King Abdullah II Fund for Development (KAJD) and implemented by the International Movement for Organic Agriculture (IMO) for a period of 3 years. The project's main activity was the payment of inspection fees to fifty farmers.



LEBANON

Said Gedeon, Fady Abou Fayad



1.

STATISTICS ON ORGANIC LAND, OPERATORS AND MARKET

RETAIL SALES AND INTERNATIONAL TRADE DATA

In 2019, organic farming in Lebanon encompassed approximately 1,600 hectares of cultivated land and involved 199 operators. Over the course of five years since 2014, the area dedicated to organic farming has progressively increased by nearly 50% as indicated in Figure 2.

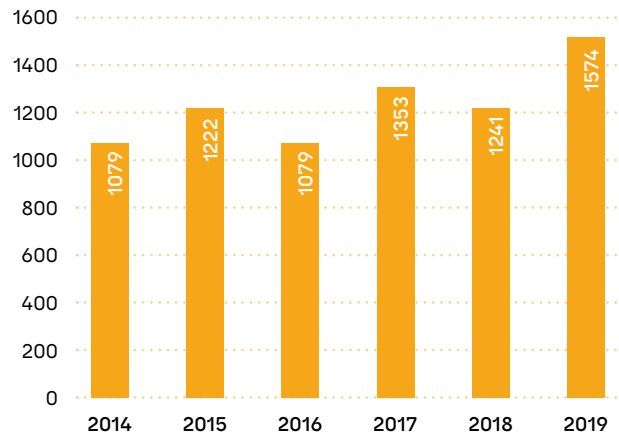


Figure 25: Evolution of organic production areas (ha) in Lebanon⁽²⁰⁾

Regarding the cultivated crops, it can be observed from figure 3 that the production of grapes accounts for nearly 50% of the total production areas, covering around 713 hectares. This production is classified into two types: table grapes and wine grapes. Subsequently, olive production follows with an area of 108 hectares, followed by fruit trees, cereals, and mixed vegetables.

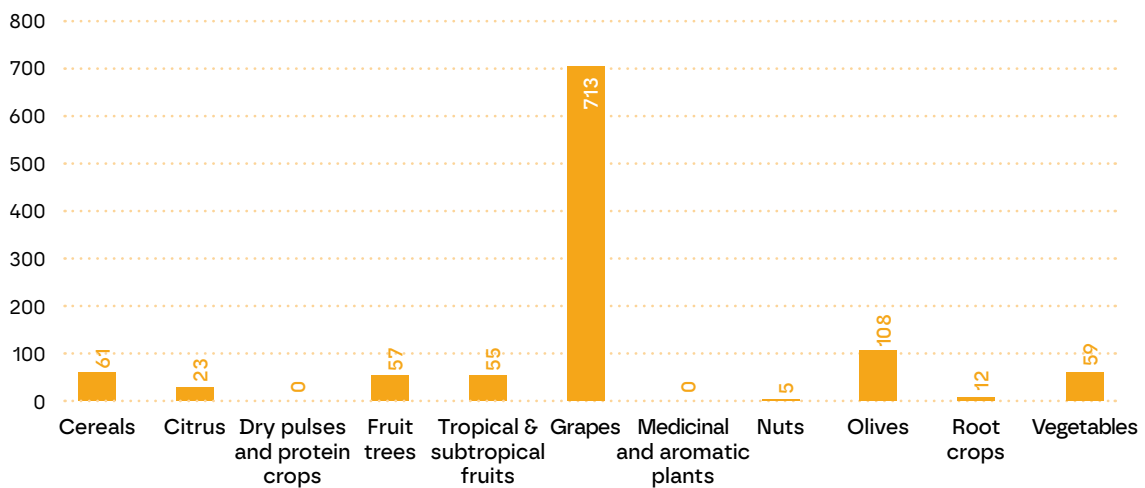


Figure 26: Distribution of organic crops (ha) in Lebanon ⁽²¹⁾

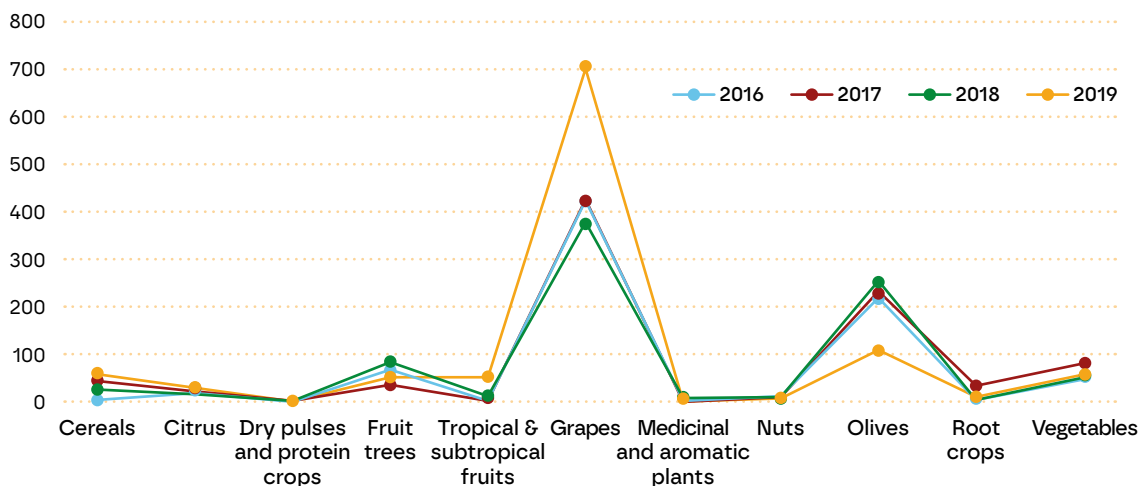


Figure 27: Evolution of organic crops (in ha) between 2016 and 2019 ⁽²²⁾

(20) (21) (22) Source: <https://statistics.fibl.org/data.html>

The data in Figure 27 indicates a general increase in the cultivated crop areas for most crops in 2018 and 2019, particularly for grapes, olives, and fruit trees. It is worth noting that there is significant potential for the growth of medicinal plants, nuts, and dried pulses, as there is a growing demand for these products in international markets.

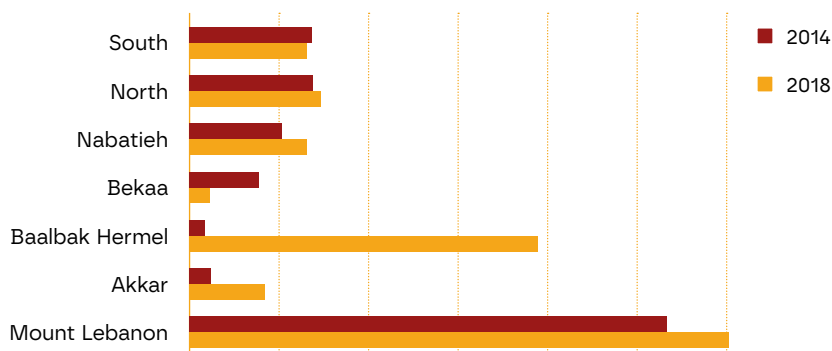


Figure 28: Evolution of cultivated organic areas by Lebanese regions between 2014-2018 ⁽²³⁾

The geographical distribution indicates that the Mount Lebanon region has the largest organic cultivated areas, followed by Baalbeck-Hermel where most of the organic wine grapes are grown. The Aakar region has shown significant development in organic agriculture. The South, North, and Nabatieh regions have maintained a relatively stable level of production areas, while there was a decline in the Bekaa region between 2014 and 2018 (refer to figure 28).

2. ORGANIC OPERATORS

The number of organic operators in Lebanon reached 199 in 2019, indicating a steady increase from 160 operators in 2016, with a 4% increase in 2017 and a 9% increase in 2018. This trend reflects the growing appeal of the organic sector for new entrants and investors. The organic operators in Lebanon are categorized into four groups: producers, processors, retailers, and importers, with few involved in more than two categories. Out of the 199 operators, 122 (61%) are producers, and 69 (35%) are processors.

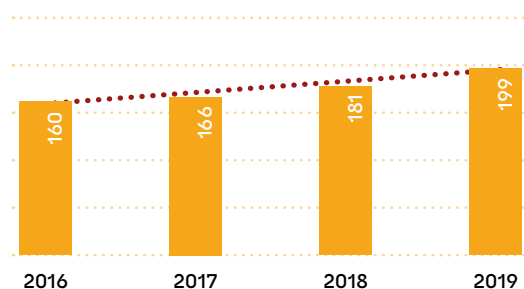


Figure 29: Evolution of organic operators between 2016 and 2019 ⁽²⁴⁾

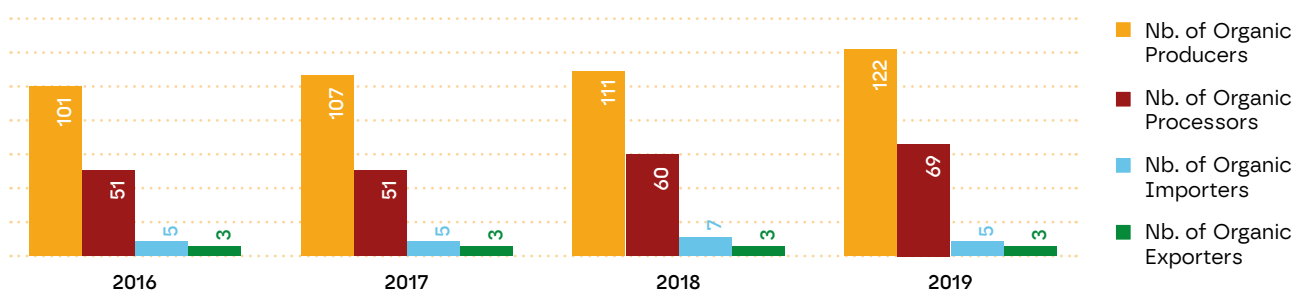


Figure 30: Distribution of categories of organic operators between 2016 and 2019 ⁽²⁵⁾

(23) Source: the Lebanese organic agriculture sector in figures, P. Eid, MoA

(24) (25) Source: <https://statistics.fibl.org/data.html>

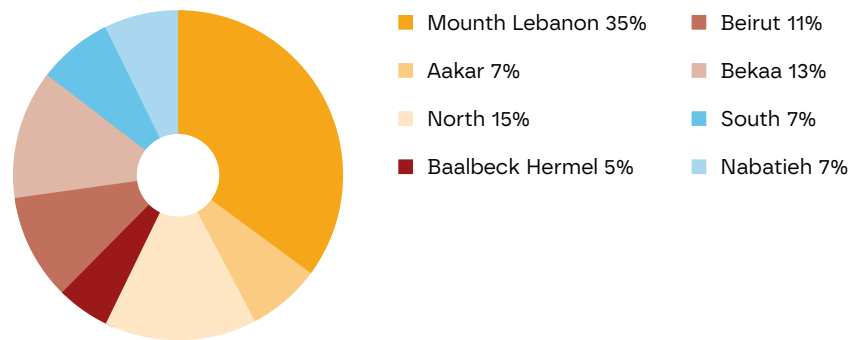


Figure 31: Distribution of organic operators by region 2019 ⁽²⁶⁾

The Regions with the highest number of operators are, progressively, Mount Lebanon (around 70), North Lebanon (30), Bekaa (26) and Beirut (22).

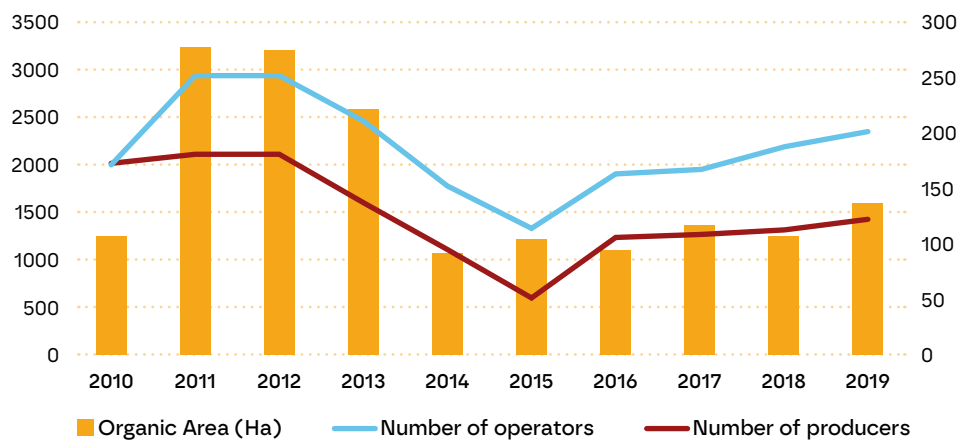


Figure 32: Evolution of organic farming in Lebanon 2010-2019⁽⁴⁴⁾

The figure 32 depicts the evolution of organic farming in Lebanon, revealing that between 2011 and 2013, the cropped areas exceeded 2500 hectares. However, starting in 2014, there was a drastic drop in the numbers as Libancert, a Lebanese certification provider, ceased its activities, leading many farmers to leave the sector. Only CCPB (Consortium for Control of Organic Products, previously IMC Lebanon) continued to provide organic certification for the different operators. From 2018, the trend shows that the number of operators is growing faster than the number of producers. This can be explained by the increasing number of new organic processors who recently joined the sector, attracted by its potential profitability. The number of organic producers remains relatively low, accounting for less than 0.1% of the total number of farmers in Lebanon, which was reported as 169,512 in the Agricultural Census of MoA/FAO in 2010. Additionally, organic producers cultivate an average of 12.9 hectares per farm, while conventional farming typically involves cultivating an average of 1.35 hectares per farm.

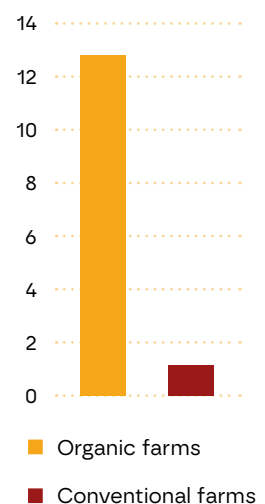


Figure 33: Comparing average size (Ha) of organic and conventional farms in Lebanon

(26) Source: <https://statistics.fibl.org/data.html>

3.

ORGANIC LIVESTOCK

In 2018, the organic livestock production was distributed as follow:

- ✓ The number of sheep and goats reared organically reached 960 certified heads.
- ✓ The total organic milk production was estimated at 148,000 litres.
- ✓ The total organic meat production reached 264 tons.
- ✓ The number of poultry farmed organically reached 29 314 birds.
- ✓ The total production of eggs was estimated at 8.1 million eggs.
- ✓ The total number of beehives was estimated at around 393.
- ✓ The production of organic honey was estimated at around 2.5 tons.

	2014	2015	2016	2017	2018	2019	2019/2018 % change
Sheep	338	338	180	230	230	330	43.5%
Goat	1,006	1,006	760	730	730	638	-12.6%
Poultry	3,290	3,290	18,885	22,825	29,314	28,411	-3.1%
Broiler	300	300	925	1,925	1,120	1,176	
Laying hens	2,990	2,990	17,960	20,900	28,194	27,235	
Beehives	183	453	446	416	393	527	+34.1%
Others	27	27	4	11	11	200	+172%

Table 19: Evolution of organic livestock between 2014 and 2018

It is evident from the available data that there was a notable increase in sheep production in 2019 after four consecutive years of decline. The production levels for sheep have now reached the same levels as those observed in 2014 and 2015. Additionally, the poultry sector has undergone significant development between 2017 and 2019. This can be attributed to the growing demand for organic eggs both locally and internationally. Moreover, the production of organic honey has also witnessed an increase in 2019.

4.

