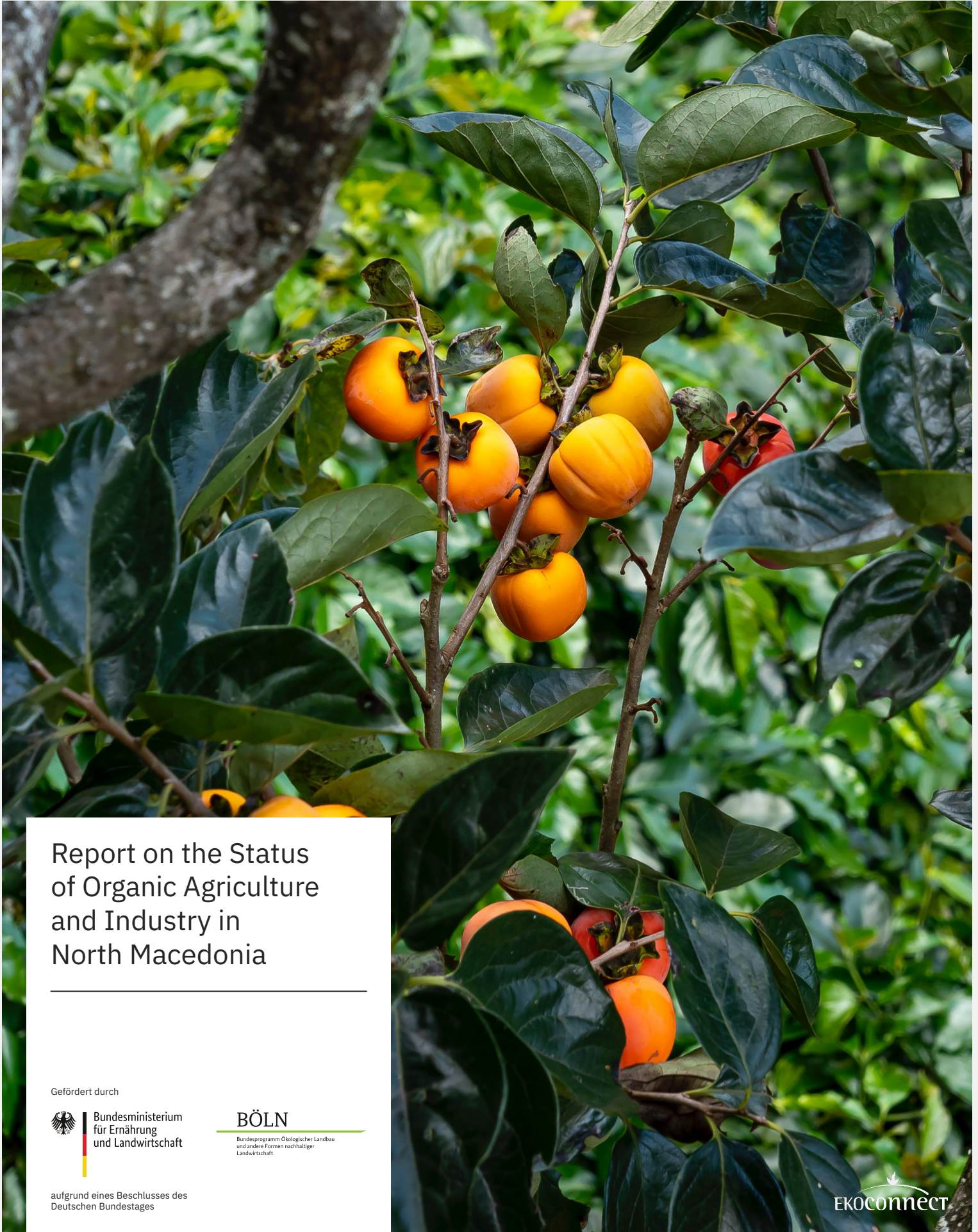


NORTH MACEDONIA



Report on the Status
of Organic Agriculture
and Industry in
North Macedonia

Gefördert durch



Bundesministerium
für Ernährung
und Landwirtschaft

BÖLN

Bundesprogramm Ökologischer Landbau
und andere Formen nachhaltiger
Landwirtschaft

aufgrund eines Beschlusses des
Deutschen Bundestages

Imprint

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Disclaimer

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This report has been prepared to the best of our knowledge and belief. We cannot however accept any guarantee for the accuracy, correctness or completeness of the information and data provided.

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North Macedonia: Facts and Figures

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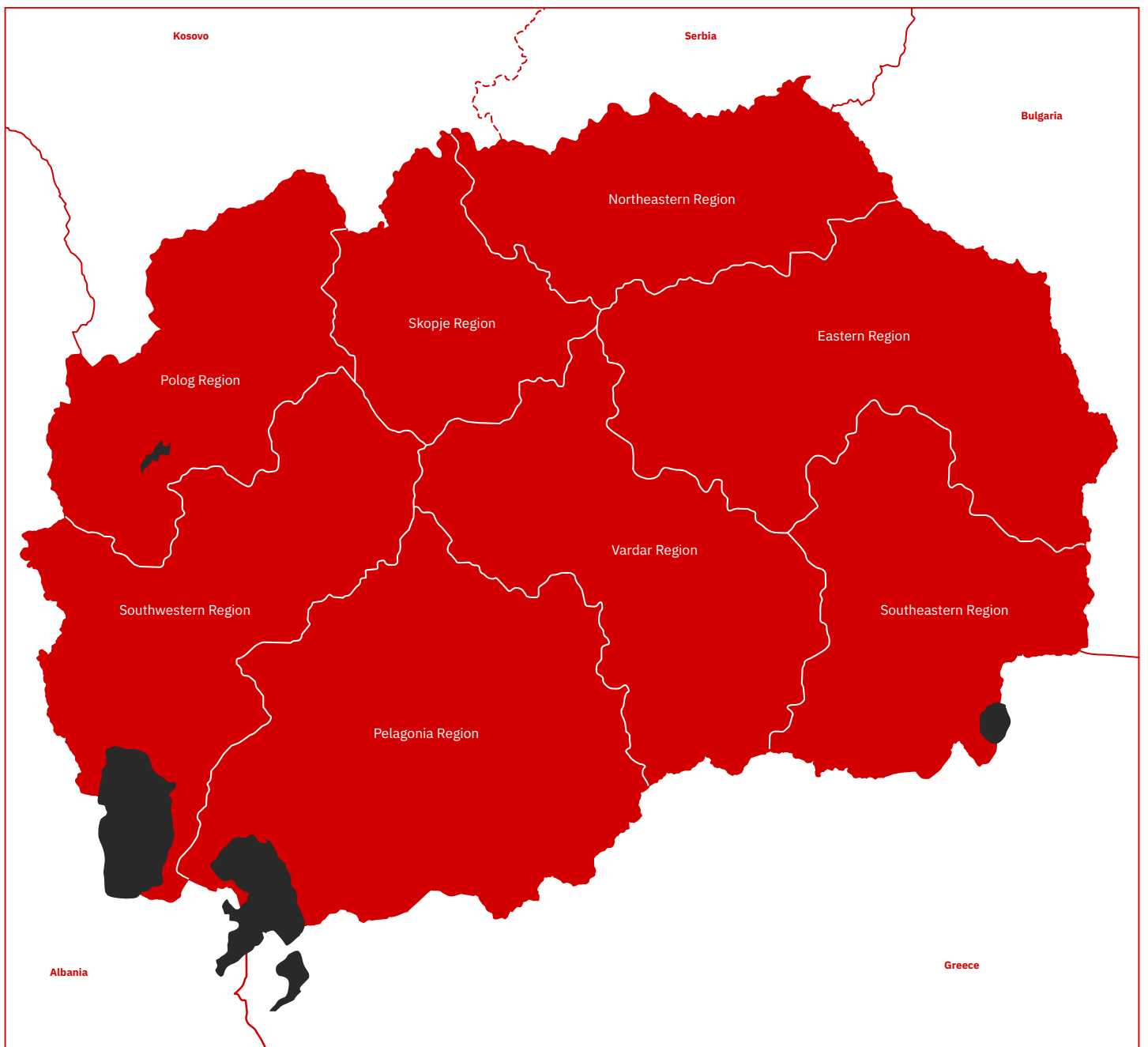


Figure 1: Map of North Macedonia

Country Statistics

25,436 km²

Surface area

5132 EUR

GDP per capita (2020)

15.7 %

Unemployment rate (2021)

47.1 %

Household expenditures on food & beverages (2021)

1,259,996 ha

Total agricultural area (2021)

516,733 ha

Cultivated land (2021)

178,125

Agricultural holdings
(2016)

1.80 ha

Average utilised agricultural area per agricultural holding
(2016)

1,836,713

Population (2021)

4.0 %

Real GDP growth rate (2021)

17.2 %

Population over 65 (2021)

39.8

Mean age of population (2020)

11.5 %

Employed in agriculture, forestry and fishery (2021)

742,760 ha

Pastures (2021)

2.5

Engaged persons per agricultural holding in average
(2016)

2.14 LU

Average livestock units (LU) per agricultural holding
(2016)

General Info

Agriculture is one of the main sectors in North Macedonia, contributing up to 10 % in the national gross value added in primary production, or around 15 % if coupled with the food industry. The majority of agricultural holdings are family owned and small, and land is highly fragmented. Agricultural land with 1.26 million ha occu-

pies half of the total area of the territory, while 44 % of the territory is under forests. About 60 % of the agricultural land belongs to pastures and the rest with an area of 517 thousand hectares is arable agricultural land which is the basis for agricultural production. Agricultural production is spread across the country; intensive

production of vegetables and viticulture takes place in the southern parts of the country under the influence of the sub-Mediterranean climate, in the valleys along the course of the largest rivers and the surrounding hilly terrains that have fertile soil composed of sediments. In the areas with a continental climate, there are conditions for the production of cereal crops and fruit growing, while in the mountainous regions the predominant activity is livestock production of a traditional type. Agriculture is dominated by crop production, which accounts for 76 % of the overall value on average (SSO, 2022).

