CZECH REPUBLIC DEVELOPMENT COOPERATION

ÚKZÚZ

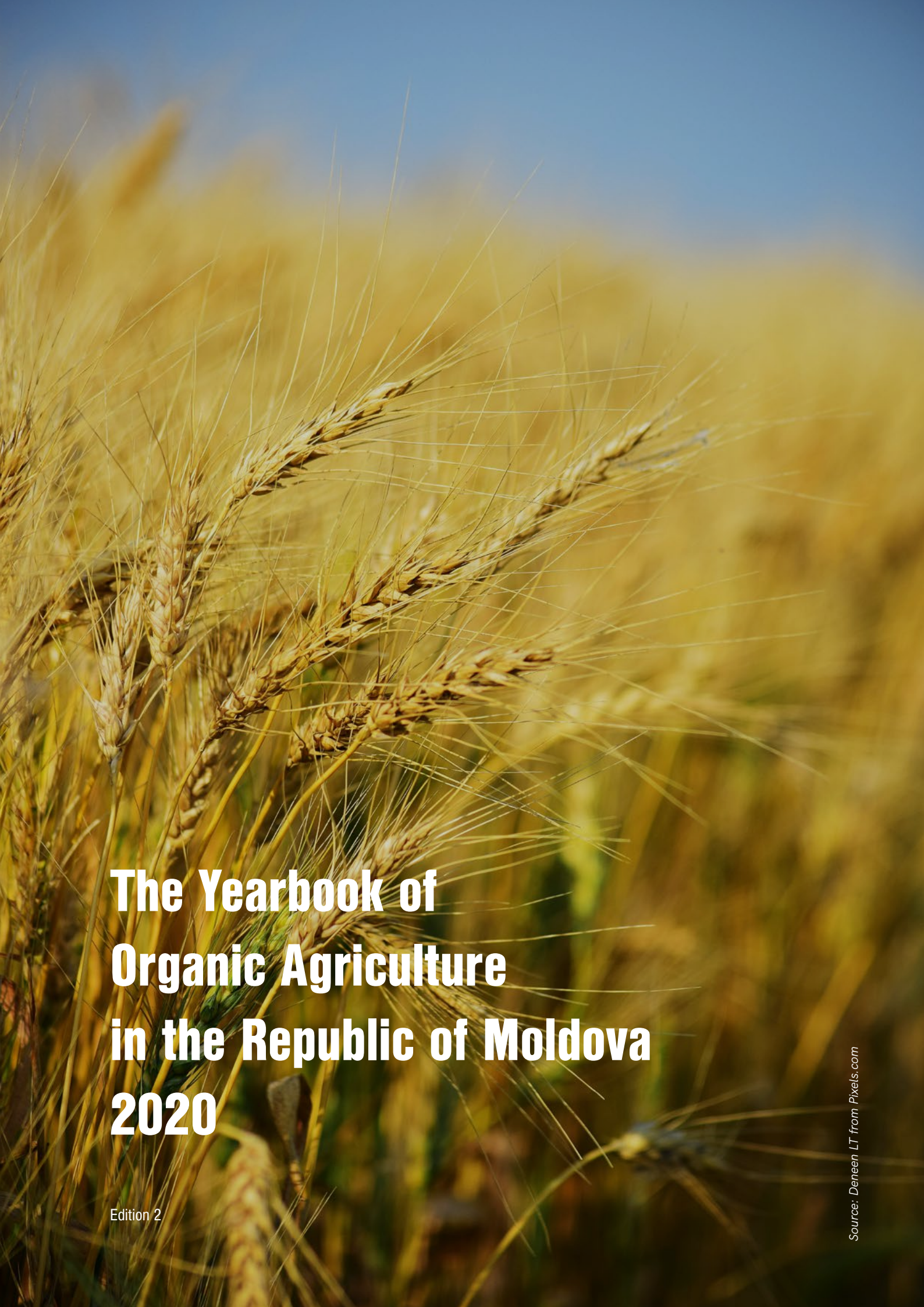
Moldova Organic Value Chain Alliance

MINISTERUL AGRICULTURII ȘI INDUSTRIEI ALIMENTARE AL REPUBLICII MOLDOVA

The Yearbook of Organic Agriculture in the Republic of Moldova 2020

Edition 2

Chisinau • 2021



The Yearbook of Organic Agriculture in the Republic of Moldova 2020

Edition 2

Source: Deneen LT from Pixels.com

Dear readers,

In this publication you will find complex information about the system of organic farming in the Republic of Moldova, which has been developing steadily in recent years, being an excellent system for maintaining both natural resources and human health, but also exposed to the highest risks.

That is why there was a need for the annual publication to inform society about the state of this important sector of the national economy. The problems faced by both organic farmers and the sector as a whole are a challenge to find smart solutions to ensure sustainable production, so that organic producers are satisfied with the results they achieve, given that the demand for organic products is not largely covered today, and there is enormous potential in this sector.

We opt for a healthy society, but for this we must also consume healthy food, and I would like to express my cordial gratitude to all those who contribute to the promotion of organic agriculture in the Republic of Moldova.

With respect, Viorel GERCIU
Minister of Agriculture and Food Industry

Dear reader,

The brochure you now hold contains great optimism where you can find a short description about the current state and future opportunities for organic farming in the Republic of Moldova. Thanks to the growing consciousness of people about ecologically produced food, we are pleased to report that over the last few years Moldova's land dedicated to organic farming has grown.

Slowly, but surely, farmers are realizing that environmentally friendly management of natural resources, including vegetation, soils, water - is more profitable for them and benefits our entire society for whom they are providing environmental and social services.

Growing number of consumers around the world are seeing the strong connection between the environment, our health and the food we consume.

Organic farming gives us the opportunity to address all the issues. It provides solutions for a more sustainable agriculture that helps to overcome economic, social and environmental challenges.

Organic agriculture provides a new approach to farm intensification that respects the integrity of the whole farm through regeneration of soil fertility.

By reducing the dependence from industrial inputs, farmers can increase their economic competitiveness and simultaneously to improve the ecological and social wellbeing.

We believe the collaboration between different players on the entire food chain will benefit all aspects. We'll help mitigate and adapt better to global warming, and we'll deliver other essential environmental and social benefits. These factors emphasize the role of organic agriculture as a vital component in building a sustainable and prosperous future for our country and new generations.

But no one can do it alone. The future success of organic farming requires the support of many of us. The time is right to build a strong foundation for a healthy future for Moldova and its citizens. We in Moldova are fortunate to have a strong team to achieve that. Cooperation of farmers, research institutions and NGOs both at the national and international levels enables farmers to exchange experience, acquire new knowledge and skills which are important for a successful growth and development of the agricultural sector, as well as of the whole country.

With respect Boris Boincean,
doctor habilitate of agricultural sciences,
research professor, director of Selectia
Research Institute of Field Crops,
Balti, Republic of Moldova
President of Moldova Organic Value Chain Alliance

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Acronyms and abbreviations

ANARM – The National Association of Beekeepers of the Republic of Moldova (NABRM)

ANSA - National Agency for Food Safety

CAECP – Accreditation Center in the field of Product Conformity Assessment

CB - Control Body

CZDA - Czech Development Agency

CEE - European Economic Community

EA-BLA - Bilateral Recognition Agreement with European Accreditation Cooperation

EASC - Euro-Asian Council for Standardization, Metrology and Certification

EU - European Union

FiBL - Research Institute of Organic Farming

GEF – Global Environment Facility

HG - Government Decision

HVAA - High Value Agriculture Activity in Moldova

IAF - International Accreditation Forum

ILAC-MRA – International organization for accreditation bodies - Mutual Recognition Arrangement

IRSA - Interregional Standardization Association

MAIA - Ministry of Agriculture and Food Industry

MOLDAC – National Accreditation Center

MOVCA - Moldova Organic Value Chain Alliance

MSSR - The Moldovan Soviet Socialist Republic

RSSM - Republica Sovietică Socialistă Moldovenească

NGO – Non-Governmental Organisation

ODIMM - Organization for the Development of the Small and Medium Enterprises Sector