IMPORTS OF ORGANIC PRODUCTS FROM THIRD COUNTRIES

The primary organic exports from Lebanon comprise fresh fruits and vegetables, eggs, olive oil, dairy products, thyme, and seedlings of aromatic plants. In contrast, the imports of organic products have a wider range and encompass salty snacks, wine, beverages, grains, rice, pasta, jams, honey and syrups, poultry meat, milk and dairy products, corn flakes and cereals, canned vegetables, spices, and peppers. It is worth noting that the estimation of business volumes is predominantly based on approximations, as import and export data are not available. The Lebanese customs employ the same HS (Harmonized System) codes for both conventional and organic products, which hampers a precise

overview of the organic sector and its development. Hence, resolving this issue is highly recommended to acquire accurate insights into the organic industry's growth and progress.

5.

THE DOMESTIC MARKET

The domestic organic trade in Lebanon is primarily focused on supermarkets, specialized shops, restaurants, and local farmers markets such as Souk el Tayeb. Fair Trade Lebanon, Biomass, and other organizations are playing a significant role in creating export opportunities for small-scale organic producers and food processing cooperatives located in rural areas.

6.

LEGISLATION AND POLICY SUPPORT

Lebanon is currently facing unprecedented challenges due to the financial and economic crisis, compounded by the effects of the Covid-19 pandemic since March 2020. Despite these obstacles, the agri-food sector has the potential to contribute significantly to the country's recovery and economic growth. However, many farms and agribusinesses in Lebanon are operating with technical inefficiencies, leading to unsustainable practices. To address this issue, the Ministry of Agriculture has developed a strategy for the agricultural sector in Lebanon (2020-2025), with a focus on promoting responsible production and consumption practices, protecting ecosystem services, and increasing organic farming. The strategy includes efforts to reverse land, soil, water and other natural resource degradation, reduce pollution, adopt energy-efficient techniques, and enhance the linkage between sustainable agriculture and preservation of ecosystem services and eco-tourism. The emerging interest in Lebanese cultural and culinary heritage, as well as the growing demand for healthy and organic food, further support the development of sustainable agriculture in Lebanon.

According to data from the World Bank, the agricultural sector in Lebanon contributed to only 3% of the country's GDP from 2016 to 2018, but employed about 25% of the labor force, including both full-time and part-time workers. The agri-food sector as a whole represents 25%-30% of the economy, with agri-food trade playing a crucial role. Fresh fruits and vegetables, as well as processed and semi-processed foods, are significant sources of exports, accounting for over 20% of total exports (equivalent to an average of USD 0.7 billion between 2014 and 2018) according to the International Trade Center ITC in 2020. Agri-food imports also make up a significant share of total imports, representing 18% of total imports (or an average of USD 2.9 billion between 2014 and 2018). Lebanon remains heavily dependent on imports for most food products, particularly grains and sugar. However, in response to the economic crisis in 2020, local industries and entrepreneurs have been actively engaged in import substitution efforts for a wide variety of agri-food products.

7.

HISTORICAL BACKGROUND AND LEGISLATIVE CONTEXT OF THE LEBANESE ORGANIC SECTOR

Organic agriculture (OA) in Lebanon began to develop in the late 1990s with the assistance of various international organizations. However, the Lebanese organic sector has faced various challenges over the years, resulting in large fluctuations. In recent years, the sector has been growing slowly but steadily.

Figure 1 illustrates the different milestones that have led to the development of the organic sector in Lebanon, which began in 2000 with some support activities. In 2003, the Lebanese Food Safety Commission (LIBNOR) voluntarily developed standards for local operators in the absence of any local legislation and created a new Organic Committee to review and update the norms.

European standards were mainly applied, especially with the establishment of the Mediterranean Certification Institute (IMC) Lebanon as the first certification body in Lebanon, followed by the creation of Libancert, a local certification institution, which ceased its activities in 2015. In 2005, the Ministry of Agriculture formed a technical and national committee to draft a law on Organic Agriculture. Some operators organized themselves under the Lebanese Association for Organic Agriculture (ALOA). Later, in 2011, a Ministerial decision (1033/1 dated 21/11/2011) was issued concerning the organization of the organic sector in Lebanon, and a new technical committee for OA was established. In 2012, the Ministry of Agriculture created the “National Organic Register” under decision # 542/1 of 15/6/2012, and a new National technical committee was formed. In 2014, the Lebanese Agricultural Research Institute (LARI) established a research station for OA in Kleiaat-Kesrwan, followed by another station in Baakline-Chouf.

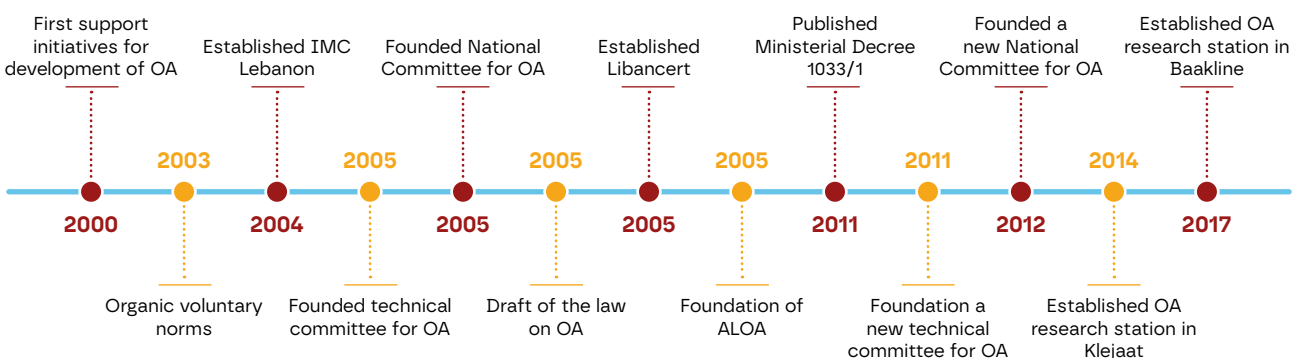


Figure 34: Major events which impacted the evolution of the Organic sector in Lebanon ⁽²⁷⁾

The Lebanese Organic Law (no. 158), aiming to organize the organic sector, was ratified by the parliament, and was published in the official gazette on May 14, 2020. The law includes the rationale, five Chapters with twenty-eight articles.

(27) Source: Role of the MOA in supporting the OA sector in Lebanon, Eng. P. Eid, 2021

The chapters are divided as follow:

- Chapter I: Scope of Implementation and Terms
- Chapter II: Data Labelling and Packaging
- Chapter III: Control and Certificate Issuing
- Chapter IV: Import and Export Conditions
- Chapter V: General Provisions

However, the OA law is missing lot of decrees of application which haven't been issued yet, preventing the proper application of the law. We hereby list some articles of the law which need ministerial decrees to be turned into an effective law:

- **Article IX:** This article specifies that the Ministry of Agriculture shall establish a control system in accordance with the present law, which must be ratified by the Council of Ministers. The implementation of this control system can be delegated to one or more control authority and/or certificate issuing body, as long as it is accredited by the Lebanese Accreditation Council (COLIBAC) or another accreditation council that is a member of the International Standards Accreditation Council (ISAC). If this is the case, the control system must be certified by COLIBAC, registered with the ministry, and implemented by the relevant operators.
- **Article XIV:** An operator has the option to file a complaint against the control and/or certificate issuing body by submitting a written letter accompanied by relevant evidence to the Ministry. The Ministry, in accordance with a mechanism established for this purpose through a law decree ratified by the Council of Ministers based on the proposal of the Minister of Agriculture, will then decide on the matter. However, it is mandatory that the Ministry informs the Lebanese Accreditation Council (COLIBAC) regarding the complaint.
- **Article XXI:** A national advisory committee for organic agriculture shall be established within a maximum period of six months from the date of issuance, by virtue of a decree according to the proposal of the minister of Agriculture. This committee shall comprise of the following members: Ministry of Agriculture as the president and rapporteur, Ministry of Economy and Trade, Ministry of Public Health, Ministry of Industry, Ministry of Environment, a representative of the President of the Lebanese Food Safety Commission, LIBNOR, the Syndicate of Lebanese Food Industrialists, COLIBAC, a representative of both orders of Engineers and Architects/Agricultural Engineers branch, representatives of the faculties of Agriculture in the universities, the Union of Agricultural Syndicates in Lebanon, a representative of the consumer associations in Lebanon, three representatives of the Lebanese NGOs that work in the field of organic agriculture, and a representative of the control and/or certificate issuing bodies.

The Organic National Committee (ONC) shall be responsible for the following tasks:

- ① Conducting studies and proposing recommendations related to the growth, development, enhancement, and organization of the organic agriculture sector in Lebanon. Additionally, the ONC shall contribute to the preparation of law projects, decrees, and decisions that govern this sector.

- ② Providing opinions regarding the assessment of control and/or certificate issuing bodies.
 - ③ Reviewing documents, guidelines, proposals, and other documents related to organic agriculture issued by international organizations, and providing opinions on them. The ONC shall also transfer recommendations to the competent authorities and follow up on their implementation.
 - ④ Providing opinions on claims related to organic agriculture that are submitted to the ministry.
 - ⑤ Performing any other tasks recommended by the government.
- **Article XXVI:** All provisions stipulated in the Consumer Protection Law No. 659 of 4/2/2005, as well as its amendments, and the provisions stipulated in the Penal Code issued by Law Decree No. 340 of 1/3/1943 and its amendments, shall be applicable in cases of fraud.

Main Challenges facing the OA sector:

- ✓ Absence of support and subsidies for organic operators especially during the conversion period.
- ✓ Due to the financial crisis, the cost of certification has increased, since a percentage of the fees has to be paid in foreign currency which affects mostly small operators.
- ✓ Limited access to finance and credit facilities due to the collapse of the banking sector.
- ✓ Increase of the cost of organic inputs due to global supply chain crisis.
- ✓ Limited choice of Certification Bodies where only one institution is ensuring such service in Lebanon.
- ✓ Lack of availability of organic inputs due to the relatively small size of the organic business.
- ✓ Organic agriculture department still not created at MoA.
- ✓ Lack of extension services for organic farmers.
- ✓ Lack of skilled labor.
- ✓ Lack of organic farmers markets at the national level.
- ✓ Decrease in the purchasing power of the Lebanese community which makes difficult the access to organic products which are relatively more expensive.

ITALY

Luigi Guarrera



1.

STATISTICS ON ORGANIC LAND, OPERATORS AND MARKET

RETAIL SALES AND INTERNATIONAL TRADE DATA

The data presented in the following paragraphs provide a preview of the year 2020, with further details to be added as soon as they become available. It is noteworthy that in 2020, the area dedicated to organic farming expanded to 2,095,380 hectares, a significant increase of 102,144 thousand hectares (5.1%) compared to 2019. Italy, a prominent member of the European Union, is one of the leading countries in the organic farming sector. With a surface area of 2,002,801 hectares dedicated to organic farming, Italy ranks third, behind France (2,550,000 ha) and Spain (2,437,891 ha). In 2020, organic land accounted for 16.6% of Italy's Utilized Agricultural Area (UAA), which is considerably higher than the EU average of 8.5% in 2019 (refer to Chart 8 and Table 8).

2.

ORGANIC SURFACES AND CROPS

The area dedicated to organic farming has experienced a substantial increase of over 100,000 hectares in just one year, with 49% of this increase being attributed to arable land and vegetables, 28% to meadows and pastures, and 24% to permanent fruit crops. Among the various crops, vines and fodder saw the largest growth, while cereal and olive hectares increased more slowly by 1% and 2%, respectively, in 2020. An analysis of the distribution of organic UAA across different regions reveals that 57% of organic crops were located in just five regions, namely Sicily, Apulia, Calabria, Tuscany, and Emilia-Romagna. Sicily had the largest organic crop area at 382,798 hectares, followed by Apulia at 269,497 hectares, Calabria at 192,854 hectares, Tuscany at 180,242 hectares, and Emilia-Romagna at 175,080 hectares. There were different dynamics in the evolution of organic areas in different regions compared to 2019. In percentage terms, the areas decreased in Calabria by 7%, but increased in Sicily by 3%, Apulia by 1%, Tuscany by 25%, and Emilia-Romagna by 5%. In absolute terms, the largest increases were in Tuscany, Sardinia, and Lazio, while the largest decreases were in Calabria, Campania, and Lombardy.

3.

ORGANIC OPERATORS

In 2020, the number of active operators in the organic farming sector in Italy reached 81,731, representing a modest increase of +1.3% in comparison to the previous year. Sicily, Calabria, and Apulia were the regions that recorded the highest number of operators, with a combined total of 37% of the national figure. Nonetheless, Tuscany, Sardinia, Lazio, and Abruzzo also reported noteworthy performances in comparison to 2019, with respective growth rates of 14%, 11%, 7%, and 7%. It is noteworthy that the category of producers/processors has significantly increased its presence in the Italian organic farming scene over the last decade, with a remarkable expansion of 301%. This indicates that the production model is undergoing transformations to cater to the requirements of more specialized and self-reliant operators.

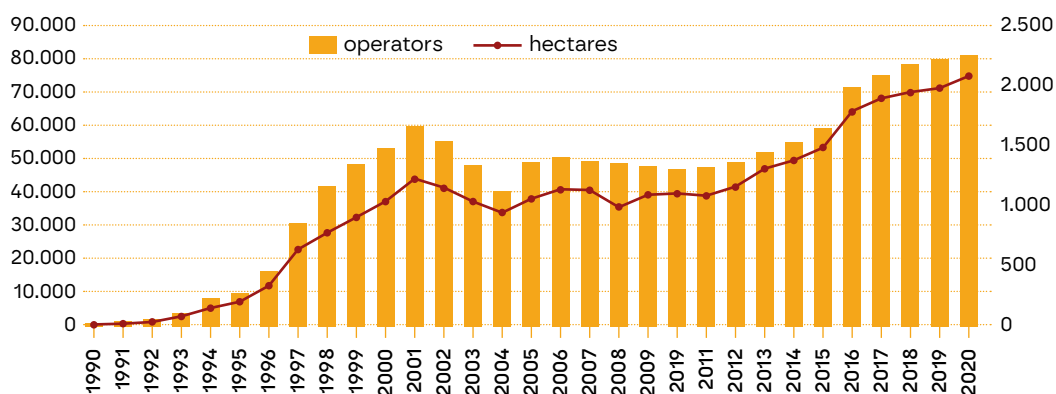


Figure 9: organic farming in Italy: areas and operators 1990 – 2020 - Hectares and number⁽²⁸⁾

(28) Source: compiled by SINAB based on data provided by MIPAAF

	2019	2020	Var.'20/'19 %
Operators	80,643	81,731	+1.3
Area	1,993,236	2,095,380	+5.1

Table 8: areas and operators - 2019 – 2020 - Hectares and number⁽²⁹⁾

4.

IMPORTS OF ORGANIC PRODUCTS FROM THIRD COUNTRIES

In 2020, there was a concurrent rise in both the areas and operators involved in organic production, as well as the importation of organic products from third countries, which increased in volume by just over 10.2% compared to the previous year. This trend was largely driven by the cereals category, which recorded a substantial increase in imported quantities of 24.5% compared to 2019. Furthermore, imports of vegetable oils and fats (41.2%), vegetables and pulses (19.7%), and the category of coffee, cocoa, sugars tea and spices (14.4%) also continued to grow (refer to Table 9 for details).