The country has a long and well-established tradition of producing wide range of agri-food products, with established internal and external export links. The most important exported agri-food products from North Macedonia in 2021 being tobacco (20 % of total exports of these products), followed by biscuits and waffles (10 %), processed vegetables (9.5 %), wine (7.8 %), cabbage (3.2 %), apples (3.5 %), peppers (2.8 %), lamb (2.5 %), processed meat (2.4 %), chocolates (2.3 %), sunflower oil (2.1 %), grapes and tomatoes (2 % each) (SSO, 2022).

The country has favourable soil-climatic and agro-ecological conditions for development of agricultural production, as well as rich biodiversity. The territory is mostly mountainous (79 %), and the rest is lowlands (19 %) and natural lakes (2 %). Although a small country, there is a diverse influence of different climate

types. The average annual temperature varies between 14.0 °C and 14.5 °C in the region with a sub-Mediterranean climate, between 11.8 °C and 13.6 °C in the region with a moderate continental-sub-Mediterranean climate, between 9.6 °C and 11.6 °C in the region with a cold continental climate, to 4.8 °C in the region with a subalpine mountain climate. The average annual amount of precipitation varies between 611 and 695 mm in the region with a sub-Mediterranean climate, between 515 and 890 mm in the region with a warm Mediterranean climate, between 1 044 and 1 103 mm in the region with continental mountain climate, 1 001 mm in the region with subalpine mountain climate and 791 mm in the region with alpine mountain climate. The negative effects of climate change are expected to have a greater impact on agriculture than any other sector in the country, significantly reducing the yields of most agricultural crops (foreseen increases in average annual temperature by 1.0 °C by 2025 and 1.9 °C by 2050, with average precipitation projected to decrease by 3 % and 5 %, respectively).

The country's strategic geographic location at the crossroads of the Balkan Peninsula is a major asset, with proximity to regional and EU markets. Trade regime is favorable (free trade agreement with EU, CEFTA, Open Balkans, and bilateral free trade agreements). Alignment with the EU legislative is under way, and there is good progress especially in the area of food safety and quality.

Organic Sector in North Macedonia

Organic farming in North Macedonia is an emerging sector. With suitable climate and soil conditions, North Macedonia has a significant potential in organic crop production, wild collection, sheep breeding, and beekeeping. Processing is still limited and the market needs to be further developed.

Organic Sector Development

One of the **first activities in the organic sector in North Macedonia** was observed in 1997, when the largest domestic pharmaceutical company **Alkaloid AD Skopje** converted to organic wild herbs (linden and chamomile) for herbal tea production and requested the first organic certificate on the national market (FAO, 2020). In the late 1990's, an ACDI / VOCA (↳) project first introduced some organic farming concepts to farmers and organised “fresh produce” deliveries to Skopje consumers. The **systemic activities in organic farming** in the country began in **early 2000's**, encouraged by the Swiss Development and Cooperation Project Local Initiative Support Project for Organic Agriculture (LISPOA), and later the production of organic persimmons was supported by the Swiss Import Promotion Program (SIPPO). Farmers began organizing around civil society organizations, and the initial legislation began to be drafted in 2000, resulting into adoption on the **first Law on organic agricultural production in 2004**. The second by-law, the Organic Agriculture Support and Development Programme, was adopted in March 2005. The **first control of organic production** in the country took place in **2003**, and the **first certificate for organic production** was issued in **2004**, with the conversion of several producers producing organic persimmons. The **first certification body Balkan Biocert – Skopje Branch** was accredited in **2005** by the national Accredita-

tion Institute, which issues certificates for primary organic production, processing and trade in organic products.

Today, there are two active certification bodies. As early as 2006, about 500 hectares in the country were under organic crops. The Government adopted the **first National Strategy for Organic Agriculture (2008–2011)** in **2007**, laying the groundwork for further development of organic production with a target to reach 4 % of arable land under organic production by 2020. The **Law on Organic Agricultural Production** was adopted in **2009** and entered into force in 2010. The law is harmonized with the European regulations **834 / 2007** and **889 / 2008**. With the enactment of the Law on Organic Agricultural Production, several **rulebooks and lists** regulating the procedures for organic production have been adopted (Figure 2). The first Macedonian certification body **Procert** started its activity in 2009. Organic agriculture was promoted by a national campaign launched in 2010. In 2012, technical assistance was provided by the Food and Agriculture Organization of the United Nations (FAO) in order to establish a working group of representatives from relevant ministries and experts in the organic sector to define the **National Action Plan**, which was adopted in **2013** and lasted until 2020. The preparation of a new legal framework for organic production to align with the new EU legislation is ongoing. The historical development of this sector in the country is illustrated in Figure 3.

National legislation on organic agriculture

Laws	
Law on Organic Agricultural Production and Amendments	Official Gazette of RM No. 146 / 2009, 53 / 11, 149 / 2015, 39 / 2016, 132 / 2016
Law on Seeds and Seedlings for Agricultural Plants and Amendments	Official Gazette of RM No. 39 / 2006, 89 / 2008, 171 / 2010, 53 / 2011, 69 / 2013, 187 / 2013, 43 / 2014, 129 / 2015, 39 / 2016, 71 / 2016
Law on Quality and Safety of Fertilizers, Bio-stimulants and Soil Properties and Amendments	Official Gazette of RM No. 27 / 2014, 154 / 2015, 39 / 2016
Law on Agriculture and Rural Development	Official Gazette of RM No. 49 / 2010, 53 / 2011, 126 / 2012, 15 / 2013, 69 / 2013, 106 / 2013, 177 / 2014, 25 / 2015, 73 / 2015, 83 / 2015, 154 / 2015, 11 / 2016, 53 / 2016, 120 / 2016, 163 / 2016, 74 / 2017, 83 / 2018, 27 / 2019, 152 / 2019, 244 / 2019, 275 / 2019
Bylaws	
Rulebook on the manner and procedure for performing expert control in organic agricultural production	Official Gazette of RM No. 163 / 10
Rulebook on the manner of issuing the authorizations of control / certification bodies for performing expert control and professional scientific institutions or other legal entities for performing analyses and super analyses in the organic agricultural production, necessary documentation, form, content and manner of keeping records	Official Gazette of RM No. 163 / 10
Rulebook on the form, content and colour of the national label for organic product and the national label for organic product in transition	Official Gazette of RM No. 163 / 10
Rulebook on the procedures for production of organically processed food	Official Gazette of RM No. 163 / 10
Rulebook on the form, content and manner of keeping records and databases on entities and organic seed and planting material	Official Gazette of RM No. 163 / 10
Rulebook on rules and procedures for plant organic production	Official Gazette of RM No. 163 / 10
Rulebook on the procedures for collection, packaging, transport and storage of organic products	Official Gazette of RM No. 163 / 10
List of products and substances used in the production process of organically processed food	Official Gazette of RM No. 163 / 10

Figure 2: Key laws and bylaws related to organic agriculture

Sources of Data on Organic Production

There are two major sources on statistics on organic production in North Macedonia: (1) the website of the Ministry of Agriculture, Forestry and Water Economy (MAFWE), where a special section is dedicated to organic production, including information on legislation, overview of number of organic production area and animals, register of organic producers, relevant literature, contacts, etc. (↪), and (2) the online MakStat database of the State Statistical Office (SSO), which displays statistical data on area with organic crops, livestock organic production and bee hives (↪). Other information and literature on organic production are available on the website of the National Extension Agency (↪), as well as from donor programs, academic institutions, etc.

Milestones of organic sector development in North Macedonia



Figure 3: Timeline of key organic sector triggers



Figure 4: Organic cherries grown in North Macedonia

Info

Ministry of Agriculture, Forestry and Water Economy (MAFWE)

www.mzsv.gov.mk

MakStat database of the State Statistical Office (SSO)

www.makstat.stat.gov.mk/PXWeb/pxweb/en

National Extension Agency

www.agencija.gov.mk/publiakcii/

Organic Production, Processing, Trade and Policy Support

Organic cereals production has the largest share in the total organic production in the country, followed by organic forage crops. Organic plums, almond and berries are the most common crops in the organic fruit production, and organic peppers and watermelons dominate in the organic vegetable production. The domestic organic market is very small and trade is still emerging.