ULE – The Union of Legal Entities

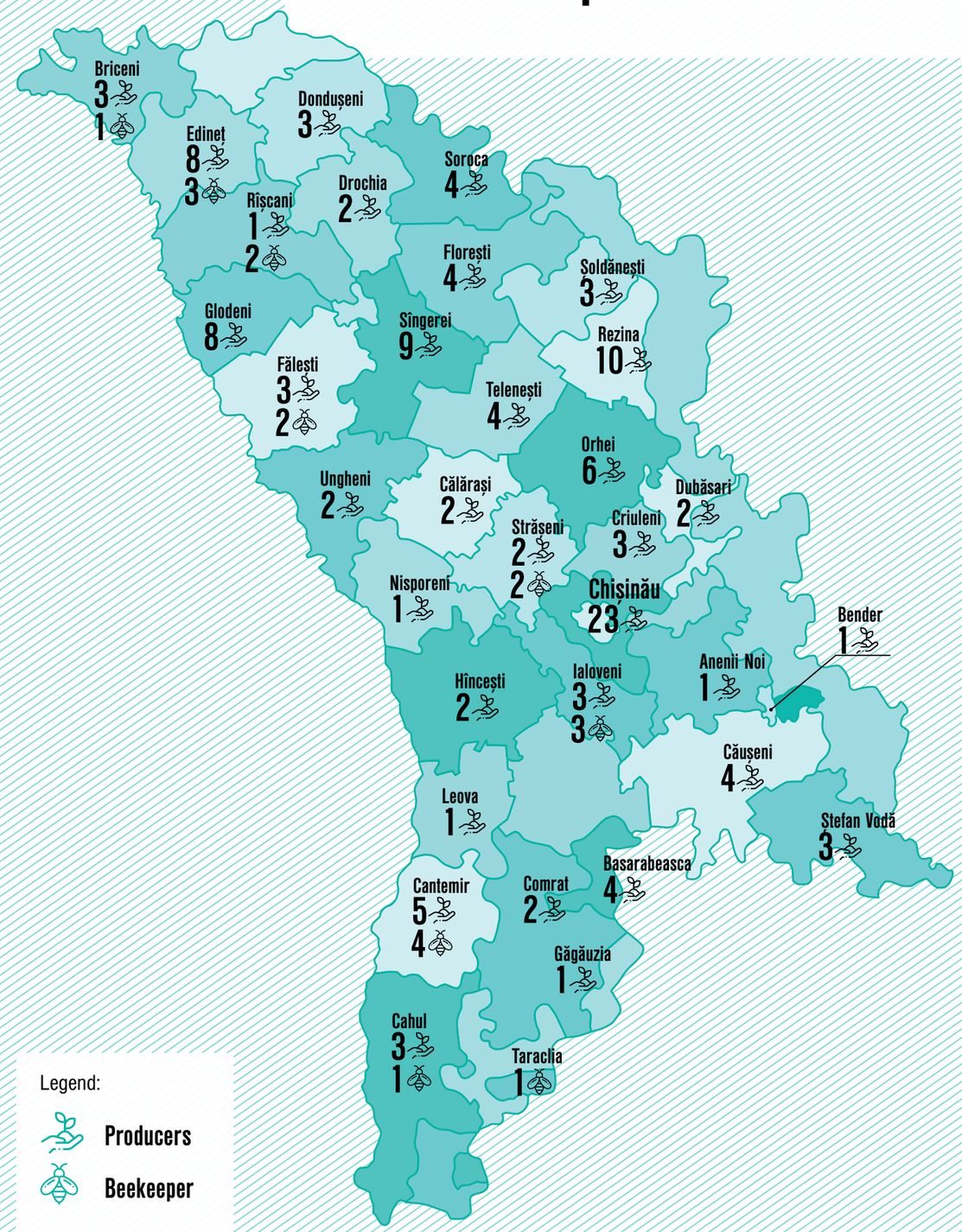
UNESCO – The United Nations Educational, Scientific and Cultural Organization

USAID - United States Agency for International Development

USDA - United States Department of Agriculture

ÚKZÚZ - Central Institute for Supervising and Testing in Agriculture

Map of organic farmers in the Republic of Moldova



01

The current state of organic farming in the Republic of Moldova

1.1 The development of organic farming

Source: Ekaterina Belinskaya from Pixels.com

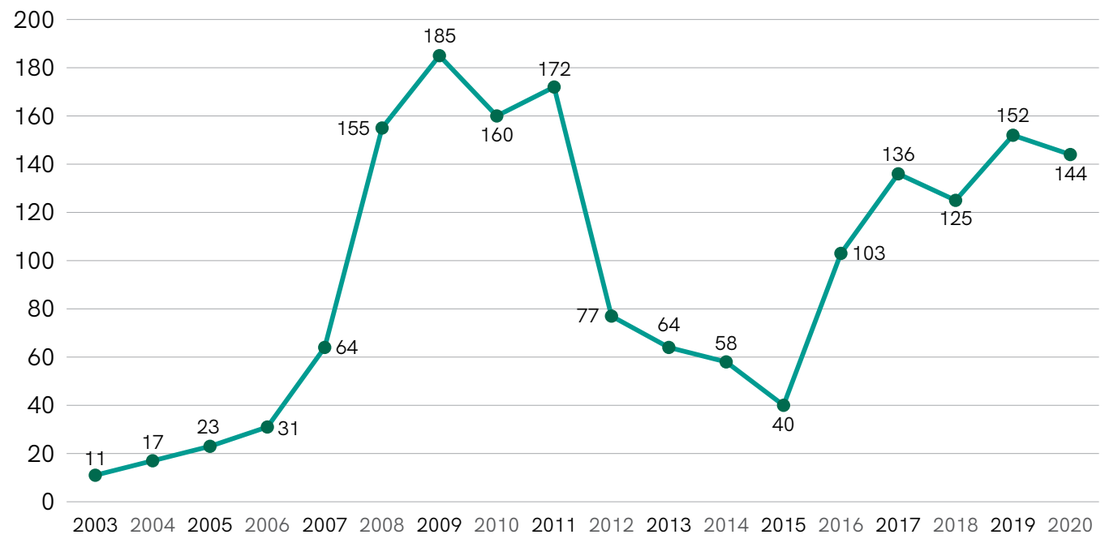
Source: Ion Ceban @ionelceban from Pixels.com

1.1 The development of organic farming

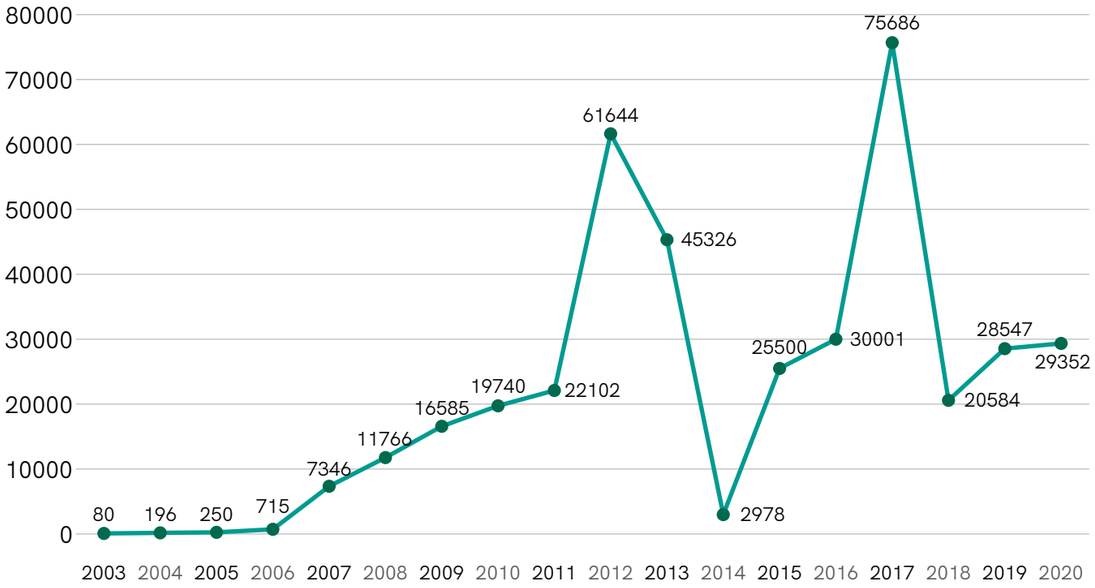
Organic agriculture acknowledges the relationship between our environment, our health and the food we eat. Nowadays organic agriculture might be a good respond to such challenges like climate change, environmental problems and fast growth of the population. The increasing consciousness of the consumers also affected the trends on the market and made organic agriculture a hot topic of discussion. Since the organic products are becoming more popular, Moldova has been trying to adapt to the new trends and promote the organic agriculture in the country through the education of farmers and creation of more favorable conditions of work.

