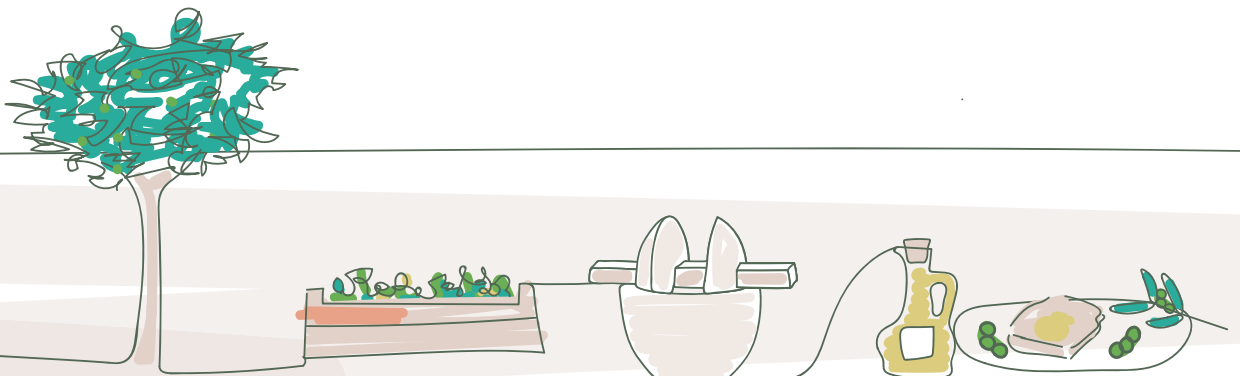


MALTA'S ACTION PLAN FOR **ORGANIC FOOD** 2023-2030

BACKGROUND DOCUMENT



AMBASSADOR FOR
**ORGANIC &
SUSTAINABLE
FOOD**

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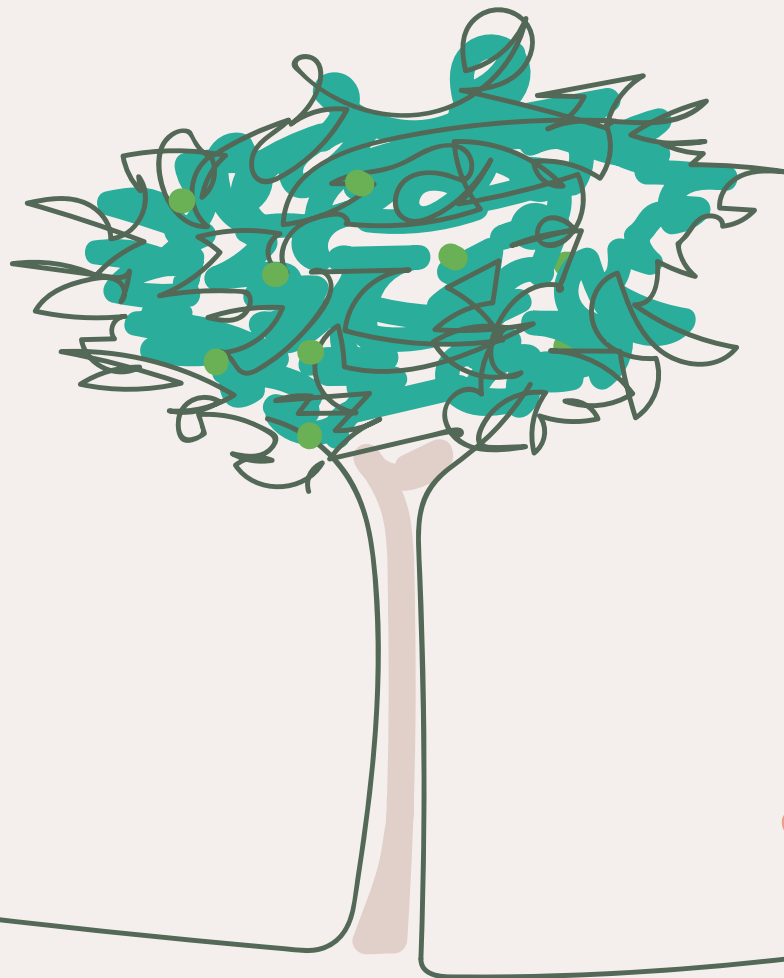
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INTRODUCTION



THE MINISTRY FOR AGRICULTURE, FISHERIES, FOOD AND ANIMAL RIGHTS (MAFA) IS PUBLISHING MALTA'S FIRST-EVER ACTION PLAN FOR ORGANIC FOOD, IN LINE WITH THE EUROPEAN COMMISSION'S (EC) DRIVE TO INCREASE ORGANIC FARMING IN THE EU.

EU member states have been encouraged to devise their own national organic action plans and set their own timelines and targets. The local vision is to offer consumers high-quality local organic food from farming and aquaculture whilst driving sustainable income for Maltese and Gozitan producers.

This document provides background information and acts as an introduction to Malta's Action Plan for Organic Food, bringing to light current organic production both internationally and locally.

1.1 Structure of the document

This first chapter provides an introduction to Malta's Action Plan for Organic Food, and outlines definitions as well as the benefits which one is to expect from organic farming and aquaculture. The second chapter presents the current state of organic land use, production and markets, both at a global and regional (EU) level in order to provide a wider context to the document. The third chapter zooms into the specific Maltese context, outlining the agriculture and aquaculture context of Malta and the current organic production carried out locally.

1.2 Definitions

The European Commission (EC or the Commission), under the Regulation No 2018/848, defines organic production as “an overall system of farm management and food production that combines best environmental and climate action practices, a high level of biodiversity, the preservation of natural resources and the application of high animal welfare standards and high production standards in line with the demand of a growing number of consumers for products produced using natural substances and processes.”¹

Regulation No 2018/848 states that: “Primarily, it should cover products originating from agriculture, including aquaculture and beekeeping, as listed in Annex I to the Treaty on the Functioning of the European Union (TFEU). Moreover, it should cover processed agricultural products for use as food or feed because the placing of such products on the market as organic products provides a major outlet for agricultural products and ensures that the organic nature of the agricultural products from which they are processed is visible to the consumer. Likewise, this Regulation should cover certain other products which are linked to agricultural products in a similarly close way as processed agricultural products for use as food and feed because those other products either constitute a major outlet for agricultural products or form an integral part of the production process. Finally, sea salt and other salts used for food and feed should be included in the scope of this Regulation because they may be produced by applying natural production techniques, and because their production contributes to the development of rural areas, and thus falls within the objectives of this Regulation. For reasons of clarity, such other products not listed in Annex I to the TFEU should be listed in an Annex to this Regulation.”²

Organic farming is a particularly resource-conserving and environmentally friendly farming system based on the principle of sustainability. It mimics the natural cycles and processes of ecosystems (to the extent possible) and relies on ecosystem management rather than external agricultural inputs to support production.

Organic farming is regulated and imposes strict limitations on the use of artificial processes and substances to aid agricultural production. Chemical and synthetic pesticides, additives, and livestock antibiotics, amongst others, are limited, whilst the use of genetically modified organisms (GMOs) is banned. Water and air quality of the area also need to be monitored regularly to ensure that no pollutants or chemicals seep into the agricultural land.

¹ Council Regulation (EC) No 2018/848 of 30 May 2018 on organic production and labelling of organic products and repealing Regulation (EEC) No 834/2007. (2018). *Official Journal of the European Union*, L 150/1.

² *Ibid.*

Organic farming encourages the use of the existing ecosystem services to enhance the production process, such as through crop rotation which replenishes the soil's nutrients. Livestock is to be raised in open-air free-range environment, as close to their natural habitats and processes as possible. There are also specific requirements relating to aquaculture, which amongst others include a strict maximum stocking densities; water quality requirements; minimising handling to avoid stress and physical damage; and the use of organic feeds.³ Organic production, however, does not stop only at the appropriate use of land and processing within the farm. The consecutive steps of the supply chain must also be as chemical free and as natural as possible, from food processing to its final delivery. All steps are strictly regulated if a product is to be labelled and certified as organic. This allows the final customer to be sure that the product is as genuine as possible and respects both animals and the environment.

The International Federation of Organic Agriculture Movements (IFOAM) sets out four pillars for organic production, as follows:

- **The Principle of Health**, whereby agriculture should support and ensure the health of the environment, animals and humans as one whole.
- **The Principle of Ecology**, whereby agricultural systems should work as closely and in tandem with natural life cycles as possible.
- **The Principle of Fairness**, making sure that the processes used give equal opportunities with regards to our common environment.
- **The Principle of Care**, whereby the agricultural practices are managed responsibly to protect the well-being of current and future generations, as well as that of the environment and animals as a whole.

EU Regulation No 2018/848 outlines that organic aquaculture is a relatively new field of organic production as compared to organic agriculture, where long experience exists at the farm level. It is expected that production rules may evolve as the organic aquaculture sector grows in line with demand, driven by increased experience, technical knowledge and development. The regulation sets out that: "Organic aquaculture should be based on the rearing of young stock originating from organic production units. Organic aquaculture animals for breeding or on-growing purposes are not always available in sufficient quantity and quality to meet the needs of operators that produce aquaculture animals. Under certain conditions, it should be possible to bring wild caught or non-organic aquaculture animals to an organic production unit."⁴

1.3 Benefits

³ European Commission. (n.d.). *Organic production and products*. Retrieved September 26, 2022, from https://agriculture.ec.europa.eu/farming/organic-farming/organic-production-and-products_en

⁴ Council Regulation (EC) No 2018/848 of 30 May 2018 on organic production and labelling of organic products and repealing Regulation (EEC) No 834/2007. (2018). *Official Journal of the European Union*, L 150/1.

Organic production holds several benefits for the various stakeholders involved, ranging from the environment itself, to farmers as well as the end consumers.

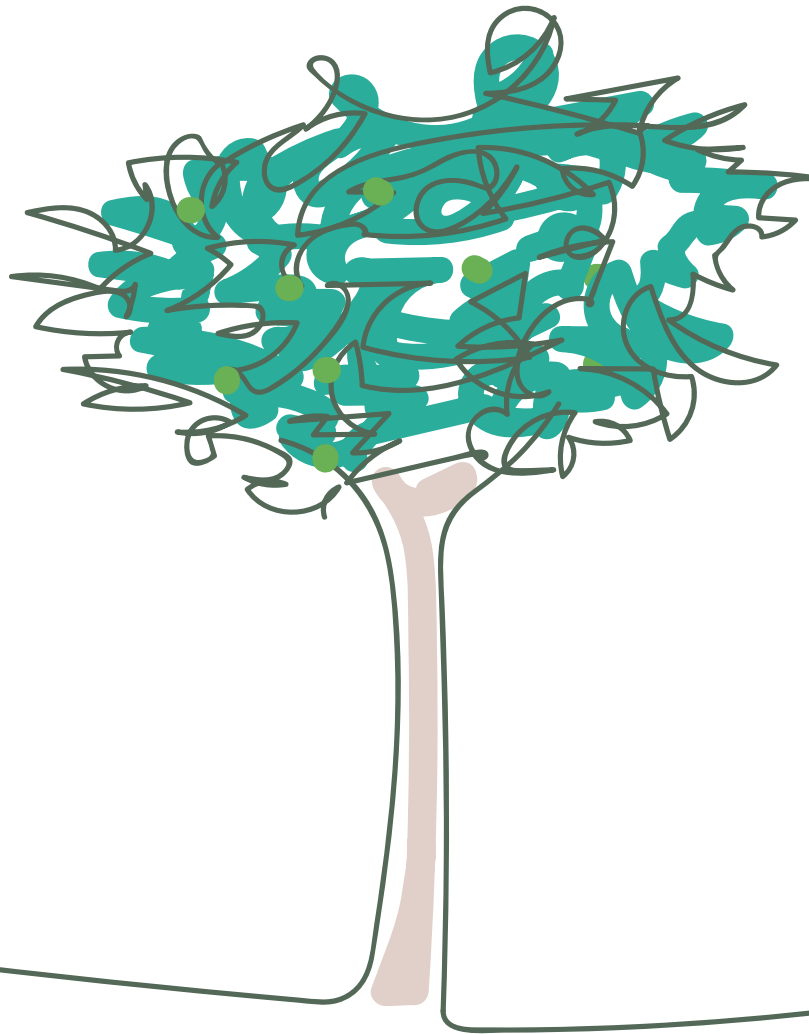
Organic livestock and animal husbandry farming favours the environment and the welfare of animals, since it maintains the natural rhythms of their habitats, without the use of any chemicals or synthetic additives. Animals are reared in open spaces, much like they would be in a 'natural setting' and are not confined in small areas for the detriment of their health. Moreover, organic crop production is known to have higher long-term soil fertility and benefits to pollinators. It has also been proven to maintain 30% more biodiversity than conventionally farmed land.⁵

The organic aquaculture industry also serves to provide an array of benefits. The industry creates jobs and economic opportunities in coastal and rural communities. This sector can also help to decarbonise the economy, fight climate change and minimise its impact, reduce pollution, contribute to improved ecosystem protection and maximise resource utilisation. The aquaculture industry in Malta has considerable socio-economic value and potential as it enhances the overall economic diversification, contributes to employment generation, provides valuable export earnings, and contributes toward the EU trade deficit for fishery products.⁶ Native varieties are well suited to organic production since they have evolved to be well adapted to survive climatic conditions and are naturally resistant to common pests and diseases. Hence, farmers who opt to produce such varieties stand to benefit by minimising the need to use further resources beyond the local natural ecosystem.