Organic Crop Production

The area under certified organic production and the number of certified organic operators have an increasing trend in North Macedonia (Figure 5). According to the latest records, in 2021, there were 4277 hectares of certified area with organic production (MAFWE, 2022), i.e. 3482 according to the national statistical information (SSO, 2022), which does not account for some categories, such as fallow land. Its peak was observed in 2011, with 6581 hectares, however slowly recuperating after 2014. The total area under organic production takes around 0.83 % of the total arable land in 2021, still far from one of the specific goals of the National Strategy for Organic Agriculture - to increase the share of total organic area in the total arable land to 4 %.

The number of certified organic operators is gradually increasing, with the highest total observed in 2021 with 929 operators registered in the official Register for organic products in 2021 at MAFWE (Figure 6). Out of the total number, 549 have a status of being in a transition period while the remaining actors are registered as organic producers. This trend indicates that there are more and more farmers getting engaged in organic farming, but at the same time the size of the farms is declining. The agricultural producers are registered mainly for organic crop production

participating with 60 % in the total number of the registered producers, while 40 % are producers of animal products.

Land area under organic production (2005–2021 | ha)

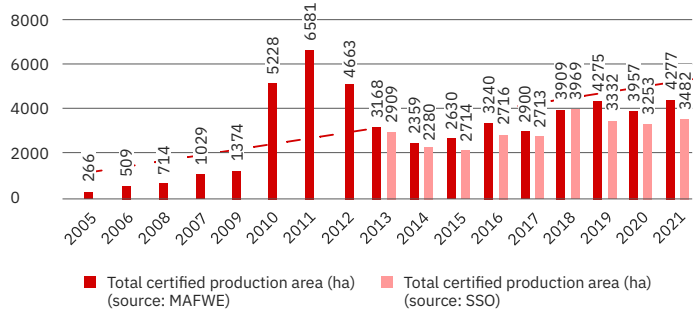


Figure 5: Trend of organic production area development

Number of operators and average area per operator (2005–2021)

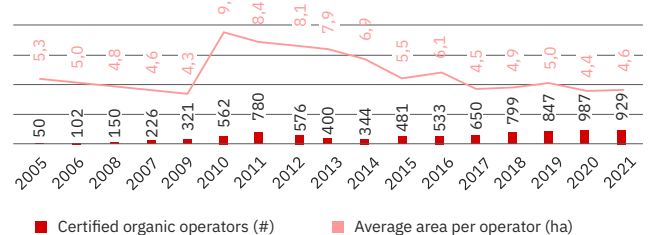


Figure 6: Organic producers

Organic crop production in North Macedonia
(area | 2021)

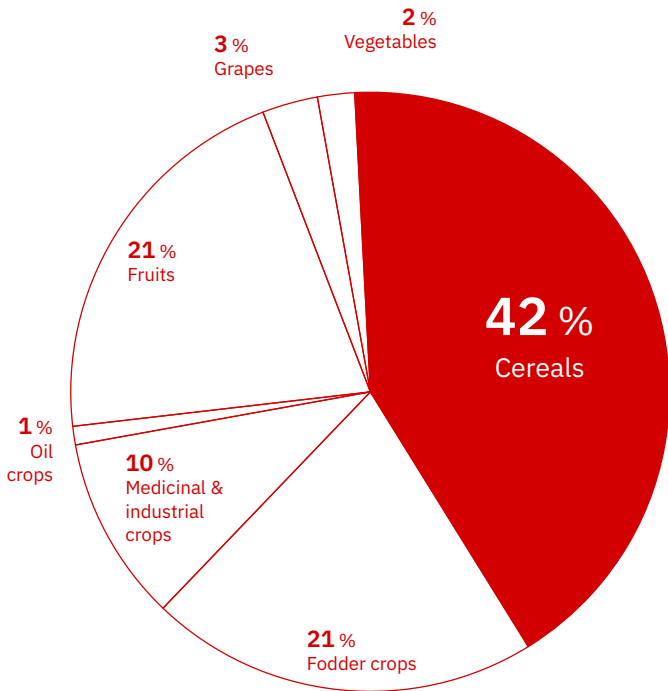


Figure 7: Cereals occupy the largest share in the total certified organic area, followed by fruits and fodder crops

Organic Cereal Production

Production of organic cereals has the largest share in the total organic production. The area under organic cereals follows an upward trend since 2015, with notable increase in 2020 and 2021 (Figure 8). According to the latest records, in 2021, there were 1679 hectares of certified area with organic cereals (SSO, 2022). The area under organic cereals occupy 0.9 % of the total area under cereals in the country. Major organic cereal is barley with the annual production of 2230.7 tonnes in 2021. Barley accounts to more than 57 % in the total organic cereal production.

Area under organic cereals (2015–2021 | ha)

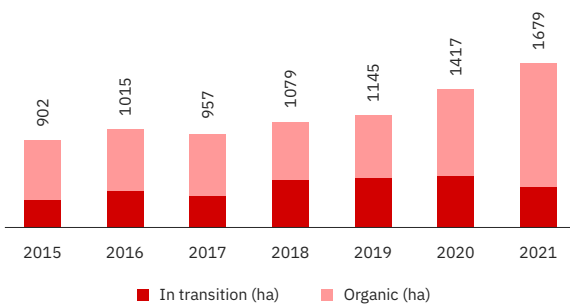


Figure 8: Organic cereals production – land area

Organic production (2021 | tonnes)

Barley	2230.7
Wheat	770.0
Maize	532.2
Oats	237.0
Rye	56.4
Other cereals	112.7
Total	3939.0

Figure 9: Organic cereals production – quantity produced

Organic Fodder Crop Production

The area under organic forage crops has an increasing trend (Figure 10). According to the latest records, in 2021, there were 731 hectares of certified area with organic forage crops, similarly as the size of the area under organic fruits. The organic fodder crops occupy 1.7 % of the total area under forage crops in the country. Major organic forage crop is alfalfa with a production of 5049 tonnes in 2021 (Figure 11). Alfalfa accounts to more than 90 % in the total organic fodder production.

Area under organic fodder (2015–2021 | ha)

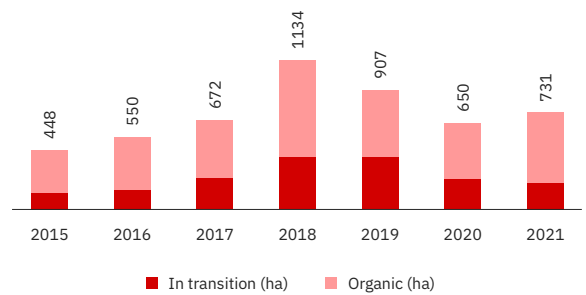


Figure 10: Organic fodder production – land area

Organic production (2021 | tonnes)

Alfalfa	5049.2
Vetchling	51.0
Fodder peas	80.0
Other fodder crops	65.0
Total	5254.2

Figure 11: Organic fodder production – quantity produced

Organic Fruit Production

The area under organic fruits has an increasing trend (Figure 12). According to the latest records, in 2021, there were 804 hectares of certified area with organic fruits. The organic orchards occupy around 4.6 % of the total orchards in the country. Different organic fruits are grown, among which, the traditional fruits for the country such as apples, plums, sour cherries and cherries, pears, apricots etc., nuts such as walnuts, almonds and hazelnuts, different berries such as blackberries, raspberries, goji berries, aronia, juniper berries and many others, including persimmons, olives etc. Major area is under almonds (around 194 ha in 2021), followed by hazelnuts (128 ha in 2021), plums (83 ha in 2021). Many of the orchards are still in the phase of initial years of production and have not yet reached its full fruit bearing potential.

Area under organic orchards (2015–2021 | ha)

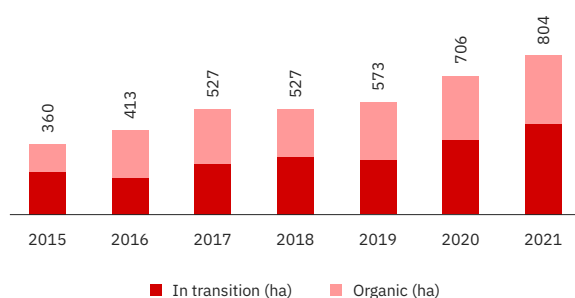


Figure 12: Organic fruit production – land area

Organic production (2021 | tonnes)

Apple	247.3
Plums	69.9
Hazelnuts	56.1
Sour cherries	35.8
Almonds	15.4
Different berries	78.9
Other fruits	72.4
Total	593.7

Figure 13: Organic fruit production – quantity produced

Organic Grape Production

The area under organic grapes has a rather steady increasing trend since 2016 (Figure 14), reaching 54 hectares of organic vineyards in 2021 according to SSO, although MAFWE reports 111 hectares under organic production in the same year. The organic vineyards occupy around 1.4 % of the total area under vineyards in the country. The total yearly grape production in 2021 was 439.1 tonnes. Organic grapes are mostly used for production of organic wine.