The statistical data shows an increase in the number of certified organic area compared to previous years. In 2020 it grew from 28,547.45 ha to 29,352.06 ha (Graph 1.1.1), even though the number of organic operators dropped from 152 to 144 (Graph 1.1.2). The reason is that many small operators prefer to merge with bigger ones in order to become more sustainable and competitive on the market.

Graph 1.1.1: Number of entities included in the value chain of organic farming in 2003-2020 in RM



Graph 1.1.2: Dynamics of areas registered in organic farming in 2003-2020 in Moldova



The continuous growth and development of organic agriculture in Moldova is connected with the support of the government and local agricultural associations that made educational materials and courses available for all the farmers. For example, MOVCA created an eLearning platform www.studii.movca.md where farmers can find any useful information for their businesses. It contains a variety of short video lessons on different topics, such as crop rotation rules, cover crops and green manure, as well as certification basics and practical registration papers nowadays.

Nevertheless, the success of the organic agriculture in Moldova is connected to the richness of the soil in the country. Chernozem which is typical for these territories appeared on the tentative list of UNESCO as a World Heritage.

Photo: The director of the Research Institute of Field Crops "Selecția" Boris Boincean with the Farmer-to-Farmer volunteer Bruce WIlliams

With the increasing importance of organic agriculture in Moldova appeared many places and events promoting it. A successful example is EcoLocal market which is opened each weekend in Chisinau. At Ecolocal consumers have the opportunity to buy local organic products, fresh or processed. In 2021 Ecolocal started to work two days a week instead of one, due to growing interest of customers.

Source: Ecolocal official Facebook page

Despite the fact that there are still some problems to be resolved in the sector of organic agriculture in Moldova, its future is quite promising. The current Ministry of agriculture has ambitious plans to increase the organic farming in Moldova.

At the moment, there are also being considered to develop plans to provide organic products for hospitals, schools and kindergartens. The farmers are ready to learn new practices for successful organic agriculture and expand their production portfolio.

A successful example is Spartac Chilat – the CEO of Prograin Moldova, founder of MOVCA and one of the pioneers in organic farming in Moldova.

This year together with a group of local organic farmers Spartac Chilat exported for the first time to Israel peeled spelta seeds, certified according to the requirements of Israeli kosher cuisine, that is, complying with Jewish religious laws.

The total certified quantity for these deliveries was 75 tons of peeled spelled seeds. This volume of finished product was obtained from about 115 tons of raw material harvested from an area of 25-30 ha of sowing.

Source: MOVCA's official website

The number of producers looking for opportunities for further growth and development in organic agriculture has been continuously increasing. The local associations working in this sector are building successful collaborations with local farmers. Farmers are able to easily find updated information about the current trends, financial opportunities, certification, etc. within the association's community.

With the creation of an efficient strategy for the agricultural sector and support from the government, Moldova has good chances of becoming a strong player in organic agriculture internationally.

Source: Karolina Grabowska from pexels.com

02

Controls and certification

2.1 State role

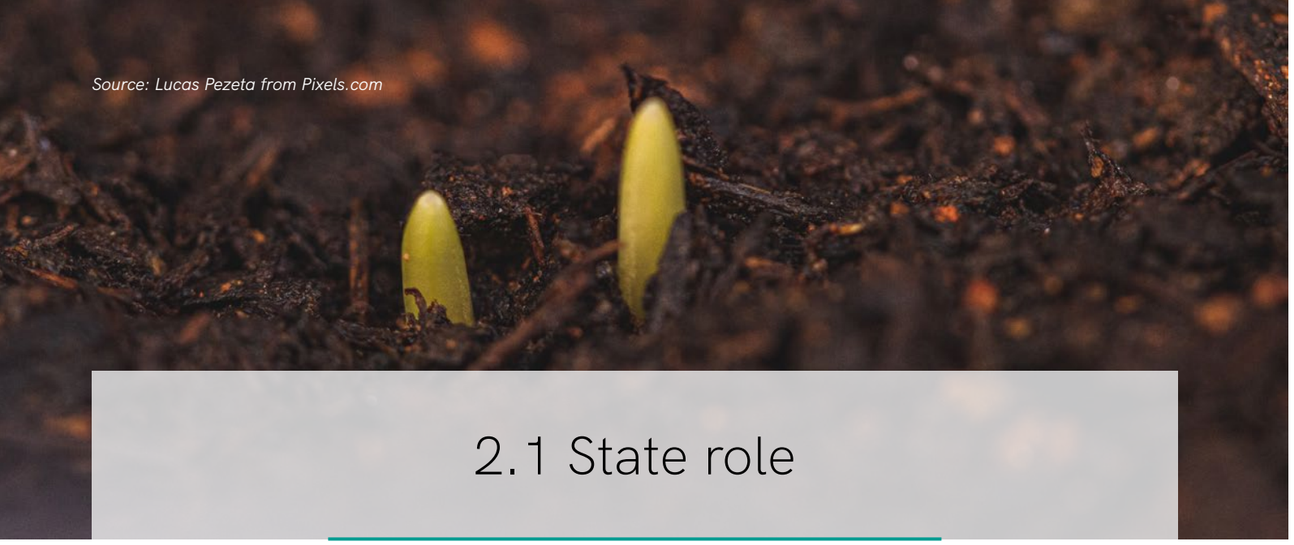
2.2 Control bodies operating in the Republic of Moldova

2.3 Basic statistics of conducted controls

2.4 Inputs for organic farming

2.5 Laboratory testing

Source: Ilya Lisauskas from Pixels.com



Source: Lucas Pezeta from Pixels.com

2.1 State role

The state has a key role in the system of administration and control in the organic farming sector through its institutions. At the moment, according to the legislation in force, MAIA is the competent authority having as basic responsibility the policies making in the field. At the same time, the duties of the competent authority are provided in art. 4 of Law 115/2005.

The state also holds the function of accreditation of the inspection and certification bodies from organic farming sector.

The National Accreditation Center of the Republic of Moldova (MOLDAC) is a public institution, monitored by the specialized body of the central public administration responsible for quality infrastructure, established under Law no. 235 of 01.12.2011 on accreditation and conformity assessment activities.

MOLDAC is a single national accreditation body and aims to implement state policy in the field of accreditation and conformity assessment, giving credibility to the technical competence, impartiality and integrity of accredited conformity assessment bodies, as well as promoting the free movement of products, increasing product competitiveness and services, protection of consumer rights and interests, ensuring the protection of life, health and safety of people and environment. MOLDAC operates in accordance with the provisions of the Constitution of the Republic of Moldova, legislative acts, decrees of the President of the Republic of Moldova, ordinances, normative acts and provisions of the Government, international treaties to which the Republic of Moldova is a party, ISO / IEC 17011, Regulation (EC) 765/2008, the documents of EA, IAF, ILAC, as well as with the provisions of the MOLDAC Regulation, approved by Government Decision no. 77 of 25.01.2013 on the reorganization of the State Enterprise "Accreditation Center in the field of Product Conformity Assessment".