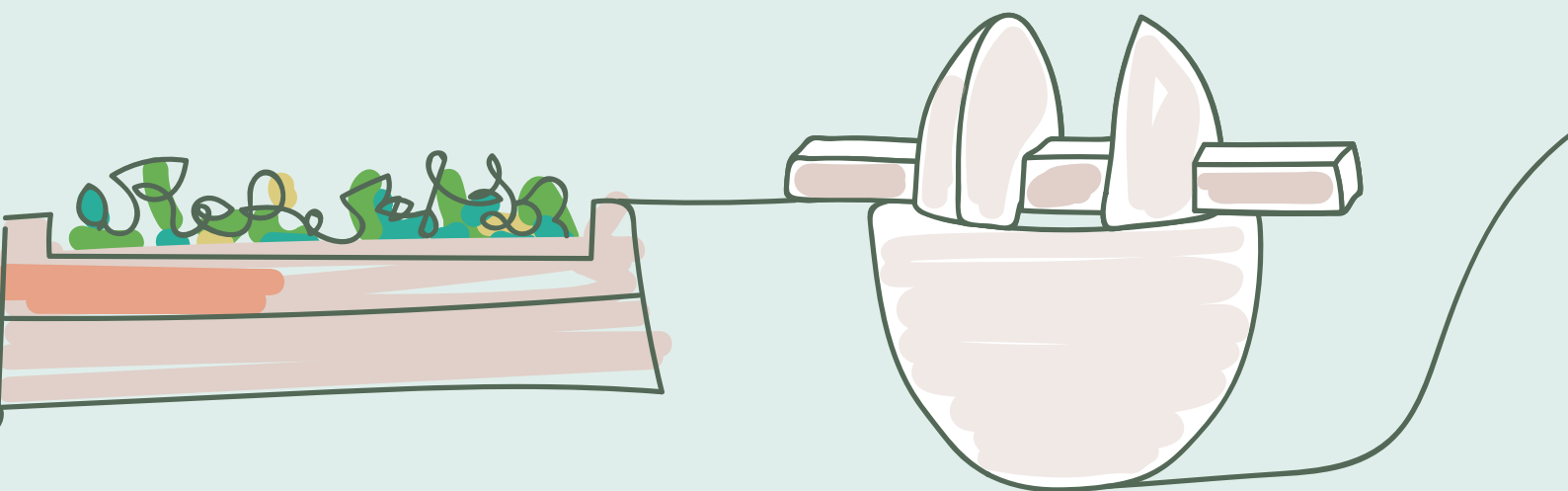
There are a growing number of sustainably conscious consumers in Europe. They benefit from organic production knowing that the environmental footprint of their consumption is kept at a minimum, whilst enjoying food which is produced in a natural manner and has been certified and regulated at international level following strict protocols that favour sustainability.

⁵ European Commission. (2021). *Action plan for the development of organic production*. agriculture.ec.europa.eu. Retrieved 16 September 2022, from https://agriculture.ec.europa.eu/farming/organic-farming/organic-action-plan_en

⁶ Malta Aquaculture Research Centre. (2022). *Malta National Plan for Sustainable Aquaculture 2022-2030*. <https://agrikultura.gov.mt/en/fisheries/Documents/maltaAquacultureResearchCentre/mnpsa2022-2030.pdf>



GLOBAL
AND REGIONAL
CONTEXT



2.1 International trends

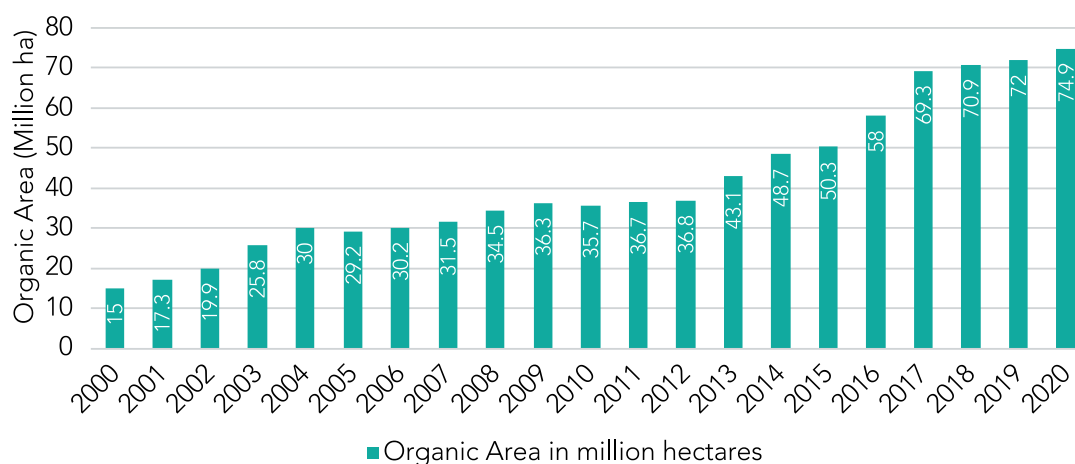
Traditionally, agriculture and farming were symbiotic of the natural life cycles of plants and livestock. Yet, as global population numbers increased, the demand for food also rose. Coupled with the improvements in technology and biochemistry of the early 20th century, farmers started shifting to the use of technological aides to maximise their yields, moving into conventional farming. This also led to the use of chemical fertiliser, pesticides and other additives causing environmental damage as well as health issues.⁷

As these processes distanced themselves more from the actual natural life cycles, criticism of such processes and the use of synthetic substances led to the beginning of the movements in favour of organic farming round about the 1920s. In the 1970s, the International Federation of Organic Agriculture Movements (IFOAM) was set up to bring together the different players related to organic farming.

As indicated in Chart 1 below, organic farming has been increasing and gaining more traction due to a variety of drivers outlined in Section 2.3, with record growth registered in 2020 according to a study published by by FiBL and IFOAM - Organics International.

Organic production was recorded in 190 countries, totalling to around 74.9 million hectares of organic land (compared to 11mln hectares in 1999). Globally, 1.6% of farmland was found to be organic (vs 0.3% in 2000). Australia registered the largest area of organic land, at an equivalent of 35.7 million hectares, followed by Argentina at 4.5 million hectares and Uruguay 2.7 million hectares. Liechtenstein holds the highest organic share of all farmland at 41.6%.⁸

Chart 1: World Growth of Organic Agricultural land and organic share 2000- 2020⁹



⁷ Gundala, R. R., & Singh, A. (2021). What motivates consumers to buy organic foods? Results of an empirical study in the United States. *PLoS One*, 16(9), e0257288. <https://doi.org/10.1371/journal.pone.0257288>

⁸ Research Institute of Organic Agriculture (FiBL). (2022). Exceptional growth of the European organic market 2020 - Organic market reaches 52 billion euros and organic farmland 17 million hectares in 2020. Retrieved September 15, 2022, from <https://www.fibl.org/en/info-centre/news/exceptional-growth-of-the-european-organic-market-2020>

⁹ Research Institute of Organic Agriculture (FiBL) & International Federation of Organic Agriculture Movements (IFOAM). (2022). *The world of organic agriculture statistics and emerging trends 2022*. FiBL and IFOAM.

There are 3.4 million organic farmers globally, an increase of 7.19% from 2019. India has the highest number of organic producers, totalling to circa 1.6 million alone, followed by Ethiopia (219,566) and Tanzania (148,607).¹⁰ The market consumption of organic products is increasing, as shown in the EU-27. The value at the retail stage in 2020 was estimated at €44.8 billion at EU 27 level, which is an increase of 15.1% compared to 2019, according to the Research Institute of Organic Agriculture (FiBL) and the International Federation of Organic Agriculture Movements (IFOAM).

The value of the organic market continues to grow driven by increasing demand for organic produce. The value of the organic market reached €120 billion in 2020, an increase of €14 billion from the previous year, despite, or in spite of the pandemic. The US was the largest market at €49.5 billion (41% of the global market), followed by Germany at €15 billion and France at €12 billion. Switzerland had the highest per capita consumption in 2020, standing at €418.¹¹

¹⁰ Research Institute of Organic Agriculture (FiBL). (2022). *European organic market grew to 52.0 billion euros in 2020 – Graphs*. Media release of FiBL and AMI of February 15, 2022.

¹¹ Research Institute of Organic Agriculture (FiBL) & International Federation of Organic Agriculture Movements (IFOAM). (2022). *The world of organic agriculture statistics and emerging trends 2022*. FiBL and IFOAM.

2.2 Regional (EU) trends

The European Union is driving forward organic production as one its major pillars towards a more sustainable Europe, as part of the 'European Green Deal', a set of policy initiatives by the European Commission with the overarching aim of making the EU climate neutral in 2050. The Commission has placed sustainable food production as a top priority in its agenda and is emphasising the need to assist and strengthen the farmer's efforts to tackle climate change and protect the environment.

Through its 'Farm to Fork' Strategy, the EC has set itself a target to have at a minimum 25% of the EU agricultural land being organic farming land by 2030, whilst also increasing substantially organic aquaculture by the same year.¹² In order to reach such targets, the EU has developed a new Organic Action Plan, based on the previous 2014-2020 action plan as well as on further public consultations.

This new action plan is centred on three-axis as follows:

Axis 1: stimulate demand and ensure consumer trust.

Axis 2: stimulate conversion and reinforce the entire value chain.

Axis 3: organics leading by example: improve the contribution of organic farming to environmental sustainability.

Member states are being encouraged to set their own individual organic land targets and draw up their own action plans of how to reach such set figures.

The EU's Common Agricultural Policy (CAP), which underwrites agricultural subsidies and other support programmes, will also be used to mobilise further organic farming. This will include greater financial support in favour of organic production and additional funding via eco-schemes. The EU is also committing itself to promote relevant knowledge exchange required for Organic farming through its Agricultural Knowledge and Innovation Systems (AKIS).¹³

Organic production is increasing in the EU, in line with global trends. There were 14.17 million hectares of recorded organic land in the EU in 2020,¹⁴ an increase of 55.6% rise from 2012.¹⁵ This is equivalent to 9.1%⁹ share of total farmland and still well-below the 25% target the European Commission (EC) has set itself to be reached by 2030, in its Farm to Fork Strategy.¹⁶

¹² REuropean Commission. (2021). Action plan for the development of organic production. Retrieved September 15, 2022, from https://agriculture.ec.europa.eu/farming/organic-farming/organic-action-plan_en

¹³ Research Institute of Organic Agriculture (FiBL). (2022). European organic market grew to 52.0 billion euros in 2020 - Graphs. Media release of FiBL and AMI of February 15, 2022.

¹⁴ Eurostat. (2021). Organic farming statistics. Retrieved September 15, 2022, from https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Organic_farming_statistics#Total_organic_area

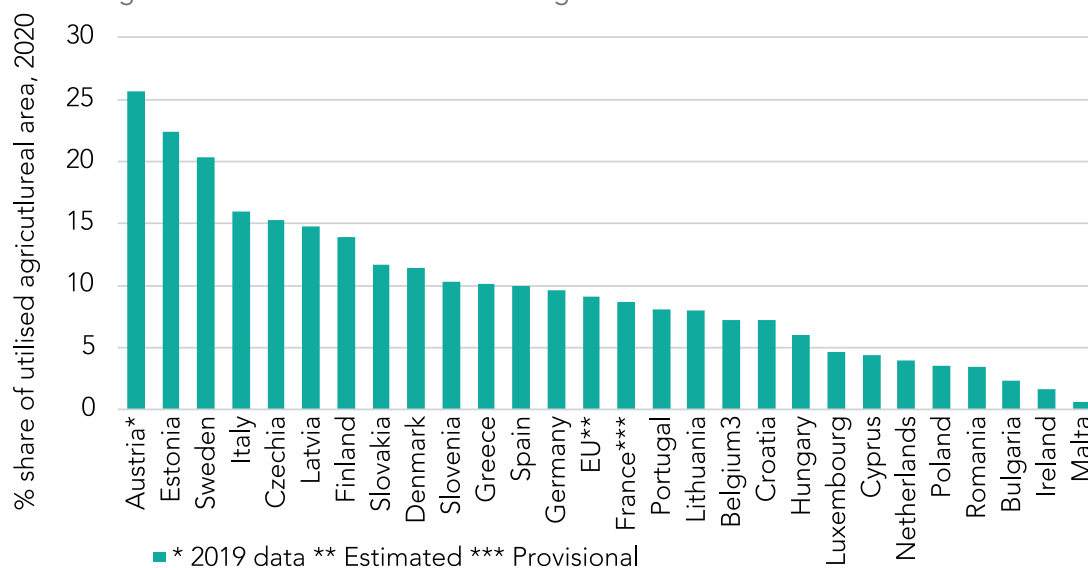
¹⁵ Eurostat. (2022, February 22). EU's organic farming area reaches 14.7 million hectares. Retrieved September 15, 2022, from <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20220222-1>

¹⁶ Research Institute of Organic Agriculture (FiBL). (2022). European organic market grew to 52.0 billion euros in 2020 - Graphs. Media release of FiBL and AMI of February 15, 2022.

More than 50% of the current organic land in the EU is distributed between four countries, namely France (2.5 million hectares), Spain, Italy and Germany.¹⁷

Austria had the highest percentage (26.5%) of organic land as a total utilised agricultural area in 2020, whilst Malta had the lowest at 0.6% (Chart 2), as will be further explained in Chapter 3.

Chart 2: Organic Area - % share of total utilised agricultural area in 2020¹⁸



The number of organic producers in the EU were approximately 350,000 in the year 2020, with Italy having the largest number at 71,590, followed by France and Spain. 78,262 organic processors were also present.¹⁹

The EU's organic market, just like the international one, increased by 15.1% to register €44.8 billion in sales for 2020, accounting for 37% of the global market.²⁰ EU consumers spent €101.8 per capita per annum on organic food in 2020, over 2.5 times the per capita spend in 2010 (€38.5 per capita).²¹

The EU organic market is growing at a much faster pace than the growth in regional organic farmland. If this trend continues, it will increase demand for organic imports into the EU and impact the region's balance of payments of the region, hence creating impetus to increase local supply.²²

¹⁷ Eurostat. (2022). Share of EU total organic area. Retrieved September 19, 2022, from <https://ec.europa.eu/eurostat/statistics-explained/index.php>

¹⁸ Eurostat. (2022). Organic Farming Statistics. Retrieved September 15, 2022, from https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Organic_farming_statistics

¹⁹ Willer, H., & Lernoud, J. (Eds.). (2022). *The World of Organic Agriculture Statistics and Emerging Trends 2022*. Research Institute of Organic Agriculture (FiBL) & International Federation of Organic Agriculture Movements (IFOAM) - Organics International.

²⁰ Research Institute of Organic Agriculture (FiBL). (2022, February 15). European organic market grew to 52.0 billion euros in 2020 - Graphs [Press release]. Media release of FiBL and AMI. <https://www.fibl.org/en/media/media-archive/media-archive22/media-release22/article/european-organic-market-grew-to-520-billion-euros-in-2020-graphs.html>

²¹ Research Institute of Organic Agriculture (FiBL). (2022). Exceptional growth of the European organic market 2020 - Organic market reaches 52 billion euros and organic farmland 17 million hectares in 2020. Retrieved September 15, 2022, from <https://www.fibl.org/en/info-centre/news/exceptional-growth-of-the-european-organic-market-2020.html>

²² Department of Agriculture, Food and the Marine (Ireland). (2019). *Review of Organic Food Sector and Strategy for its Development 2019 - 2025*.