Area under organic vineyards (2015–2021 | ha)

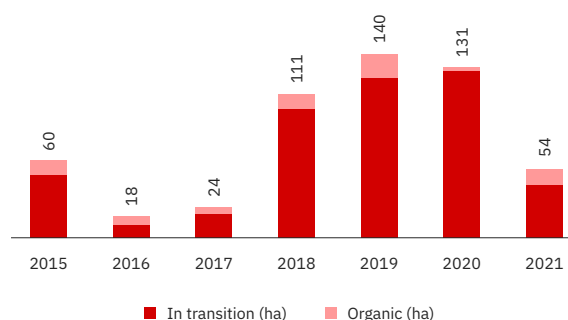


Figure 14: Organic grapes production – land area

Organic grape production (2021 | tonnes)

Grapes	439.1
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Figure 15: Organic grapes production – quantity produced

Organic Aromatic and Medical Herbs Production

The certified area under medical and aromatic plants (MAP) is rather unstable, as large part of this area for organic forest and wild collection areas are not covered in these statistics. In 2021, SSO reports 105 hectares (Figure 16), while MAFWE records show 400 hectares as certified area with organic MAPs, and industrial crops. Different types of medicinal and aromatic plants are available (e.g. camomile, wild thyme, mint, elder, St. John's Wort, hibiscus, etc.), as the flora of North Macedonia is among the richest floras not only in respect to the Balkan Peninsula, but also in the context of the whole European continent. The total yearly production of aromatic and medical herbs in 2021 was 43 tonnes of herbal mass.

Area under medical, aromatic and industrial crops (2015–2021 | ha)

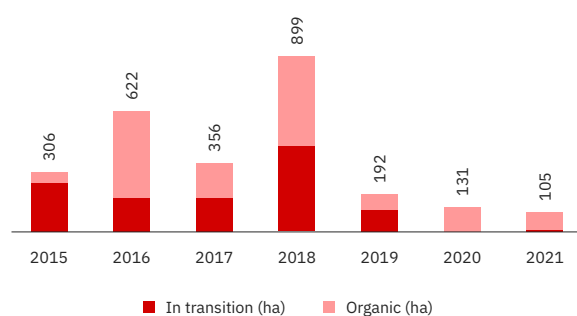


Figure 16: Organic medical, aromatic and industrial crops production – land area

Organic production (2021 | tonnes)

Aromatic plants, medicinal and culinary plants	80.0
Sunflower	22.9
Fodder peas	80.0
Other	0.7
Total	104.5

Figure 17: Organic cereals production – quantity produced

Organic Vegetable Production

The area under organic vegetables has large fluctuations over the entire period of analysis (Figure 18). According to the latest records, in 2021, there were 110 hectares of certified organic area under vegetables (SSO, 2022). The record in the production was achieved in 2019, when the area under organic vegetables was 381 hectares. Organic vegetables occupy only 0.25 % of the total area under vegetables in the country. Major organic vegetables are peppers with production of 127 tonnes in 2021. Peppers account for about one-fourth of the total organic vegetable production.

Area under vegetable crops (2015–2021 | ha)

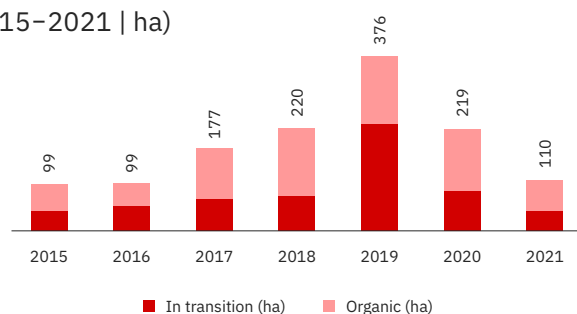


Figure 18: Organic vegetable production – land area

Organic production (2020 | tonnes)

Peppers	127
Tomatoes	31.1
Cabbage	3.7
Watermelons	56
Onions	12.7
Other vegetable	305.8
Total	536.5

Figure 19: Organic vegetable production – quantity produced

Organic Oil Crop Production

The area under organic oil crops has a decreasing trend (Figure 20). According to the latest records in MAFWE, in 2021, there were only 24 hectares of certified organic area under oil crops. The record in the production was achieved in the period 2011–2012, when there was a boom in the total organic production in the country. There is no record of the production quantity.

Area under oil crops (2015–2021 | ha)

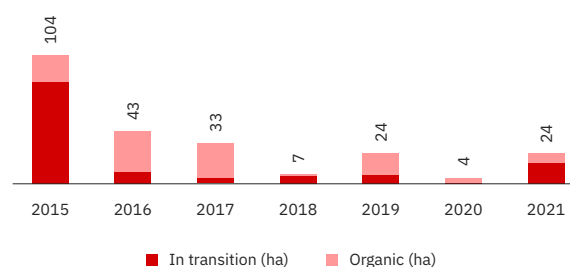


Figure 20: Organic oilseed production – land area

Organic Livestock Production

Sheep have the largest share in the total number of certified livestock, since most of the sheep breeding is extensive, given the large area under pastures in the country (Figure 21). The number of sheep in the organic production accounts to 120,275 in 2021 or 19.5 % of the total sheep in the country. Sheep yielded 889,180 litres organic milk in 2020, and substantially increased the production up to 3,326,562 litres in 2021. The number of goats in the organic production accounts to 5,666 in 2021 or 5.69 % of the total goats in the country. Organic goat milk production also tripled from 131,350 litres in 2020 to 394,980 organic

milk in 2021. The number of cattle in the organic production accounts to 9,254 in 2021 or 3.78 % of the total cattle in the country, with production of 227,500 litres organic cow milk production in 2021.

Other organic livestock production is insignificant for the country, except for organic honey production. There are 11,327 beehives in 2021 that are certified for organic honey production. These beehives accounts to 3.17 % of the total beehives in the country. The production of organic honey was 29,705 kilograms in 2020 and 59,152 in 2021 (out of which 27,042 in conversion). Slight potential is observed for organic poultry production, but this sector needs further development.

Organic livestock (2015–2021 | number)

Year	Cattle	Sheep	Goats
2015	3,180	70,007	4,012
2016	3,317	78,664	4,142
2017	4,698	92,386	3,833
2018	6,556	103,307	5,582
2019	7,114	103,028	4,724
2020	8,396	122,671	5,406
2021	9,254	120,275	5,666

Figure 21: Number of organic cattle, sheep and goats

Organic milk production – in the conversion period and fully organic (2021 | litres)

Sheep milk	3,326,562
Goat milk	394,980
Cow milk	227,500

Figure 22: Quantity of organic sheep, goat and cow milk

Other organic livestock (2015–2021 | number)

Year	Poultry	Beehives
2015	0	6,932
2016	0	7,760
2017	0	7,676
2018	340	8,193
2019	200	8,894
2020	60	9,826
2021	193	11,327

Figure 23: Number of organic poultry and beehives

Organic honey production (2021 | kilograms)

Honey	59,152 (27,042 in conversion)
-------	-------------------------------

Figure 24: Quantity of organic honey

Major Stakeholders in the Organic Sector

In line with the National Action Plan for Organic Agricultural Production for the period 2013–2020, various groups of stakeholders (individuals, groups or institutions) are directly or indirectly involved in the organic sector. The stakeholders can be broadly categorised in several groups.

Supply / value chain

- Input suppliers
- Organic operators – producers
- Associations of producers of organic products
- Organic products processing companies
- Traders (exporters/importers)
- Wholesalers and retailers
- Consumers of organic products

Governmental institutions / agencies

- Ministry of Agriculture, Forestry and Water Economy (MAFWE)
- Food and Veterinary Agency (FVA)
- State Agricultural Inspectorate (SAI)
- Agency for Financial Support in Agriculture and Rural Development (AFSARD)
- Other ministries (Ministry of Environment and Spatial Planning Ministry of Economy Ministry of Finance)

Enabling bodies

- Certification and inspection bodies
- Institute for Accreditation of the Republic of North Macedonia

Education and research

- Agricultural high schools
- Universities – faculties and research institutes
- National Extension Agency (NEA)
- Non-formal education and training

Donor organisation

- International programmes supporting organic farming

Organizations of Organic Producers

Organic agriculture was triggered after farmers organized themselves around civil society organizations, and the first Law on Organic Agriculture was drafted in 2000. Since then, organic farmers have been organized in local civil associations. A workshop was organized in 2002 for the country's associations on organic agriculture and their national union. Regional cooperation in organic agriculture was promoted through a series of workshops in Balkan countries between 2002 and 2005. In 2003, local associations joined in a national organic federation (**Biomak**, headquartered in Kavadarci). During this stage, one project promoted the conversion of some persimmon producers, and 13 farmers received the first organic certificates in 2004. In that same year, the first law on organic agriculture was accepted and enforced. The Agricultural and Organic Federation was registered in 2006 as a national federation of associations of producers of organic products **Biosan**, based in Skopje. The North Macedonia Organic Producers Federation as such was established in 2008 with the task of unifying and coordinating regional producers' associations. The federation is an umbrella organization formed by the Regional Organic Producers Associations in Macedonia. Recently, the Chamber of organic producers (150 to 180 active members, organizes annual events in the country, the so-called **Fair Organic table**, and abroad) and the Cluster of organic production, also increasingly active in the organic sector.