The primary objective of MOLDAC is to maintain the status of signatory of the Bilateral Recognition Agreement with the European Accreditation Cooperation and that of the signatory of the Mutual Recognition Agreement with the International Cooperation for the Accreditation of ILAC-MRA Laboratories.

MOLDAC was subject to peer review on the basis of clear and transparent evaluation criteria and procedures established by the European and international accreditation bodies EA, IAF, ILAC.

MOLDAC respects in its activity the basic principles of accreditation:

- use of unique assessment procedures, harmonized with European and international rules, for the accreditation of conformity assessment bodies;
- competence and impartiality;
- transparency, public availability and credibility;
- representation of public interests;
- free, non-discriminatory access of all applicants to the accreditation process;
- independence from the possible predominance of any specific interests;
- ensuring confidentiality and maintaining professional and commercial secrecy;
- impartial examination of appeals and complaints;
- voluntary nature of accreditation.

The accreditation activity is an officially recognized activity of public authority.

At regional, European and international level, the National Accreditation Body is a member of:
EA European Cooperation for Accreditation
ILAC International Cooperation for the Accreditation of Laboratories
IAF International Forum for Accreditation
EASC Euro-Asian Council for Standardization, Metrology and Certification
IRSA Interregional Association for Standardization

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Web: www.maia.gov.md/agricultura-ecologica

Standards and legislation related to organic farming

Currently, in the Republic of Moldova the normative framework in the field of organic agri-food production is reflected primarily by Law no. 115-XVI of 09.06.2005 on organic farming, in which the provisions of the European regulations of "old approach" or more precisely Council Regulation (EC) no. Regulation (EC) No 2092/91 on organic production of agricultural products and its indication on agricultural products and food, which was subsequently repealed by Regulation (EC) No Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labeling of organic products.

In 2020, the process of harmonization of the legislation of the Republic of Moldova with the European one was extended by transposing the provisions of the EU Regulation 2018/848 on organic production and labeling of organic products.

National legislation on organic farming

1. Law no.115 of 09.06.2005 on organic agri-food production **lex.justice.md**
2. Government Decision no.149 of 10.02.2006 on implementation of the Law on organic agri-food production l**ex.justice.md**
3. Government Decision no.1078 of 22.09.2008 on the approval of the Technical Regulation "Organic agri-food production and labeling of organic agri-food products" **lex.justice.md**
4. Government Decision no.884 of 22.10.2014 for the approval of the Regulation on the use of the national mark "Organic Agriculture - Republic of Moldova" **lex.justice.md**
5. Order of the Ministry of Agriculture and Food Industry no.107 of 26.05.20082008 on the approval of the Rules on the economic agents registration in organic agri-food production **lex.justice.md**
6. Order of the Ministry of Agriculture and Food Industry no. 49_27.03.2015.pdf on the establishment of the profile commission, the Regulation on the organization and functioning of the profile commission regarding the examining of the applications for use of the national mark "Organic Agriculture-Republic of Moldova"
7. Order of the Ministry of Agriculture and Food Industry no. 9_19.01.2010.pdf on the establishment of the authorization commission, the Regulation of the authorization commission of the inspection and certification bodies
8. Government Decision no. 356 of 11.06.2015 on approval of the Technical Regulation "Organization of the wine market"
9. Law on Vine and Wine no 57-XVI of 10.03.2006
10. Law no. 78-XV of 18.03.2004 on food products.

These documents are available on MAIA's web page https://maia.gov.md

National mark "Organic Agriculture – Republic of Moldova"

According to the Law on organic agri-food production, the right to use the national trademark "Organic Agriculture - Republic of Moldova" on products, labels and packaging of organic agri-food products has the economic agents that produce, process, import, export and / or sell organic agri-food products register with MAIA.

The trademark is registered by the State Agency for Intellectual Property. It belongs to the state and is managed by MAIA.

The symbol of the brand is a leaf in space, the colors of which change from light to dark shades. Inside the leaf is placed the light green "eco" logo. The symbol of the mark is a leaf in space, the colors of which change from light to dark shades. Inside the leaf, there is the "eco" logo in light green.

RM –OC prec -001

2.2 Control bodies operating in the Republic of Moldova

In 2020, in the Republic of Moldova continue to operate 2 inspection and certification bodies "Eco Certificate" SRL and SRL "Control Union Dnjestr" in accordance with the provisions of Law no.115 of 09.06.2005 on organic agri-food production **lex.justice.md** (Tab. 2.2.1)

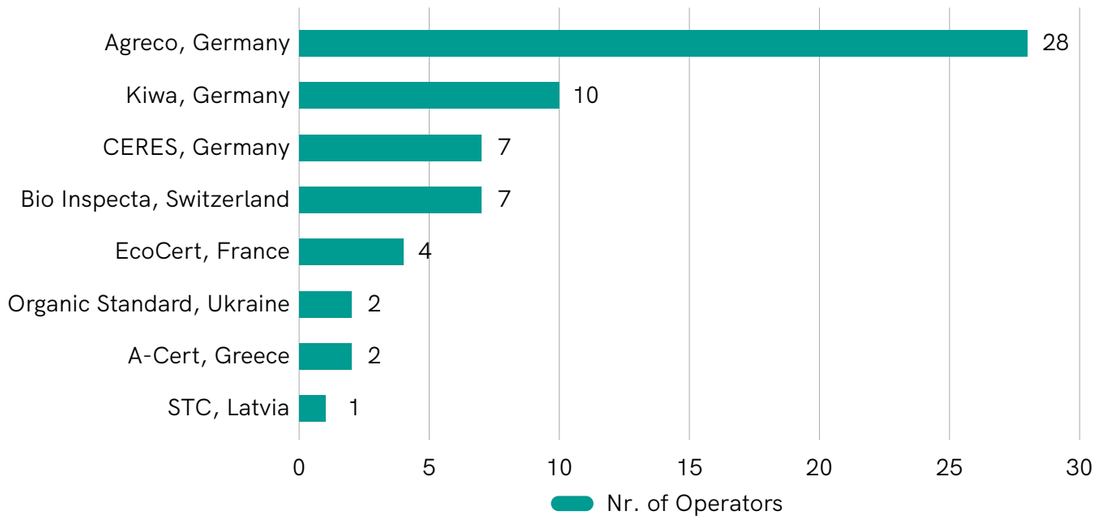
Tab 2.2.1 *Analysis of accredited enterprises for ecological certification and analysis of their activity in 2020.*

Name of the CB	Number of entities with organic certification		Total certified area	
Number	Number	Ratio %	Area, ha	% ha
SRL Control Union Dnjestr	43	50%	6085.16	83%
SRL Certificat Eco	43	50%	1227	17%
Total	**86**	**100%**	**7312.16**	**100%**

Compared with 2019, we notice a decrease in the number of certified operators with 12 companies in total from both CBs, which is explained by the decrease in organic operators as a whole, but the increase in areas. Thus, in 2020, the control bodies certified a total of 7,312.16 ha, with 1,094.56 ha more than in 2019.

At the same time, in the Republic of Moldova there are 9 inspection and certification bodies, 1 more than in 2019, which are recognized by the European Commission and operate on the basis of European Regulation 834/2007. (Graph 2.2.2). In total, these CBs have certified 61 organic farmers, with 16 fewer enterprises than in 2019.

Graph 2.2.1: Certification bodies (Nr. of Operators)



Currently, statistics in the field of certification of organic products are carried out in two ways:

1. Data accumulated by the competent authority, MAIA;
2. European Commission data on areas certified under European Regulation 834/2007.

Ecological group certification - increased access to local products in the ecological circuit

Nine local horticulturists have entered the organic conversion on January 1, 2021 and will offer their products to the local consumer.

The Association of Organic and Artisanal Consumers and Producers of Moldova created the first group of small producers in organic conversion - **the EcoLocal CERT group.**

The members of the EcoLocal CERT group are small producers with areas of up to 5 hectares that grow vegetables, berries, fruits and grapes. They came together under a single brand, EcoLocal CERT, and launched the organic conversion period, which will last between two and three years, 2021-2022-2023-2024, depending on the product. Annual crops such as vegetables require a conversion period of 2 years, and multi-annual crops (berries, fruits, grapes) will be in conversion for 3 years.

