





Stakeholder Organic Sector Mapping in Cyprus

ORGANIKO LIFE+ PROJECT

Revamping organic farming and its products in the context of climate change mitigation strategies

Type of deliverable: Report

Partner: Agricultural Research Institute

Author: Andreas Stylianou

Contributors: Michalis Omirou, Damianos Neocleous, Panagiotis Dalias, Dionysia Fasoula, Soteroula Ioannidou, Ioannis Ioannides

Nicosia, 2016







Contents

Aims and Scope	3
1. Organic Sector in the European Union (EU-28)	3
2. Organic Sector in Cyprus.	5
2.1. Organic area and organic producers	6
2.2. Organic land use	8
2.3. Certified organic crop production	10
2.4. Certified organic livestock	12
2.5. Processing and Trade of organic products	13
References	14
Appendix. The Organic Sector in Cyprus at a glance	15







Aims and Scope

This report is included in the preparatory actions of the project LIFE+ORGANIKO ("Revamping organic farming and its products in the context of climate change mitigation strategies"). The aim of this report is to provide a comprehensive mapping of the Organic Sector in Cyprus from the production at farm level right through to processing and trading (wholesale, retail, imports and exports). Thus, the report describes the current situation of the wider Organic Food Supply (Value) Chain in Cyprus and presents useful information for each part/actor constituting the Supply Chain. At the end of this report, the Organic Sector in Cyprus is presented at a glance (see Appendix).

1. Organic Sector in the European Union (EU-28)

European Union (EU-28) is considered to be a global forerunner in organic farming. This is due to a number of reasons, such as the strong consumer demand, the legal protection and requirements for organic production and labelling, the development of private organic standards and labelling as well as the Common Agricultural Policy (CAP) support measures (Helga and Lernoud, 2015).

The total organic area, the number of organic producers, as well as the organic market in the EU-28 show an upward trend and the wider organic sector is characterised by dynamic growth. Over the last decade, the total organic area in the EU increases by approximately 500000 hectares (ha) every year. In 2014, the total organic area (fully converted and under conversion) in the EU-28 was 10.3 million ha compared with 10.1 million in 2013 (+2.3% change) corresponding to 5.9% of the total Utilised Agricultural Area (UAA). Figure 1 shows the organic area as a percentage of the UAA by EU Member State for 2014. It can be seen that in Austria, Sweden and Estonia the share was over 16%, while in Czech Republic, Italy and Latvia was over 10% of the UAA. In the remaining countries, the share of organic area ranged from 0.3% in Malta to 9.5% in Slovakia (Eurostat, 2015).

The number of organic producers was 257124 in 2014, an increase of 2.1% from 2013. It is worth mentioning that organic producers accounted for over 80% of the 312500 organic operators in the same year in the EU-28, while over 38000 were organic processors and the rest were importers, exporters and traders (wholesalers and retailers) (Eurostat, 2015).

In the EU-28 the organic area is divided into three main crop types: arable land crops (cereals, green fodder, fresh vegetables and industrial crops), permanents crops (fruit trees and berries, olive groves and vineyards) and pastures and meadows (permanent grassland). Pastures and meadows are mostly used for grazing organic livestock and represent 45.7% of the total organic area of the EU-28 followed by arable (42.8%) and permanent crops (11.5%) (Eurostat, 2015). Regarding organic livestock in EU, statistics are incomplete and give only a partial picture of the sector.







Nevertheless, taking into consideration available information, the EU organic livestock sector shows an upward trend as well (EC, 2014). In 2014, about 3.6 million heads of bovine animals, 4.4 million sheep, 0.7 million goats, 33.6 million poultry and 0.9 million pigs were kept in EU-28 with sheep species having the lead (Eurostat, 2015). It is noted that organic animal production still remains limited in comparison with the total animal production in EU (between 0.5 and 4% depending on the animal species) (Helga and Lernoud, 2015).