Budgetary support to organic farming

The priorities of agricultural policy are defined in the National Agriculture and Rural Development Strategy (NARDS). The main legal framework determining the implementation of agricultural policy in North Macedonia is established within the Law on Agriculture and Rural Development – LARD (MAFWE 2010), supplemented by a dozen other laws to regulate specific issues (Law for organic production 2009). The Ministry of Agriculture, Forestry and Water Economy (MAFWE) is the authority responsible for the planning, monitoring and evaluation of agricultural policy and its instruments and the key governmental institution concerning the policy regulation related to the organic products. The Agency for Financial Support in Agriculture and Rural Development (AFSARD) is responsible for policy implementation and control. The general control and supervision system for organic agriculture is performed by the State Agricultural Inspectorate and the Food and Veterinary Agency. The

National Extension Agency (NEA) is the public service responsible for dissemination of the information to the agriculture producers and advisory.

For organic production in the period of the National Agriculture and Rural Development Strategy 2014–2020, emphasis is placed on the recognition of this production on the domestic market and meeting target groups of consumers, in order to increase domestic consumption and ensure long-term sustainability of production itself and the concept as such. Therefore, the support measures are aimed at ensuring market-sustainable organic production and wider application of the agri-environmental approach.

Organic production is supported in accordance with the LARD in both pillars of measures. The following support measures are applied in the program for financial support of agriculture:

- Direct payments per arable land for all crops except tobacco – organic;
- Direct payments per arable land for all crops except tobacco with certified seed material – organic;

Stakeholder

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www.kop.org.mk/

Cluster of Organic Production

- Valentina Kolar Jovanovska
- +38 978 41 16 49
- valentinakolarjovanovska@gmail.com

[Facebook](#)

- Direct payments per arable land for garden production and flowers in the open and in greenhouses – organic;
- Direct payments per arable land for maintenance of existing orchards – organic;
- Direct payments per arable land for maintenance of existing vineyards – organic;
- Direct payments per heads of cattle – organic;
- Direct payments per heads of all categories sheep – organic;
- Direct payments per goats – organic;
- Direct payments for registered bee family – organic.

Also in this period the organic production is supported in the rural development program, with the following measures:

- Direct payments for processing of organic products and organic products in transition from domestic origin (including for finishing and packaging of wild species of organic origin);
- Direct payments for trade or export of fresh and processed organic products and organic products in domestic origin;
- Special direct payments for expert control and certification of organic production;
- Special direct payments for agricultural holdings that have performed agrochemical or soil or organic products analysis of pesticide residues and heavy metals in them;
- Direct payments for areas intended for green manure or crop rotation.

The total amount of funds paid to the beneficiaries in the programming period 2014–2020 is 7.5 million EUR (shown in Figure 25). The amounts to support this production are growing from year to year, which should be expected to increase production and producers who will decide on this type of production. The proportion of the support of organic production in the total agricultural policy budgetary transfers ranges from 0.4 % in 2014 to 1.1 % in 2019 (MK APMC, 2022).

The recently adopted National Agriculture and Rural Development Strategy 2021–2027, provides support for organic agricultural production in similar measures as those listed in the previous period. In addition to the domestic support for the next period, support for organic production will be provided by IPARD. Support will be provided for the following types of operations: green cover, crop rotation, and organic farming (Measure Agri-environment, climate and organic farming is foreseen to be soon accredited and implemented).

Budgetary support (2014–2020 | million EUR)

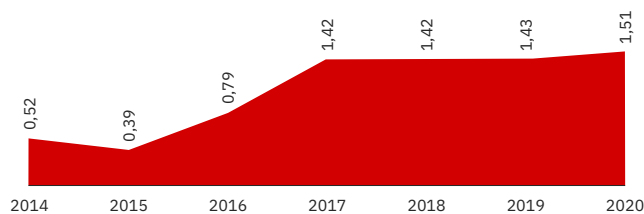


Figure 25: Budgetary transfers to organic producers

Control / Inspection

According to the national Law on organic agricultural production, the control of organic producers, processors and traders should be carried out by the registered inspection bodies. These bodies must be based in the country, employing at least three employees to be accredited. Currently, two certification bodies, accredited by the Accreditation Institute of the Republic of North Macedonia (L) are authorized by the Ministry of Agriculture, Forestry and Water Economy to perform control in the organic production.

Stakeholder

Balkan Biocert Makedonija DOOEL

- +38 978 41 16 49
- info@balkanbiocert.mk

www.balkanbiocert.mk

Pro-Cert Control and Certification OKS DOOEL

- +38 978 45 85 91
- procert@procert.mk

www.procert.mk

Processing of Organic Products

The processing companies operating in the organic industry are mostly export oriented, due to the limited local market in the country. The certification bodies registered a total of 26 companies for processing of organic products in 2020, of which 21 in Balkan Biocert and 5 in Procert. The quantities of exports still remain rather small. Several companies are processing and trading wild gathered products and producing dried herbs / tea and mushrooms, preserved and processed fruits (mostly wild berries) as well as juices, juice concentrate, jams and wine vinegar. Notable forerunners in organic products processing are **Alkaloid AD** and **Koro** in organic teas, **Vinarija Grkov** in organic wine, **Vitalia** in organic marmalade and **Inter-mak** in wild mushrooms and forest fruits (FAO, 2020). Furthermore there are some capacities for processing on the farmers level (e.g. honey, juice, cheese).

The problem in organic processed food production is the lack of continuous supply of domestic organically processed products in sufficient quantities. Most of the processing companies need organic raw materials and due to this shortage they face difficulties to process small and non-standardized quantities of organic products, thus ensure maximum utilization of their capacities. Small number of processing and storage facilities that are specialized and certified for secondary and final processing and packaging of organic products.

Direct payments for processing of organic products and organic products in transition of domestic origin (including for finishing and packaging of wild species of organic origin) fall within the Measure M215. The number of companies is very small and shows large fluctuations, with in 2020 only one company applying for this measure (Figure 26).

Number of companies that applied for the measure M215-3 (2016–2020|number)

2016	12
2017	2 (Kochani, Kisela Voda)
2018	25
2019	3 (Kavadarci, Kochani, Struga)
2020	1 (Kavadarci)

Figure 26: Processing companies that applied for organic production measure

Trade

There are very scarce statistics on the turnover and size of the market of organic products. The data on trade is also limited, mainly because of the small quantities of organic products subject to trade. Forty-five companies are registered in the official Register for organic products in 2021 at MAFWE, as traders or processors of organic products, and most of these companies are registered for trade and processing, or trade, processing and primary processing. However, the trade of the organic products is mainly an additional activity to the companies, that mostly trade non-agricultural or processed products. Two of these are the largest pharmacy companies in the country: **Alkaloid AD** and **Zegin**, followed by other companies such as **Tinex**, one of the largest retailers. **Extra fungi Doel Trade** is the only company which reported exports of fruits.

Direct payments for trade or export of fresh or processed organic products and products in transition from domestic origin are within the Measure M215 and the number of companies that applied for this measure in the last five years fluctuate from 11 in 2017, to 19 in 2020 (the last year with available data).

Export and import of certified organic products from and to North Macedonia is regulated by the National Organic Law for Organic Production. The authorized governmental body for regulation of trade is the Ministry of Agriculture, Forestry and Water Economy (MAFWE).

Nine companies reported imports of organic products in the form of: bio-beverages, pharmaceutical products, powdered products, fruit porridges, flakes, seeds, granular products, spreads, beer, bio-couscous, jams etc., in relatively small quantities. The organic products are mainly imported from EU, Serbia, Slovenia, Czech Republic, Italy, Turkey and Bulgaria.

Number of trading companies that applied for the measure M215 (2016–2020|number)

2016	18
2017	11
2018	15
2019	17
2020	19

Figure 27: Trading companies that applied for organic production measure

Retail

The sale of the organic products is organized through specialized organic shops, markets, supermarkets, online sale via social networks (Facebook, Instagram) and green markets. The sale in the supermarkets or markets is mostly organized in the “healthy corner” within the stores. Organic products in the markets or supermarket are mostly sold as processed or as fresh fruits and vegetables. The organic market is still very dependent on imports, especially in the processed

segment because it is easier to procure them in terms of sourcing (Agence Bio, 2021). Besides grocery markets and supermarkets, there are few organic food stores that sell organic products in retail and wholesale with own private labels and brands (**BioCosmos**, **Good Nature**). The **drugstore chain DM** also offers a wide range of organic food products, some of which are of domestic origin. Online trade is becoming more popular, especially growing as a result of the pandemic, with more and more online shops and sales channels available.

Stakeholder

Nasha Dobra Zemja

- Cooperative and specialized shop
- +38 978 39 10 21
- info@dobrazemja.org



www.facebook.com/dobrazemja

Organiko zdrava hrana – Kumanovo

- Specialized shop
- +38 978 22 71 15
- organiko.mk@gmail.com



www.facebook.com/Organiko.zdrava.hrana

DM

- Drugstore market
- +38 923 22 27 33
- info@dm.mk



www.dm.mk/

Reptil

- Supermarkets
- +38 976 23 11 29
- info@reptilmarketi.mk



www.reptilmarketi.mk/

Mar Vik

- Online direct sale
- +38 970 32 20 84
- mario.biocosmos@gmail.com



www.facebook.com/MARVIK.ZDRAVAHRANA

Markt

- Market
- +38 970 75 02 38
- direkcija@markt.mk, wecare@markt.mk



www.markt.mk/

Tinex

- Supermarkets
- +38 922 72 75 01
- tinex@tinex.com.mk



www.tinex.com.mk/

Vero

- Supermarkets
- +38 923 06 99 16
- info@vero.com.mk



www.vero.com.mk

Kam

- Supermarkets
- +38 923 17 17 47



www.kam.com.mk

Zegin

- Pharmacies
- +38 923 11 56 00
- kontakt@zegin.com.mk, zeginonline@zegin.com.mk



www.zegin.com.mk/index.php/mk/products?f%5B0%5D=cat%3A20

Aronija Zdrava Hrana D.O.O.