Upon successful completion of the conversion period, each producer will receive the organic certificate and will be able to sell his products with the status of "organic product".

In the meantime, these producers bear the title of "producer who practices agriculture in organic conversion".

The national certification body that took over the task of inspection, verification and certification of the EcoLocal CERT group is the company Certificat Eco SRL.

All representatives of the EcoLocal CERT group are active members of the EcoLocal Farmers Market Moldova market, are well known among consumers oriented towards healthy food and believe that through the organic certificate they will offer even more credibility and trust in their products and the way they grow them. Each producer will be registered with the Ministry of Agriculture in the National Register of Ecological Circuit Operators.

All businesses are small, in a family format - husband and wife, father and daughter - and group certification gives them the opportunity to achieve the status of organic through low costs.

Moreover, the group benefits from a professional manager, internal inspector, individual mentoring, as well as a program of activities aimed at mutual support and training in the field.

Group organic certification is a new element in the EU Regulation on organic farming and will become part of the new national law on organic farming, which is currently being amended.

The group of producers in organic certification must have legal identity, be independent, be under the umbrella of an existing organization.

The members of the group must be:

- Legal entities
- To own up to 5 hectares of land
- Develop a common product marketing plan
- To be in geographical proximity
- Comply with all the rules for the application of organic farming and certification, in accordance with the legislation in force.
- To pay the ecological certification fees
- To comply with the internal quality standard, provided by a quality manager
- To sign compliance agreements with the certification body and with the group organization for a period of 3 years, for the entire conversion period.

The EcoLocal CERT Group was created with the support of the Swiss Agency for Development and Cooperation (SDC) (***@SwissCooperationinMoldova*** within the project "Optimum - Opportunities through Technologies and Innovation in Moldova", carried out by HELVETAS Swiss Intercooperation, entitled "Supporting the Association" Ecolocal "in establishing a new model of cooperation and introducing the Organic Group certification".

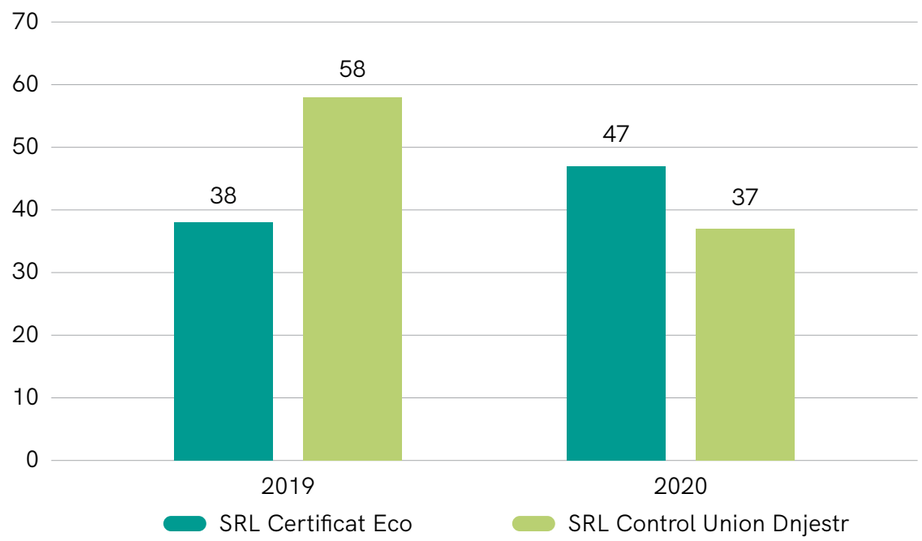
Below there are brief descriptions of each member of the EcoLocal CERT group.

1. GȚ Ababei Petru from Ochiul Alb village, Drochia district, specializes in field crops, such as root vegetables, beans, garlic, berries, quinces and Greek walnuts. The farm covers an area of 3 hectares and Petru is present at the market in season with fresh and easily processed products.
2. GȚ Cojocaru NC from Budești owns 3.8 hectares on which oilseeds for live oils will be cultivated.
3. GȚ Druță Vera from Bacioi cultivates vegetables and has a peach and plum orchard with a total area of 2.86 ha.
4. GȚ Gori Nadejda under the Gori's brand cultivates salads and vegetables on an area of 0.5 ha in the village of Gura Bâcului, Anenii Noi district.
5. GȚ Mardari Roman Emilian under the Eco Grădina brand owns 0.89 ha in Mândrești village, Telenești district, and will specialize in watermelon and melon, as well as other field vegetables.
6. GȚ Niculiță Vasile with the Eco Paradis brand from Drăgușeni village, Hâncești district, cultivates vegetables on an area of 3.3 hectares.
7. GȚ TNG Tronciu specializes in table grapes and wine in the village of Pereni, Hâncești district, on a total area of 5 hectares.
8. GȚ Neboisea Ivan will certify 0.96 hectares under vegetables and salads in Ialoveni.
9. GȚ Roman Vasile specializes in greenhouse vegetables in Seliște village, Leova district, on a total area of 0.4 hectares.

2.3 Basic statistic of conducted controls

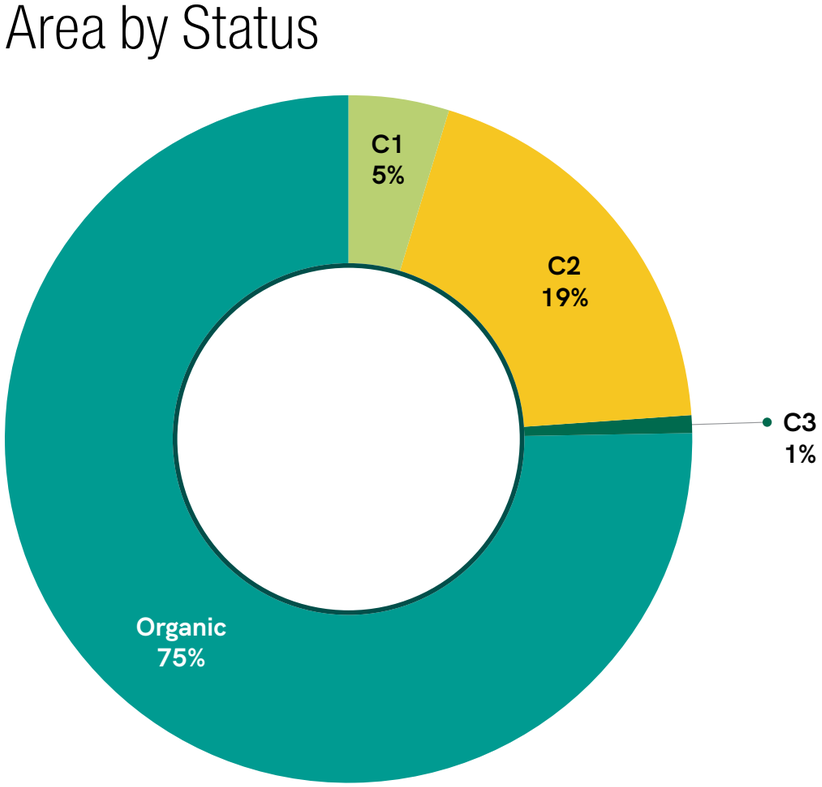
According to the data presented by both local certification bodies, 84 inspections were carried out between January 2020 and December 2020 (Graph 2.3.1). Each farmer, production or processing unit is inspected at the place of production or processing. The operator who has several production units is inspected at each farm, in each field (with sampling, as needed), in each warehouse and office.

Graph 2.3.1: Conducted controls



If we analyze the area by status, then we see in graph 2.3.2 that the largest share in 2020 is held by organic land, namely, 75% or 22,078.5 ha, followed by the status in conversion year 2 with 19% of organic land or 5,577.3 ha.