Product	Volumes 2019 t	Volumes 2020 t	Var '20-'19 %
Cereals	63,601.2	79,206.1	24.5
Fresh and dried Fruit	35,845.0	36,323	1.3
Vegetables and legumes	16,240.3	19,434	19.7
Industrial crops	41,026.2	31,194	-24.0
Vegetables oils and fats	18,994.3	26,817	41.2
Coffee, Cocoa, Sugars, Tea and Spices	26,648.8	30,474	14.4
Processed products	7,897.9	8,269	4.7
Total	210,253.7	231,716.5	10.2

Table 9: volumes of organic products imported to Italy from third countries, by product category - 2019 and 2020. Tonnes⁽³⁰⁾

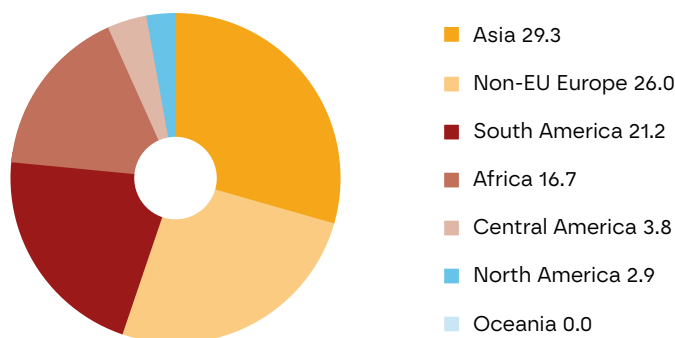


Figure 10: share of the quantity of organic product imported in Italy from third countries, by geographical area – 2020 - % share⁽³¹⁾

(29) Source: compiled by SINAB based on data provided by Control Bodies, Regional Authorities and SIB

(30) (31) Source: compiled by SINAB based on data provided by SIB

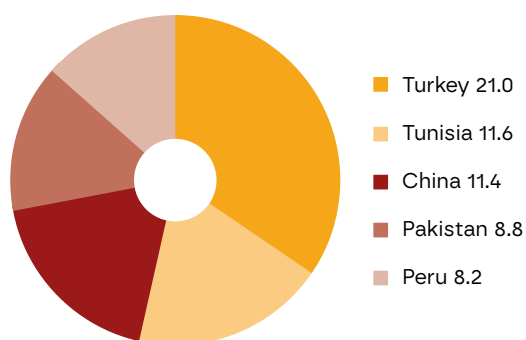


Figure 11: the top five countries by origin – 2020 - % share⁽³²⁾

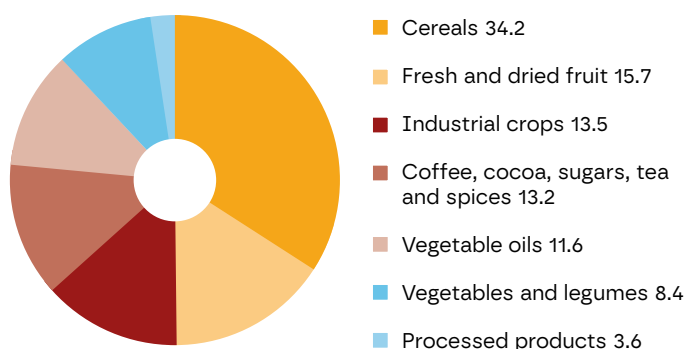


Figure 12: share of the quantity of organic product imported in Italy from third countries, by product type – 2020 - % volumes⁽³³⁾

According to the analysis, cereals constitute the largest category of imported organic products from third countries to Italy, representing 34.2% of the total. Cut and dried fruits follow with 15.7%, while vegetables and fruits together account for 25.1%. The other significant categories are industrial crops (13.5%) and coffee-cocoa-sugar-tea and spices (13.2%). Vegetable oils, including olive oil, constitute 11.6% of the total imported organic products (Figure 12).

5.

THE DOMESTIC MARKET

In the first half of 2020, the consumption of organic food products in Italy reached 3.3 billion euros, representing 4% of the overall impact of organic farming sales on Italian food spending. A total of 90% of Italian consumers bought an organic food product more than three times, showing a 1.4% increase from the previous year. If we consider families that have bought at least one organic food product, the value increases to 97%. The fruit and vegetable sector remains the most popular, accounting for over 46.6% of the value (as shown in Figure 13).

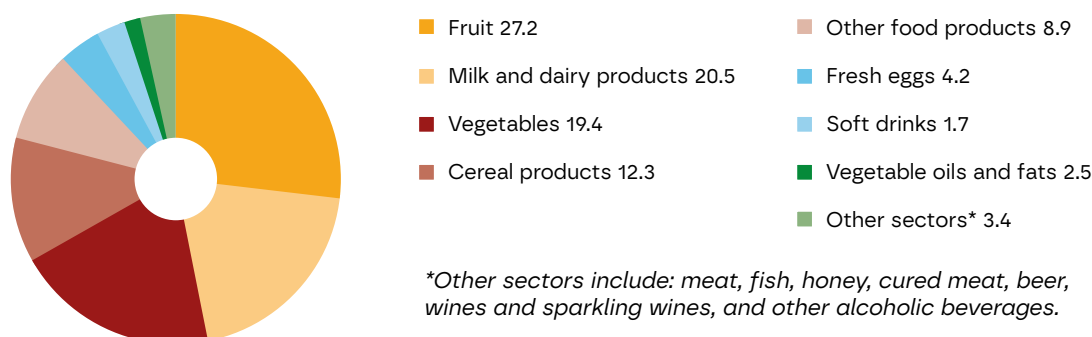


Figure 13: breakdown of organic spending by sector 2020 - % share⁽³⁴⁾

(32) (33) Source: compiled by SINAB based on data provided by SIB

(34) Source: Compilation by ISMEA based on data provided by Nielsen

6.

SPENDING IN LARGE-SCALE DISTRIBUTION: GEOGRAPHICAL DISTRIBUTION

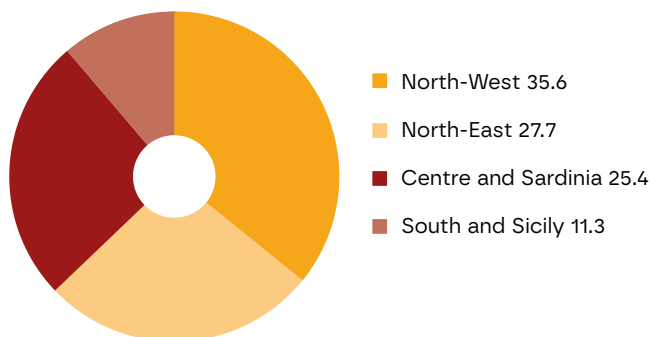


Figure 14: distribution of organic sales in large-scale retail trade by geographical area - 2020 % share⁽³⁵⁾

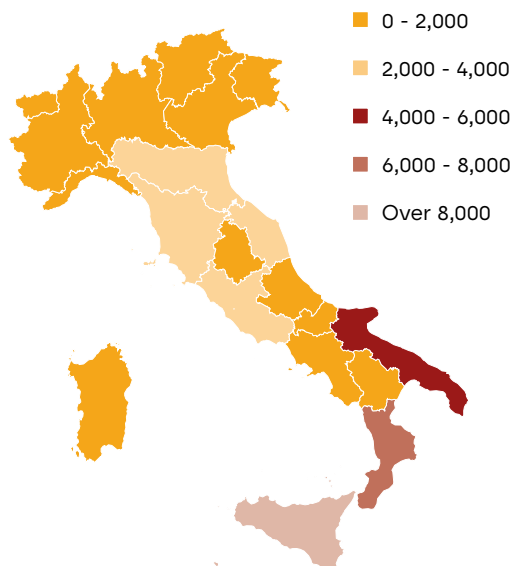
In Italy, there is a noticeable geographic variation in the consumption of organic products. The North-East has experienced a growth of +7.2% in organic spending in the first half of 2020, while other regions have reported lower increases, particularly in the South, where spending has only increased by +1.4%, in Sicily. Additionally, sales channels also differ significantly, with traditional channels accounting for 77.5% of estimated organic spending in the South, whereas in the North, the incidence of traditional channels is below 30% (Figure 14).

The analysis of the organic farming sector in the decade spanning 2010 to 2020 reveals a steady growth trajectory that has only recently experienced a slowdown. The sector still requires renewed efforts to achieve the target of 25% agricultural UAA set by the “Farm to Fork” strategy for 2030. In 2010, there were 47,663 operators in the organic farming sector, which has since expanded by over 34,000 units, marking a growth rate of over 70%. As of 2020, the total number of operators in the sector stands at 81,731 (as illustrated in Table 10 and Infographic 3).

ORGANIC OPERATORS	% CHANGE		
	2010	2020	2020/2010
TOTAL	47,663	81,713	71.5
Exclusive producers	38,679	59,035	52.6
Exclusive processors	5,592	9,618	72.0
Producers/Processors	3,128	12,534	300.7
Importers*	264	544	106.1

* “Importers” include exclusive importers and importers who also carry out production and processing activities

Table 10: categories of operators in the decade of 2010/2020 – number⁽³⁶⁾



(35) Source: Compilation of ISMEA based on Nielsen data

(36) Source: Compiled by SINAB based on data provided by Control Bodies, Regional Authorities, and SIB

In relation to agricultural land, there has been a noteworthy increase of 981,638 hectares over the past decade, which corresponds to an 88% growth rate. Specifically, in 2010, organic farming covered 1,113,742 hectares, while in 2020 the area has surpassed 2 million hectares, reaching a total of 2,095,380 hectares. The augmentation in organic farming surfaces has had an impact on all crop groups, exceeding 50%. Notably, the vineyards, vegetables, and root crops have experienced an increase in areas of over 100%, as evidenced by Table 11.

	SURFACES (HA)		% CHANGE	DIFFERENCE (HA)
	2010	2020	2020/2010	2020/2010
TOTAL	1,113,734	2,095,380	88.1	981,638
Cereals	194,974	333,563	71.1	138,589
Olives	140,748	246,504	75.1	105,756
Vineyards	52,273	117,378	12.5	65,105
Vegetables*	27,920	69,069	147.4	41,149
Permanent crops	318,429	495,295	55.5	176,866
Nuts	27,488	53,097	93.2	25,609
Citrus fruit	23,424	35,517	51.6	12,093
Fruit**	22,196	39,120	76.2	16,924
Meadows and pastures	288,562	583,781	102.3	295,219
Root crops	1,696	3,493	106.0	1,797

***“Strawberries” and “cultivated mushrooms” are included in vegetables*

***Fruit includes “fruit of temperate climate zones”, “fruit of sub-tropical climate zones”, “berries” (soft fruit)*

Moreover, the organic UAA in 2010 was 8.7% of the total UAA (2010 Agricultural Census), while in 2020 it reached 16.6% of the total UAA (ISTAT SPA 2016)

Table 11: areas and crops under organic farming in Italy – 2010/2020 – Hectares⁽³⁷⁾



(37) Source: compiled by SINAB based on data provided by Control Bodies

7.

LEGISLATION AND POLICY SUPPORT

The development of Organic Agriculture (OA) in Italy predates the enactment of the EU legislation in 1991. In fact, as early as the late 1940s, Alfonso Draghetti envisioned an integrated approach to farming based on biological principles. This was followed by the establishment of the first association for OA, “Suolo e Salute”, by Professor Francesco Garofalo in 1969, and the pioneering biodynamic activities of Ivo Totti. Other pioneers in the field of OA in Italy include Gino Girolomoni, who founded the “Alce Nero” cooperative with a group of farmers in the early 1970s, the “Ki Group” in 1974, Giulia Crespi in 1976 (who established Cascine Orsine in the protected area “Parco del Ticino”), “Probios” and the cooperative “Iris” in 1978, and a group of farmers in Sardinia who founded the cooperative “S’atra Sardigna” in 1982.

The aforementioned entities exerted pressure at the regional level to establish appropriate legislative frameworks, which eventually materialized in certain Italian regions, including Lazio, Marche, and Tuscany, towards the end of the 1980s. Moreover, the establishment of local production regulations was expedited by the formation of the AIAB, or the Italian Association for Organic Farming, in 1988. This organization was initiated by a group of organic farmers with the aim of representing producers, technicians, and consumers who sought to establish a distinct relationship between humans, agriculture, and society.

The historical development of the regulatory framework for OA in Italy also applies to all EU Member States. The first EU Regulation on organic production, Council Regulation (EEC) No 2092/91, was published in 1991, coinciding with the establishment of an organic farming unit within the Italian Ministry of Agriculture. In 1992, imports of organic products from third countries were regulated at the EU level with the adoption of Commission Regulation (EEC) No 94/92. The Italian Ministry of Agriculture implemented the provisions laid down in Regulation (EEC) No 2092/91 with the publication of legislative decree No 220/95 in 1995. The EU regulatory framework for organic livestock production was further developed with the adoption of Council Regulation (EC) No 1804/1999 in 1999.

At the turn of the 21st century, the Italian organic sector saw the establishment of the National Committee for Organic Agriculture through Ministerial Decree No 91 982 in October 2001. From 2007 to 2009, there were several significant developments in EU-level legislation, starting with Council Regulation (EC) No 834/2007, which focused on organic production and labeling of organic products and repealed Council Regulation (EEC) No 2092/91. In 2008, the implementation of the regulation was detailed through two regulations: I) Commission Regulation (EC) No 889/2008, which established rules for organic production, labeling, and control and II) Commission Regulation (EC) No 1235/08, which established rules for imports of organic products from third countries under Council Regulation (EC) No 834/2007.

Subsequently, in 2009 and 2012, Commission Regulation (EC) No 889/2008 underwent amendments, with the former introducing detailed regulations on organic aquaculture animal and seaweed production (Commission Regulation (EC) No 710/2009) and the latter defining detailed regulations on organic wine production (Commission Implementing Regulation (EU) No 203/2012). All of these regulations lapsed at the end of 2021, when a new regulation approved in 2018 by the European Commission, Reg. (EU) No 2018/848 on organic production and labelling of organic products, went into effect on 1 January 2022. Over the past two years, a series of supplementary regulations have been implemented to define a comprehensive legal framework that is increasingly aligned with the sector’s requirements.

It is worth noting that in 2016, the Italian Ministry of Agriculture, Forestry and Food (Mipaaf), which was renamed MASAF in 2022, approved a “National Strategic Plan for the Development of the Organic Farming System”. The plan, which expired in 2020, aimed to achieve various objectives, including a 50% increase in the area under organic cultivation by 2020. Most of these goals were achieved. Currently, in line with the “Farm to Fork” strategy (which is part of the “New Green Deal” initiative and aims to have 25% of the EU agricultural surface in organic production by 2030) and the “New European Action Plan for Organic Farming”, Italy is preparing a new “National Strategic Plan”.

From a legislative standpoint, Italy has enacted a national law regarding organic farming, known as “Provisions for the protection, development and competitiveness of organic, agri-food and aquaculture production”. This law covers important topics such as the creation of an Italian organic logo, a national plan for organic seeds, the promotion of sector-specific training, the aggregation of producers, the establishment of supply chain agreements to enhance organic production, and the development of organic districts. The latter are significant entities that have already been established in various regions across Italy.

8.

OUTLOOK ON FUTURE STRATEGIES

From a political perspective, Italy, like other EU member states, is dedicated to achieving the objective of expanding its organic agricultural land to 25% by 2030 in accordance with the European Union’s “Farm to Fork” strategy, a vital component of the European Green Deal aimed at promoting sustainable and environmentally friendly agriculture through a collaborative effort among member states.

To attain the objective of the “Green Deal”, the European Commission introduced an “Action Plan for Organic Farming” in 2021. The plan includes various measures to promote and conduct research in the sector, the establishment of a “European Day for Organic Farming,” integration with the new CAP-Common Agricultural Policy, and the stipulation that the Action Plan ought to be executed by the Member States through the development of National Strategic Plans.

It is evident that Italy has taken on this challenge with great commitment, particularly through the development of the National Strategic Plan 2023-2027 for the Common Agricultural Policy. This plan includes several measures to support the growth of the organic sector, with the ambitious goal of reaching 25% of organic surface by 2027, which is ahead of the target set by the European Union’s “Farm to fork” strategy.

While Italy was drafting the CAP National Strategic Plan, a new national law was passed in 2022 to provide additional support for the growth of the country’s organic farming sector.