- natural and organic food stores (retail and whole sale)
- +38 943 22 27 48, +38 977 89 37 50 (whole-sales and orders)
- +38 970 32 20 84, info@biocosmos.mk (import and export)



www.biocosmos.mk/information/contact

Dimitar

- Green market – Bunjakovec
- +38 970 43 35 43

www.facebook.com/Medis-Honey-Dimitar-1507014786060079

Vitalia

- Health food shops
- +38 923 21 71 77
- contact@vitalia.com.mk



www.vitalia.com.mk/

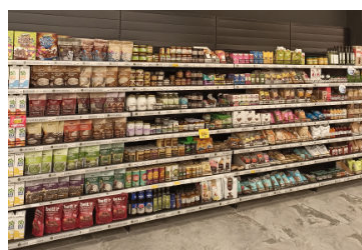


Figure 28: Supermarket organic food display

Domestic Consumption

Local consumers in general have insufficient understanding of the benefits of the organically produced food. Lately however, there is a trend of changing consumer patterns towards increasing consciousness of the importance of fitness and healthy eating habits, especially among the urban higher income population, paving the grounds for increasing demand and consumption of organic products.

Local consumers are in general very price sensitive. On one hand, sometimes organic products are still sold at the price of products produced in a conventional way, notably in the fresh produce segment, and on the other hand, supermarkets take relatively high margins on organic products because they consider that their sales are not going to grow quickly (Agence Bio, 2021). This is also enhanced with the relatively low standard and relatively flat income of the population, ultimately leading to lack of motivation of the consumers to pay higher prices for organic products, which largely impedes the market growth (Organic food report, 2018).

Nevertheless, activities are on occasions supported to **increase the awareness of local consumers** with regard to organic food. For instance, the Consumers

Organisation of Macedonia led a campaign to promote organic food and bring it closer to the consumer (Figure 29).

Donors / Supporters

The **Swiss Agency for Development and Cooperation (SDC)** is one of the largest donors for promotion and advancement of organic production in the country. The foundations for the development and functioning of organic production have been laid by projects supported by it: supporting the establishment of the first certification body for organic production, the first law on organic production, the first association, the first cluster and the first chamber of organic producers, as the first export of organic products. Significant technical support was provided through a series of projects under the **Increasing Market Employability program (IME)** funded by SDC, aimed to improve the business development and competitiveness of organic producers, and to meet the demands of foreign markets (export facilitation, certification, advocating, etc.). SDC continues to support this segment by harmonizing legislation and bylaws with

those of the EU, organizing B2B meetings to connect producers and buyers, training of trainers on organic production, educative brochures on organic production, etc. In addition, the **Swiss Import Promotion Program (SIPPO)**, as a long-term mandate of the Swiss State Secretariat for Economic Affairs (SECO), within its co-operation for economic development, has been implemented in North Macedonia for 20 years.

The **German Society for International Cooperation** (Deutsche Gesellschaft für Internationale Zusammenarbeit – GIZ; until 2011 Gesellschaft für technische Zusammenarbeit – GTZ) is also a very active participant in the development of organic production in the country. Present through a series of projects over the years GTZ/GIZ participated in various activities in this segment of agricultural production. GTZ organized the first training for inspectors for organic production, with theoretical part conducted in the country and practical part conducted in Greece in cooperation with a Greek certification body. GTZ supported and participated in the working groups for the preparation of the strategy for organic production. In cooperation with Standing Working Group Regional Rural Development in South East Europe, in 2011 GIZ supported the development of a set of publications on organic production, including a Guide to Organic Agricultural Production and an Overview of Provisions for Labeling and Marketing of Organic Products in the Balkan Countries. GIZ supported the initiative of MAFWE for a discussion on models of eco-regions with a round table at which the German model of eco-regions was presented and the organization of a study trip by representatives of the ministries of agriculture from the region.

Other active projects covering organic production within their activities are supported by the United States Agency for International Development (USAID). Since 2019, the **Economic Development, Governance and Enterprise Growth (EDGE)** is a regional programme in Europe and Eurasia that aims to create inclusive, sustainable economic growth and to support intra-regional and Euro-Atlantic integration. EDGE works closely with USAID Missions and projects in the country. Its activities promote regionalization, reduction of barriers to trade, and support the growth of SMEs in three key value chains, one of which is fruits and vegetables.

Currently, the **Standing Working Group Regional Rural Development in South East Europe (SWG RRD)**, in cooperation with the German Federal Ministry of Agriculture and Food, runs the Agricultural Policy Dialogue Project – Western Balkans (APD). In 2022, the Regional Expert Advisory Working Group on Organic Production within the APD Project had the first meeting to discuss

the findings of the Regional synthesis report “State of art of the Organic Agriculture in SEE region” (SWG members).



Figure 29: Brochure “Organic food – closer to the Consumers”, Consumers Organisation of Macedonia, 2018

Education and Research

Organic farming is **still not sufficiently represented in the national education system**, which is why agricultural producers still need to upgrade their knowledge of organic farming, and especially the specifics of production technologies and marketing of this type of products.

Attempts are being made to introduce the concept in the secondary agricultural schools through practical training; an Organic Forum was established with representatives from agricultural high school in order to train high school teachers in organic farming techniques and transpose those through practical lessons in the schools, combining schools’ specialisations in several different aspects such as composting, vegetable production, grape production, animal husbandry (Trajković, 2014). Eco-agriculture syllabus is offered at bachelor studies at the Faculty of Agricultural Sciences and Food, Ss. Cyril and Methodius University in Skopje, where also a postgraduate module in organic production is available. A post graduate module in organic crop production is also offered at the Agricultural Faculty at the University Goce Delchev in Stip.

Simultaneous activities have been made to institutionalize **non-formal education** by vocational training (a module was verified for Organic production farmer by the Foundation Agro-Center for Education); also various applied research entities such as, for example, the Centre for Applied Research and Continuous Education in Agriculture, include organic farming along its scope, through strengthening human capacity. Non-formal education is very useful for solving the problems with regards to lack of information and knowledge in the topics of organic production, processing of organic products, as well as the transfer of technology to all the stakeholders in the organic sector.

Research related to conventional, and especially organic farming, has traditionally received very limited government funding. Nevertheless, due to the differences in methods and approaches as well as the growing interest in organic production, it has been of great importance in the recent years that the country

sets specific projects to finance research in organic programs and put organic agriculture among the priorities of sectors and national research programs. In this respect, more comprehensive education in organic farming is needed in order to raise public awareness, increase the level of knowledge of the experts in the field, increase the level of information for agricultural producers as well as the other stakeholders in the chain for production of organic agricultural products.

Educational Materials related to Organic Production

A number of publications is available to organic producers and the wider public, covering various aspects of organic practices or subsectors. Most are produced within donor program frameworks.



Figure 30: Organic agriculture guide – possibilities for European organic operators