Graph 2.3.2: Area by Status



The inspection at the production unit (category A) aims at the inspection to determine the conformity of the production with the legislation in force (Table 2.3.3). The inspection also assesses compliance with ongoing process aspects (category D). The processes are: storage, sorting, cleaning, packaging, etc. It is also considered a process and the activity of trade or export (for example, here the invoices and (entries - exits) the balances of goods are checked and it is contrasted with what is, was in the warehouse.

Tab 2.3.3 *„Summary on the conducted controls under national legislation" – Certificat Eco SRL*

Controls performed (inspections)	Between January 2020 and December 2020, 47 inspections were carried out.
Laboratory tests	The results of laboratory tests of samples taken from operators were below the detectable limit.
Issued Certificates	Certificates of conformity (organic status) - 26 Cat. A - 19 Cat. A / D - 3 Cat. D (import) - 4
	Conversion confirmation (Year 1-3) – 17
Product categories (National legislation on organic agri-food production)	Plant production Cat. A - 39 Operators - 1227 ha
	Processed agricultural products Cat. D - 7 Operators, including: - 3 processors (wine, tea, hazelnut kernel); - 4 importers (fresh fruit and vegetables, alcoholic beverages, wines, dairy products, pastries, cereals, other processed foods).

The project "Institutional support in organic farming in the Republic of Moldova" had an important role in ensuring effective controls by organizing training in this field. The training was divided into 2 parts. The first part focused on a study visit to the Czech Republic, between March 18-22, 2019. The second part took place in Moldova, being organized within the Czech project, in cooperation with MOVCA, between May 21-23, 2019. In this regard, ANSA inspectors, representatives of local CBs and 3 MOVCA members were trained by Czech inspectors in ÚKZÚZ, Brno, on how to carry out official controls in the field of organic farming.

The most common infringements of the rules on organic farming

Following the controls carried out during 2020, various non-conformities with minor-medium degree were detected. Compared to 2019, in 2020 deviations persist in producers with small areas (approximately 65% of certified agents have an area of less than 25 ha), cultivated with perennial plants and, respectively, these operators have a small number of employees. As a result, the most common non-compliances in this case are:

- Deficiencies in the management of documents and records (lack of records or failure to update them);
- Lack of measures to prevent contamination with prohibited products from neighboring lands;
- Errors in completing the annual production plan (larger harvests were forecast and no updates were submitted by 2020);
- Partial non-declaration of production;
- Non-compliance with the practices of use of fertilizers beneficial to the soil by the operator.

2.4 Inputs of organic farming

The State Service "State Center for Attestation and Approval of Phytosanitary Products and Fertilizers" hereinafter the State Center under the Ministry of Agriculture and Food Industry was created based on the Government Decision of the Republic of Moldova no. 897 of December 8, 1994 "On the approval and use in agriculture of plant protection products and fertilizers." The state center collaborates with more than 40 companies producing phytosanitary products and fertilizers. The laboratory is accredited regarding the technical and independent competence by the unique national accreditation body of the Republic of Moldova (MOLDAC) according to the European requirements SM EN ISO / IEC 17025: 2018 (Accreditation Certificate No. LÎ - 052 of June 23, 2018), valid until 22 June 2022).

The procedure for conducting state research-testing-experimentation

State research-testing-experimentation of phytosanitary products and fertilizers is performed in at least 3 variants:

1. witness (control) - the variant without treatment;
2. the product requested for state research-testing-experimentation in minimum 2 doses (two variants are considered);
3. standard variant - for comparison.

All variants are provided for at least 3 repetitions, according to the unitary schemes approved by the Council.

- Phytosanitary products containing a new active substance (with a new chemical composition) are subjected to state research-testing-experimentation, depending on climatic conditions, for 2-3 cycles of vegetation, those whose active substance is known in other preparative forms (analog products) - for 1-2 cycles of vegetation.
- Fertilizers are subjected to state research-testing-experimentation for 1 cycle of vegetation.
- Natural or composted organic fertilizers, including manure and processed manure from the Republic of Moldova, do not require research-testing-experimentation and state approval, unless otherwise provided by law.
- The import, research-testing-experimentation and state approval of natural organic fertilizers, including manure and processed manure, and sludge from sewage treatment plants produced in other states are not allowed.

- **Stages of state research-testing-experimentation**
- *Research-testing-experimentation in laboratory conditions and in field conditions on experimental plots* - The purpose of research-testing-experimentation in laboratory conditions and in field conditions on experimental plots lies in establishing and / or confirming the biological efficiency of a new product in relation to the products currently used and / or previously, of its role and its transformation in the plant-soil-environment system, in the elaboration of some application regulations.
- *Research-testing-experiments of post-approval production* - A special condition for conducting research-testing-production experiments is the use of machines and technologies recommended for the cultivation of agricultural plants. The surface of the plots in case of production experiences is at least 1000 m2.

The recognition procedure consists in the recognition and use of assessments carried out by one of the Member States of the European Union on the product containing indices identical to the indices of the product submitted for approval in the Republic of Moldova, provided that:

a) the product contains an active substance approved according to European standards;

b) the authorization to be issued in accordance with the uniform principles of evaluation and authorization of the phytosanitary products of the European Union.

The applicant for the approval of plant protection products, according to the recognition procedure, may be the holder of the authorization, who will present:

a) the application, according to the form;

b) the legalized copy of the authorization, granted by one of the member states of the European Union and its legalized translation into Romanian;

c) the draft label for the product proposed for approval in Romanian and the copy of the original of the label, with translation into Romanian;

d) the declaration on one's own responsibility, in Romanian, confirming that the product requested for approval by the recognition procedure is the same as the one authorized in one of the Member States of the European Union;

e) the assessment report of the Member State of the European Union which will contain information on the assessment and reference decisions on the plant protection product, including information on the risk assessment for operators, workers and consumers.

Fertilizers that meet the technical conditions specified in the Technical Regulation "Mineral fertilizers. Essential requirements", approved by Government Decision no. 268 of April 26, 2012 and European rigors, those registered according to the national requirements of a Member State of the European Union are subject to approval and registration without state research-testing-experimentation and without sanitary and environmental approval.

The applicant for the approval of the fertilizer in the Republic of Moldova, under the conditions of this decision, may be the producer of a fertilizer marked "EC Fertilizer" or the holder of a fertilizer authorization registered according to the national requirements of a Member State of the European Union.

a) the application for homologation of the fertilizer, according to the form, and the power of attorney, if the applicant is other than the producer;

b) the declaration on own responsibility that the product is a standard fertilizer, corresponds to the requirements of the Technical Regulation "Mineral fertilizers. Essential requirements" and European standards or is registered in accordance with the national requirements of a Member State of the European Union;

c) the quality certificate of the fertilizer attesting its composition and physico-chemical properties;

d) the certificate of origin of the product, issued by the manufacturer;

e) the safety data sheet for the product, drawn up in accordance with EU requirements;

f) the draft of the label for fertilizer in Romanian and the copy of the original of the label with translation in Romanian;

g) for fertilizers authorized according to the national requirements of a Member State of the European Union, a copy of the documents related to this authorization shall be presented, in Romanian and English.

The group of experts from the specialized public authorities in the fields of agriculture, public health and environment performs the documentary verification of the quality indices, conditions and norms of use based on the materials presented by the applicant, the assessment of foreseeable, immediate or long-term risks that may include the plant protection product or the fertilizer for humans, animals and the environment with those declared, according to the specific evaluation requirements of the products concerned, with the preparation of the Report and the conclusions regarding the approval of the respective product.

The list of allowed inputs in organic agriculture is presented on http://www.pesticide.md/agricultura-ecologica/.

Contact:
Legal address: MD 2032, Republic of Moldova, mun. Chisinau, str. Sarmizegetusa 16 A
Tel: (+373) 22 639 002
Email: centros@pesticide.md

2.5 Laboratory testing

P.I. Phitosanitary Central Laboratory is composed of several laboratories. The institution's laboratories have implemented the quality system in accordance with ISO 17025 being accredited and recognized nationally and internationally.

Enterprise laboratories are structured in 2 departments: Phytosanitary Quarantine Department and Product Quality Department.