The new national law passed in 2022 aimed at supporting the development of the Italian organic farming sector includes several significant aspects. For instance, it establishes the ‘Made in Italy’ organic label that can help the sector to take a qualitative leap forward by creating supply chains consisting of 100% Italian organic products made with raw materials grown or bred in Italy. These supply chains will offer a fair price and combine the value of food identity with that of sustainability provided by the organic label.

The newly enacted law also includes provisions for the recognition of organic districts, which can facilitate the growth of agriculture and the economy in rural areas by organizing production and the market. The organic districts can promote aggregation between producers and other actors in the supply chain, which can further support the development of the organic sector and provide more opportunities for small-scale farmers.

The new law also establishes a fund for the development of organic production, with 30% of its resources earmarked for research and innovation programs. Additionally, the fund provides support for the conversion to organic production, facilitating associative and contractual forms to strengthen supply chains and employment opportunities.

The new law also mandates the adoption of a national action plan every three years, consistent with the European Action Plan, to promote the growth of Italian organic production and consumption.

Italy is now in the process of finalising its National Action Plan, which will be approved later this year.

Some of the main areas of activity envisaged include what we have already seen included in the law:

The main areas of planned activities include some of the aforementioned provisions contained in the law, such as:

- Taking action to increase awareness and consumption of organic products in Italian households and public schools, including the promotion of the national organic label, which is expected to enhance the perception of Italian organic products;
- Allocation of specific national funds to implement an organic seed plan, which aims to enhance the availability of certified seed and plant propagation material, thereby reducing the use of derogations for the use of conventional seed;
- Provision of funding for new research projects, as the analysis of needs and discussions with the organic production industry have demonstrated the pressing need for an improvement in the production and technical assistance sectors.

The planned interventions also include:

- Facilitating the conversion to organic farming, with a particular focus on conventional farms with incomes not exceeding 7,000 euro and promoting the establishment of new organic farms in rural mountain areas.

Establishing associative and contractual forms to strengthen the supply chains of small organic farms.

- Improving the control and certification system.
- Incentivizing institutions and public bodies to use organic products in the management of green areas and to promote the consumption of organic products in public and private canteens through contractual agreements.
- Promoting projects for products originating from organic districts and enhancing typical Italian organic production.
- Promoting environmental sustainability through actions that foster the maintenance of natural soil fertility and the use of environmentally friendly methods of preservation, packaging, and distribution.

Finally, the resources that Italy have recently assigned to the sector are considerable and are spread between several initiatives:

- The strategic Plan for the Common Agricultural Policy (CAP) 2023-2027 has allocated a substantial sum of 2.164 billion euro towards intervention to support areas undergoing organic conversion and those already maintained, over the course of the five-year programming period. This allocation constitutes 14.9% of the total rural development resources. Notably, this sum includes the transfer of 360 million euro from the first to the second pillar of the funding mechanism, with the amount being distributed to the Regions in four annual instalments from 2023 to 2027. This allocation is based on the incidence of the regional organic Utilised Agricultural Area (UAA) on the total, as stipulated in the EU Regulation 2021/2115, Article 103. The objective of this funding is to reach the target of 25% of the national agricultural area under organic cultivation by 2027.
- The plan also includes resources related to CMOs/sectoral policies, measures for investments, young people setting up, cooperation, risk management, and AKIS (Agricultural Knowledge and Innovation System). These resources are designed to provide specific selection criteria or rewards for organic farms.
 - A supplementary fund to the National Recovery and Resilience Plan (PNRR) has been approved in 2021, with a dedicated allocation of 300 million euro to support organic farming in the agri-food, fishing, aquaculture, forestry, floriculture, and nursery sectors through supply chain and district contracts.
 - The Organic Farming Fund, as established by the Stability Law of 2020, provides an annual allocation of 5 million euro from 2021, with an additional allocation of 15 million euro exclusively for 2021.

This fund is designed to support the organic farming industry through a range of measures, including:

- aid for knowledge transfer and information actions intended for vocational training, skills acquisition (such as training courses, seminars, and coaching), as well as demonstration activities and information actions.
- aid for consultancy services aimed at improving the economic and environmental performance, sustainability, and climate resilience of organic farms, organic farming sectors, and organic farming districts.
- aid for promotional measures in favor of agricultural products, such as organizing and participating in competitions, fairs, and exhibitions, and publishing materials to increase awareness among the general public about organic agricultural products, organic farming clusters, and districts.

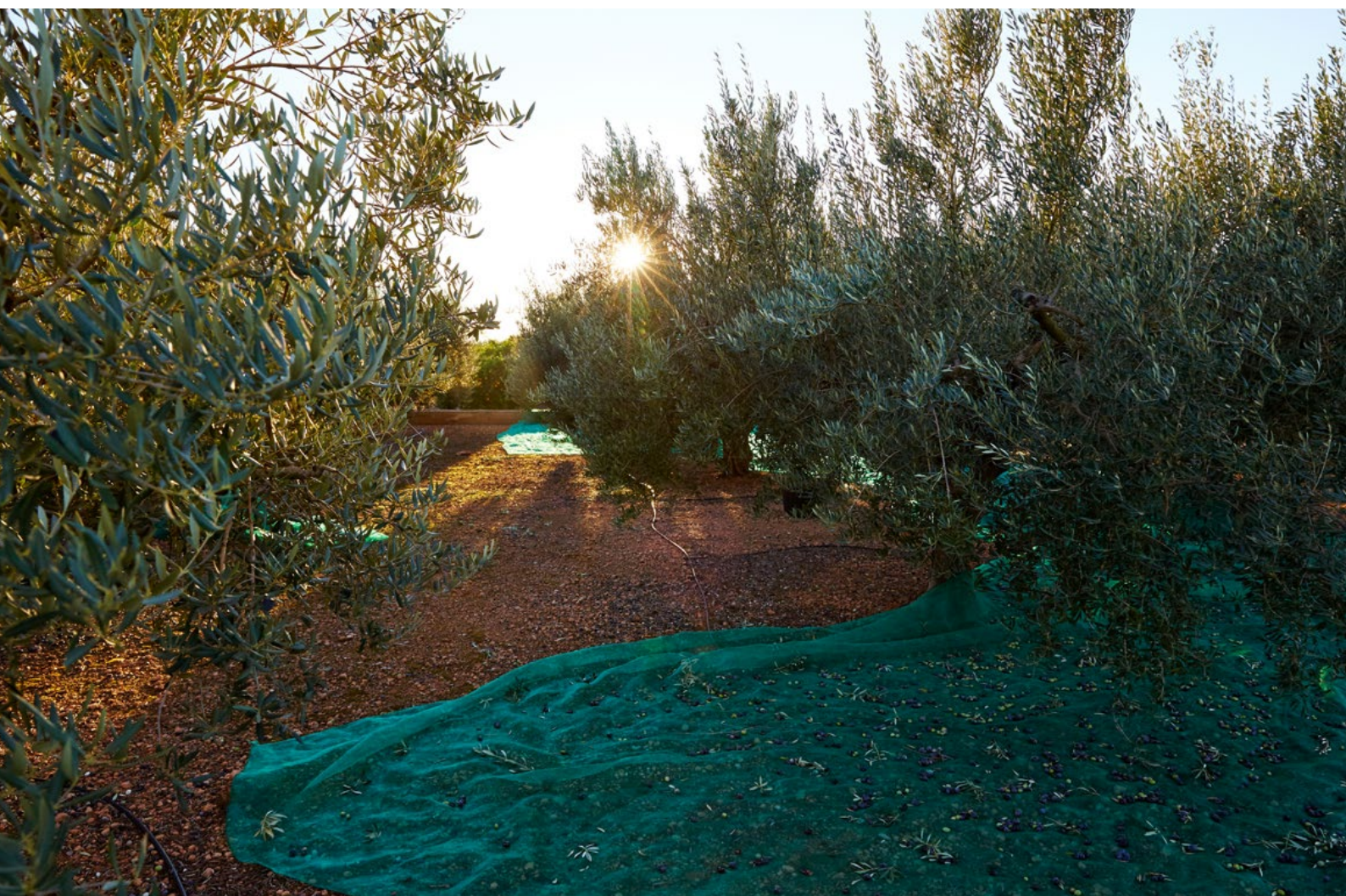
The Fund for research in the field of organic and quality agriculture was established by Law 488 of December 23, 1999, but it has been repealed by a new law in March 2022. It has now been merged into a new Fund for the development of organic production, which is fed by 2% of the total turnover from the sale of chemical fertilisers and pesticides. This fund finances the following initiatives:

- Interventions contained in the National Action Plan for Organic Production and Organic Products. The first plan was approved in 2015 and lasted until 2020, and a new plan is currently being prepared and will be approved in 2023.
- Initiatives aimed at increasing the availability of seeds for farms and improving their quantity and quality, with reference to varieties suitable for organic and biodynamic farming.
- Projects for the realization of the Italian organic label.
- Research and innovation programmes, training and updating courses, and research programmes on food safety and security.
- The Fund for Organic School Canteens (approved by law in 2017) has allocated 5 million euros annually for both 2022 and 2023. Its purpose is to reduce the costs borne by beneficiaries of the organic school canteen service, and to implement information and promotion initiatives in schools to support the refectory service.
- The Fund for the Development of Organic Aromatic and Officinal Plant Crops (part of the Budget Law 2022) allocates 1.5 million euros for the three-year period 2022-2024. The aim is to promote organic aromatic and officinal plant crops throughout the national territory.
- The Budget Law 2022 includes a contribution in favor of PDO, PGI, and organic wine producers for digital labeling systems, with a spending limit of 1 million euros. This contribution is for the year 2022.



GREECE

Katerina Sotiropoulou



1.

STATISTICS ON ORGANIC LAND, OPERATORS AND MARKET

RETAIL SALES AND INTERNATIONAL TRADE DATA

The data presented in the following paragraphs offer a preliminary insight into the year 2020. Specifically, the total area dedicated to organic farming (excluding pastures) in 2020 was 172,440,016 hectares, representing a 3.67% decline or 6,562.77 thousand hectares less than in 2019. Within the European Union, Greece ranks 8th in terms of surface area dedicated to organic farming, placing it in the middle of the rankings, behind leading countries such as Italy, France, Germany, and Spain, as depicted in Figure 14.

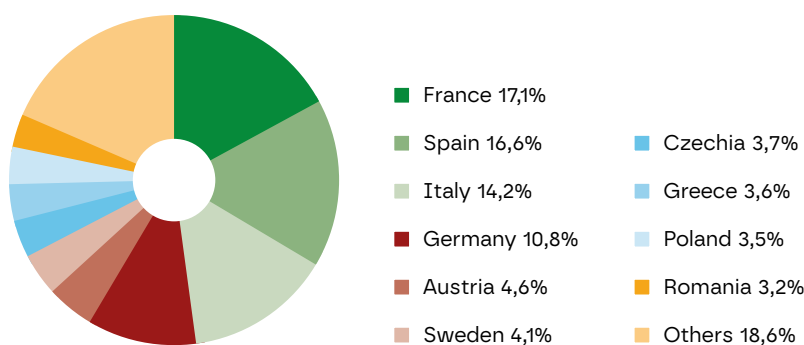


Figure 14. Share of total organic area (fully converted and under conversion without pastures) (EU, 2020).

2.

ORGANIC SURFACES AND CROPS

It is noteworthy that the proportion of organic land, including cultivation areas and pastures, in Greece reached 10% of the national Utilized Agricultural Area (UAA) in 2020. This figure places Greece considerably above the EU average, as illustrated in Figure 15.

The total area dedicated to organic farming in Greece in 2020 was 535,000 hectares, including cultivation areas and pastures, with a total of 29,869 organic producers. Over the period from 2013 to 2020, the organic area has increased by 39%, while the number of organic producers has grown by 36%, as depicted in Chart 11 and Table 12.

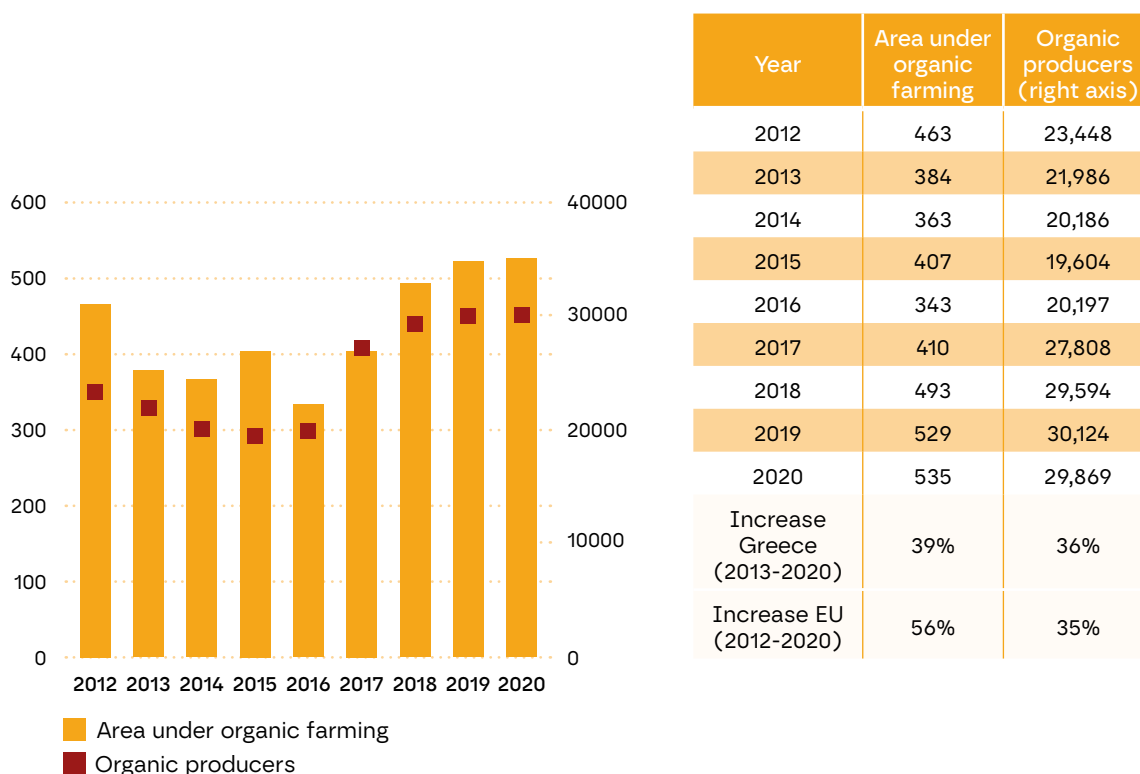


Figure16 - Table 12: Organic area and producers (1 000 ha) in Greece ⁽³⁸⁾

(38) Source: <https://agridata.ec.europa.eu/extensions/DashboardIndicators/OrganicProduction.html>

In 2020, the total organic area in Greece, including cultivation areas and pastures, was 535,000 hectares, of which 289,000 hectares (1000 ha) received specific support from the Common Agricultural Policy (CAP). This represents a proportion of 54% of the total organic area, which is lower than the EU-27 average of 61.6%, as shown in Figure 16 and Table 12.