Figure 31: 90 arguments for organic agriculture



Figure 32: Guide for organic agricultural production



Figure 34: Guide for organic strawberry production

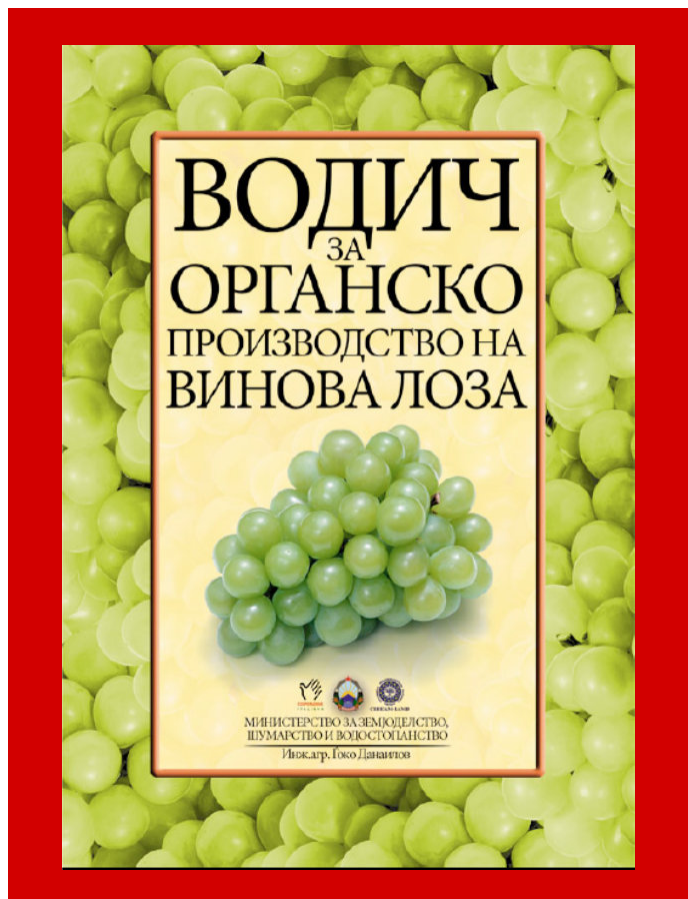


Figure 33: Guide for organic grape production

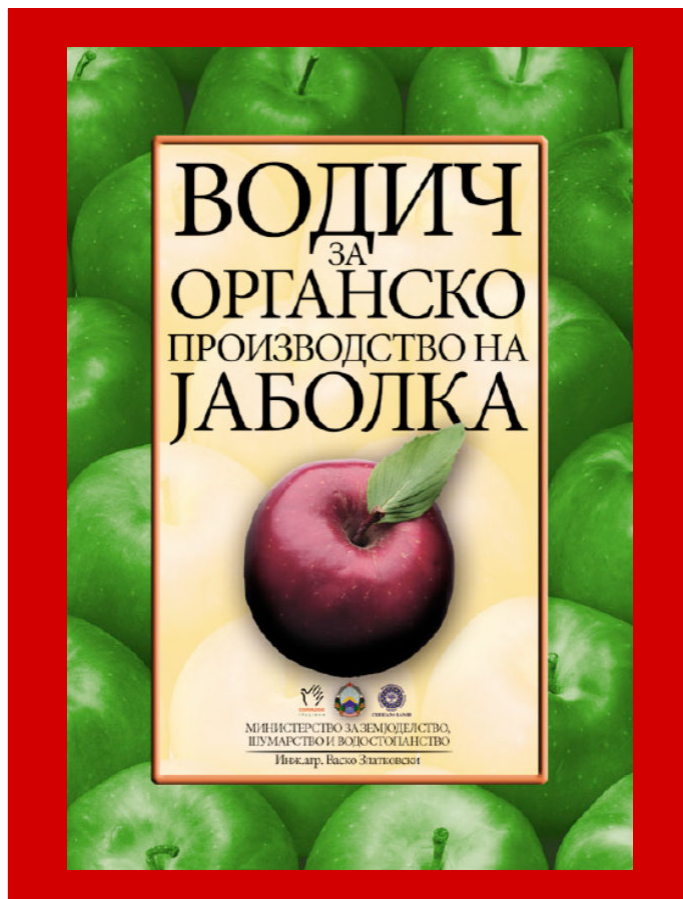


Figure 35: Guide for organic apple production

Selected Actors in the Organic Sector in North Macedonia

Some of the most prominent companies dealing in the organic sector in North Macedonia are presented here.

Most began as family owned businesses and have developed into significant actors at the organic market. Included are companies from the primary organic production sector, processing industry and retail.

Alkaloid AD

Alkaloid AD Skopje is a company which more than eight decades, has been operating in the field of manufacturing drugs, cosmetic and chemical products and processing botanical raw materials.

Alkaloid AD is a joint stock company that consists of two profit centers: Pharmaceuticals and Chemicals, Cosmetics and Botanicals; there are two subsidiaries in the country as well as 18 subsidiaries and 2 representative offices abroad (Serbia, Montenegro, Kosovo, Albania, Bosnia and Herzegovina, Croatia, Slovenia, Switzerland, Bulgaria, Turkey, Ukraine, the Russian Federation, USA and UK). The company has 2.015 employees in the country and 604 employees in subsidiaries and representative offices abroad.

The **Botanicals** product range includes wide assortment of organic herbal teas.

- Name of company: **Alkaloid AD Skopje**
- Certified since: 1997
- Main products: GOOD NATURE teas (organic chamomile tea, mint tea, rosehip and hibiscus, white thyme, nettle tea, elder tea, linden team, marjoram tea).
- +38 923 10 40 33, dnanov@alkaloid.com.mk

www.alkaloid.com.mk/



Figure 36: Organic herbal teas from Alkaloid AD Skopje

BIOCOSMOS

BIOCOSMOS is a brand created and owned by **Aronija zdrava hrana** DOO, a company that started as a family owned local business in 2003, at that time focused on production of wholegrain, additives-free natural products. Today the company is dedicated to healthy, organic and gluten-free food production, trading, whole-sales, import and export. The main brand of the company **BIOCOSMOS** is leading natural, organic and gluten-free brand name in Macedonia. The company at the moment owns 1 production facility, 2 health food stores and is also supplying all the big chains of supermarkets in Macedonia with its products. Supporting the local organic farmers throughout the years, the company aims to strengthen and expand its own organic farmland areas as a reliable and controlled source of supplies for its own production.

- Name of company: **Aronija Zdrava Hrana D.O.O.**
- Certified since: 2013
- Main products: **BIOCOSMOS BRAND** (organic crunchy and toasted muesli, organic gluten-free toasted muesli, organic gluten-free cookies with all natural ingredients, organic juices and jams from berries, whole-grain flower and pasta, organic stone milled flour and organic super foods).
- +38 978 21 15 57, info@biocosmos.mk

www.biocosmos.organic

www.biocosmos.mk



Figure 37: Whole grain sticks and crackers from BIOCOSMOS

Biomelan



Biomelan is a company engaged in processing 100 % cold pressed aronia juices – not from concentrate. The juices are prepared using methods that guarantee maximum quality, rich taste and color. No water is added to the production process as well as sugars or preservatives. They are exclusively cold pressed and pasteurized at 80 degrees. The juices have a significant amount of beneficial effects on human health thanks to their antioxidant and nutritious formula. The company can offer packaging of 3 l bag in box, 1 l and 200 ml glass bottles.

- Name of company: **Biomelan Ltd**
- Certified since: 2016
- Main products: Aronia juice 100 %
- +38 978 60 97 66, biomelanprodukt@hotmail.com

www.biomelan.com



Figure 38: Biomelan's aronia juice

BIOPLANT



The motive for establishing **BIOPLANT** company is to offer something new and fresh in Macedonian agribusiness – to offer highly profitable plants which can provide higher profits and guarantee the sale of the crops. **BIOPLANT** has the only goji berry garden Centre in North Macedonia for production of certified seedling material controlled by experts of the Faculty for Agricultural Sciences and Food in Skopje. Apart from the seedling material, **BIOPLANT** offers something which is the most important thing for every producer – it guarantees the sale of the goji berry crop and prompt payment. **BIOPLANT** provides free production technology for its partners, and **BIOPLANT** team of experts is available for free consultations and advices. **BIOPLANT** is a subsidiary of **ANIMA DOOEL Skopje** (♣), which was established in 2001 and which holds ISO9001:2015 quality and ISO 22000:2018 food safety certificates.

- Name of company: **Anima Doel**
- Certified since: 2020
- Main products: Bioplant 100 % cold pressed organic juices
- +38 970 30 60 30, info@bioplant.mk

www.bioplant.mk



Figure 40: Goji berry products from Bioplant

KONIMEX



The company's effort and involvement in promoting the Macedonian ecologically clean wild-growing herbal raw materials, essential oils and forest fruits came into being in 1992. The production facility is located in clean, pollution-free area that offers perfect condition for growing plants. In the past several years the company has developed its own collector's network, assuring them that all the raw materials that are in use come in an excellent condition at the Quality Control Point of the production facility. **KONIMEX Holding Group** is engaged in the production of a broad variety of products such as medical plants, 100 % natural essential oils, a wide range of teas, acetic acid and many more activities completing their portfolio. Their production line is present on the whole domestic market and expanded in the countries of the European Union, the United States, Australia and the neighboring countries in the Balkan region.

- Name of company: **KONIMEX Holding Group**
- Certified since: 2013
- Main products: **KORO Organic Teas; KORO Organic vinegar**
- +38 922 46 12 18, viktor.kolovski@gmail.com

www.konimex.com.mk



Figure 39: Organic teas from KONIMEX

Lipa



Lipa is family owned organic farm nestled in truly peaceful place in North Macedonia called Mustafino. Their story began in 1994 as a grocery store selling basic necessities to the local inhabitants. Within a few years the business grew, extending its commercial proposition and activity. In 2005 the company was in full swing, taking 54 ha of land under concession and started with organic agriculture. At the same year they received the status of organic-in-conversion. Nowadays, on around 70 ha certified organic land, Lipa's experienced a success offering fantastic range of delicious barleys, apricots, and grapes, grown without using harmful pesticides and preservatives. The manager, Suzana Dimitrievska is a real pioneer, leading the way to introduce more organic production in North Macedonia (a story dedicated to her personal development is available at (♣)).

- Name of company: **Lipa**
- Certified since: 2005
- Main products: wine and table grapes, cereals, barley, apricot, alfalfa
- Production area: 20 ha Barley; 4 ha Grapes; 2 ha Apricot
- +38 978 33 36 58, suzana_dimitrievska@yahoo.com

www.ipa.com.mk/en/



Figure 41: Family owned organic enthusiast Lipa

Nelkoski Organic Food



Nelkoski organic Hazelnut farm is a family business that is producing 100 % organic ECO home-grown Hazelnuts. The area is located on approximately 700 m above sea level, which is perfectly suitable for providing highest quality nuts. The production started in 2010 with an amount of nearly 5000 trees. Nowadays the orchard is comprised of 10.000 trees with constant growth. In total, the family farm deals with 16 ha of arable land, with production capacity from 20.000–40.000 kg premium hazelnuts. The Nelkoski family are stepping ahead the competitors by having their own growing practices and production/ processing factory. Nelkoski organic Hazelnuts farm is having their own hazelnut processing factory which includes a part where products are customer oriented which means that the nuts are cleaned and packed raw or baked, according to customer's specification. From 2017 the **Nelkoski Organic** Hazelnut farm started with production of organic hazelnut paste.