2.3 Drivers

In the previous section we have looked at the statistics regarding the growth in organic production and its markets. In this sub-section, the major drivers for increased production, both from a demand as well as a supply perspective are explored.

a. Information accessibility

From a demand point of view, over the past years, organic activists have long been raising awareness about the benefits of organic agriculture and aquaculture, as well as the potential harm of conventional practices. Such awareness raising has reached both policy makers and individuals, through various information channels, which are influencing changes to both policy and consumer behaviour.

b. Greater environmental awareness and focus on animal rights

Consumers are becoming more attuned to how and where the products they purchase are being produced. The increased availability of data and information means that consumers are nowadays more informed on companies' environmental impacts²³ and hence, have better basis to change their purchasing patterns.

This is the major driver for increased demand in organic produce in countries such as Denmark and France. On the other hand, in Germany, the major driving force is the increased protection of animal welfare.²⁴

c. Increased health focus

Another leading factor driving an increase in demand for organic food is the growing awareness of the health benefits associated to such products. For instance, in the USA, consumers often seek organic produce since it is free from GMOs and therefore, perceived to be safer and healthier. The COVID-19 pandemic has also influenced an increase demand for organic food, as people prioritised health and wellness to fend off diseases.²⁵ Consumer association of organic food with a healthy lifestyle, coupled with a forecasted increase in the size of the health and wellness market, is expected to continue to drive increasing levels of demand for organic food and drinks.

²³ Minton, A. P., & Rose, R. L. (1997). *The effects of environmental concern on environmentally friendly consumer behaviour: An exploratory study*. *Journal of Business Research*, 40, 37-48. <https://www.sciencedirect.com/science/article/abs/pii/S0148296396002093>

²⁴ Research Institute of Organic Agriculture (FiBL). (2022, February 15). *European organic market grew to 52.0 billion euros in 2020 - Graphs* [Press release]. Media release of FiBL and AMI. <https://www.fibl.org/fileadmin/documents/en/news/2022/fibl-press-release-EUROPE-2022-02-15-EN.pdf>

²⁵ Research Institute of Organic Agriculture (FiBL). (2022, February 15). *European organic market grew to 52.0 billion euros in 2020 - Graphs* [Press release]. Media release of FiBL and AMI. <https://www.fibl.org/fileadmin/documents/en/news/2022/fibl-press-release-EUROPE-2022-02-15-EN.pdf>

Organic farming is seen as a crucial tool in addressing the challenges posed by antimicrobial resistance. This is due to several factors, such as the avoidance of synthetic pesticides and antibiotics that contribute to the development of resistance, promotion of biodiversity which helps reduce disease pressure, utilization of alternative management practices like crop rotation and composting to maintain soil health, and encouragement of the use of natural predators and parasites to manage pests. These practices help reduce the reliance on antimicrobial inputs, thereby preserving their effectiveness for human and animal health.

d. Changes in lifestyles and trends

Growing demand for organic products is also attributable to changing lifestyles, trends and living standards. Overall income levels have been increasing over the past few decades, which has resulted in more people being able and willing to pay premium prices for certain products, such as organic products.

As more female and younger generations enter the labour professional market, the demand for prepared, healthy, ready-to-go meals is on the increase. Organic food is becoming one of the favoured options in such a niche market.

Additionally, organic produce is also being framed as the new 'trendy' go to food. Retail chains and supermarkets seem to market such foods separately, often having specific display areas for these items. Restaurants and hotels are also increasing the use organic produce, often marketing their signature dishes with such 'genuine' ingredients. These shifts are therefore signalling to the consumers that organic is the new trend.

Given all the above changes in demand, suppliers are increasingly noticing that this could be a growing niche to tap in, hence encouraging the shift towards more organic production. Moreover, supply is also pushed further through other drivers, namely the following:

e. Regulations, guidelines and information dissemination

As more guidelines and regulations are being drawn globally in terms of organic farming, it becomes clear that governments are pushing for such agricultural processes. Moreover, farmers are being better guided on how to successfully produce organic fruit, vegetables and livestock. In 2021, 76 countries had fully fledged regulations in place, with 46 being in Europe.²⁶

Moreover, given the greater information availability, the transfer of knowledge and expertise in relation to specific organic processes and measures has become much easier. In this way farmers can learn from others and make sure that their processes are in line with the requirements to get certified.

²⁶ Research Institute of Organic Agriculture (FiBL). (2022, February 15). European organic market grew to 52.0 billion euros in 2020 - Graphs [Press release]. Media release of FiBL and AMI. <https://www.fibl.org/fileadmin/documents/en/news/2022/fibl-press-release-EUROPE-2022-02-15-EN.pdf>

f. Other policies

Apart from regulations, other supporting policies around the world are constantly pushing countries towards increasing their supply and trade in organic produce.

For instance, in the EU, the 2030 'Biodiversity Strategy' and the 'Farm to Fork' Strategy are two policies which set out concrete actions to ensure organic production across the entire value chain, therefore encouraging a shift in farming and aquaculture from conventional to organic. The development of the EU Organic Action Plan, as well as the push for Member States to develop their organic action plans, is also outlining practical measures to support the transition and growth of organic.

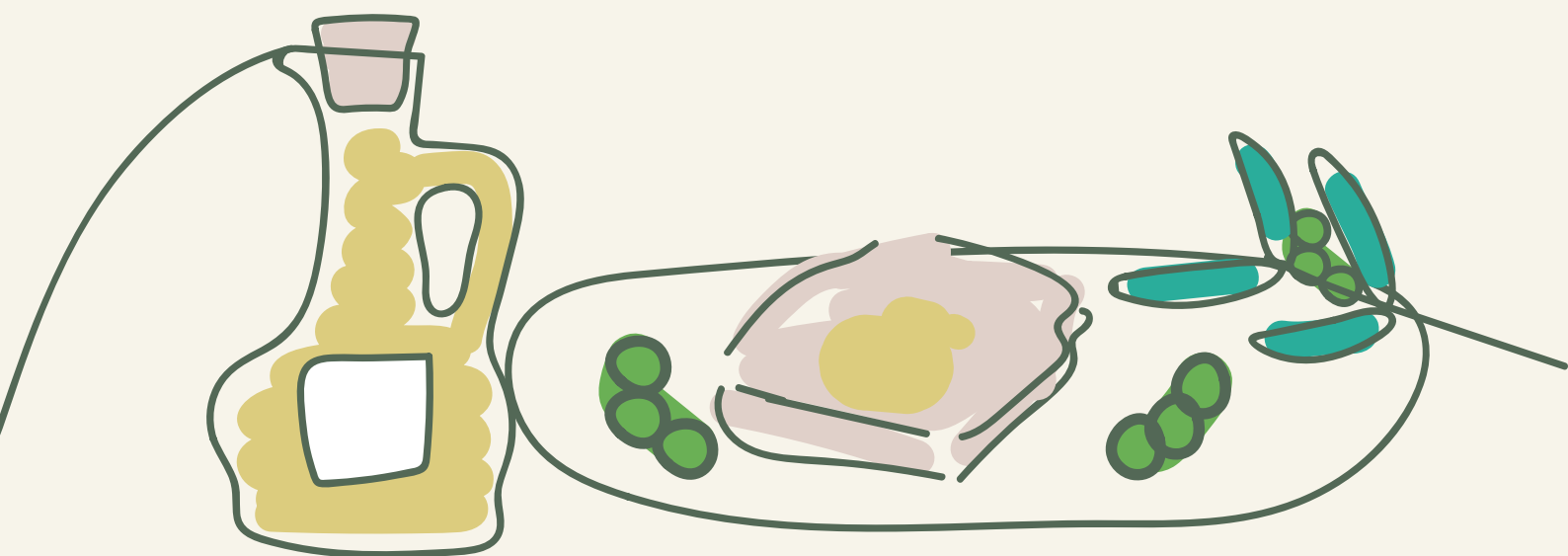
Other policies, such as the Sustainable Development Goals (SDGs), also support organic production, albeit not directly as one of the Goals. Yet, many of the 17 SDGs, tie in with better farming and better food and drinks. For instance, organic farming and aquaculture could assist in better nutrition, feeding into SDG 2 - Zero Hunger, as well as SDG 12 - Responsible Consumption and Production, amongst others.

g. Financial and other support

Producers are also further encouraged to make such changes, when assisted through schemes and financial support programmes. For instance, in the EU, the revision of the CAP to include and better encourage organic farming is also assisting farmers who want to start increasing their organic production. Indeed, subsidies in this area have often been quoted as one of the major drivers in organic farming, especially in western Europe.²⁷

²⁷ Lockeretz, W. (2007). *What explains the rise of organic farming?* CABI Books. CABI International. <https://www.cabidigitallibrary.org/doi/10.1079/9780851998336.0001>

ORGANIC SECTOR IN MALTA



As first step into developing the governments strategic vision on organic production, which will be complemented by a concrete Action Plan for Organic Food for Malta, the status quo of organic production in Malta and country specific requirements, advantages or constraints were analysed. This section focuses on organic agriculture (crops and livestock), and also assesses the current situation and potential of organic and conventional aquaculture in Malta.

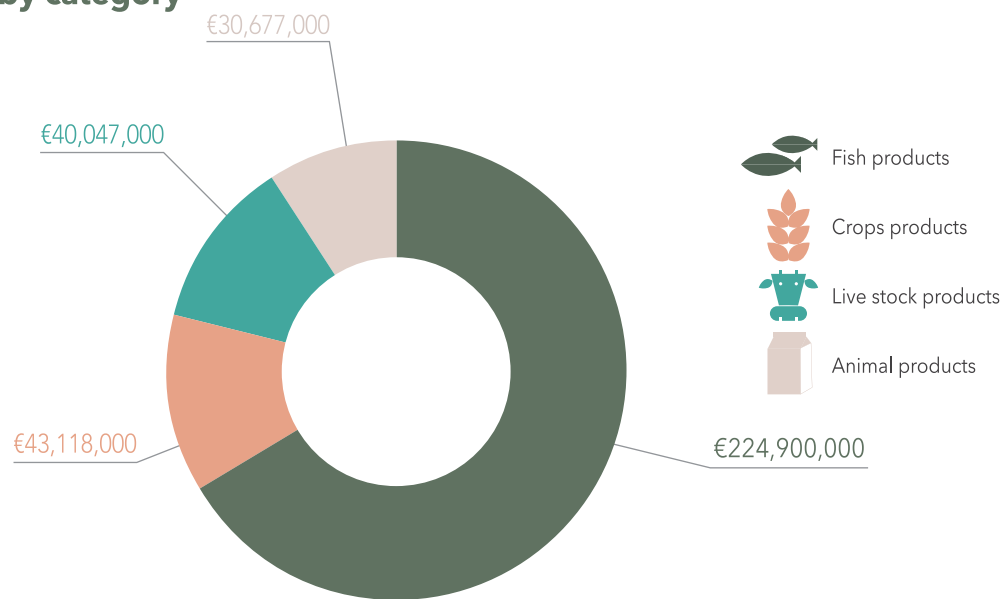
3.1 Malta: country characteristics and status quo of organic production

3.1.1 Malta's agriculture and aquaculture sector in general

GENERAL SECTOR

GDP in Malta	0.45%	2021
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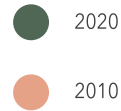
Total output by category



Total labour by category (2021)



AQUACULTURE SECTOR



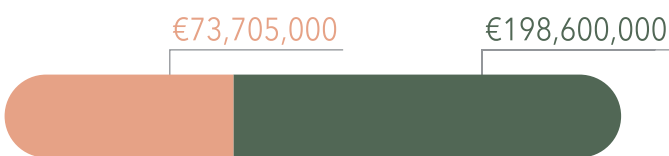
Fish farms in Malta



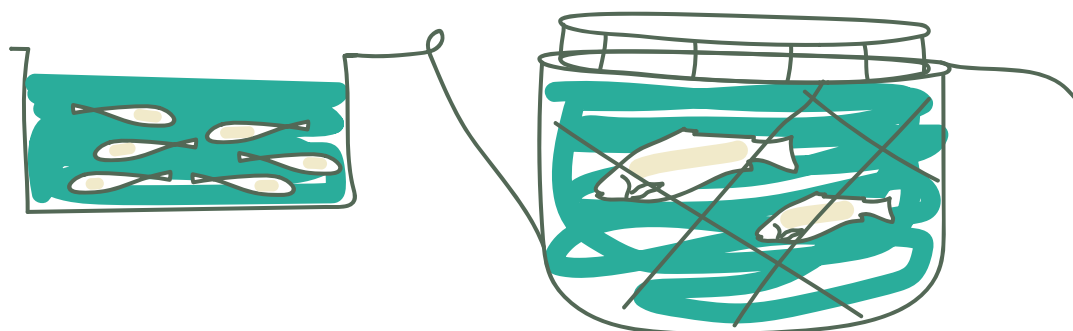
Total labour in aquaculture



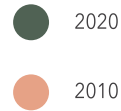
Total output of tuna farming



% of Total output (Tuna farming)



AQUACULTURE SECTOR



Total output of closed cycle species



% of Total output (Closed cycle species)



Total output of other output



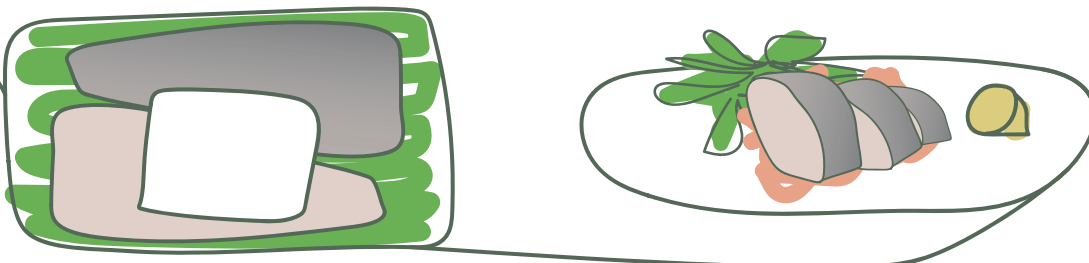
% of Total output (Other output)



notes

F.K.A 'other species', closed cycle species refer to Gilthead seabream, European seabass, Meagre and Amberjack.

Other output refers to rent received, other interest income, other receipt/income, and not elsewhere classified.