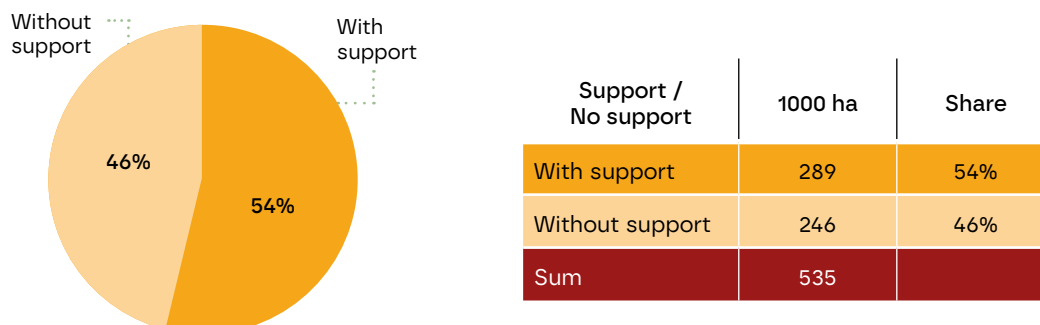


Figure 17-Table 13: Share of organic area receiving specific CAP support in Greece in 2020⁽³⁹⁾

As of the end of December 2020, organic farming in Greece, excluding pastures, covered almost 172 thousand hectares of cultivated land and involved approximately 32,000 producers. However, between 2019 and 2020, there was a slight decrease in the area dedicated to organic farming and the number of producers. Specifically, the total area dedicated to organic farming in 2020 was 172,440.02 hectares, with a corresponding number of 31,907 organic producers.

2019		2020		2020/2019	
Total Organic		Under conversion	Converted	Total	% Change
Total (cultivations areas + pastures)	528,751.73	83,563.48	451,065.22	534,628.7	1.11
Total (cultivations areas)	179,002.79	46,557.83	125,882.19	172,440.02	-3.67
Cereals-Total (with rice)	46,493.45	10,598.79	27,508.61	38,107.4	-18.04
Cereals-Total (without rice)	44,749.37	10,165.96	26,253.75	36,419.72	-18.61
Wheat-Total	16,610.01	2,999.64	8,549.26	11,548.91	-30.47
Rye	557.81	95,002	280.65	375.65	-32.66
Barley	8,337.85	2,096.29	4,755.27	6,851.56	-17.82
Oats	6,575.25	2,169.99	3,587.96	5,757.95	-12.43
Maize (Fruit)	9,896.93	2,074.66	7,686.58	9,761.24	-1.37
Triticale	2,771.52	730.38	1,394.03	2,124.41	-23.35
Rice	1,744.08	432.82	1,254.86	1,677.68	-3.81
Fruit plants (Psychanthi and proteins crops)	19,282.40	7,107.8	15,900.3	23,008.1	19.32
Root crops	222.13	54.4	207.448769	261.85	17.88
Potatoes	192.16	46.64	180.538769	227.18	18.22

continue ↓

(39) Source: <https://agridata.ec.europa.eu/extensions/DashboardIndicators/OrganicProduction.html>

2019		2020		2020/2019	
Total Organic		Under conversion	Converted	Total	% Change
Sugar beets (except from seeds)	22.35	7.75	10.8	18.55	-17.002
Other root crops	7.62	0.01	16.11	16.12	111.55
Organic Plants-Total	12,919.49	3,538.27	6,992.71	10,530.97	-18.49
Olive fruits	4,959.49	778.5	2,320.12	3,098.63	-37.52
Tobacco	328.25	86.25	142.408	228.66	-30.34
Hops	0	0	0	0	0
Textile plants	3,864.24	1,086.84	2,283.52	3,370.36	-12.78
Aromatic and medicinal plants Herbs	3,614.14	1,559.65	2,218.69	3,778.34	4.54
Other Organic plants	153.37	27.02	27.96	54.98	-64.15
Fresh vegetables Melon, Strawberries-Total	2,384.67	965.93	1947.21	2,913.15	22.16
Fresh vegetables	2,352.58	963.81	1914.22	2,878.03	22.33
Cultivated fruits	624.34	124.55	606.04	730.59	17.02
Roots and bulbs vegetables	267.05	23.74	180.17	203.91	-23.64
Legumes	619.7	411.61	443.98	855.61	38.07
Other vegetables	97.19	162.5	39.98	202.5	108.35
Strawberry	32.09	2.117	32.99	35.11	9.41
Apples	314.6	86.12	257.71	343.84	9.29
Pears	204.88	71.91	141.52	213.44	4.18
Peaches	134.82	55.21	99.95	155.16	15.09
Apricots	161.55	17.53	32.87	50.4	-68.8
Nectarines	49.2	53.29	124.57	177.86	261.5
Cherries	204.11	31.06	158.9	189.9	-6.96
Plums	108.07	26.24	87.81	114.05	5.53
Berries	268.63	24.794	165.24	190.03	-29.26
Nuts	1,522.60	809.32	517.56	1,326,882	-12.85
Subtropical plants	1,182.17	454.17	744.91	1,199.079	1.43
Citrus fruits	2,144.42	1,039.85	1,199.21	2,239.23	4.42
Vineyard - Total	5,487.75	834.56	4,046.35	4,880.91	-11.06
Olive - Total	57,061.92	17,678.38	38,828.46	56,506,836	-0,97
Other perennials crops	211.24	72.9	121.5	194.4	-7,97

Table 14. Areas and crops under organic farming in Greece 2019 and 2020, Hectares⁽⁴⁰⁾

(40) Source: Greek Ministry of Rural Development and Food, 2020

In Greece, as of 2019, the proportion of animals held by organic farmers in cattle, goat, and sheep was significantly greater than that of the EU-27 (excluding the UK). Specifically, the proportion of animals held in cattle was 27%, compared to the EU average of 6%. Similarly, the proportions of animals held in goat and sheep were 14% and 15%, respectively, compared to the EU averages of 8% and 7%. However, the proportion of pigs held by organic farmers in Greece was lower, at 1%, compared to the EU average of 2%. These differences can be attributed to the much larger rate of change observed between 2013 and 2019 in Greece, which was eight times greater in cattle, three times greater in goats, and four times greater in sheep than the corresponding rates observed in the EU-27, as depicted in Figure 18 and Table 15.

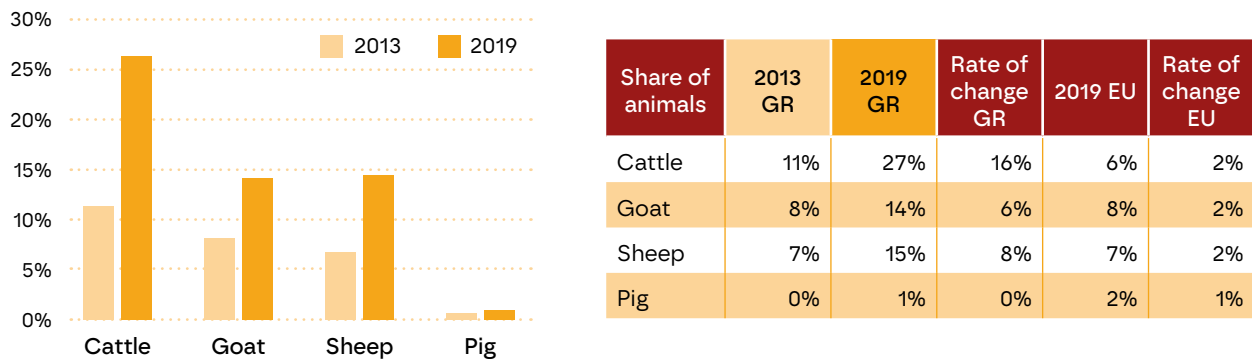


Figure 18 - Table 15 Share of animals held by organic farmers (%) in Greece ⁽⁴¹⁾

As of December 31, 2020, organic livestock in Greece recorded significant increases in several categories when compared to 2019. Specifically, there was a noteworthy increase of 14.34% in bovine animals, 17.16% in sheep, and an extraordinary increase of 18.17% in poultry, marking the first time such an increase has been recorded. A smaller increase of 4.12% was observed in goats. However, despite an increase of 7.14% in fattening pigs, the overall increase in the total number of pigs was very small at 1.62%, as shown in Table 16.

Additionally, in 2020, Greece produced 924.77 tons of organically certified beef-pork-goat-sheep meat, 130,886.78 tons of organically certified goat-sheep and cow milk, and 19,208,488 organically certified eggs.

Live animals	2019	2020	Change% 2020-2019
Bovine animals (total)	142,609	163,066	14.34%
Bovine animals for slauter	54,361	66,424	22.19%
Dairy cows	16,956	18,734	10.49%
Other Bovine	71,292	77,908	9.28%
Pigs (total)	4,994	5,075	1.62%
Fattening Pigs	2,212	2,370	7.14%
Female breeding	1,008	1,004	-0.40%
Other Pigs	1,774	1,701	-4.11%
Sheep (total)	1,229,684	1,440,721	17.16%
Goats	498,219	518,722	4.12%
Poultry	258,751	305,757	18.17%

Table 16: Organic animal husbandry in Greece – 2019, 2020 Number of live animals⁽⁴²⁾

(41) Source: <https://agridata.ec.europa.eu/extensions/DashboardIndicators/OrganicProduction.html>

(42) Source: Greek Ministry of Rural Development and Food, 2020

3.

ORGANIC OPERATORS

In 2020, Greece had approximately 33,000 organic product operators, although this number has decreased in the organic farming certification system. The total number of registered companies reached 33,655, which is a decrease of 0.18% compared to the previous year. Of these companies, 31,907 are exclusive producers, which shows a slight decrease of 0.19% compared to the previous year. There were 1,653 processors, accounting for an additional 0.7% of the segment, while the number of producers in aquaculture units amounted to 10, which is a 9.1% decrease.

Furthermore, there were 45 total importers, marking an increase of almost 2.3%, while the number of exporters was 40, reflecting a 23.1% decrease compared to the previous year (Table 17).

ORGANIC OPERATORS			
	2019	2020	2020/2019 % change
Total	33,716	33,655	-0.18
Producers	31,967	31,907	-0.19
Units Aquaculture	11	10	-9.1
Processors	1,642	1,653	0.7
Importers	44	45	2.3
Exporters	52	40	-23.1

Table 17. Organic operators by category - 2019 and 2020 (Numbers)⁽⁴³⁾

4.

IMPORTS OF ORGANIC PRODUCTS FROM THIRD COUNTRIES

In 2020, Ecuador surpassed the Dominican Republic to become the main exporter of organic products to the European Union by volume, accounting for 12% of all organic imports to the EU. Greece, on the other hand, did not have a significant share in imports from third countries, and was included in the category of other countries with the lowest production. However, there was a significant increase observed in this category in 2020 compared to 2019. This information is illustrated in the figure provided.

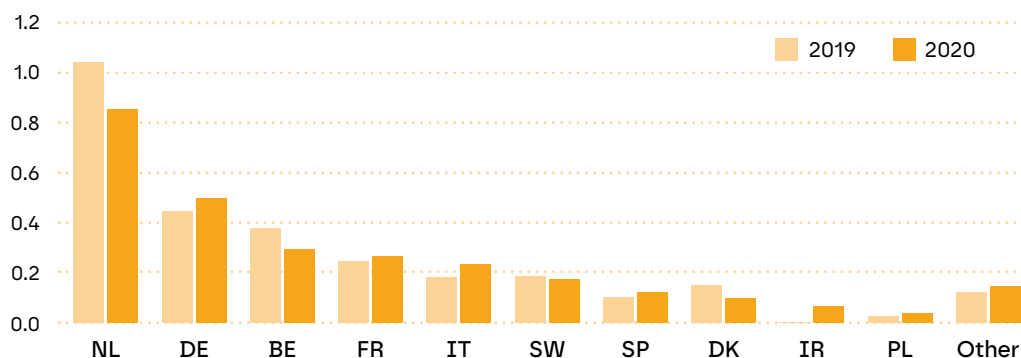


Figure 20. Organic agri-food import volumes by import country (million t) (European Commission, 2021).

(43) Source: Greek Ministry of Rural Development and Food, 2020

5.

THE DOMESTIC MARKET

In Greece, the organic goat livestock accounted for 14.5% of total organic livestock in 2020, indicating a notable contribution to the organic farming sector. Despite the prolonged economic crisis, the organic market in Greece has shown signs of recovery and was estimated to be between €90 and €100 million in 2020. Additionally, organic sheep farming has gained significant momentum in some countries, such as Estonia and the Czech Republic, where it represented 41.2% of total organic livestock. In Greece, organic sheep farming accounted for 17.4% of total organic livestock in 2020. Moreover, organic aquaculture production in Greece has witnessed a substantial increase in 2020, with new species, such as meagre, gaining a significant market share in addition to sea bass and sea bream, which already comprise a substantial portion of the Mediterranean marine fish farming industry.

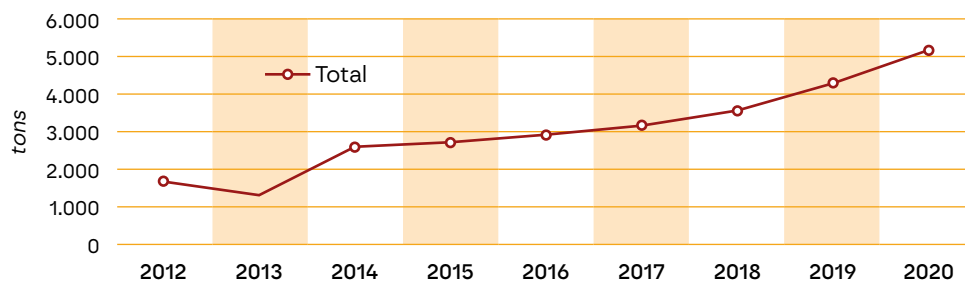


Figure 21. Production of other organic marine products (FGM, 2020).

6.

LEGISLATION AND POLICY SUPPORT

Organic Farming is an agricultural production system that seeks to minimize or eliminate the use of synthetic inputs such as fertilizers, herbicides, growth regulators, hormones and feed additives. Organic farmers adopt a range of practices, such as crop rotation, residue management, fallow periods, and the use of animal manure and mechanical cultivation, to maintain soil fertility, promote plant growth and control pests and diseases. The ultimate goal of organic farming is to produce high-quality and nutritious crops in an environmentally sustainable manner, while also promoting biodiversity and protecting the health of ecosystems.

Organic Farming is commonly linked with supporting principles that go beyond the boundaries of agriculture, such as Fair Trade and environmental management. In accordance with the regulation of the European Parliament in Brussels, issued on 27 April 2018, organic agriculture is characterized as a holistic system of management of agricultural holdings and food production that merges the most efficient practices of environmental and climatic action, a high level of biodiversity, preservation of natural resources, norms that guarantee the optimal quality of life for animals and high production standards. These standards are aligned with the increasing consumer demand for products cultivated utilizing natural substances and techniques.

7.

OUTLOOK ON FUTURE STRATEGIES

The market for organic products has witnessed a steady growth in recent years, with a consumption estimate of approximately €45.2 billion in 2019, showing a 10.3% increase as compared to the previous year. The sector has experienced an impressive growth trend, having more than quadrupled between 2004 and 2019. Based on our current analysis, the European Union’s consumption of organic products for 2020 is anticipated to be over €50 billion.

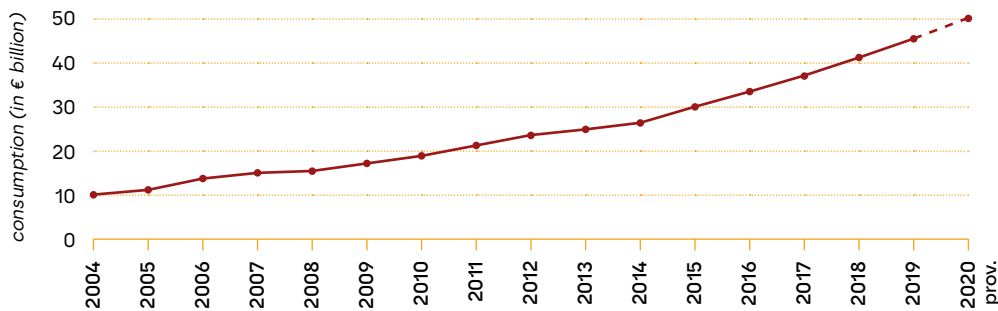


Figure 22. Evolution of the EU organic market (Agence Bio, 2021).