1. Phytosanitary Quarantine Department:

1. Morpho-biometric testing laboratory - analytical capacity:

- Trogoderma granarium
- Thrips palmi
- Pseudaulaucaspis pentagona
- Frankliniella occidentalis
- Scaphoideus titanus
- Tuta absoluta
- Diabrotica virgifera
- Aonidiella aurantii
- Aonidiella citrina
- Sitophilus oryzae
- Sitophilus zeamais
- Plodia interpunctella
- Cydia pomonella
- Cydia funebrana
- Grapholita molesta
- Ceratitis capitata
- Globodera rostochiensis
- Globodera pallida
- Ditylenchus destructor
- Ditylenchus dipsaci
- Bursaphelenchus xylophilus
- Meloidogyne chitwoodi
- Meloidogyne fallax
- Longidorus diadecturus
- Xiphinema americanum
- Xiphinema californicum

2. Microbiological testing laboratory - analytical capacity:

- Erwinia amylovora
- Agrobacterium tumefaciens
- Clavibacter michiganensis spp sepedonicus
- Clavibacter michiganensis spp michiganensis
- Ralstonia solonacearum
- Pantoea stewartii
- Monilinia fructicola
- Monilinia laxa
- Monilinia fructigena
- Verticillium albo-atrum
- Verticillium dahlia
- Verticillium nigrescens
- Phomopsis helianthi
- Tilletia controversa
- Tilletia tritici
- Tilletia indica
- Helminthosporium carbonum (Cochliobolus carbunus)
- Stenocarpella macrospora, St. maydis
- Plasmopara helianthi
- Puccinia horiana
- Plum pox virus
- Arabis mosaic virus
- Strawberry latent ring spot virus
- Strawberry mild yellow edge virus

Sursa: Karolina Grabowska din Pexels.com

- Tomato ring spot virus
- Tomato yellow leaf curl virus
- Tomato spotted wilt virus
- Tomato black ring virus
- Pepino mosaic virus
- Tobacco ringspot virus

3. Molecular biology laboratory - analytical capacity:

- Detection of genetically modified organisms in soybean, rapeseed, corn and their derivatives
- Diagnosis of Grapevine Yellows Phytoplasmas (Flavescence doree) and Black Wood (Bois noir)
- Diagnosis of Xylella fastidiosa bacterial disease (Pierce's disease)
- Diagnosis of Clavibacte michiganensis spp sepedonicus bacterium

2. Product Quality Department

1. Chemical testing laboratory - analytical capacity

Determination in flour and bran, cereals, oilseeds, groats, bakery products and pasta, vegetable oil, feed material, fodder of the following indices:

- Protein
- Oil content
- Acidity
- Non-oily impurities
- Peroxide index
- Acid index
- Phosphorous substances
- Color index
- Starch
- General ash
- Ash insoluble in hydrochloric acid
- Urease activity
- Cellulose
- Soap content
- Heavy metals (Pb, Cd, As)
- Aflatoxin B1,
- Sum B1, B2, G1, G2
- Deoxynivalenol
- Zearalenon
- Determination of pesticide residues by the GC MS / MS method:

Organochlorine:

1. Acetochlor;
2. Bromuconazole;
3. Chlorobenzyl;
4. Diniconazole;
5. Endosulfan,-alfa;
6. Endosulfan,-beta;
7. Endosulfan-sulfat;
8. Fenheximid;
9. HCH,-alfa;
10. HCH,-beta;
11. HCH,-delta;
12. Iprodione;
13. Penconazole;
14. Procymidone;
15. Propiconazole.
16. Tebuconazole;
17. Tetradifon;
18. Triadimefon;
19. Triadimenol

Pyrethroids:

1. Bifenthrin;
2. Cypermethrin;
3. Cyfluthrin;
4. Deltamethrin;
5. Fenvalerate / esfenvalerate;
6. The λ-cyhalothrin;

Organophosphorus:

1. Chlorpyrifos;
2. Diazinon;
3. Dichlorvos;
4. Ethion;
5. Phosalone;
6. Malathion;
7. Pirimiphos-methyl;
8. Profenofos

Nitrophenol:

1. Azoxystrobin;
2. Flutriafol;
3. Kresoxim-methyl;
4. Picoxystrobin;
5. Pirimetalin;
6. Prometryn;
7. Spiroxamine;
8. Pendimethalin

- Determination of pesticide residues by the LC MS / MS method

Organochlorine:

1. Acetamiprid;
2. Clopyralid;
3. Imidacloprid;
4. Thiacloprid;
5. Tiametoxam;

Organophosphorus:

1. Dimethoate;
2. Ometoate;

Nitrophenol:

1. Bromoxynil;
2. Carbendazim;
3. Cimoxanyl;
4. Diquat;
5. Lenacil;
6. Methomyl;
7. Metribuzin;
8. Oxamil;
9. Thiabendazole

- Determination of nitrate content in products of non-animal origin (fruits and vegetables) by the ionometric method

2. Physico-chemical testing laboratory - analytical capacity

Determination in flour and bran, cereals, oilseeds, groats, bakery products and pasta, vegetable oil, feed materials, fodder of the following indices:

- Organoleptic properties
- Humidity
- Foreign impurities
- Hectolitre mass
- Falling number
- Pest infestation
- Gluten (quantity, quality)
- Ash content
- Acidity
- Magnetic metal purities
- Determination of granularity, fineness of grinding
- Germination energy
- Viability
- Porosity of the core

3. Seed testing laboratory - analytical capacity:

- Determination of the purity and number of grains of other crops
- Determination of germination
- Determination of viability by the method of tetrazole using
- Determination of attack by pests
- Determination of humidity
- Determining the mass of one thousand grains
- Identification of variety purity by the method of protein electrophoresis
- Organoleptic indices