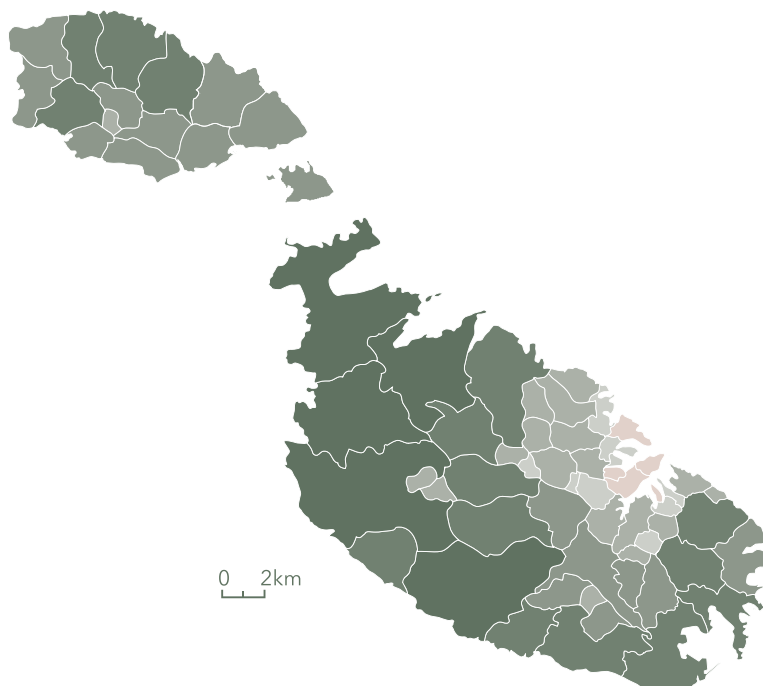
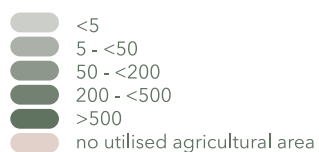
AGRICULTURE SECTOR



Distribution of utilised agricultural area by locality: 2020

KEY

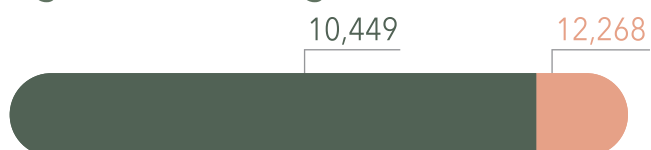
Utilised agricultural area (ha)



Utilised agricultural area



Agricultural holdings



Persons employed in agricultural holdings



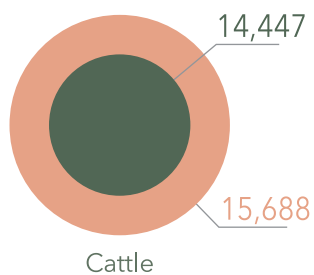
AGRICULTURE SECTOR



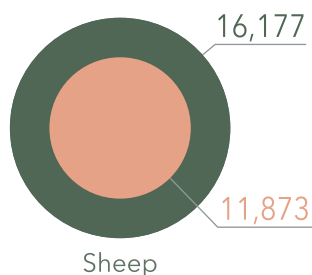
2020

2010

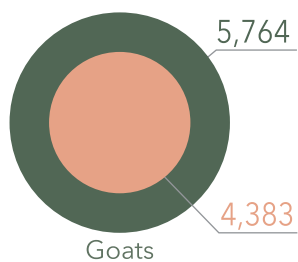
Livestock population



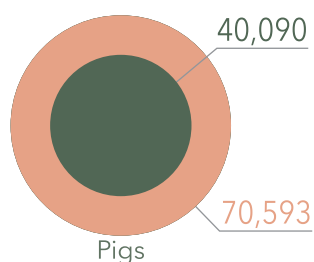
Cattle



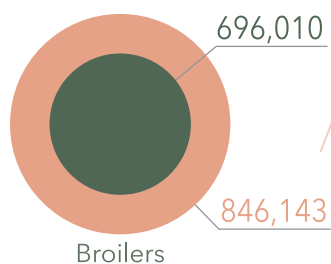
Sheep



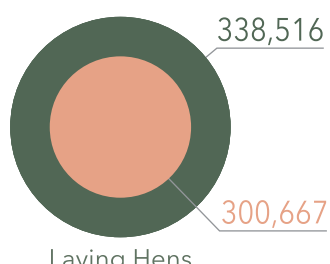
Goats



Pigs

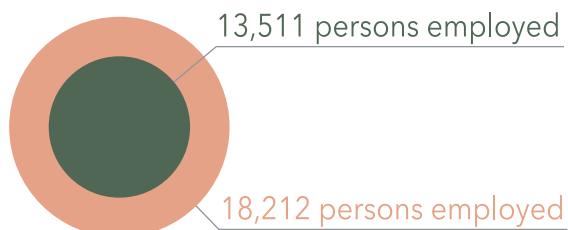


Broilers



Laying Hens

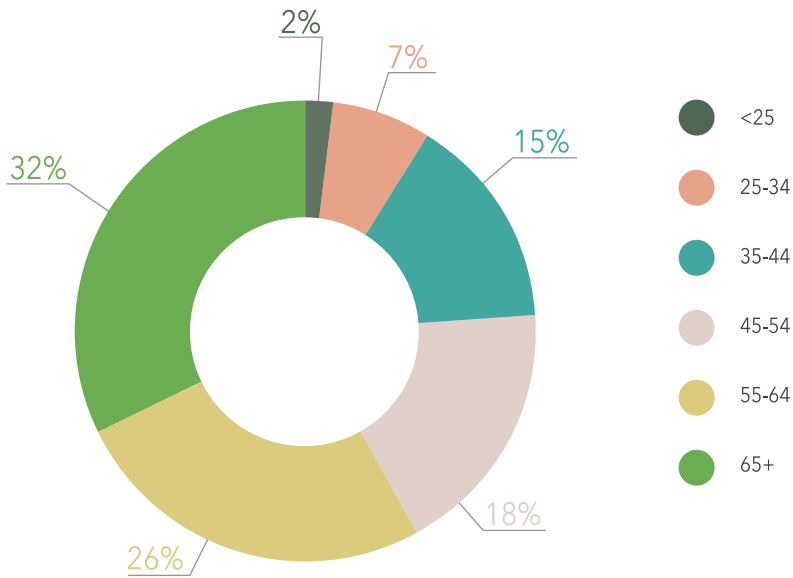
Total labour in agriculture



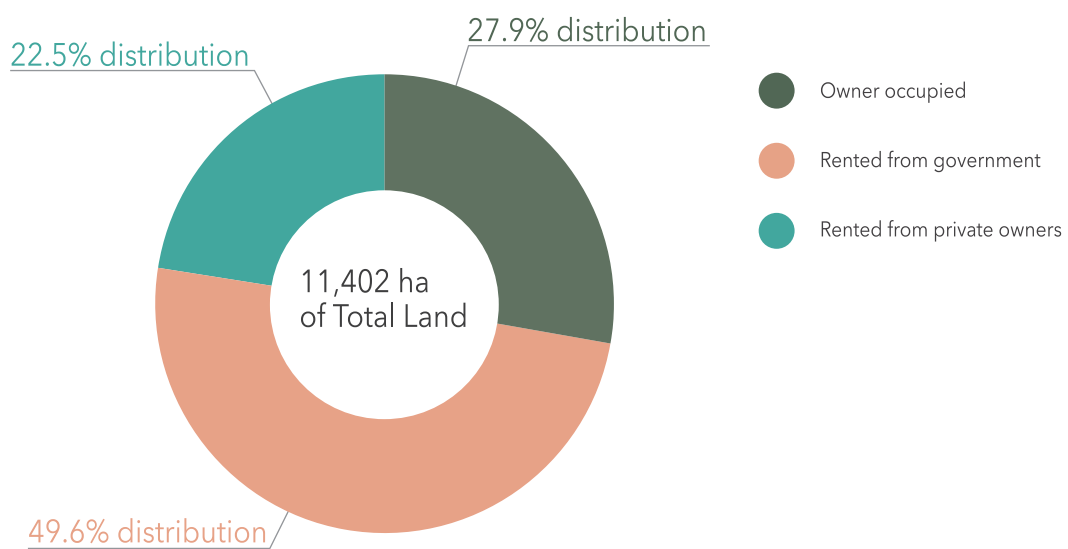
AGRICULTURE SECTOR



Age of workforce (2020)



Agricultural land by type of tenure

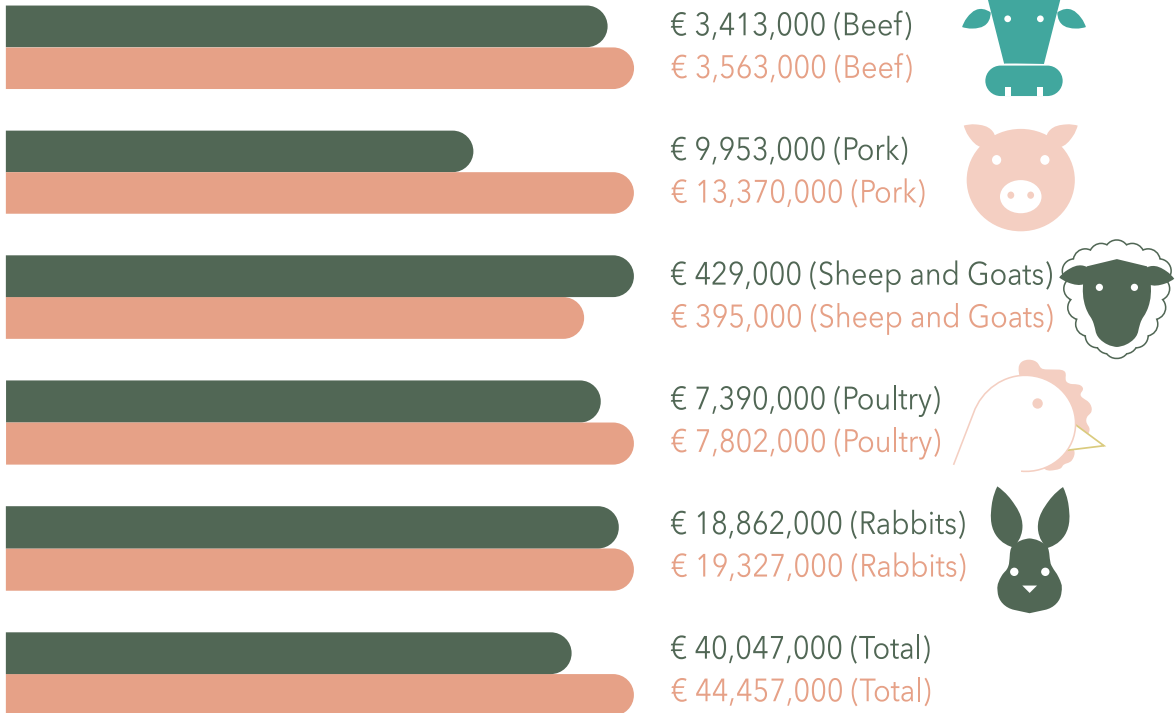


OUTPUT BY 4 SUB-SECTOR

Livestock products



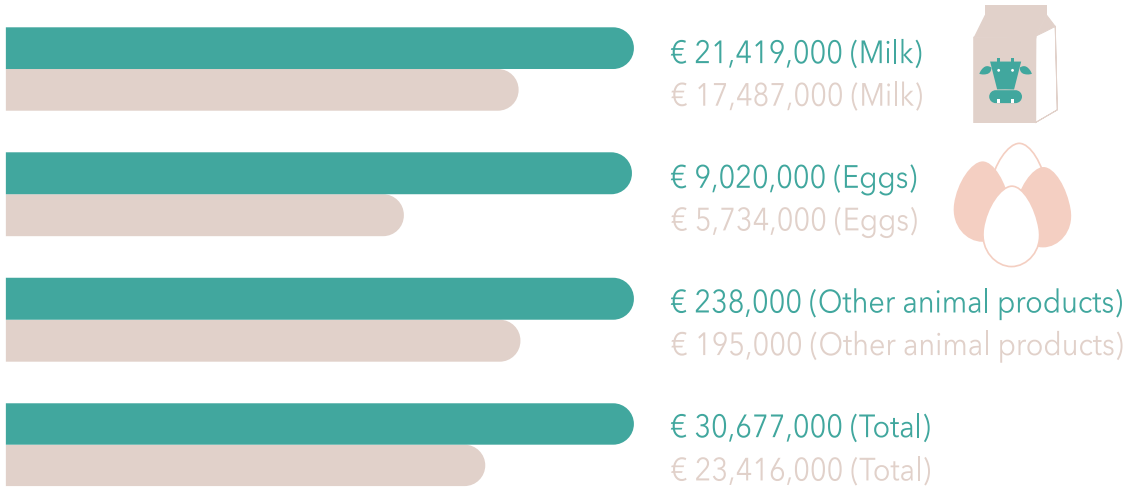
● 2020
● 2010



Animal products



● 2020
● 2010



OUTPUT BY 4 SUB-SECTOR

Crop products



● 2020

● 2010



€ 3,846,000 (Forage)

€ 4,213,000 (Forage)



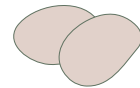
€ 27,978,000 (Vegetables)

€ 30,146,000 (Vegetables)



€ 3,731,000 (Potatoes)

€ 2,238,000 (Potatoes)



€ 5,669,000 (Fruit)

€ 6,902,000 (Fruit)



€ 1,895,000 (Flowers and seeds)

€ 2,270,000 (Flowers and seeds)



€ 43,119,000 (Total)

€ 45,769,000 (Total)

Secondary activities



● 2020

● 2010



€ 1,397,000 (Wine)

€ 2,628,000 (Wine)



€ 5,422,000 (Cheese)

€ 5,021,000 (Cheese)