Organic farming is part of the wider Organic Food Supply Chain, which encompasses food processing and trade. With regard to the EU organic market, organic products also represent a growing share in the EU food market. In 2013, the value of the EU organic market was €22.2 billion and is the second largest market globally, after the United States. In comparison with 2012 figures, the growth rate for the EU organic market was approximately 6%. Germany, France, United Kingdom and Italy are the largest markets with €7.6, €4.4, €2.1 and €2 billion, respectively. Moreover, the per capita consumption of organic products in the EU is higher than in other parts of the world. Specifically, in four EU countries (Denmark, Luxembourg, Austria and Sweden) the per capita consumption was over €100, while in some other EU countries (e.g. Cyprus, Portugal, Bulgaria) was less than €5. Unfortunately, there is no available data on imports and exports in the EU and thus it is difficult to draw clear conclusions on the developments of exports and imports. However, taking into account the growing domestic markets, it may be assumed that trade activities will also increase (Katsarova, 2015; Helga and Lernoud, 2015).

Marketing or distribution channels of organic products are also an important aspect of the Organic Food Supply Chain in EU. According to a recent study (Katsarova, 2015), the majority of the consumers in the EU buy their organic products in specialized organic shops and supermarkets (67% and 65%, respectively) but other channels are also used, like direct marketing (directly from the farm where the food was produced), local markets, farmers' cooperatives and Internet. However, the importance of individual marketing channels differs among the EU countries. For example, in some countries, direct marketing and marketing via specialized shops dominate the organic sector, while in some others most of the sales are concentrated in supermarkets and non-specialized shops.







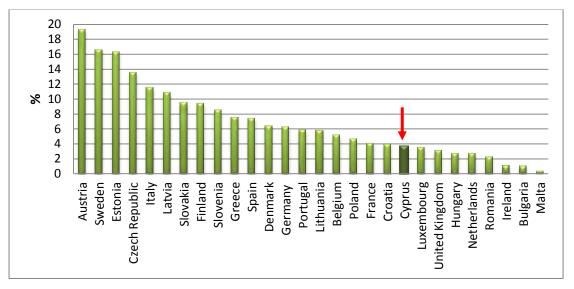


Figure 1. Share of organic area (fully converted and under conversion) in total UAA, by country, 2014 (EU-28).

Source: Eurostat (org cropap)

2. Organic Sector in Cyprus

The competent authority in Cyprus for the promotion of organic farming and for the implementation of EU Regulation 834/2007 and the National Law on organic farming 227(I)/2004, is the Department of Agriculture (DoA) of the Ministry of Agriculture, Rural Development and Environment (MARDE). The responsibility of the official organic controls is shared among two private bodies (control or certification bodies), which are accredited by the DoA. The one is "Lacon Ltd" and the other is "Biocert Cyprus." A National Registry for the organic farming is also kept by the DoA. Research on organic farming aspects is carried out mainly by the Agricultural Research Institute (ARI).

Concerning the organization of organic producers in Cyprus, two officially recognized organizations are involved in the organic production: the Producers' Group "SYNERGATIKI ETERIA AMPELOURGON PISSOURIOU (S.E.A.P.)" and the Producers' Organization "BIOAMPELOS CYPRUS P.O. LTD". Both are mostly engaged in the production and marketing of grapes and grape-derivative products, like raisins. Moreover, at national level, there is one association in the organic sector, the Cyprus Organic Farmers Association (C.O.F.A.).

Despite the fact that organic farming in Cyprus seems to be developing at a fast pace in the last decade, is still lagging behind in terms of the share of organic area in total UAA compared with other EU countries. As shown in Figure 1, Cyprus is in the twentieth place among the EU-28 countries.







2.1. Organic area and organic producers

In 2002, there were only 45 registered organic producers in Cyprus which cultivated 1665 decares¹ (0.12% of the total UAA). From 2004, when Cyprus became a member of the EU, to 2011 the number of producers increased to 762 and the organic area to 40033 decares corresponding to 3.04% of the UAA (see Table 1 and Figure 2). This dynamic development during the period 2004-2011 is probably due to the EU and National policies for the promotion of organic farming and to the change in consumers' preferences for healthy and quality food. During the period 2012-2014 the share of organic area in the UAA has stagnated at approximately 3%. Specifically, in 2014, the most recent year for which data is available, the number of producers was 743 and the total organic area was 38870 decares (3% of the UAA). Figure 3 illustrates the evolution of the share of the organic area in the UAA in Cyprus for the period 2002-2014 (DoA, 2014).