In Greece, there has been a nearly 22-fold increase in the area devoted to organic farming over the past two decades. However, this expansion has been characterized by irregular growth patterns.

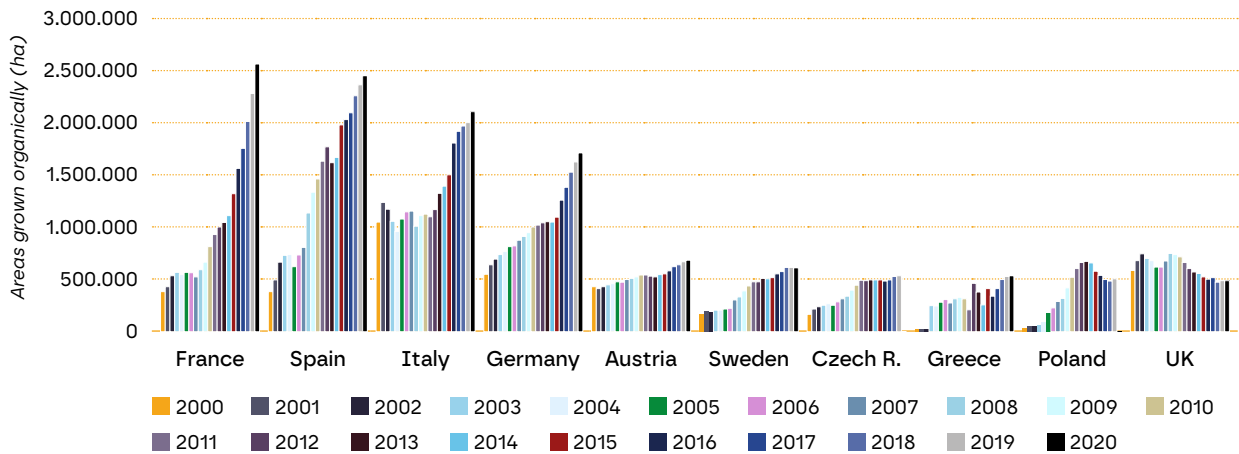


Figure 23. Evolution of areas grown organically (certified organic areas and in-conversion) in the top 10 EU countries since 2000 of the EU organic market (Agence Bio, 2021).

According to the analysis of the decade from 2010 to 2020, the organic sector has experienced significant growth. Specifically, the number of operators in the sector has increased from 22,736 in 2010 to over 33,600 in 2020, representing a percentage increase of more than 50%. This data is presented in Table 18.

ORGANIC OPERATORS			
	2010	2020	2020/2010 % change
Total	22,736	33,655	50.8
Producers	21,157	31,907	6.8
Processors	1,547	1,653	650
Importers	6	45	92.3
Other Professionals	26	40	48

*Table 18. Organic operators by category - 2010 and 2020 (Numbers)
(Ministry of Rural Development and Food, 2020).*



8.

OUTLOOK ON FUTURE STRATEGIES

Greece boasts one of the highest levels of biodiversity in the Mediterranean and Europe, characterized by a notable degree of endemism. The National Strategy for Biodiversity of Greece is the culmination of a prolonged undertaking, initiated in 1999, following the ratification by law (Law 2204/1994) of the International Convention on Biological Diversity in the country.

The Greek Government envisages the agri-food sector as a significant player in a new development model.

The vision is for the agri-food sector to grow in order to contribute in growth and competitiveness under conditions:

- a sustainable production of healthy and safe foods.
- b increasing employment opportunities and
- c reducing economic, social and spatial inequalities.

The National Strategy for Sustainable Development is facing a significant challenge related to the growing international demand for agricultural products in both the EU and international markets. The increase in demand for high-quality, safe, locally produced, and environmentally friendly products with designations such as PDO, PGI, and organic products presents a challenge for effective preparation and competitiveness in international markets (Ministry Economy & Development, 2019). The Ministry of Agriculture participates in financing research activities in the European program CORE Organic, which aims to coordinate transnational research in organic food and farming systems. Organic farmers can also benefit from EU funds under the Common Agricultural Policy (CAP), the Common Market Organization for fisheries and aquaculture products, and the EMFAF. The European Commission has adopted several actions (12, 13, 14, 15) to promote organic farming in Member States. Organic livestock farming must meet high EU standards, and Action 16 aims to support research and innovation to ensure the supply of algae as an alternative feed material for organic animal farming. Furthermore, the new guidelines on the sustainable development of EU aquaculture (Action 17), expected to be adopted in spring 2021, will encourage Member States and stakeholders to support the increase in organic production (European Commission, 2021).

Organic agriculture in Greece faces two significant challenges: weak domestic demand and high production costs. The reduction of available income in Greece is one of the main reasons for the weak domestic demand, leading to a lower per capita spending on organic products compared to other European countries. Denmark and Switzerland, for example, have a per capita expenditure of 418 and 384 euros respectively, while Greece's per capita expenditure was only 6 euros in 2020. Another contributing factor to weak domestic demand is the low level of recognition and understanding of organic product labelling and production processes.

The higher cost of production per unit of output in organic agriculture is due to multiple factors, such as the high cost of inputs (e.g., organic fertilizers, mechanical weed control, organic feed) and reduced crop yields due to their expansive nature. Moreover, Greek organic farmers face relatively high costs of product control and certification. These increased production costs lead to higher prices, along with the seasonal increase in demand over supply, particularly for vegetables. Despite the availability of imports, Greek consumers prefer Greek organic products, which further increases prices.

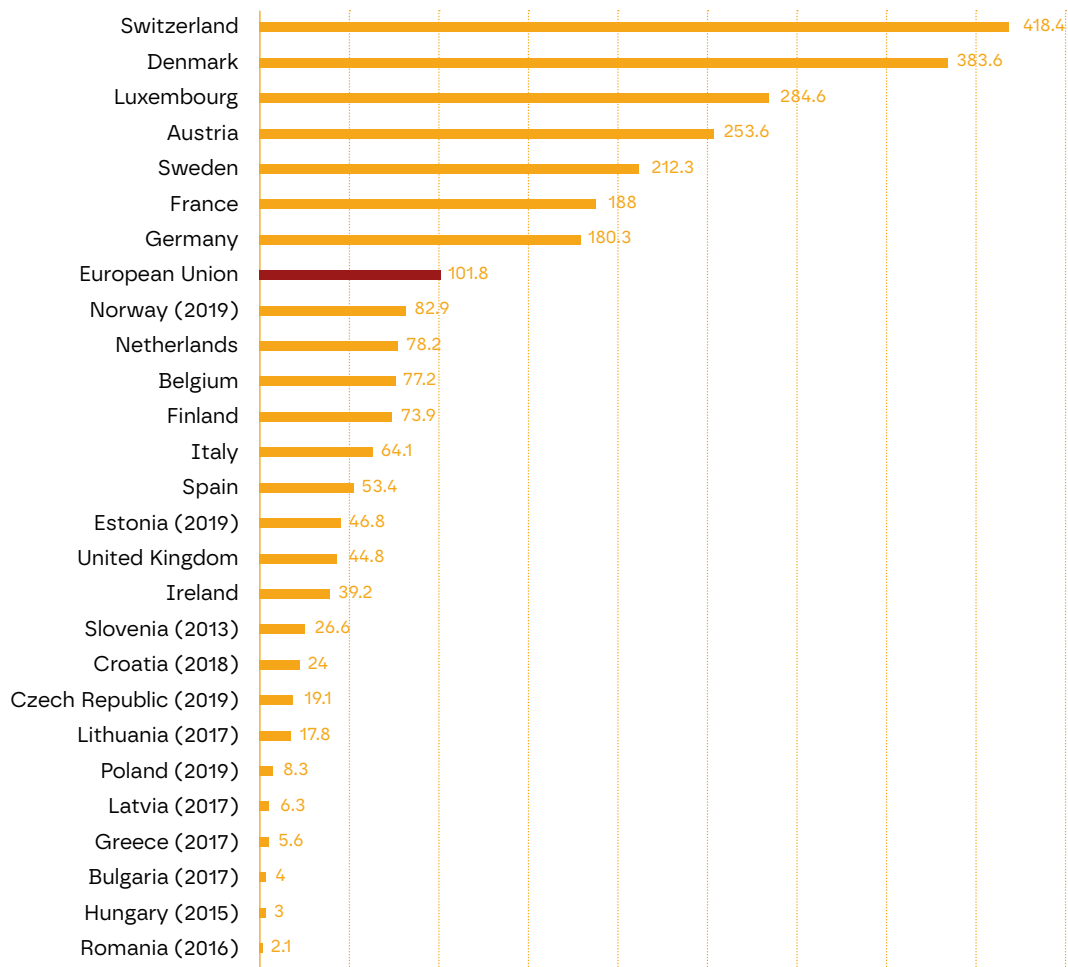


Figure 24: Per capita spending on organic food in selected countries in Europe in 2020 (in euros)⁽⁴⁴⁾

The European Commission has recommended that Greece's Common Agricultural Policy (CAP) strategic plan should aim to increase the area of land dedicated to organic agriculture in order to contribute to the Green Deal target for organic farming. The Commission suggests achieving this by incentivizing the conversion and maintenance of organic agriculture, particularly in mountainous and disadvantaged areas where there are opportunities for high-quality products, as well as by addressing research and innovation gaps in organic and low-impact farming.

Greece's national target for organic farming in the CAP Strategic Plan is set at nearly 15% by 2030, which requires an increase from the current 10% of the total agricultural area. The CAP interventions that will support this increase are focused on promoting organic farming and ecoschemes.

Moreover, it is essential to provide CAP support for interventions such as training, advice, innovation, producer groups, and quality schemes in organic farming to achieve the national target of 15% organic farming area in Greece by 2030. However, additional measures are required to stimulate demand for organic products, including a lower VAT rate, the utilization of public contracts, promotion, and public information actions. These factors emphasize the urgent need to develop the "first Organic Action Plan for Greece by 2030" with comprehensive and ambitious strategies to address demand, production, processing, and promotion of organic agriculture.

(44) Source: [Statista](#)

TUNISIA

Raja Benzarti



1.

STATISTICS ON ORGANIC LAND, OPERATORS AND MARKET

RETAIL SALES AND INTERNATIONAL TRADE DATA

The information outlined in this paragraph offers a preliminary overview of organic agriculture in Tunisia **for 2020, with some projections for 2021**. More comprehensive data will be added once it becomes available. Specifically, the organic agriculture sector is expected to occupy 335,000 hectares of cultivated land and have 7218 operators in 2020, reflecting a 52,136-hectare increase in land use and a 0.38% increase in the number of operators compared to 2019.

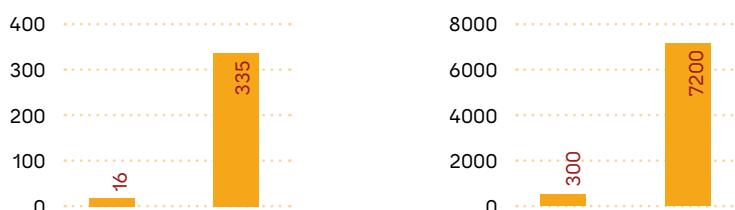
Organic area (in ha)	Evolution vs. 2016	Share of UAA under organic farming	Number of organic farms	Evolution / 2016	Average organic area per certified farm	Classification area	Classification share of UAA under organic farming	Ranking of the number of expl.
297,137	69.25%	3.00%	7,236	112,82%	42	23	42	41

Table 20: Description of the organic farming sector in Tunisia ⁽⁴⁵⁾

Incentives:

- ✓ 50% subsidy on the cost of materials, equipment, and tools specific to organic farming (from APIA)
- ✓ 70% subsidy on inspection and certification costs for organic farming for 5 years (from CRDA).
- ✓ Suspension of customs duties and VAT on certain specific organic farming inputs (from DGAB).
- ✓ 50% discount on the cost of analysis, registration and testing of specific organic farming inputs (from DGPCQPA).

Over the past two decades, significant progress has been made in the organic agriculture sector, with the establishment of an institutional organization that covers all aspects of the supply chain. Additionally, the control and certification system has been strengthened, leading to a remarkable increase of 20-fold in the organic area and 24-fold increase in the number of stakeholders from 2001 to 2020.



Figures 35-36: organic areas (Thousand ha) and No. of stakeholder 2001-2020

Thanks to supportive measures provided by the state and a surge in international demand, the organic agriculture sector has undergone rapid growth in recent years. As of 2020, organic agriculture has occupied over 333,000 hectares, making Tunisia the world leader in certified organic olive growing areas and Africa’s top producer in certified organic areas and quantity of organic products exported. With a production exceeding 550,000 tons and covering over 450 organic products, including flagship products such as olive oil and dates, the sector has attracted 7,218 operators (producers, processors, exporters). This marks a ten-fold increase from 2010 to 2020 (see figure 38). This development has been facilitated by an institutional organization that covers all links in the sector and a strengthened control and certification system.

(45) Sources: FIBL/IFOAM and various European sources 2020

2. ORGANIC CROPS

More than 80% of Tunisia's total organic area is dedicated to three main types of crops, namely olive trees (256,173 ha), forest (37,825 ha), and date palms (3,044 ha). The country's organic agriculture sector is ranked 23rd in the world, and is the largest producer of organic olives, with Tunisia's certified organic olive-growing areas being the largest in the world. In addition, Tunisia ranks first in Africa in terms of certified areas and exported organic products. In 2020, the organic agricultural area in Tunisia covered 3% of the country's total agricultural area (UAA), reflecting the growth and importance of the organic sector in the country.

CULTIVATED AREA AND PRODUCTION	FULLY CONVERTED AREA (ha)	BIOLOGICAL AREA TOTAL (ha)
Agricultural land and crops (Excluding aquaculture, wild collection, beekeeping)	297,137	297,137
Cereals for cereal production (including seeds)	1,185	1,185
Wheat, no details	1,082	1,082
Oats	103	103
Industrial crops	19,153	19,153
PAM	19,153	19,153
Fresh vegetables	2,183	2,183
Other arable crops	25,0953	25,0953
Permanent crops	2,687,243	2,687,243
Fruit of temperate climate zones	34,773	34,773
Citrus	1,673	1,673
Fruit of subtropical and tropical climatic zones	52,683	52,683
Dates	30,443	30,443
Figs	5,153	5,153
Other tropical and subtropical fruits	17,093	17,093
Almonds	16,043	16,043
Pistachios	1,203	1,203
Olives	2,561,733	2,561,733
Permanent medicinal and aromatic plants (spices)	19,153	19,153
Forest	378,253	378,253

Table 21: Cultivated area and organic production (year 2020) ⁽⁴⁶⁾

The data presented provides an overview of the organic agriculture sector in Tunisia for the year 2020 and 2021. In 2020, the total volume of organic products was estimated at 950,000 tonnes. The organic farming area in 2021 decreased by 17,000 hectares compared to 2020, recording a decline of 5%, however, there was an increase of 2% in the area under olive trees and 8.5% in the area under forests. Tunisia is ranked 28th in the world for organic agriculture and holds the first position in the world for

(46) Sources: FIBL/IFOAM and various European sources

olive-growing areas, as well as first in Africa in terms of certified areas and exported products. The distribution of organic areas by governorate in 2021 shows that 82% of the organic areas are occupied by olive trees, 14.4% by forests, and 3.6% by permanent fruit crops. More than 61.37% of the organic areas are located in three governorates: Mahdia (25.36%), Sfax (20.11%), and Kairouan (15.9%). The increase in olive-growing areas in 2021 was greater than in 2020. The dynamics of the evolution of organic surfaces differ from one governorate to another compared to 2020.