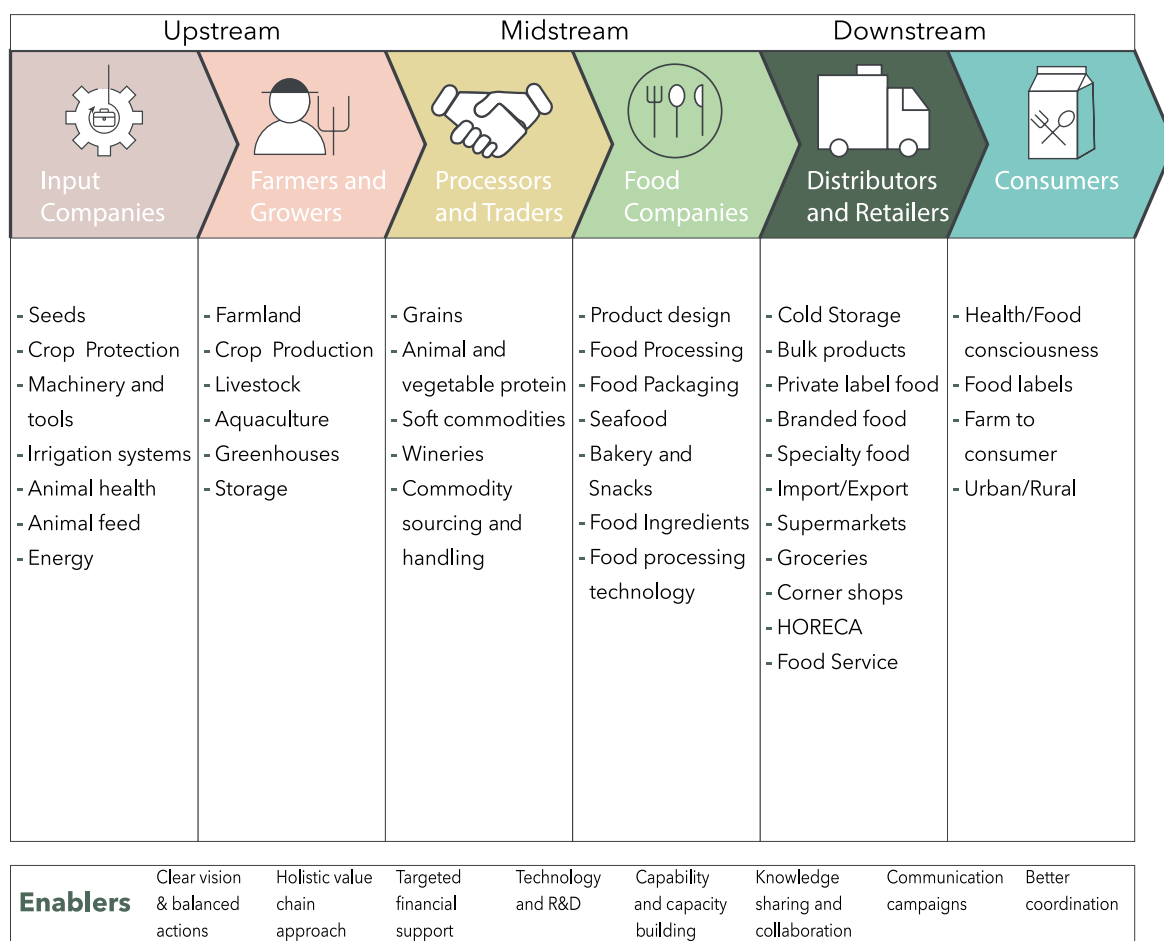
€ 6,819,000 (Total)

€ 7,649,000 (Total)

3.1.2 Organic production and value chain in Malta

Organic and conventional production can be split in two main activities - agriculture, which includes the farming of crops and livestock as well as aquaculture. The wider value chain of organic production includes processors, retailers and wholesalers, importers and exporters, as well as traders.

Figure 1 - (Organic) production value chain



To develop a holistic and systemic understanding and vision on the organic production sector for Malta, its wider value chain is crucial to further nurture the linked economic activities as well as leverage key synergies and enablers whilst mitigating major barriers or risks including along the supply chains - both upstream and downstream. Those enablers as well as potential risks and opportunities will be analysed and evaluated in more detail in Chapter 3.4 and 5 respectively.

The Maltese organic agriculture value chain consists of 26 producers, 8 processors of organic produce, 38 importers 29 retailers and 16 wholesalers. No operator within the value chain exports Maltese organic produce or products.²⁸

The number of organic products imported into Malta increased from 8.8 million tons to 60 million tons in 2020, indicating, that the market is growing significantly, and consumer demand has been taking up.²⁹

3.1.2.1 Organic agriculture in Malta

According to Eurostat and NSO statistics on organic production (2020), 0.58% of the total utilized agricultural land in Malta were either fully converted (0.36%) or under conversion (0.23%) to organic production, whereas the EU average (EU-27) stood at about 9% in 2020.³⁰ In 2020, the total organic agricultural land was 67 ha, up 21.8% from 2019 (55 ha) and 193.6% for the ten-year period between 2011 to 2020. Of that 67 ha, 41 ha were fully converted.³¹ The organic land use in 2020 was 40 ha for arable land and 27 ha for permanent crops.³² The most common products cultivated by organic farming in terms of area in 2020 were olives and grapes (see Table 1).

Table 1: Organic area by crop in Malta in 2020.³³

Product	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Cereals	5	0.00	4	1
Citrus	1	0.00	na	na
Grapes	10	2.2	7	3
Olives	15	0.0	10	5
Vegetables	5	0.4	6	na

Grapes and brassicas (cabbages) account for a significant portion of total organic production locally measures by tonnage yielded.³⁴

²⁸ Malta Competition and Consumer Affairs Authority. (2022). Organic Operators as at 15-07-2022. Retrieved September 16, 2022, from <https://mccaa.org.mt/media/7551/organic-operators-as-at-15-07-2022.pdf>

²⁹ FiBL, & IFOAM. (2022). The World of Organic Agriculture Statistics and Emerging Trends 2022.

³⁰ Eurostat. (2022). Organic farming statistics. Retrieved September 16, 2022, from https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Organic_farming_statistics#Total_organic_area

³¹ Eurostat. (n.d.). Organic crop area by agricultural production methods and crops. Retrieved September 16, 2022, from https://ec.europa.eu/eurostat/databrowser/view/org_cropar/default/table?lang=en

³² FiBL, IFOAM. (2022). The World of Organic Agriculture Statistics and Emerging Trends 2022.

³³ FiBL, IFOAM. (2022). The World of Organic Agriculture Statistics and Emerging Trends 2022.

³⁴ MAFA. (n.d.). Presentation Organic. Retrieved September 16, 2022, from <https://agrikultura.gov.mt/en/ikeltakwalita/Documents/organicAgriculture/adPresentationOrganic.pdf>

Table 2: Produce on certified organic land in 2019*³⁵

Produce	Area in conversion	Fully converted	Production in 2019 (tons)
Grapes	x	x	14.71
Brassicas	x	x	5.84
Other fresh vegetables	x	x	4.23
Leafy and stalky vegetables	x	x	3.14
Root, tuber and bulb vegetables	x	x	2.74
Wheat and spelt	x	x	2.50
Potatoes	x	x	2.05
Olives	x	x	1.78
Barley		x	1.72
Plants harvested green from arable land	x	x	1.00
Sugar beet		x	0.97
Other permanent crops	x	x	0.95
Vegetables cultivated for fruit	x	x	0.89
Strawberries		x	0.82
Citrus fruits	x	x	0.69
Other root crops	x	x	0.52
Aromatic, medicinal and culinary plants	x	x	0.41
Sunflower seeds		x	0.12
Other pome fruits	x	x	0.11
Plums	x	x	0.05
Dry pulses and protein crops		x	0.04
Peaches	x	x	0.02

*Only yields > 0.1 tons included.

³⁵ MAFA. (n.d.). *Presentation Organic*. Retrieved September 16, 2022, from <https://agrikultura.gov.mt/en/ikeltakwalita/Documents/organicAgriculture/adPresentationOrganic.pdf>

Whilst the NSO regularly publishes statistics on livestock and agriculture, unfortunately no separate, individual statistics on organic versus non-organic produce are available. Aquaponic produce can per se not be certified as organic, due to the requirement for crops to be cultivated in soil and the ban on using recirculating aquaculture systems based on the new Commission Regulation (EU) 2018/848.³⁶

3.1.2.2 Organic aquaculture in Malta

Another pathway to boost organic production could be aquaculture. In fact, the European Commission has committed to significantly increase organic aquaculture by 2030.³⁷ The European Commission encourages EU Member States to include the increase of organic aquaculture among the objectives of their reviewed multi-annual national strategic plans for aquaculture, an objective which is not yet reflected the current Aquaculture Strategy for the Maltese Islands 2014 - 2025.³⁸ While organic aquaculture production is a relatively new sector, it has significant potential for growth. However, to date no organic production data has been recorded by Eurostat/National Maltese Authorities since 2015 according to EUMOFA. Malta has included specific actions intended to drive the shift to organic aquaculture in its Multiannual National Plan for the Development of Sustainable Aquaculture (MNPSA) 2022-2030. These actions aim to promote organic aquaculture practices and certification also by putting in place aid schemes to further invest in this industry.

3.1.2.3 Organic livestock and animal husbandry in Malta

Moreover, another potential sector for which organic practices can be integrated is that of livestock production and animal husbandry practices. This could contribute to animal welfare and environmental protection. Livestock on an organic farm play a vital role, for example in nutrient cycling through utilizing manure and compost to return nutrients back to the soil and weed control as animals can be used to graze out weeds on crops.

The sector is not developed in Malta and according to the Malta Competition and Consumer Affairs Authority (MCCAA), currently no certifications of animal husbandry or other livestock applications have been granted, in line with Eurostat data on organic livestock (none).³⁹

³⁵ Fruscella, L., Kotzen, B., & Milliken, S. (2021). Organic aquaponics in the European Union: towards sustainable farming practices in the framework of the new EU regulation. *Rev. Aquacult.*, 13, 1661-1682. <https://doi.org/10.1111/raq.12539>

³⁷ European Commission. (2021, March 25). New action plan will boost organic agriculture and aquaculture in Europe. Retrieved September 16, 2022, from https://oceans-and-fisheries.ec.europa.eu/news/new-action-plan-will-boost-organic-agriculture-and-aquaculture-europe-2021-03-25_en

³⁸ MAFA. (2014). *Aquaculture Strategy for the Maltese Islands 2014 - 2025*. Retrieved September 16, 2022, from <https://agrikultura.gov.mt/en/fisheries/Documents/maltaAquacultureCentre/Aquaculture%20Strategy%20for%20Maltese%20Islands%20July%202014.pdf>

³⁹ Eurostat. (n.d.). *Organic livestock*. Retrieved September 16, 2022, from https://ec.europa.eu/eurostat/databrowser/view/org_lstspec/default/table?lang=en

3.1.3 Key local characteristics potentially affecting the shift to organic production

To identify the biggest levers, synergies, opportunities and possible hurdles across the agricultural ecosystem in Malta, one must take local characteristics into account. The conversion from conventional to organic methods is most often perceived as challenging and complex, also due to a lengthy process for obtaining permits and the conversion period of 2-3 years. Other potentially inhibiting factors include land fragmentation, windy conditions leading to pesticide drift, proximity to conventional farmers and main roads, unfavorable soil condition and the availability and effectiveness of plant protection products certified for use in organic farming.⁴⁰ Key elements potentially affecting a successful and sustainable increase of organic production have been analysed below:

a. Land fragmentation and parcel size

Conventional farming methods require large, consolidated land holdings to strengthen the competitiveness element of producing the same crop over large land parcels. In Malta, conventional farmers often fail to achieve such benefits due to land fragmentation and parcel sizes.

Organic farming is different as it takes a systemic approach deploying onsite resources, improving the soil structure and quality, reducing excessive tillage and thus improving biodiversity and soil-water retention. Hence, parcel fragmentation does not constitute as big a barrier for organic farming through the practice of micro crop rotation versus mono-cultivation practices in conventional methods.

Organic farming practices utilize micro crop rotation instead of mono-cultivation. Small parcel sizes and the fragmentation of Maltese farmland, and the risk of contamination between parcels presents are often perceived as a major challenge for organic farming practices. However, rubble walls, plant hedges, and vegetation buffers can be effectively deployed to create barriers to conventional farming and other sources of pollution according to analyses undertaken by the MCCAA, where cross contamination in product samples taken on the edges of parcels neighboring conventional farming was not observed. Generally best practices should be applied by all farmers, which include refraining from spraying pesticides when wind speed and direction would cause drift.⁴¹

⁴⁰ MAFA. (2018). *National Agricultural Policy for the Maltese Islands 2018-2028*. Retrieved September 16, 2022, from https://agrikoltura.gov.mt/en/agricultural_directorate/Documents/nationalAgriculturalPolicy/napFinal.pdf

⁴¹ MAFA. (2018). *National Agricultural Policy for the Maltese Islands 2018-2028*. Retrieved September 16, 2022, from https://agrikoltura.gov.mt/en/agricultural_directorate/Documents/nationalAgriculturalPolicy/napFinal.pdf

In addition, certain land parcels that are not located in intensive conventional agricultural areas could be utilized, if made available. This land could present an opportunity to develop bio-districts across Malta. A bio-district is a geographical area with a natural vocation for organic farming. The various actors in the area, including the farmers and associations, would define an agreement for the sustainable management of resources. The idea behind the bio-district approach is to create and reinforce links across the supply chain that would create a win-win situation for everyone. For example, organic farmers would get better market access, consumers would benefit from the transparency related to the origin of their food, and tourism operators would have the opportunity to offer new activities and destinations through eco-trails.

Furthermore, controlling the acquisition and ownership of land is fundamental for the sustainability of agriculture and food production, as well as the protection of the rural environment. This has implications not only on farmers but also on the supply and security of food in Malta. The government is addressing the risk of farmers losing agricultural land through the 'Acquisition and ownership of agricultural land reform'. Several proposals have been made to aid local producers in acquiring and owning land presenting opportunities to the sector, including the setting up of an Authority which will, for example, give farmers who lease land a right of precedence to purchase that same land if the owner chooses to sell, and it will also act as an intermediary bringing together young farmers or genuine farmers who are looking for agricultural land, farmers who are about to retire and who are willing to transfer their land parcel, or private landlords who are willing to lease or sell their land. In addition to the Authority, the reform proposes further tax measures and financial assistance to aid farmers in acquiring their own land.⁴²

b. Fertiliser and pesticide use

Contrary to popular belief, some pesticides and fertilisers are permitted for use in organic farming as long as they are synthesised from elements of 'natural origin'. The MCCA maintains a Database of Authorised Plant Protection Products (PPPs) in Malta for professional use as required by the Regulation (EC) No 1107/2009 as well as a list of PPPs which are in addition authorised for use in organic farming according to Regulation (EC) No EU 834/2007. Thus, there are currently several active ingredients of pesticides and fertilisers, which can be utilised for organic farming in Malta.⁴³ In addition, there is the possibility to apply for inclusion/authorisation of additional active ingredients, which are already authorised for use in the EU, by an agriculture association. However, although this possibility has been advertised/promoted by the authorities, there was no uptake so far.