Table 1. Organic producers, total organic area (fully converted and under conversion) and share of total UAA occupied by organic farming in Cyprus, 2002-2014

Year	Number of organic producers	Area (decares)	% of UAA
2002	45	1665	0.12
2003	85	3010	0.22
2004	150	9093	0.69
2005	320	17091	1.30
2006	388	20008	1.56
2007	468	23149	1.75
2008	582	28400	2.15
2009	670	35750	2.70
2010	697	38210	2.90
2011	762	40033	3.04
2012	719	39639	3.01
2013	746	40358	3.06
2014	743	38870	3.00

Source: Department of Agriculture, 2014

-

 $^{^{1}1 \}text{ decare} = 0.1 \text{ha} = 1000 \text{m}^{2}$







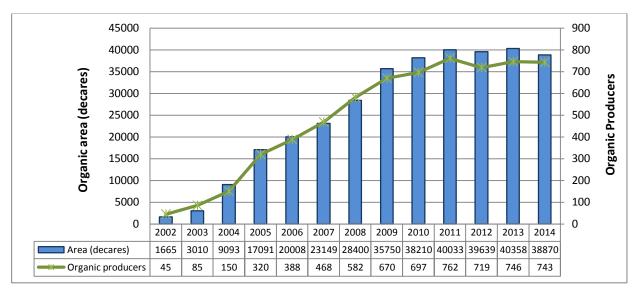


Figure 2. Evolution of the area and producers involved in the organic sector in Cyprus (2002-2014)

Source: Department of Agriculture, 2014

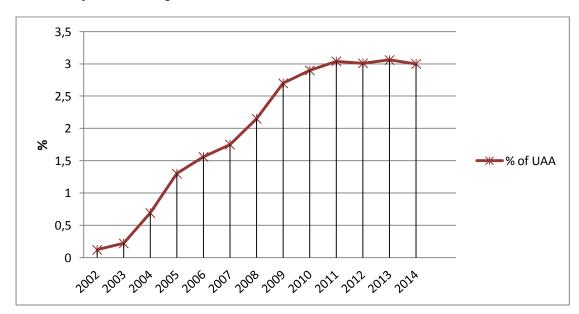


Figure 3. Evolution of the share of the organic area in the UAA in Cyprus (2002-2014) **Source**: Department of Agriculture, 2014

Regarding the distribution of organic area in Cyprus, as shown in Figure 4, Lefkosia, Larnaka and Pafos have the biggest shares in total organic area (31.1%, 28.4% and 20.6%, respectively) followed by Lemesos (17.1%), Ammochostos (1.6%) and Pitsilia (1.2%) (DoA, 2014).







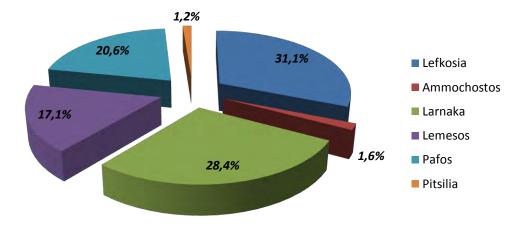


Figure 4. Organic area as a percentage of UAA by agricultural region in Cyprus. **Source**: Department of Agriculture, 2014

2.2. Organic land use

According to the DoA (2014), the main crop types in Cyprus are arable land crops and permanent crops with 47.4% and 43.6% of the total organic area, respectively. Pasture and meadows represent only 9% of the total organic land. Among arable land crops, cereals accounted for approximately 23% of the arable land in 2014 (10.9% of the total organic area) and green fodder for 51% (24.4% of the total organic area), while fresh vegetables made up the smallest share (1.6% of the arable land and 0.8% of the total organic area). Organic olive groves is the most important permanent crop with more than 65% of the total permanent crops land and 28.4% of the total organic area, followed by vineyards with approximately 12% of the permanent crops land and 5.2% of the total organic land. Organic land use in Cyprus is shown in Table 2 and illustrated in Figure 5.