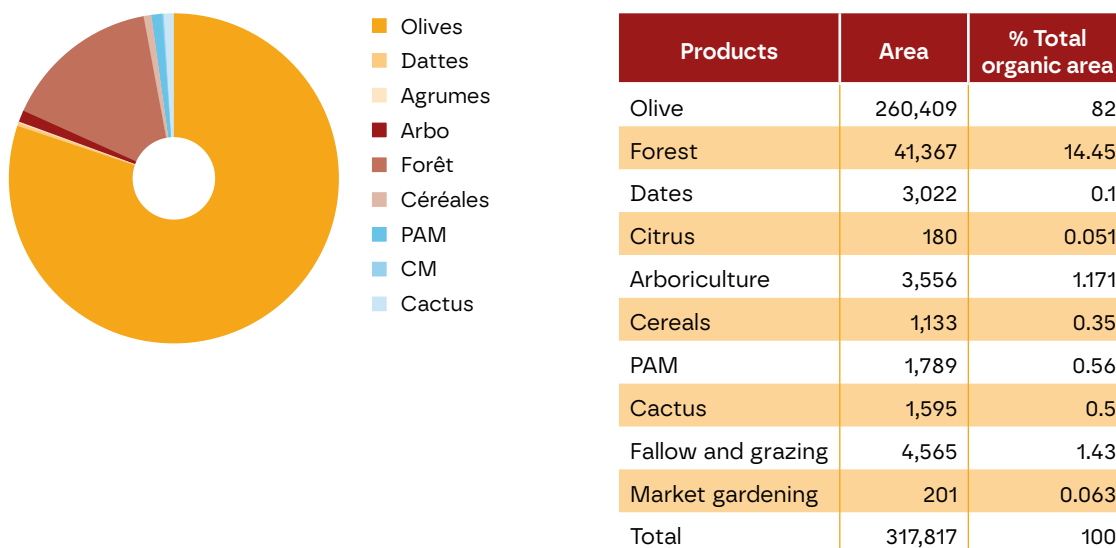


Figure 41 - Table 21: Distribution of agricultural areas according to species - Year 2021

An examination of the geographic allocation of organic areas based on available data reveals that, in 2021, olive trees occupied nearly 82% of the total area, mainly concentrated in the governorates of Mahdia, Sfax, and Kairouan. Forests rank second with 14.45% of the area, followed by arboriculture which represents 1.11% of the area and includes crops such as almonds, pistachios, figs, and pomegranates. Additionally, products that occupy less than 1% of the area include date palms, Medicinal and Aromatic Plants (MAPs), market gardening, and cactus.

It is worth noting that olive growing dominates these areas, occupying 70% of the total area. Moreover, organic date farming is considered a strategic choice due to its potential for easy conversion to organic farming, significant demand on the international market, and the potential for a critical positioning opportunity for Tunisia. The knowledge and expertise in exportation of these crops are also important advantages for the country.

While the surface area of market garden crops remains limited due to local demand constraints, recent interest from Tunisian consumers, and a lack of organized distribution channels, operators have made significant strides by securing niche export markets for organic vegetables, mainly in geothermal crops. Nonetheless, it should be noted that the latter is by far the most challenging in terms of mastering organic cultivation techniques (Samia Maamer 2022).

However, following the events that occurred in the country in 2011, the total area of organic farming decreased to approximately 245,000 hectares. This reduction was partly due to the discontinuation of the organic forest certification programme by the General Directorate of Forests, as well as the cessation of the organic farming programme for farms under the supervision of the Office of State Lands. The area dedicated to organic forests and pastures was recorded at 115,000 hectares, while organic olive trees covered 119,000 hectares, representing 81% of the target set for 2016.

3.

ORGANIC OPERATORS

The organic agriculture sector in Tunisia experienced a positive trend in 2021, as the number of active operators increased by 3% compared to the previous year, reaching 7,418 operators. Notably, the number of organic producers grew by 5.5% in 2021, indicating a growing interest in organic farming. Additionally, the sector saw the integration of 35 new operators in the export category, further highlighting the potential for Tunisian organic products in the global market.

Registered operators	Number of operators 2021
Producers	6,800
Transformers	424
Exporters	194
Total	7,418

Table 22: Distribution by type of operator -Year 2021

While the category of processors saw a slight decline in 2021, the overall valorisation of organic products is on an upward trajectory, indicating an increased demand for more specialised and autonomous operators in the sector.



According to the data, in 2021, the governorates of Mahdia and Kairouan have the highest number of organic operators, with 33.4% and 19.4% respectively, making up a total of almost 53% of all operators. It is worth noting that the number of operators in Mahdia has increased by 24% compared to 2020. Additionally, several other governorates have seen a substantial growth in the number of organic operators compared to the previous year, such as Gabes with an increase of 80%, Jendouba with 70%, and Médenine with 67%. Béja and Gafsa have also maintained a steady growth rate of around 30%.

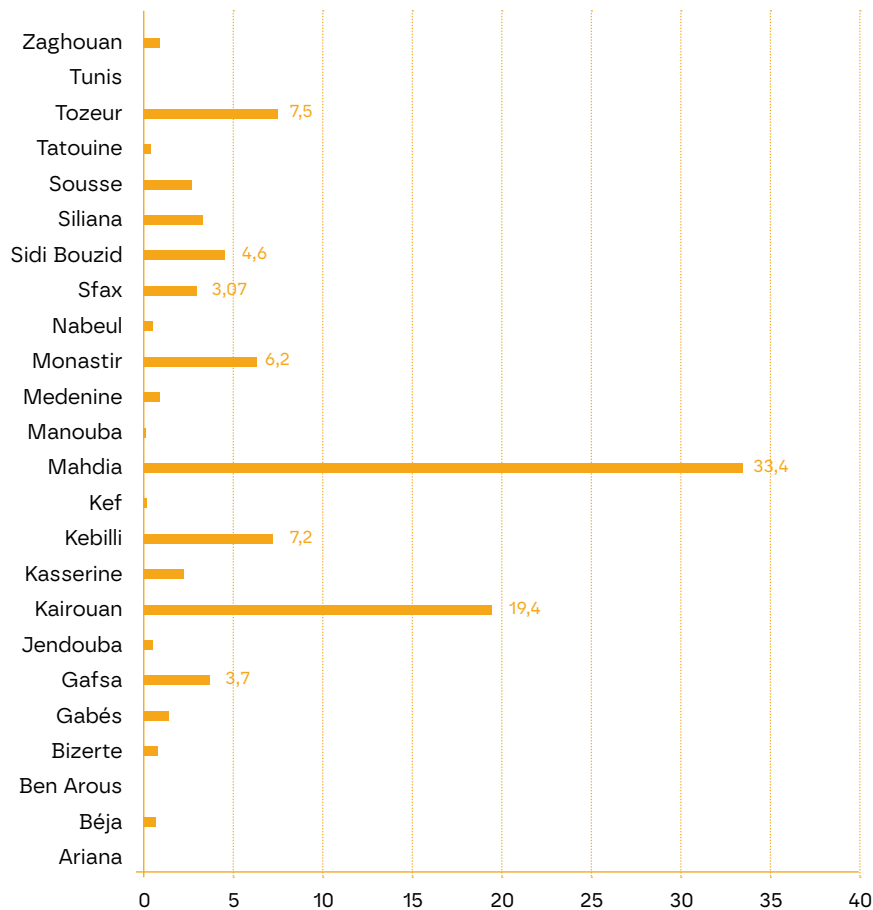


Figure 42: Distribution of operators / governorate (2021)

Over the past 15 years, the number of actors in Tunisia’s organic sector has experienced a significant increase, growing from approximately 311 in 2005 to approximately 7,190 in 2020, encompassing producers, processors, and exporters. Despite a decrease in the country’s land area following events in 2011, the number of operators in the sector has continued to expand. This growth can be attributed to a series of incentives and support measures implemented by the Tunisian government, encouraging investment in organic agriculture. Between 2001 and 2020, the number of stakeholders has increased by a remarkable 24 times, highlighting the significant progress made by the organic sector in Tunisia.

4.

ORGANIC LIVESTOCK AND AQUACULTURE

The Ministry of Agriculture, Hydraulic Resources and Fisheries in Tunisia has set standards and regulations for organic livestock production through a decree on 9th July 2005. However, the organic livestock production sector in Tunisia remains modest and underdeveloped with only a limited number of livestock such as sheep (87), goats (359), beehives (583), and some organic poultry and cattle.

The insufficient progress of organic cereals, and consequently the insufficient integration of organic fodder crops in crop rotation, are the primary impediments to the expansion of organic livestock production in Tunisia. To address this issue, a significant initiative has been undertaken in the form of the DGAB project “BIOREST,” which is managed by the FAO and financed by Swiss cooperation. This project will place a particular emphasis on enhancing the organic livestock sector, beginning in 2022.

Number of livestock	Animals slaughtered (heads)	Animals, average livestock (heads)	Animals (heads)
Sheep	0	0	87.0
Goats	0	0	359.0
Bees and hive numbers			583.0

Table 23: Number of organic livestock

Organic aquaculture in Tunisia is presently limited to the cultivation of spirulina. The first such project was initiated in the year 2014, in the region of Sidi Bouzid, located in the central part of the country. Presently, there are six projects that are involved in the breeding and processing of spirulina.

5.

IMPORTS OF ORGANIC PRODUCTS FROM THIRD COUNTRIES

In Tunisia, the import of organic products has remained limited and underdeveloped, primarily consisting of certain inputs such as apiaries, auxiliaries, and phytosanitary products authorized for organic farming. Despite the absence of a specific customs code for organic products, a limited number of operators in the sector have benefited from the suspension of customs duties and VAT on specific organic farming inputs, which is a privilege granted by the competent authority, DGAB. In 2021, only 23 companies received this tax privilege for the import of organic inputs, with the quantities totaling 300 tons of inputs, 9000 apiaries and auxiliaries, and various other products such as bottles of phytosanitary products. As a result, the official statistics from the Ministry of Commerce do not report any organic products being imported into the country.

6.

EXPORTS OF ORGANIC PRODUCTS FROM TUNISIA

It is worth noting that the majority of organic products produced in Tunisia are exported, making the country the top organic product exporter in Africa. The main organic products exported from Tunisia are olive oil and dates. The main export destinations for Tunisian organic products are France, Italy, and the United States.

Quantity exported (1000T)	Organic products	Total	Export share of organic Pdt/ total exported Pdt ⁽⁴⁸⁾
Olive oil	73	386.9	18.87%
Dates	11,3	109.2	10.35%
Other	1,213	55.7	2.18%
Total	85,513	551.8	15.5%

Table 24: Export of organic products in quantity 2020

Value of exports (MD)	Organic products	Total	Export share of organic Pdt/total exported Pdt
Olive oil	605	2,299.7	26,31%
Dates	91	732.4	12,42%
Other	16	552.5	2,90%
Total	712	3,584.6	19.8%

Table 25: Organic exports by value in 2020 ⁽⁴⁹⁾

The total volume of Tunisian organic exports, which includes both primary and processed products, is 85,000 tonnes, with a total value of € 216 million. In 2020, there was a 46% increase in preparation units compared to the previous year. The majority of organic exports were organic olive oil, which accounted for 79% of total organic quantities, followed by organic dates, which accounted for 17.3%. The remaining 3.7% was comprised of various other organic products. Tunisian organic products were exported to 39 countries across five continents, with France, Italy, and the USA being the main destinations.

7.

THE LOCAL MARKET

The development of the organic farming sector in Tunisia by 2025 focuses on opening up to the local market, as there is a growing demand from consumers who are conscious of the need to protect their health and the environment. This trend has been reinforced by the Covid-19 pandemic. To meet the demands of the local market, the supply of organic fruit, vegetables, cereals, and animal products needs to be increased. Therefore, public and private partners have signed memoranda of understanding and conventions to support the development of local seeds for organic market gardening, cereals, and inputs authorized for organic farming, such as compost, phytosanitary control methods, and fertilizers. Moreover, a training programme is launched annually to strengthen the capacity of operators in cultivation techniques for more than 20 organic plant, animal, and forestry sectors.

(48) Produits du terroir.

(49) Source: DGAB

To adapt to this local demand, appropriate distribution channels need to be established, and the emerging market needs to be organized. Although the number of organic and natural product outlets has grown significantly in recent years, they have mainly been concentrated in large cities, and dedicated shelves in supermarkets are more or less provided. Therefore, cultivation contracts between sales outlets and organic farmers need to be established, and production should be planned according to demand. New means of sale such as online sales, weekly baskets, purchase at the farm, and short circuits need to be explored to ensure volumes, quality, availability, and competitive prices of organic products for local consumers.

The promotion programme will be aimed more towards the local market, with a focus on awareness campaigns on the benefits and production methods of organic products for local consumers.

The introduction of organic products in the canteens of hospitals and clinics, mainly for patients with cancer, reduced immunity, allergies, and sensitivities to chemicals, is also being initiated. (Samia Maamer 2022).

8.

LEGISLATION AND POLICY SUPPORT IN TUNISIA

Tunisia stands out as the African country providing the most substantial level of government support for organic agriculture. The establishment of technical, administrative, and supportive structures has contributed to the sector's growth. Additionally, a support system has been implemented to assist new investors in the industry. The integration of organic farming in public training and university curricula for agricultural engineers has been ongoing for more than two decades. Moreover, Tunisia takes pride in being home to the world's first organic farmers' school, established in 200.

The national strategy (2005-2009) emphasized the sector's development, particularly in production and exports, and the completion of the regulatory framework, culminating in mutual recognition with the EU in 2009 and the Swiss Federation in 2011.

In 2010, the Directorate General for Organic Agriculture was established as the competent authority in the field, along with the Organic Agriculture Divisions within the Regional Agricultural Development Commissariats.

The national strategy (2010-2015) has resulted in support programs that inform and train operators and stakeholders on the sector's principles and fundamentals. Furthermore, a promotion program for Tunisian organic products has been launched, featuring the creation of an official promotional logo, alongside several activities, such as the annual organization of the national event "Organic Week," the "Organic market," specific fairs promoting organic products, such as the "Organic Expo," among others.

As far as the historical overview of organic agriculture in Tunisia is concerned, it is as follows:

- 1984** Beginning of organic farming by a few private producers
- 1997** Launch of the work of an Ad-Hoc Committee for reflection within the Ministry of Agriculture
- 1999** The enactment of the law on organic farming

Creation of the National Committee for Organic Agriculture

Creation of the Technical Centre for Organic Agriculture

2001 Creation of the Sub-Directorate for Organic Agriculture within the Ministry of Agriculture

2006 Creation of the Regional Research Centre for Horticulture and Organic Agriculture

2010 Creation of the General Directorate of Organic Agriculture and the Regional Directorates at the level of the CRDA

Law No. 99-30 of 5 April 1999 on organic farming applies to natural or processed agricultural products that bear or are intended to bear indications referring to the organic production method.

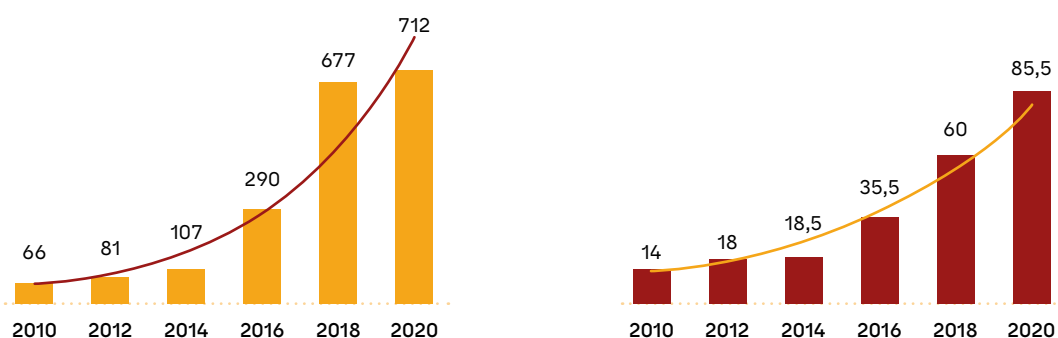
Since 2010, the date of creation of the General Directorate of Organic Agriculture under the Ministry of Agriculture, Hydraulic Resources and Fisheries, the **DGAB (Direction Générale de l'Agriculture Biologique)** is the competent authority for the organic sector in Tunisia.