⁴² MAFA. (n.d.). *Acquisition and ownership of agricultural land reform*. Retrieved November 28, 2022, from https://meae.gov.mt/en/Public_Consultations/MAFA/Pages/Consultations/Acquisitionandofagriculturalallandreform.aspx

⁴³ MCCA. (2019). *List of approved plant protection products that may be used for organic production*. Retrieved September 16, 2022, from <https://mccaa.org.mt/media/4727/ppps-approved-organic-nov-2019.pdf>

An increase in environmentally sustainable farming could also create a spillover effect on practices employed in conventional farming, especially since most farmers are facing difficulties in controlling certain pests and pathogens with chemical methods. A positive trend that has emerged is the promotion of more targeted biological treatments and remedies, such as the Nitrates Directive and Integrated Pest Management (IPM) Strategy. Through the Nitrates Directive, an effective regulatory framework has been set up together with extensive information sessions on the obligations of farmers. Furthermore, the Integrated Pest Management (IPM) strategy was formulated by MCCA in 2015 and is regulated by Legal Notice 489 of 2011 (Sustainable Use of Pesticides Regulations) which provides direction on the utilisation of available plant protection methods.⁴⁴ Farmers looking to adopt such practices should ideally be provided with technical hands-on advice as well as follow-ups on their fields as needed on a case-by-case basis. Functional extension services providing dedicated expertise on this farming system could be an asset for the proliferation of organic practices.

c. Yield and productivity gap and yield stability

Observations from global research into organic production highlight that average organic yields are 70-80% of those obtained under conventional agriculture and combining the yield gap with the reduction in the number of crops harvested in the rotation can lead to an estimated productivity gap of 29% to 44% depending on the type of crops included in the rotation.^{45,46} In addition, a higher yield variability was observed with conventional farming having on average 15% higher yield stabilities.⁴⁷

Furthermore, organic aquaculture presents operators with lower fish density through organic practices in comparison to conventional aquaculture, which acts as a deterrent to convert to more sustainable methods of production.

One should also be cautious when comparing the two options on a yield basis only. The production of organic products will not necessarily be marketed on the same quantity-based platform typically associated with the conventional products. Instead, it is often linked to a premium segment including different branding and targeted customer groups. Thus, organic production demands a shift in all the aspects of production and a customer-focused approach. As organic production supports biodiversity and is generally more environmentally friendly, future efforts should focus on reducing its yield variability and closing the yield gap. Novel technologies such as the use of green manure or enhanced fertilisation can be a major contributor.

⁴⁴ MAFA. (2018). *National Agricultural Policy for the Maltese Islands 2018-2028*. Retrieved September 16, 2022, from https://agrikultura.gov.mt/en/agricultural_directorate/Documents/nationalAgriculturalPolicy/napFinal.pdf

⁴⁵ de Ponti, T., Rijk, B., & van Ittersum, M.K. (2012). *The crop yield gap between organic and conventional agriculture*. *Agricultural Systems*, 108, 1-9. <https://doi.org/10.1016/j.agsy.2011.12.004>.

⁴⁶ Alvarez, R. (2021). *Comparing Productivity of Organic and Conventional Farming Systems: A Quantitative Review*. *Archives of Agronomy and Soil Science*. <https://doi.org/10.1080/03650340.2021.1946040>

⁴⁷ Knapp, S., & van der Heijden, M.G.A. (2018). *A global meta-analysis of yield stability in organic and conservation agriculture*. *Nature Communications*, 9(1), 3632. <https://doi.org/10.1038/s41467-018-05956-1>

d. Farm management

Moving to organic production does not only involve substituting the use of hazardous chemical substances with non- or less-harmful biological methods, but should imply a radical change in farm management. Converting to more sustainable practices takes time, especially to stabilize a healthy production. Whilst several recognized tools and practices exist, improving soil quality is key and can be impacted by minimizing soil disturbance, use of cover crops, establish complex crop rotation systems and utilization of composts and animal manures (avoiding over fertilization and nitrate leakage). The selection of the right seeds, biological pest control, organic pesticide and fertiliser systems use, mulching and tillage also need to be adapted. Each farm operation will have to develop and fine-tune its own combination of these tools and practices to establish a functional organic system.⁴⁸

e. Polyculture and mixed livestock-crop farming

Maltese farmers seem to prefer cultivating a large variety of products, rather than focusing on a few with increased and favorable margins of scale. Some farmers also produce crops and livestock simultaneously. This is due to the fact that customers, buying directly from farmers/ street vendors, prefer to be able to buy all or most of their agricultural products such as fruit and vegetables from one vendor. This behavior needs to be considered when developing incentives for the farmers themselves but also when it comes to supporting them with potential sales and marketing opportunities of their produce.

f. Farmers have shifted focus to more economically viable options than organic

Some farmers have pointed out in the past, that implementing some of the Agri-Environment Climate Measures (AECM) could be more economically viable than converting to organic practices, especially when comparing the effort involved. Aquaculture operators face potential barriers for growth depending on the species and for finfishing the main issues mentioned by stakeholders include the high investments cost or additional labour to support animal welfare, along with the availability and higher costs of organic feed.⁴⁹

⁴⁸ College of Agricultural & Environmental Sciences, University of Georgia. (n.d.). *Organic Production Management*. Retrieved September 16, 2022, from <https://sustainagga.caes.uga.edu/systems/organic-production/management.html>

⁴⁹ EUMOFA. (2022). *Organic Aquaculture in the EU – current situation, drivers, barriers and potential for growth*. May 2022.

3.2 Organic agriculture - policy and regulatory framework

3.2.1 Core policy framework and incentives

Organic farming is highly regulated at European union level, laying down the rules on organic production and labelling of organic product union level. Since 1 January 2022, Regulation (EU) 2018/848 of the European Parliament and of the Council of 30 May 2018 is the applicable legislative act, also known as the basic act. It is complemented by several secondary legal acts further detailing rules on labelling and production, implementation and controls.⁵⁰ Those EU legislative acts have been transposed into national Maltese law -as applicable - by Legal Notice 15 of 2018 on Organic Production and Labelling of Organic Products Regulations.

The designated control authority for Malta, which for example handles the registration of organic farms, on-farm inspections and enforcement, soil testing, certification and the placing of organic products on the market and reporting, is the Malta Competition and Consumer Affairs Authority (MCCAA). On the other hand, the Directorate of Agriculture, which serves as the competent authority, is entrusted with market supervision and surveillance.

Organic farming production rules apply to:

1. Farm production
 - a. Plant production
 - b. Seaweed production
 - c. Livestock production
 - d. Aquaculture production
2. Processed feed production
3. Processed food production

⁵⁰ European Commission. (n.d.). Organic Farming - Legislation. Retrieved September 16, 2022, from https://agriculture.ec.europa.eu/farming/organic-farming/legislation_en

MAFA's Farm Advisory Services are providing technical assistance to incentivise the conversion to organic farming. In addition, financial support was available until 2019 via CAP Measure 11, to convert to organic farming practices and methods and to maintain these. The rate for the former was €1,208.55/ha for land which is in conversion, while for maintenance it amounted to €555.28/ha.^{51,52} Uptake of those incentives in the past has been relatively low, with producers indicating that they were insufficient to cover foregone income and costs associated with organic conversion and maintenance. These rates have been revised under Malta's new CAP SP at €4,377.60/ha for land which is in conversion, while for maintenance it amounted to €3,614.40/ha.

The sustainability of agriculture and food production, as well as the protection of rural environments, is greatly impacted by the control of land acquisition and ownership. Without proper control, farmers risk losing their agricultural land, leading to a decline in both their livelihood and the country's ability to produce food and maintain the rural environment. This affects both organic and conventional farmland. To address this issue, a white paper to reform the agricultural land market was developed as part of Electoral Manifesto Measure 582. The proposal was published for public consultation on October 4th, 2022 and the consultation period ended on November 8th, 2022. The white paper aims to regulate the agricultural land market in a fair and proportionate manner, reducing speculation, protecting rural areas, and most importantly supporting farming's crucial role in the food supply. The proposal includes several measures relating to land acquisition and ownership in the agricultural sector.

3.2.2 Certification and enforcement

The Malta Competition and Consumer Affairs authority (MCCAA) is currently the designated control authority for the registration of organic farms, on-farm controls, soil testing and the placing of organic products on the market. The market surveillance and supervision of the control authority falls within the remit of the competent authority, which is the Directorate of Agriculture within the Ministry for Agriculture, Fisheries and Animal Rights (MAFA).

Certification by the recognised control authority is mandatory for all operators intending to cultivate and/or place on the market and sell loose (by weight/ kg) organic products, sell organic products through an online shop, intend to store organic produce in a separate premises, import or export organic products from or to third countries or distribute to other shops.

Organic operators are categorised into retailers, traders (including transport operators), wholesalers, producers, processors, importers and exporters. Activities of an operator can fall under more than one category.

⁵¹ EU Funds Malta. (n.d.). Measure 11.1. Retrieved September 16, 2022, from <https://eufundsmalta.gov.mt/content/measure-111-payment-convert-organic-farming-practices-and-methods>

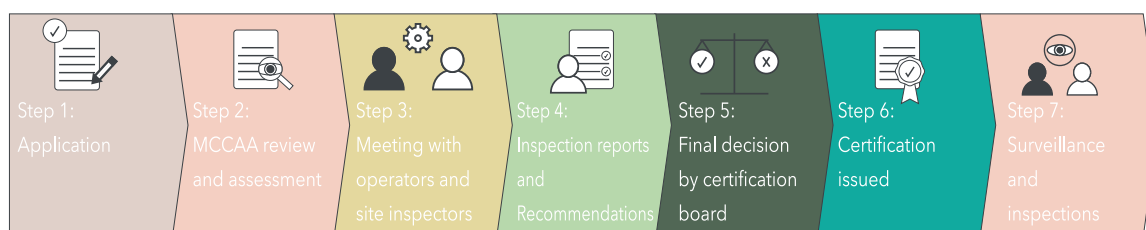
⁵² EU Funds Malta. (n.d.). Measure 11.2. Retrieved September 16, 2022, from <https://eufundsmalta.gov.mt/content/measure-112-payment-maintain-organic-farming-practices-and-methods>

Certain operators can be exempted through written request to the authorities in case their sole activity is to sell organic products directly to the final consumer or user.

The following steps are carried out as part of the certification process:

1. The operator applies for certification based on his role (operator type) via an online form provided on the MCCA website.
2. MCCA will then review the form and a representative will contact the operator, eventually asking for additional specific documents.
3. An inspector will contact the applicant to fix an appointment for the site inspection.
4. During the inspection, an inspection report will be filled out and would include a recommendation or otherwise for certification.
5. This report will be forwarded to the certification board who will take the final decision.
6. A certificate will be issued showing the status of the operator (under conversion or Organic), the type of operator and the certification scope. A unique certification number and logo will be issued to the operator.
7. Surveillance inspections are held at least once a year.

Figure 2 Certification process



The annual certification fees depend on the operator category. For example, producers pay €150 for a total area of up to 1 tumolo and €65 per additional tumolo, with the maximum annual fee being capped at €540. The annual fee for processors and retailers amounts to €120 whilst importers pay €800. Wholesalers and other traders are due a fee of €300 per annum.⁵³

⁵³ MCCA. (n.d.). *Organic Farming Certification - Pricing Schedule*. Retrieved September 16, 2022, from <https://mcca.org.mt/media/4025/organic-farming-certification-pricing-schedule-rev8.pdf>

All products, that comply with the organic production regulation requirements and are handled/produced by certified operators shall bear the "EU organic logo".

Figure 3 Labelling of organic produce



Different obligations as well as certification and inspection/control mechanisms apply to the specific different categories of organic operators. For example, an on-site inspection of a producer would typically assess the use of fertilisers, seeds and seedlings used, risk assessment and assessment of organic practices and sampling & testing of soil, products or others. Whilst for retailers or wholesalers the focus would be on certification (including suppliers) and correct labelling as well as purchasing and sales records of organic labelled products. In 2019 the control authorities carried out 19 market surveillance controls and 71 risk based inspections (Chart 2 and Chart 3).⁵⁴

⁵⁴ MAFA. (n.d.). *Presentation Organic*. Retrieved September 16, 2022, from <https://agrikultura.gov.mt/en/ikeltakwalita/Documents/organicAgriculture/adPresentationOrganic.pdf>

Chart 3 Number of controls made through the market surveillance by Agriculture Directorate in 2019⁵⁵

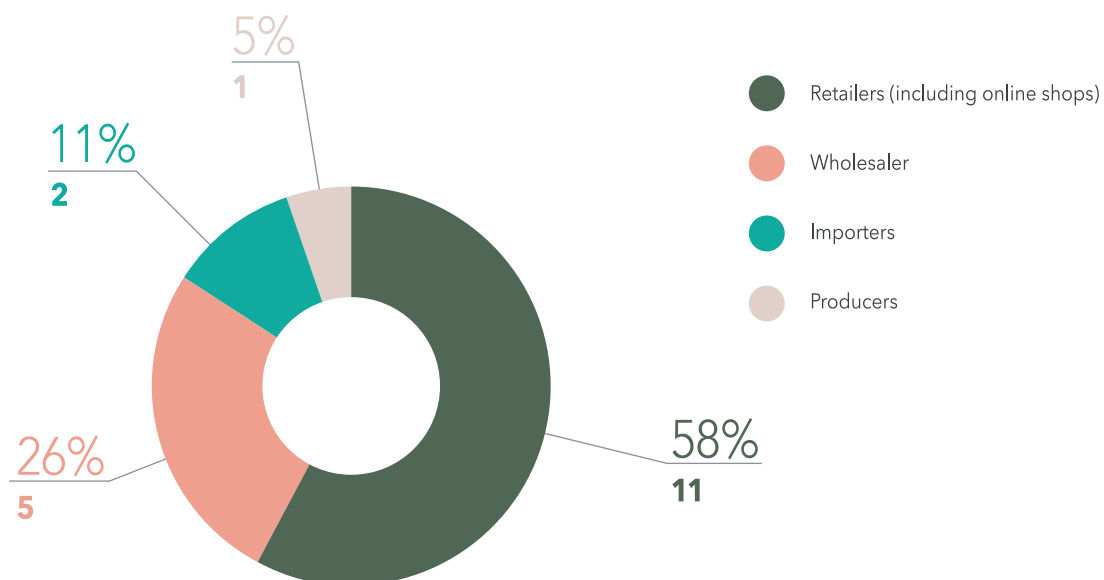
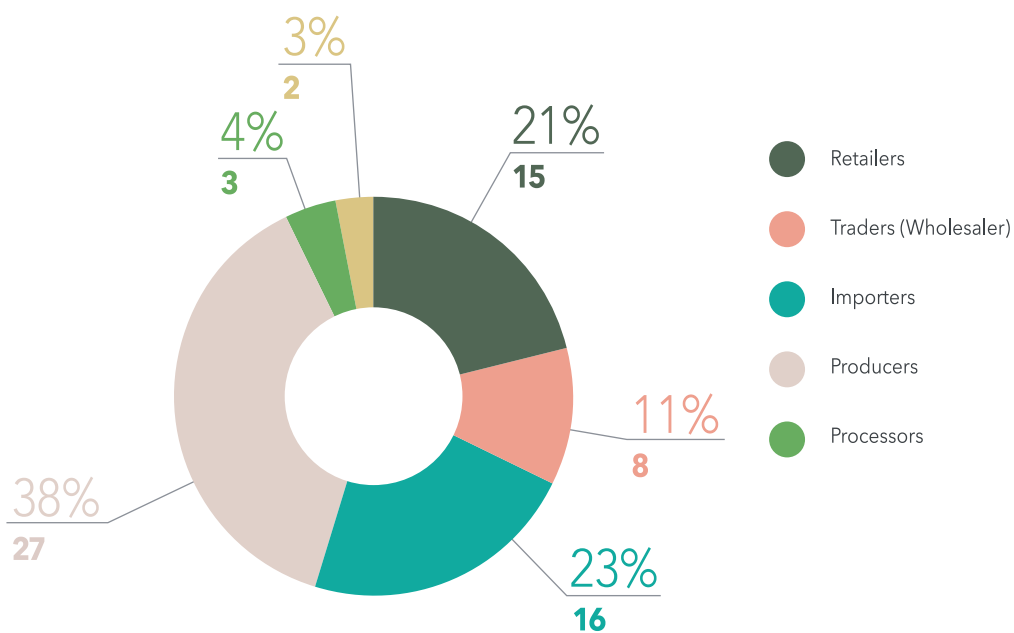