Table 2. Organic area (fully converted and under conversion) by crop and shares in total organic area in Cyprus (2014)

ID	Стор	Area (decares)	% of total organic area
1	Wheat	1489.6	3.8
2	Barley	2732.2	7.0
3	Total cereals land (1+2)	4221.8	10.9
4	Potatoes	163.7	0.4
5	Aromatic, medicinal and culinary plants	709.7	1.8
6	Plants harvested green from arable land	9479.9	24.4
	(green fodder)		
7	Brassicas	60.0	0.2
8	Leafy and stalked	49.2	0.1
9	Vegetables for fruit (incl. melons)	65.0	0.2
10	Root, tuber and bulb	72.7	0.2
11	Fresh pulses	50.5	0.1
12	Total fresh vegetables land	297.4	0.8
	(7+8+9+10+11)		
13	Fallow land	3544.0	9.1
14	Total arable land (3+4+5+6+12+13)	18416.5	47.4
15	Pasture and meadows	3510.2	9.0
16	Apples	141.2	0.4
17	Pears	26.2	0.1
18	Other pome fruits	31.9	0.1
19	Peaches	164.5	0.4
20	Nectarines	15.0	0.0
21	Apricots	137.8	0.4
22	Cherries	17.7	0.0
23	Plums	276.0	0.7
24	Other stone fruits	177.4	0.5
25	Fruits from subtropical and tropical	507.6	1.3
26	climate zones Berries (excl. strawberries)	71.0	0.2
27	Nuts	872.1	2.2
28	Citrus fruits	561.3	1.4
28 29	Grapes	2013.1	5.2
30	Olives	11042.3	28.4
31	Other permanents crops	891.0	2.3
32	Total permanent crops land	16946.1	43.6
34	(16+17++31)	10/70.1	73.0
33	Total organic land (14+15+32)	38872.8	100.0

Source: Department of Agriculture, 2014; Eurostat (org_cropap)







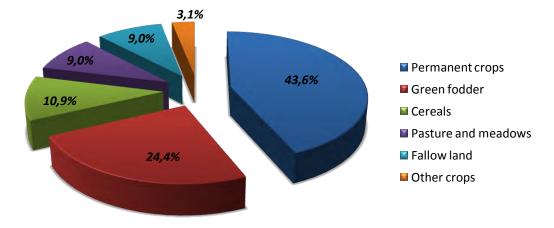


Figure 5. Organic land use as a percentage of total organic area in Cyprus, 2014 **Source**: Department of Agriculture, 2014; Eurostat (org. cropap); see also Table 2

2.3. Certified organic crop production

It should be clarified that certified organic production comes from fully converted areas (areas under conversion are excluded). When looking at the information provided in Table 3, the total organic crops production in 2014 was over 7900 tons, an increase of 1.6% from 2013. However, the production volume of most crops in 2014 was significantly reduced compared with 2013. Cereals and green fodder production volumes decreased by more than 85%, respectively in 2014, while fresh vegetables production decreased by 15.8%. In contrast, potatoes and permanent crops production volumes increased by 35.2% and 41.9% respectively, with olives showing the biggest positive change (201.7%) (DoA, 2014; Eurostat, 2015).

It is worth to mention that the total organic area is the sum of the "area under conversion" and the "fully converted area." The area under conversion as a percentage of the total organic area can give an indication of the potential growth in the organic farming in the coming years. In 2014, the area under conversion in Cyprus was 14872.9 decares and the total organic area 38872.8 decares. As a result, the share was over 38% which shows that organic production in Cyprus may significantly increase in the years to come.