In addition to its tasks of elaborating and implementing strategies, development plans and operational concepts for the development of organic agriculture, including the development of value chains and contractual relations, and ensuring international cooperation for the organic sector, the DGAB:

- Develops, implements and monitors extension, mentoring and training programmes
- Develops and implements the promotion plan for organic products
- Strengthens marketing channels
- Monitors and audits of CCOs (Control and Certification Organisms)
- Is in charge of control and traceability
- Manages the official control system for the organic sector
- Manages the award and management of the organic label.

In Tunisia, the official recognition of organic agriculture can be traced back to the promulgation of law n°30 of 5 April 1999. This law provided for a range of incentives and support measures aimed at establishing a Tunisian organic model with improved sector governance.

The quantities exported amounted to 85.5 thousand tons for a value of more than 220 million euros.



Figures 38-39: value of export (Million DT) and quantity of export (Thousand)

The positioning of Tunisia in Organic is summarized as follows:

- The first Arab and African country to set up a regulation for the organic sector (1999)
- The only Arab and African country to have obtained equivalence and mutual recognition with the EU (2009) and Switzerland (2011) and the UK (2020)
- The first place in the world in terms of area devoted to organic olive growing since 2018
- The first place in Africa in terms of area devoted to organic agriculture and in terms of exports
- The 1st organic farmer's school in the world

Over the past decade, the export value of Tunisian organic products has increased six-fold, highlighting the competitiveness of Tunisian organic products on the global market. With exports reaching more than 45 destinations in 2020, the total export value was nearly 220 million euros. This achievement can be attributed to a policy that is grounded on a recognized regulatory framework equivalent to international standards, and a rigorous control and certification system that is managed by five accreditation bodies approved by the Ministry of Agriculture. As a result, Tunisia has gained recognition from the European Union in 2009, Switzerland in 2011, and the United Kingdom in 2020 for its organic agriculture system.

Efforts are currently underway to secure new market recognition for Tunisian organic exporters in high-potential markets, including the United States, Canada, and China. Additionally, tailored commercial and marketing policies are being developed to accommodate the varying organic product categories. Presently, approximately 80% of Tunisian organic products are exported to over 45 global destinations, with exports to all five continents comprising over 60 distinct products

Tunisia has made significant investments in the development of organic agriculture, and is now a major third-party supplier of organic products to Europe. In 2020, almost all of the EU's imported organic olive oil came from Tunisia. In terms of the organic agriculture sector, Tunisia is ranked 23rd globally, and is the first in the world in terms of olive-growing areas. Moreover, Tunisia is the first African country in terms of certified areas and exported products.

9.

OUTLOOK ON FUTURE STRATEGIES

The organic farming sector in Tunisia has demonstrated steady growth between 2005 and 2010, with over 400,000 hectares of organic land by 2010, which constituted 81% of the target set for 2016. However, the period from 2012 to 2016 saw some disruptions in the sector's growth in terms of land area, but a clear expansion was observed in the number of operators. Since 2016, there has been a notable surge in the sector's development until the end of 2017. However, this progress experienced a slight setback due mainly to climatic factors and low rainfall, resulting in a minor stabilization of the sector during the last three years.

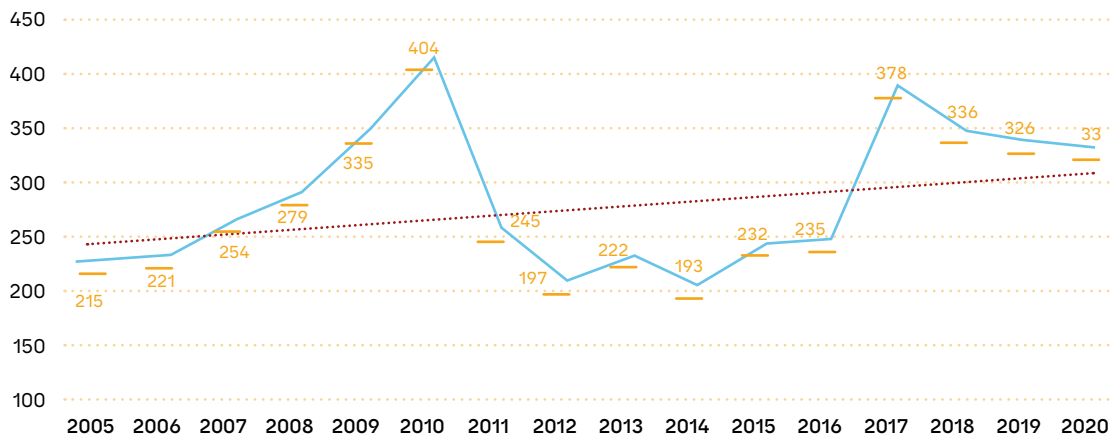


Figure 43: Evolution of the organic area in Tunisia (2005-2020)

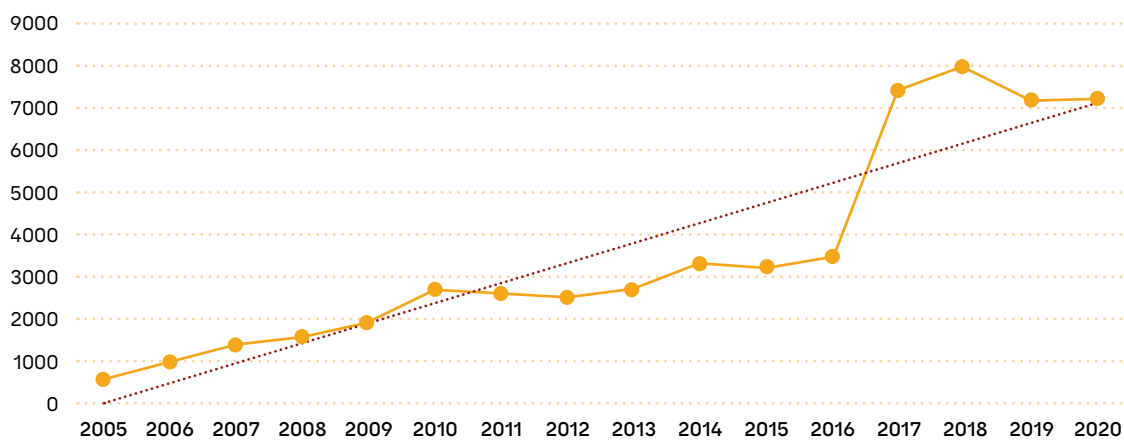


Figure 44: Evolution of the number of organic operators in Tunisia (2005 - 2020)

As previously mentioned, Tunisia has experienced a remarkable growth in the export of organic products, increasing from 2.6 MT in 2005 to over 48 MT in 2015. Although there was a slight regression in 2016 and 2017, the export of organic products has significantly increased during the last three years, reaching 85.5 MT in 2020. Between 2012 and 2015, the export of Tunisian organic products saw a significant annual growth rate of 32%.

Tunisia’s exports of organic products are primarily composed of organic olive oil, dates, and various other products, encompassing more than 60 different species, amounting to 3.74% of the total organic quantities exported. These exports are mainly destined for France, followed by Italy and the United States. Approximately 81% of Tunisian organic products are exported to the European Union, which accounts for 15.1% of the European organic market, while roughly 18% of Tunisian organic products are exported to the United States of America, which represents 13.1% of the American organic market.

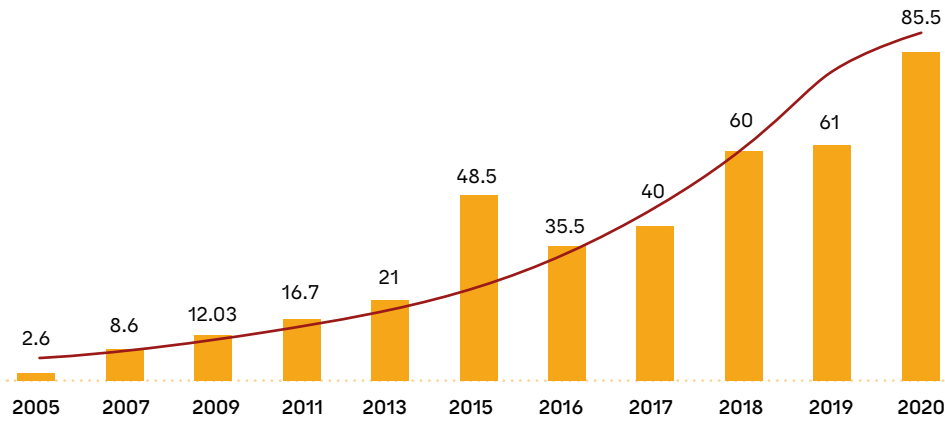


Figure 45: Evolution of exports in quantity (2005- 2020) ⁽⁵⁰⁾

The revenue generated from Tunisian organic products has shown significant growth over the years. Starting from a modest 4 million euros in 2005, the revenue has steadily increased to reach over 120 million euros in 2015 and continued its impressive growth to exceed 220 million euros in 2020. Notably, organic olive oil contributed significantly to this revenue growth, accounting for 81% of total exports in 2015. In order to sustain this growth, a special program has been included in the strategy for the development of organic agriculture by 2025. The program aims to support exports of Tunisian organic products to international markets, conduct target market studies, and secure mutual recognition for exports ⁽⁵¹⁾.

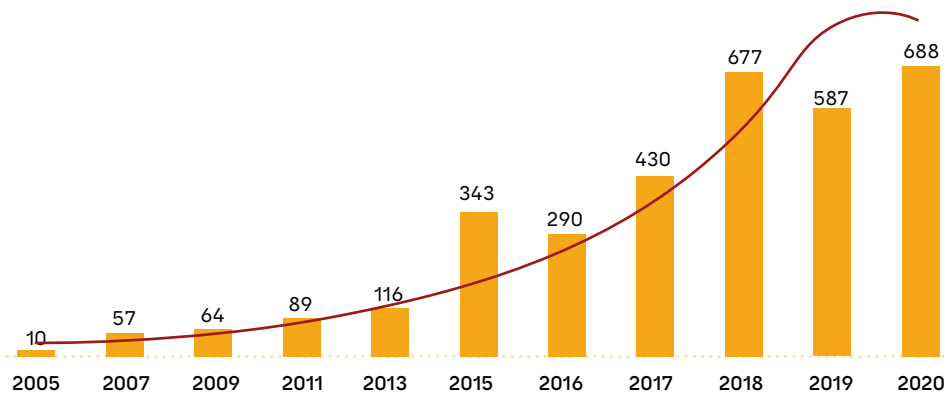


Figure 45: Evolution of exports in quantity (2005- 2020) ⁽⁵¹⁾

(50) (51) Source: DGAB-S. Maamer

CONCLUSIONS - FINAL RECOMMENDATIONS

Mara Semeraro, Simona Giordano

In line with the analysis carried on in the present document, following the above mentioned topics, the following final recommendations can be outlined for the future of the organic sector in the Mediterranean area. The same are meant to be a starting point for further reflection and development regarding the issue at stake.

1. ORGANIC SURFACES, CROPS AND METHODS OF PRODUCTION

- ✔ To foster the growth of the organic sector through effective support to interested operators.
- ✔ To utilize the topography of the country for the implementation of organic agriculture and animal husbandry.
- ✔ To apply the principle of regenerative-organic agriculture at all levels from the primary sector to their processing stages
- ✔ To exploit new varieties in agriculture and new breeds in organic livestock to create innovative organic products.

2. CERTIFICATION AND CONTROL SYSTEMS

- ✔ To simplify the control and certification system of organic products in terms of bureaucratic processes.
- ✔ To reduce the cost of support for individual producers and businesses related to their certification.
- ✔ To establish an international certification system for all EU as well as non-EU countries.

3. NATIONAL LEGISLATION

- ✔ To harmonise the national legislation with the Community legislation concerning organic agriculture, animal husbandry, processing, certification and exports of products.
- ✔ To allow enough time for producers, operators and trading partners to adapt to the new national and Community legislation.

4. WORLDWIDE VISION OF ORGANIC AGRICULTURE

- ✔ To build the EU's Agricultural Pact and Agricultural Action Plan for Sustainable Development on organic agriculture, envisioning the green growth of the planet.
- ✔ To boost the role of the MOAN in order to harmonise Action Plans at this level.
- ✔ To provide financial incentives at national and international level regarding the development and promotion of organic agriculture in order to realize the global vision of green sustainable development.
- ✔ To empower financially all groups of human resources as well as all territorial zones of the planet for the balanced and adequate development of the global vision.

5. MARKET

- ✔ To create favorable conditions in the European markets to increase the exports of organic products.
- ✔ To create conditions for the implementation of national or international support and development policies for the organic market sector in order to export organic products
- ✔ To increase competition in the long term, from low-cost third countries attempting to develop their organic production with the aim of increasing their exports.
- ✔ To create scope for the development of the domestic market due to the very low penetration of organics in the total food consumption, which is one of the lowest in Europe.

6. ORGANIZATION OF VALUE CHAINS

- ✔ Converting inputs into products or services.
- ✔ Interfacing with customers – Key Activities
- ✔ Independenace of activities - Sequential Simultaneous
- ✔ Relationships of interdependence - Successive Parallels
- ✔ Competitive advantage
- ✔ Cheapest Best Customer Service
- ✔ Organisational Structure - Interlinked chains Interlinked networks

7. RESEARCH AND INNOVATION

- ☑ We propose that the European Commission increases the allocation of funds for research and innovation actions in the field of agriculture, forestry, and rural areas, specifically addressing issues related to organic production. A minimum of 30% of the budget should be allocated for this purpose.
- ☑ The European Commission should also enhance the coordination of national research and innovation programs related to organic food and provide new opportunities for partnerships through the proposed mission of the “Horizon Europe” program in the field of soil health and food, particularly concerning agroecology and food systems.
- ☑ Moreover, dissemination of research and innovation actions should be strengthened through the European AGRI Innovation Partnership and the Agricultural Knowledge and Innovation System (AKIS) to promote the overall growth of organic products in all Member States.



LIST OF ACRONYMS

AP	<i>Associated Partner</i>
CA	<i>Competent Authority</i>
CB	<i>Cross-Border</i>
CBC	<i>Cross-Border Cooperation (CBC) initiative</i>
CR	<i>Country Report</i>
ENI	<i>European Neighbourhood Instrument</i>
ENI CBC	<i>ENI CBC “Mediterranean Sea Basin Programme”</i>
EU	<i>European Union</i>
EUPC	<i>European Partner Country</i>
FAO	<i>Food and Agriculture Organization</i>
MoA	<i>Ministry of Agriculture</i>
MOAN	<i>Mediterranean Organic Agriculture Network</i>
MPC	<i>Mediterranean Partner Country</i>
MSME	<i>Micro-Small and Medium Enterprise</i>
NR	<i>National Report</i>
OE project	<i>ORGANIC ECOSYSTEM “Boosting cross border Organic Ecosystem through enhancing agro-food alliances” project</i>
PA	<i>Public Authority</i>
PP	<i>Project Partner</i>
SDGs	<i>Sustainable Development Goals</i>
SFS-MED	<i>Sustainable Food Systems in the Mediterranean Region Platform</i>
UfM	<i>Union for the Mediterranean</i>
WP	<i>Work Package</i>



ORGANIC ECOSYSTEM

ORGANIC AGRICULTURE PROSPECTS IN THE MEDITERRANEAN REGION

WITH THE COLLABORATION OF



 <http://www.enicbcmmed.eu/projects/organic-ecosystem>

 **ORGANIC ECOSYSTEM**

 **ORGANIC ECOSYSTEM in the Mediterranean region**