Chart 4 Annual risk-based inspections by the control authority in 2019⁵⁶



⁵⁵ MAFA. (n.d.). Presentation Organic. Retrieved September 16, 2022, from <https://agrikultura.gov.mt/en/ikeltakwalita/Documents/organicAgriculture/adPresentationOrganic.pdf>

⁵⁶ MAFA. (n.d.). Presentation Organic. Retrieved September 16, 2022, from <https://agrikultura.gov.mt/en/ikeltakwalita/Documents/organicAgriculture/adPresentationOrganic.pdf>

3.3 Market outlook and marketing, advertising and pricing strategies for organic food

The global organic food and beverages market was valued at \$187.46 billion in 2021 and is expected to grow at a compound annual growth rate (CAGR) between 12 - 13% during the forecast period 2022 to 2030, surpassing \$497 billion by 2030. The increased demand for clean-label food and beverages products is predicted to be a major driver of organic food and beverages industry growth. Looking at distribution channels, off-line purchases had a 66% of the market share in 2021, whilst 34% were attributed to the online segment. However, the growth trend of the online segment is forecasted to continue due to convenience provided, increased use of internet or further roll-out of express delivery services driven by changing consumer preferences following the COVID-19 pandemic.^{57,58}

The European organic food market is projected to grow at a slightly higher compound annual growth rate than the global market of 13.6% respectively surpassing a total volume of \$184 billion by 2030.⁵⁶ A driver that is expected to continue to contribute for this growth is the increasing awareness of consumers about the health benefits of organic food. Due to the growing number of people facing chronic illnesses such as cardiac issues, cancer, or diabetes, and the rise in healthcare costs, consumers are increasingly focusing on their diet. This includes demand for cleaner and more minimalistic food products, that claim to be "organic" or "free-from". This trend is also extending to beverages, with the segment expected to increase towards a share of more than 9% in 2027.⁵⁹

Whilst the general market outlook is very promising, one also needs to recognise that a substantial number of organic products is being imported. In 2020, the EU27 imported 2.79 million tons of organic agri-food products.⁶⁰ To satisfy the growing market demand and to achieve the EU's goal of 25% organic farmland by 2030, a larger increase of the annual growth rate than currently observed will be needed (2020 EU growth rate for organic farmland was 5.3%).⁶¹

⁵⁷ Polaris Market Research. (2021). *Global Organic Food and Beverages Market Size, Share, Trends, Analysis Report by Product (Organic Food, Organic Beverages), by Distribution Channel (Hypermarket/Supermarket, Convenience Stores, Specialty Stores, Online), by Region, Segment Forecasts, and COVID-19 Impacts, 2021-2028*. Retrieved September 17, 2022, from <https://www.polarismarketresearch.com/industry-analysis/global-organic-food-and-beverages-market>

⁵⁸ Precedence Market Research. (2022). *Organic Food Market Size, Share, Growth & Trends Analysis Report By Product Type (Fruits & Vegetables, Dairy Products, Frozen & Processed Food, Meat, Fish & Poultry), By Distribution Channel, By Region, And Segment Forecasts, 2022 - 2030*. Retrieved September 17, 2022, from <https://www.precedenceresearch.com/organic-food-market>

⁵⁹ Bonafide Research. (2022). *Europe Organic Food and Beverage Market Outlook 2021-2027*. Retrieved September 17, 2022, from <https://www.bonafideresearch.com/product/210229933/europe-organic-food-and-beverage-market>

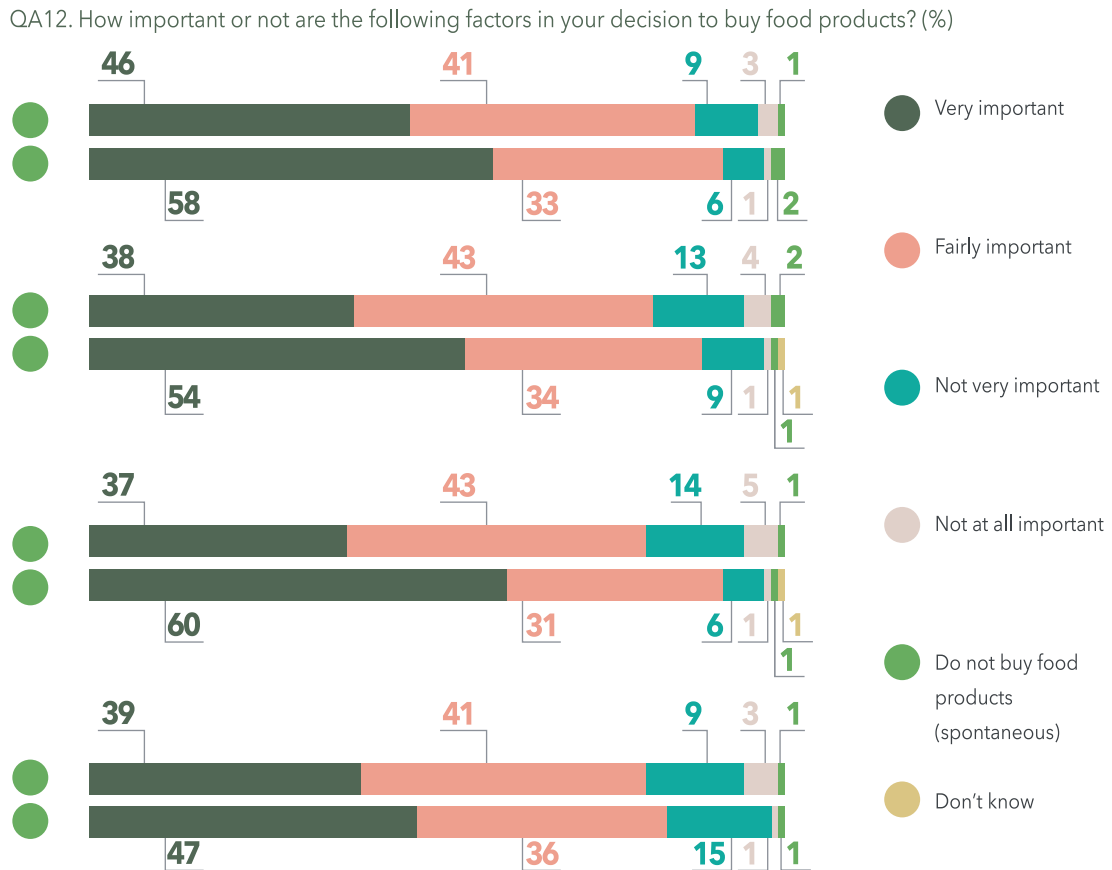
⁶⁰ European Commission. (2021). *EU agri-food imports from third countries - Organic products*. Retrieved September 17, 2022, from https://agriculture.ec.europa.eu/system/files/2021-06/agri-market-brief-18-organic-imports_en_0.pdf

⁶¹ FiBL & IFOAM. (2022). *The World of Organic Agriculture - Statistics and Emerging Trends 2022*. Retrieved from <https://shop.fibl.org/CHen/mwdownloads/download/link/id/15359/>

In most of the larger European countries, the organic retail and wholesale market is already very mature showcasing various sales concepts from organic-only supermarkets, organic (subscription) food box delivery services, organic food markets to large conventional supermarket chains listing more and more organic products and launching own-organic brands. The allocation of an increasing amount of shelf space for organic food in retail stores has been driven by the augmented demand for organic products. The improved accessibility and visibility will accelerate sales and growth of the sector, further fueled by a paradigm shift in consumer preferences.⁶²

Compared to other European countries such as Germany, France or Denmark, the Maltese organic food retail market is still in its infancy, but is expected to be impacted by the same European and global trends, such as increased health awareness and moving towards healthier diets, especially given that Malta has one of the highest obesity rates in the EU of 65%.⁶³

Chart 5 Special Eurobarometer on Agriculture and the CAP: food purchase decisions⁶⁴

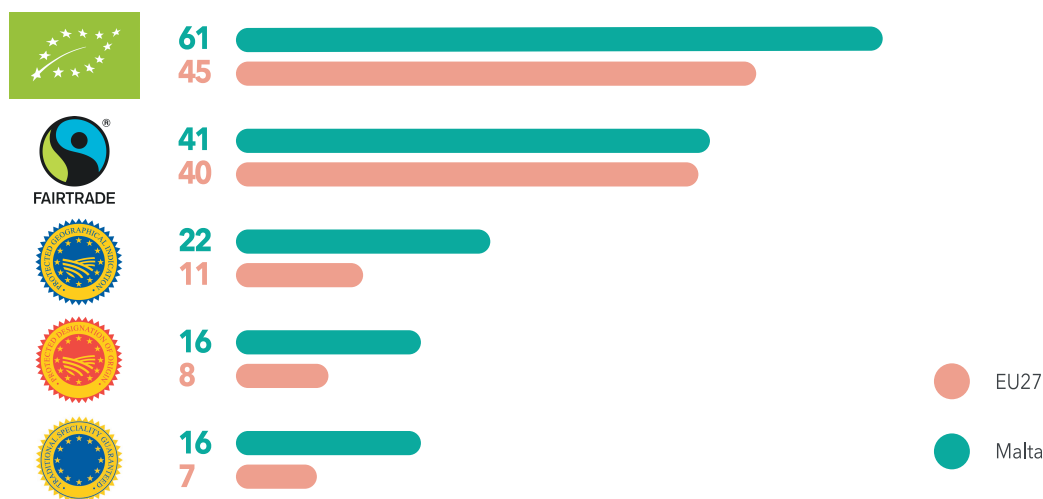


⁶² Bonafide Research. (2022). Europe Organic Food and Beverage Market Outlook 2021-2027. Retrieved September 17, 2022, from <https://www.bonafideresearch.com/product/210229933/europe-organic-food-and-beverage-market>

⁶³ Eurostat. (2019). The EU's external trade in goods in 2018. Retrieved September 17, 2022, from <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/ddn-20210721-2>

⁶⁴ European Commission. (2022). Special Eurobarometer 520: Attitudes of Europeans towards the environment. Country factsheet: Malta. Retrieved September 17, 2022, from <https://europa.eu/eurobarometer/surveys/detail/2665>

QA13. Which of the logos are you aware of? (%)



A current Eurobarometer survey shows that the Maltese pay particular importance to the quality (incl. label), short supply chains/local produce and local traditions when purchasing food, all those requirements can be easily fulfilled by organic local production; however, only 45% of the Maltese recognize the EU organic label (Chart 5). This shows the importance of raising awareness amongst consumers as well as potential need for targeted marketing campaigns for organic products.⁶⁵

Whilst the larger supermarkets chains in Malta usually have a range of organic products, the situation in small corner shops or mini-markets is very different. In general, local organic produce is rarely offered or advertised separately. Organic local producers mostly apply direct marketing models, selling their own produce via direct channels example, via farm shops, food markets, online shops and delivery or direct sales to restaurants and hotels. Other business model options include direct marketing towards wholesalers or collaborative approaches to jointly market the produce and improve margins of scale, product offering and lower administrative individual efforts such as founding farming cooperatives or joint farm shops. Many farmers tend to begin with selling through one marketing channel only example, farm shop or roadside stands and as the business grows or with time tend to diversify to other channels. Direct sales for specific crops or products can also be combined with wholesale channels. However, the business model also strongly depends on the type of product; for example organic grapes are mostly used to produce organic wine, the market of which is mainly international such as tourists.⁶⁶

⁶⁵ European Commission. (2022). Special Eurobarometer 520: Attitudes of Europeans towards the environment. Country factsheet: Malta. Retrieved September 17, 2022, from <https://europa.eu/eurobarometer/surveys/detail/2665>

⁶⁶ EU Observer. (2017, July 5). Malta puts organic food on EU presidency menu. Retrieved September 18, 2022, from <https://euobserver.com/green-economy/138057>

Effective product marketing via several communication channels is key for organic producers, especially if pursuing direct sales routes. With the rise of social media, below the line advertising measures, that is measures beyond mainstream TV, radio or print adverts, have significantly gained importance. Below the line measures include for example: social media marketing, targeted search engine marketing, tastings, trade fair appearances or information stands. As mentioned earlier, the specific product related advertising should ideally be complemented by more general campaigns, informing consumers about the benefits of organic products and differences to conventional farming as well as the labelling of organic food.