 Table 3. Certified organic crop production in Cyprus (2013-2014)

		Production volume (tons)		Change
ID	Crop	2013	2014	- 2013-14 (%)
1	Wheat	707.00	97.84	-86.2
2	Barley	643.00	136.61	-78.8
3	Oats	306.00	0.00	-100.0
4	Total cereals production	1656.00	234.45	-85.8
	(1+2+3)			
5	Potatoes	181.00	244.80	+35.2
6	Aromatic, medicinal and culinary plants	113.00	69.91	-38.1
7	Plants harvested green from arable land (green fodder)	342.00	11.06	-96.8
8	Brassicas	0.00	125.00	
9	Leafy and stalked	438.00	176.80	-59.6
10	Vegetables for fruit (incl.			
	melons)	230.00	120.00	-47.8
11	Root, tuber and bulb	0.00	140.00	
12	Fresh pulses	111.00	94.40	-15.0
13	Total fresh vegetables	779.00	656.20	-15.8
	production (8+9+10+11+12)			
14	Apples	153.00	137.64	-10.0
15	Pears	36.00	29.28	-18.7
16	Other pome fruits	n.a*	19.84	
17	Peaches	43.00	43.96	+2.2
18	Nectarines	9.00	10.50	+16.7
19	Apricots	86.00	86.73	+0.8
20	Cherries	27.00	19.44	-28.0
21	Plums	226.00	171.20	-24.2
22	Other stone fruits	n.a.	122.78	
23	Fruits from subtropical and tropical climate zones	293.00	419.10	+43.0
24	Berries (excl. strawberries)	0.00	0.00	
25	Nuts	273.00	180.13	-34.0
26	Citrus fruits	1173.00	758.34	-35.4
27	Grapes	1414.00	1319.01	-6.7
28	Olives	991.00	2990.34	+201.7
29	Other permanents crops	n.a.	394.14	
30	Total permanent crops production (14+15++28)	4724.00	6702.43	+41.9
31	Total organic crops production (4+5+6+7+13+30)	7795.00	7918.85	+1.6

^{*}not available

Source: Department of Agriculture, 2014; Eurostat (org_cropap)







2.4. Certified organic livestock

Even though organic livestock sector in Cyprus shows an upward trend, is still at an early stage of development. The organic livestock consists of sheep, goats and poultry species. There are no organic bovine animals or pigs. Looking at the data of Table 4, in 2014 in Cyprus were reared 1306 heads of sheep (+23.2% change from 2013), 4502 goats (+17.1% change from 2013) and 8616 heads of poultry (-9.8% change from 2013) (DoA, 2014; Eurostat, 2015).

As shown in Table 5, the organic production of animal origin shows a positive trend. In 2014, poultry meat and sheep milk production, increased by 50% and 63.7%, correspondingly, compared with 2013 production volumes. Goats milk, drinking milk and cheese production volumes, increased by more than 80%, respectively, while acidified milk production increased by 266.3%. The increase in production of eggs exceeded 50% (DoA, 2014; Eurostat, 2015).

Table 4. Certified organic livestock in Cyprus (2013-2014)

Livestock -	Heads		Change 2013-14	
Livestock -	2013	2014	<u> </u>	
Sheep	1060	1306	+23.2	
Goats	3844	4502	+17.1	
Poultry	9550	8616	-9.8	

Source: Department of Agriculture, 2014; Eurostat (org. lstspec)

Table 5. Certified organic animal products in Cyprus (2013-2014)

Livestock	Production volume (tons)		Change 2013-14	
product*	2013	2014	(%)	
Poultry meat	10.00	15.00	+50.0	
Sheep milk	159.60	261.20	+63.7	
Goats milk	719.40	1350.60	+87.7	
Drinking milk	264.00	483.54	+83.2	
Cheese	50.00	92.10	+84.2	
Acidified milk	132.00	483.54	+266.3	
Eggs for				
consumption				
(number)	745500.00	1179360.00	+58.2	

^{*}There is no market for sheep and goat meat, so this kind of meat is sold as conventional; Sheep and goat milk is the raw milk, produced at the farm.