- Name of company: **Nelkoski Organic Food**
- Certified since: 2014
- Main products: Hazelnuts and hazelnut spreads
- Production area: 160,000 m²
- +38 978 23 30 73, contact@zaumorganic.com

www.zaumorganic.com/



Figure 42: Nelkoski's organic hazelnuts and hazelnut spread

Food Coop Good Earth



Good Earth is the first consumer cooperative in North Macedonia, aimed at establishing an alternative to the existing system of production, distribution and consumption of local food. The cooperative stands for organic and chemically untreated local food produced in a sustainable way and in a reciprocal relationship with natural resources instead of their exploitation. In order to protect the environment, the cooperative uses public instead of private transport for procurement of organic products, promotes reuse and minimal packaging and does not use plastic bags. At the same time, their activity is not directly aimed at profit, but at investing and caring for the community and improving the human relations. The cooperative believes that a better society is built by cooperation, rather than by competition. **Good Earth** is also a member of the Network of Social Enterprises of North Macedonia.

- Name of company: **Good Earth**
- ++38 976 86 30 89, info@dobrazemja.org

www.dobrazemja.org



Figure 44: Food Coop Good Earth offering fresh and processed organic food, in their shop and as home delivery

Zoralek



Zoralek was founded in 2005 as limited liability company selling honey and bee products to wholesalers of companies involved in pharmaceutical production. In 2013 the company built modern facilities. The same approval opened an opportunity to produce and market products both in North Macedonia and European countries. The following year the company started with production and packaging of honey and placing it in the sales outlets in Macedonia. In 2015, Zoralek started with the production of the **FLOREO** brand (Immuno Honey, Vita Med. Digesto Honey, Relaxa, Chocomed, Gumbir Honey, Cinnamon Honey, Livadia Honey, Mountain Honey, Honey with Piece Pie and Pergastart Syrup).

- Name of company: **Zoralek**
- Certified since: 2008
- Main products: Imuno Honey, Cinnamon Honey, Choco Honey, Relax Honey, Ginger Honey, Vita Honey
- +38 970 21 12 20, info@floreo.mk

www.floreo.mk



Figure 43: Honey and bee products from Zoralek

AgroLeska



AgroLeska is a family-owned business that has been producing fruits and vegetables for generations. They have been producing and harvesting some of Europe's best pure and organic bio aronia berries since 2006. **AgroLeska** produces berries with unique characteristics that are naturally bigger and sweeter, full of nutrients. The berries are grown in clean areas, harvested with extreme care so that they can ensure maximum quality and freshness.

- Name of company: Doel Agro Leska - Bitola
- Certified since: 2006
- Main products: Aronia
- +38 978 25 27 75, agroleska@yahoo.com

www.organskisvet.mk/product/agro-leska/



Figure 45: Organic aronia in AgroLeska's focus

Challenges and Outlook

There is significant potential for further development of the organic sector in North Macedonia. The market needs improved organisation supported by relevant institutions, including appropriate knowledge transfer and stronger linkages in the sector. This will bring enthusiasm in the organic production and its consumption.

Organic farming in North Macedonia is an **emerging sector** with a potential for opening new employment opportunities and new market perspectives for farmers. There is large unused potential that can be further developed. To use the opportunities offered in the organic sector, certain obstacles need to be addressed. The development of organic production in the country has been hampered by lack of adequate plant protection, resulting into higher certification of crops with lower plant protection requirements (walnuts, hazelnuts, persimmons, pomegranates, etc.). Input providers often lack interest in importing products approved for use in organic production due to the limited market. Insufficient educational and informational activities for organic farmers are another obstacle to the development of organic production.

In order to assure larger quantities of standardised products, it is necessary that the producers consider **joint activities** in cooperatives, producers' organisations etc. Cooperatives of organic producers contribute to pooling resources for greater and more organized promotion of domestic and export markets. In addition, the association of producers should ensure a

wider range, larger quantities and smaller fluctuations in the availability of certain types of organic food. All of this is necessary for organic products to retain and attract wholesale buyers, including large supermarket chains. To be competitive, organic producers need to jointly plan and organize better access to the domestic and international market in the future.

Until recently, there was a lack of market development undertakings and underdeveloped marketing channels for organic products on the domestic market. Organic production is not yet sufficiently advanced in scope and variety in order to be able to carry out significant **marketing activities**. Most of these activities so far have been aimed at national promotion of organic food. International activities include export promotion support, mainly channelled through donor organisations, as well as organic food from the country is promoted internationally (e.g. at the **Biofach** fair in Nuremberg, Germany).

There is **significant potential to further expand the domestic organic market, by domestic production and also by imports**. The growing presence of modern grocery retailers and supermarket chains (with increas-

ing space dedicated to healthy and organic food corners) and specialised health food stores, as well as increased online e-commerce, makes organic food more accessible and recognisable on the domestic market. Other activities include selling freshly squeezed fruit juices in several coffee bars and selling selected products directly (for example, honey, bread, fruit) directly from the farm to supermarkets. Locally produced organic production needs **greater recognition and market verification** through higher prices, which is still mostly not the case as organic products are often marketed without the necessary differentiation. The **price sensitivity** of the local consumers' needs to be taken into account, but also the rising segments of the population where **well-being aspects and fitness** are becoming increasingly important to the young adults, families with young children and mid-agers.

Swot – Organic Sector in North Macedonia

Strengths

- **Suitable agro-climatic conditions**
Possibility for growing wide range of products, traditional practices.
- **Growing trend of organic production**
The number of organic producers is increasing, as well as the volume of organic production as a raw material, but also the range of organic products with higher value, specialized shops for organic products or corners for organic products in the existing sales chains.
- **Support from donor organizations**
Donor organizations, especially those supported by the Swiss government, are important for laying the foundations and development of OP in the country, which are still present and active in this field in the country.
- **Existing two national certification bodies for organic production,**
with the possibility of obtaining internationally recognized certificates. These certification bodies are up to date with changes and market demands, which they further pass on to producers. In addition to these certification bodies, producers can also be certified in foreign certification bodies.
- **Government support**
Existing legislation on organic production and additional financial support from the state for organic

producers, both for those who are certified and for those in conversion. There is financial support for processed and exported quantities of organic products. The government also supports the participation in the world's leading organic food fair – **BioFach** in Germany.

- **Organisations of organic producers**
Existing structures connecting and representing organic producers.
- **Role and enthusiasm of individuals**
The role of individuals who demonstrate enthusiasm and promote organic production is very important, among organic producers as well as in governmental institutions and non-governmental organizations, which lead the development of organic production.
- **Many success stories that persist and grow over the years.**
One such example is **Good Earth**, as well as the product lines **BioCosmos**, **GreenLine**, **BioPlant**, and others, which are increasingly present on the market. These provide a premium price for the primary organic agricultural products (thus overcoming the previously identified shortcoming for inability to realize a price higher than the conventionally obtained products).

Weaknesses

- **Incomplete functionality due to lack of human capacity in government institutions**
to support the organic sector development. It is necessary to create a functional team within the institutions, for example the Ministry of Agriculture, Forestry and Water Economy, with authority and enthusiasm to develop this segment of agricultural production. Some development initiatives remain unfinished or in the idea stage, precisely because of this constraint.
- **There are no professional employees in the associations.**
All activities are based on enthusiasm and available free time to dedicate to the set tasks.
- **Incomplete records**
There is no national list of permitted inputs for organic production (this weakness is offset by advice from certification bodies). There are no appropriate tariff numbers for records of import and export of organic products. The National Organic Production Plan 2013-2020 needs to be updated. The existing Register of Organic Producers / Operators in the country can be upgraded and made easier to use by potential interested parties.

Opportunities

- **The importance and potential of organic production** is recognized by donor organizations, which increasingly support this segment of agricultural production, and also by the government that provides opportunities to support the production.
- **Potential for connecting with foreign markets** for the export of organic products, such as the existing cooperation with Coop in Switzerland.
- **Potential to organize the purchase of organic production between different buyers,** which will facilitate the production process of processors.
- **Local advisors or trainers,** in frequent contact with producers, can further improve the quality and volume of production. Organizing training of trainers, with geographical dispersion, can help in offering field advice.
- **Media representation and informing consumers** to recognize the differences from products obtained with conventional production and certified organic production.

- **Organic processors recognize the importance of stability in the supply of organic products, so offer contract production and additional support to organic producers** to ensure this stability in the supply of raw material for their production.
- **Potential synergies with (agro)tourism.**

Threats

- **The crisis as a result of the war in Ukraine and the continuation of the post-pandemic conditions** affect the purchasing power of consumers to buy higher value-added products, or donor organizations to support this segment in the country.
- **Lacking adequate key personnel with competences and authority** to promote this sector may be neglected in the future development plans of the country, or in using the willingness of donor organizations to support initiatives in the sector.

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