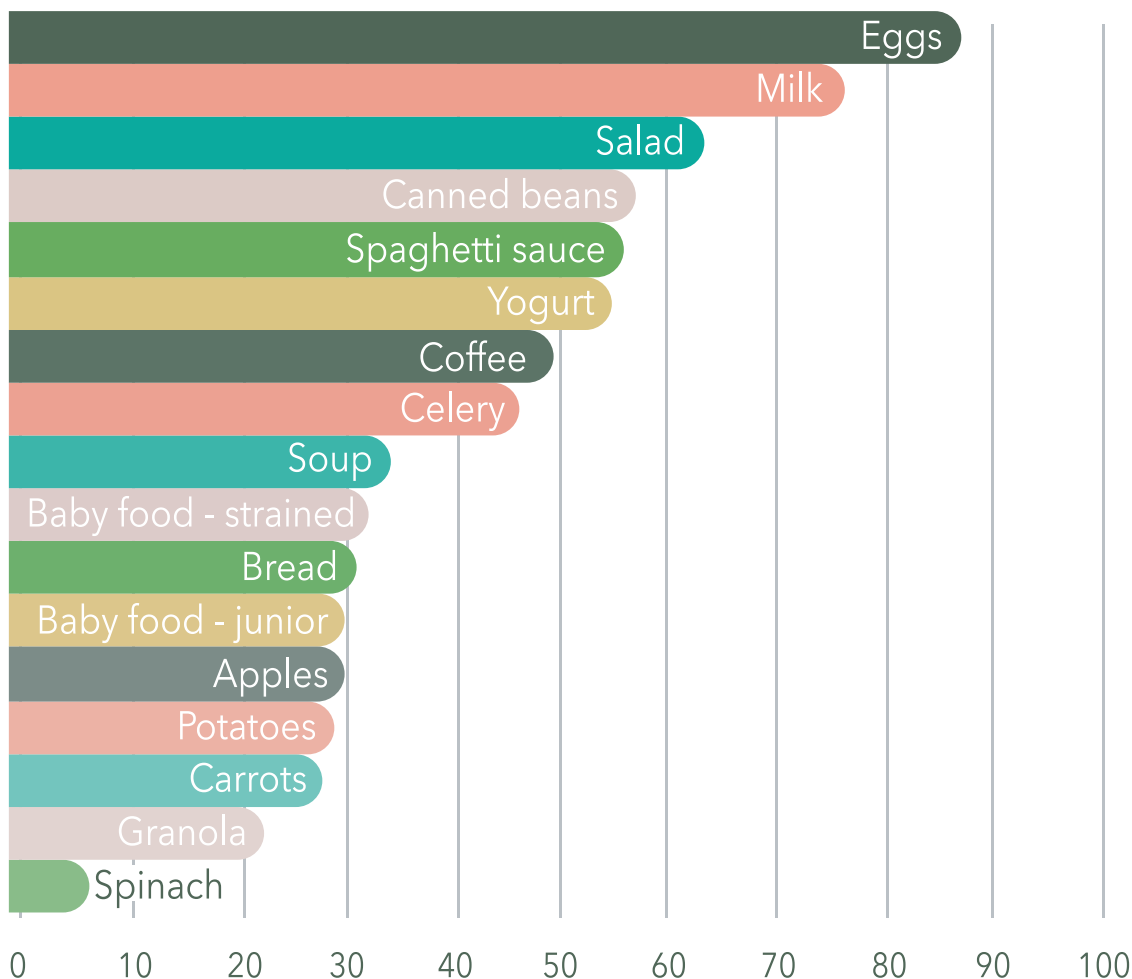
Even though organic farming is often linked to lower yields, higher yield variability (risks) and higher operating costs, some of these can be (partly) offset via pricing strategies as organic products are in general associated with a price premium. A recent piece of market research has shown that although many consumers are inclined to support organic, they might not be willing to tolerate higher price tags. The majority of respondents expected to pay a premium of about 5% and only about 14% indicated willingness to pay a premium of more than 10% for organic products.⁶⁷

A study carried out by the US Department for Agriculture in 2016 analyzed how the price premiums of 17 organic products and their non-organic counterparts developed from 2004 to 2010. In general, all organic products were more costly than their non-organic counterparts, with a premium above 20% for all except for spinach. Most premiums did not show a clear trend (e.g. steady in- or decrease) but fluctuated over the period of seven years. Of the 17 products analysed, only 4 (spinach, canned beans, granola, and coffee) exhibited a general decline of the premium over the whole period. On the other hand the price premiums on strained baby food and yogurt steadily increased. Product-specific supply and demand factors for the 17 products can explain some of the differences with regard to the estimated organic price premiums. Organic price premiums as a percentage of the non-organic price for 2010 are presented in Chart 6. In general, in 2010 dairy and eggs (52% and 82% respectively) had the highest retail-level premiums, whilst fresh fruits and vegetables exhibited the widest spread of premiums, ranging from 7% for spinach to 60% for salad mix. The relative organic premiums for processed foods ranged from 22% for granola to 54% for canned beans.⁶⁸

⁶⁷ Bonafide Research. (2022). *Europe Organic Food and Beverage Market Outlook 2021-2027*. Retrieved September 17, 2022, from <https://www.bonafideresearch.com/product/210229933/europe-organic-food-and-beverage-market>

⁶⁸ US Department for Agriculture. (2016). *Economic Research Report Number 209: Changes in Retail Organic Price Premiums from 2004-2010*. Retrieved September 18, 2022, from https://www.ers.usda.gov/webdocs/publications/45547/59472_err209.pdf?v=0

Chart 6 Organic Price premiums on selected products in the U.S.A in 2010⁶⁹



Looking at different food categories in Europe, the pricing exceeds their conventionally produced counterparts by as much as 5-30% for milk and dairy products, 5-60% for cereal products, 20-82% for eggs, 60% for carrots and onions, 40% for potatoes and 10-60% for organic fish. Nevertheless, consumers are willing to pay very high premiums only in isolated cases. Over time price premiums tend to decrease as supply increases and organic foods are becoming more accessible as supermarkets increase the range of organic products offered. As shown previously, on a global level, the highest price premiums can be observed for dairy products and eggs. For this reason, egg production is one of the most rapidly growing segments of the organic food market. In the wealthy Western European countries, organic eggs represent 8-30% of the poultry market.⁷⁰

⁶⁹ US Department for Agriculture. (2016). *Economic Research Report Number 209: Changes in Retail Organic Price Premiums from 2004-2010*. Retrieved September 18, 2022, from https://www.ers.usda.gov/webdocs/publications/45547/59472_err209.pdf?v=0

⁷⁰ Pawlewicz, A. (2020). *Change of Price Premiums Trend for Organic Food Products: The Example of the Polish Egg Market*. *Agriculture*, 10(2), 35. <https://doi.org/10.3390/agriculture10020035>

When looking at the conversion cost and possible price premiums in Malta, one also needs to consider local differences. For example one major driver of European dairy farmers to convert to organic in the past – a higher price per litre of milk, was not necessarily applicable for Malta, as farmers already received a much higher price compared to EU average.^{71,72} In addition, for some industries such as wine making, which already target the premium and high-end market, the conversion towards organic and a potential operating cost increase and yield decrease can be better absorbed and is thus felt to a lesser extent, rendering conversion less of a “risk”.⁷³

However, recent data from Germany on organic farm income shows, that organic farms can even be more profitable than conventional farms. According to calculations by the Thünen Institute, the organic farms selected for the comparison made an average profit plus labour costs per worker of €39,958 in the 20/21 financial year. The conventional reference farms, which were selected to have comparable site conditions and production factors, made an average profit of €32,133 only. Thus the average income of the organic test farms surpassed the income of the conventional reference farms by 24%. The calculations are based on 563 organic farms and 3,243 conventional reference farms.⁷⁴

⁷¹ European Commission. (n.d.). Milk Market observatory. Retrieved September 18, 2022, from https://agriculture.ec.europa.eu/data-and-analysis/markets/overviews/market-observatories/milk_en

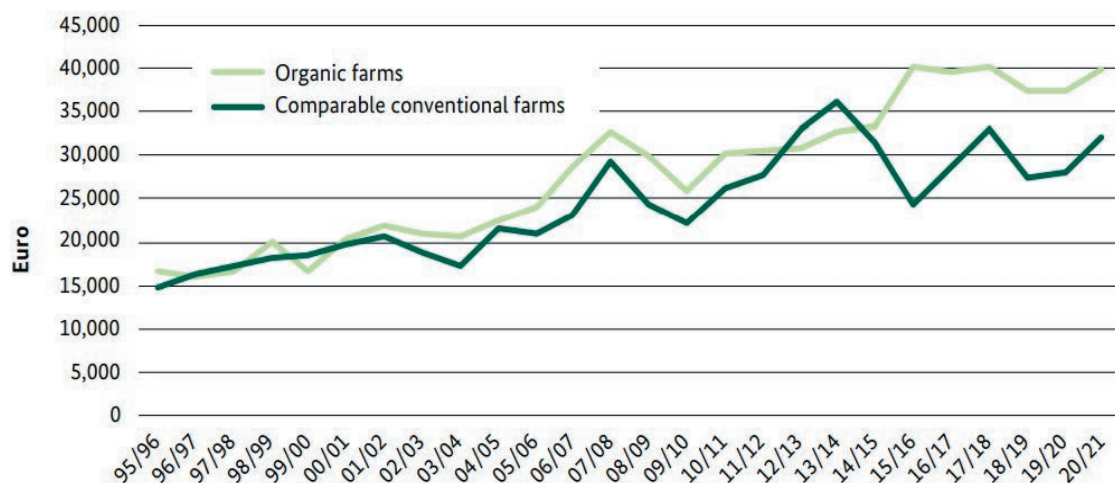
⁷² EU Observer. (n.d.). Green economy. Retrieved September 18, 2022, from <https://euobserver.com/green-economy/138057>

⁷³ EU Observer. (n.d.). Green economy. Retrieved September 18, 2022, from <https://euobserver.com/green-economy/138057>

⁷⁴ German Federal Ministry on Agriculture. (2022). Organic Farming in Germany. Retrieved September 18, 2022, from https://www.bmel.de/SharedDocs/Downloads/EN/Publications/Organic-Farming-in-Germany.pdf?__

Chart 7 Development of income (profits plus labour costs per worker) of organic farms and comparable conventional farms⁷⁵

Profit plus labour costs per worker



¹ The increase in income in the 2020/21 financial year is caused in part by a change in comparison criteria.

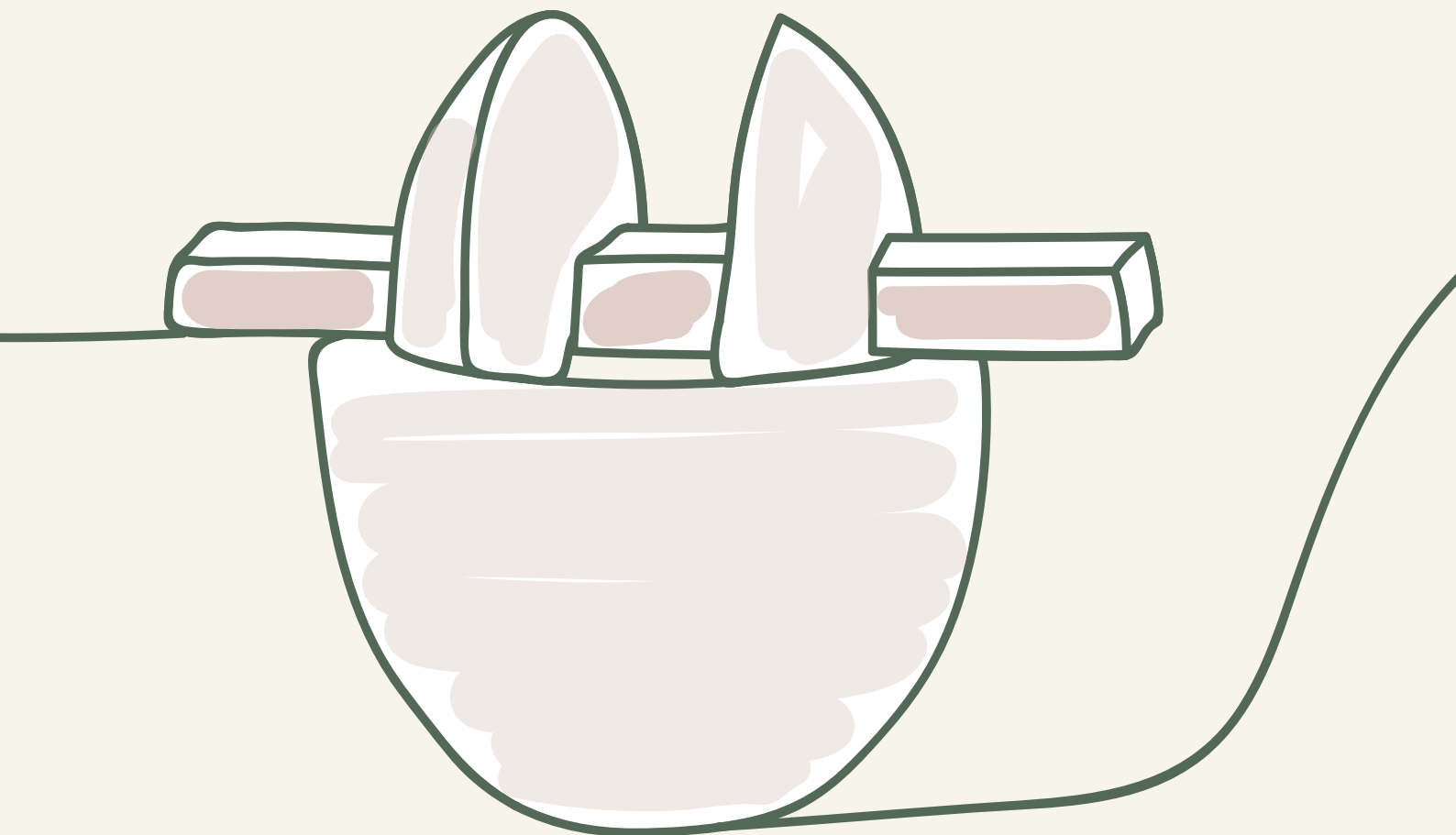
Source: Thünen Institute based on test farm data (FY 1995/96 – 2020/21)

This very positive trend clearly shows that organic farming cannot only compete with conventional methods but also outperform it in the long run. Thus, exhibiting a solid financial business case in addition to the broad range of environmental and societal benefits.

⁷⁵ German Federal Ministry on Agriculture. (2022). Organic Farming in Germany. Retrieved September 18, 2022, from https://www.bmel.de/SharedDocs/Downloads/EN/Publications/Organic-Farming-in-Germany.pdf?__blob=publicationFile&v=4



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