Source: Department of Agriculture, 2014; Eurostat (org aprod)







2.5. Processing and Trade of organic products

Activities within the organic sector include not only the production at farm level (i.e. organic crops and rearing of organic animals), but also the processing of organic products, and other important activities, such as wholesale and retail trade, imports and exports. Unfortunately, the available official data on processing and trade of organic products is limited and insufficient. Hence, a complete picture of the organic sector and of the Organic Food Supply Chain in Cyprus is at this point in time unavailable. It should be noted that according to Eurostat's definition, an organic producer is "any natural or legal person who operates an agricultural holding involved in producing, packaging and labelling his own organic products." Packaging and labelling of organic products is also considered to be processing. As a result, a number² of organic producers may also be processors. The producers which are also processors are included in the 743 organic producers (see Table 1).

In Cyprus, there were about 51 processors at the end of 2014. Most of them (33), were engaged in the processing of vegetable and animal oils and fats, while 4 in the processing and preserving of fruit and vegetables, 2 in manufacture of dairy products, 2 in bakery and farinaceous products, 3 in the manufacture of beverages (wine from grape) and 6 were processors of other food products. One (1) processor was engaged in the manufacture of grain mill products, starches and starch products (DoA, 2014).

Regarding sales and trade of organic products, approximately 55 traders (wholesalers and retailers), 4 importers and 4 exporters were counted in 2014. Exports to EU and other countries are very limited and involve small quantities of table grapes, raisins and citrus fruits. Almost no official data is available on retail sales of organic products. However, retail sales in Cyprus are estimated at €2 million (Kilcher et al., 2011; Helga and Lernoud, 2015) and the per capita consumption at only €2, which is considered to be amongst the lowest in the EU-28 (Kilcher et al., 2011). According to DoA (2014), there are over 26 specialized healthy and organic food shops in Cyprus, while the majority of the large supermarket chains have specific spaces and shelves with organic products. Consumers might also encounter organic products in greengroceries. Other distribution/marketing channels for organic products are included in the broader category of direct marketing which involves organic farmers market, on-farm shops (directly from the farm where the food was produced), street markets and roadside stalls, and via Internet. It is noted that the retail prices of certified organic products are generally higher than the price of their conventional counterparts (Markou and Stylianides, 2009; DoA, 2013).

Consumers is the last important part of the Organic Food Supply Chain, however there is limited information on their perceptions and attitudes towards organic products in Cyprus. A study conducted by Markou and Stylianides (2009) on

_

² The number of organic producers that are also processors in Cyprus is not officially available.







Cypriot organic market, showed that even though the majority of consumers surveyed were aware of organic farming, only a few buy certified organic products. Moreover, consumers are willing to pay premium prices to buy organic products.

References

Department of Agriculture (DoA). 2013. Current Situation Analysis of the Agricultural Sector in Cyprus (in Greek). Available at: http://www.moa.gov.cy/moa/da/ead/ead.nsf/All/CC795D1070EE1EC9C2257C0F00275C5D/\$file/SWOT-FINAL%2015.20.pdf.

Department of Agriculture (DoA). 2014. *Organic Sector in Cyprus*. Quality Products Section (personal communication).

European Commission (EC). 2014. *The rapid growth of EU organic farming*: Key facts and figures. EU Agricultural Markets Briefs.

Eurostat. 2015. *Organic farming statistics*. Available at: http://ec.europa.eu/eurostat/statistics-explained/index.php/Organic_farming_statistics [Accessed January 2016].

Helga, W. and Lernoud, J. 2015. *The World of Organic Agriculture. Statistics and Emerging Trends 2015*. FiBL-IFOAM Report. Research Institute of Organic Agriculture (FiBL), Frick, and IFOAM – Organics International, Bonn, 306 p.

Katsarova, I. 2015. *Organic food: Helping EU consumers make an informed choice*. European Parliamentary Research Service, European Parliament.

Kilcher, L., Willer, H., Huber, B., Frieden, C., Schmutz, R. and Schmid, O. 2011. *The Organic Market in Europe*: 3rd edition, SIPPO, Zürich and FiBL, Frick.

Markou, M. and Stylianides, T. 2009. A plan to place successfully organic products in the Cypriot market. *Journal of Development and Agricultural Economics*, Vol. 1 (3), pp. 055-074.







Appendix. The Organic Sector in Cyprus at a glance