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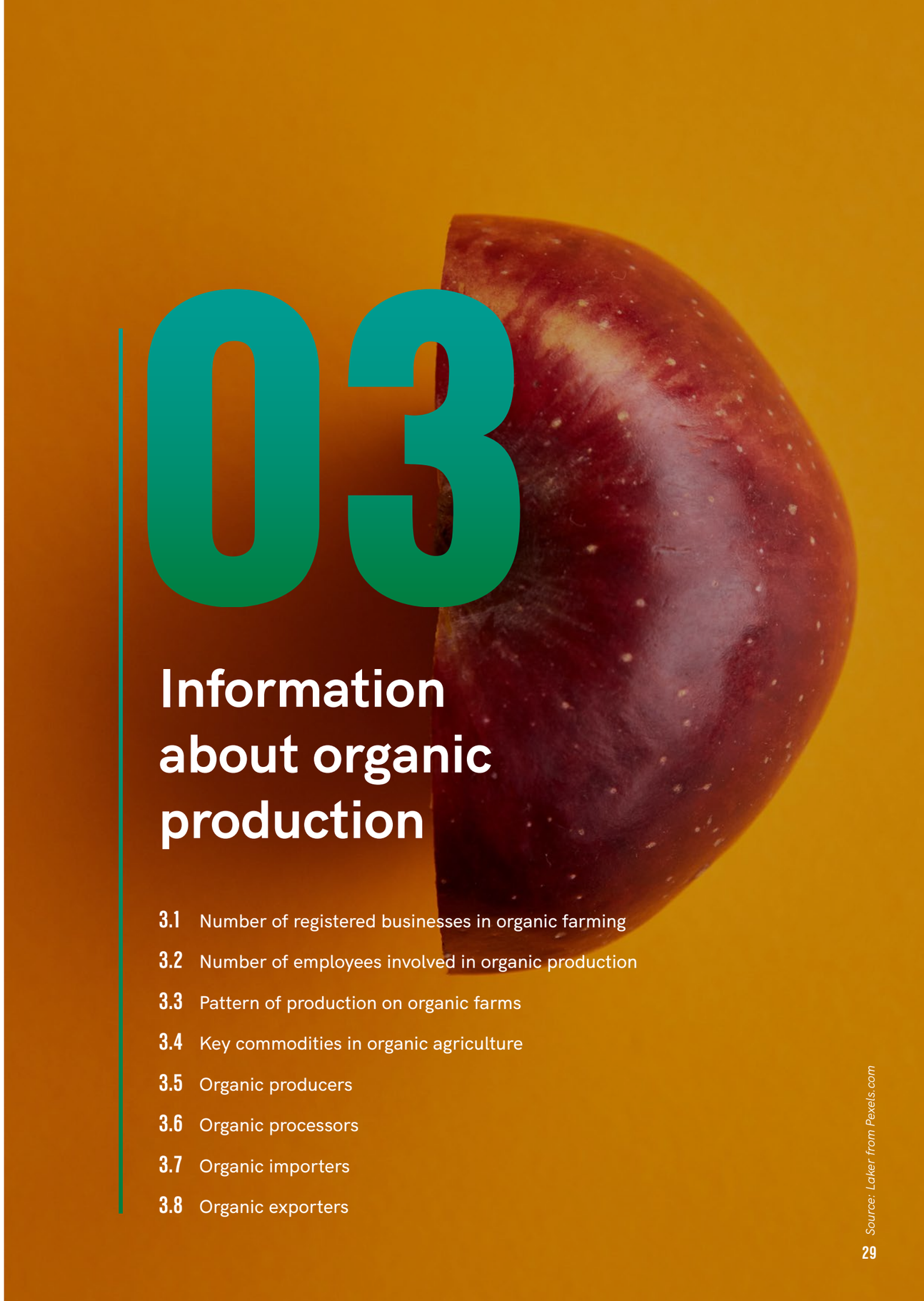
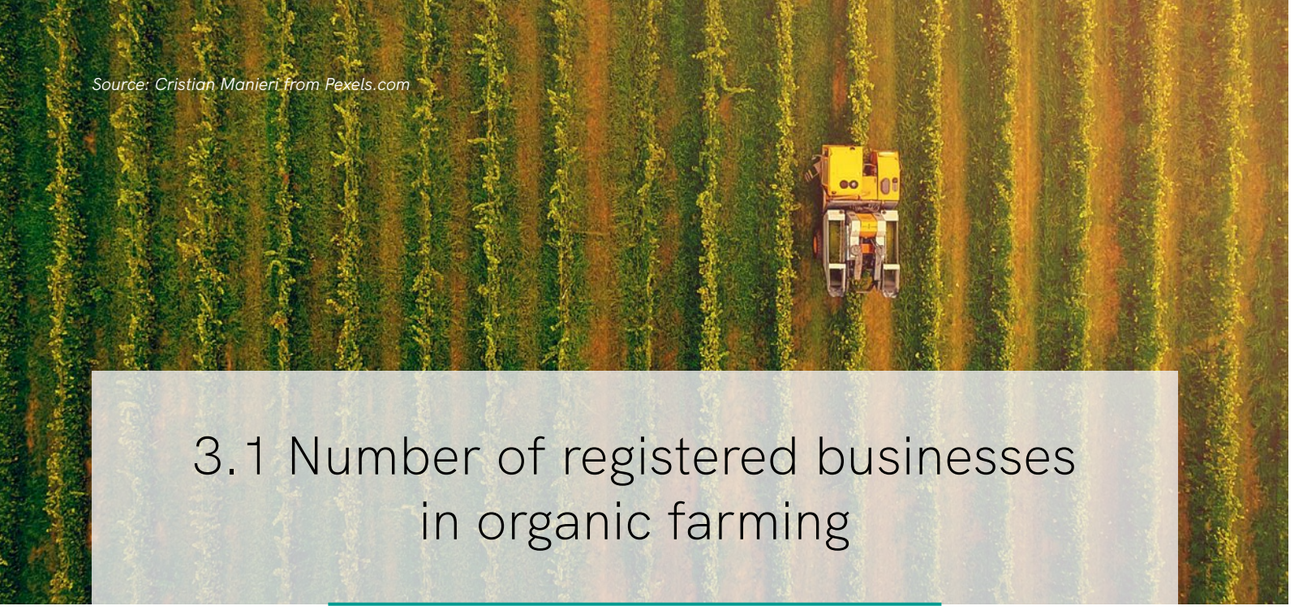


03

Information about organic production

3.1 Number of registered businesses in organic farming
3.2 Number of employees involved in organic production
3.3 Pattern of production on organic farms
3.4 Key commodities in organic agriculture
3.5 Organic producers
3.6 Organic processors
3.7 Organic importers
3.8 Organic exporters

Source: Laker from Pexels.com

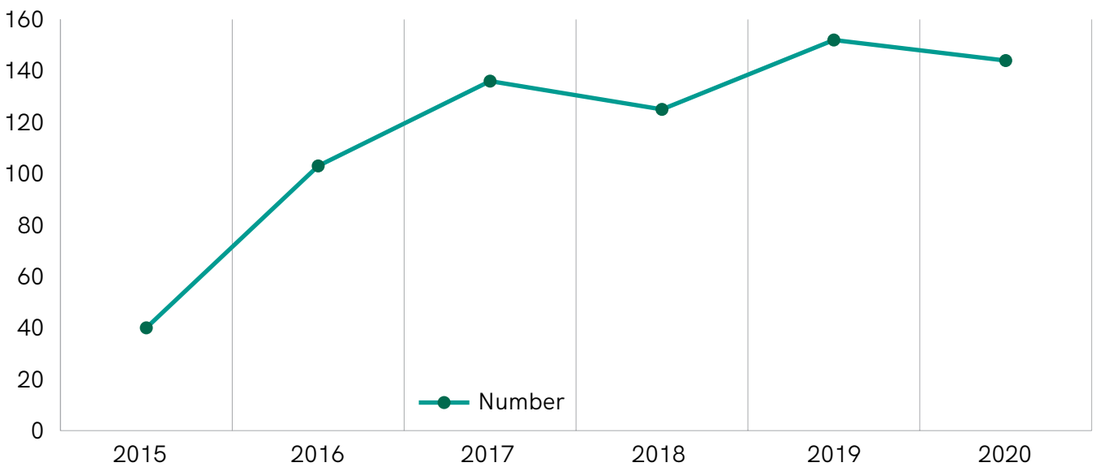

Source: Cristian Manieri from Pexels.com

3.1 Number of registered businesses in organic farming

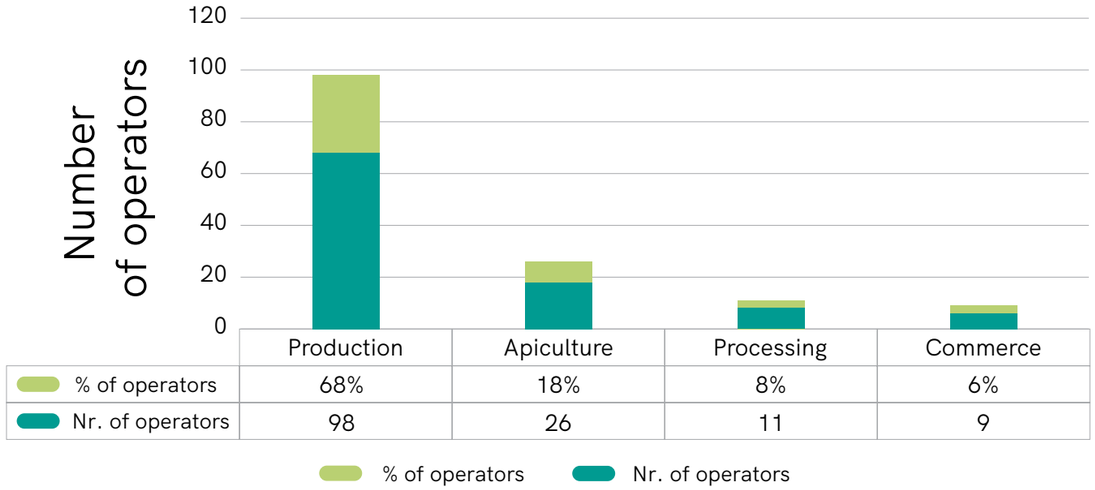
Organic farming continues to develop in the Republic of Moldova. Although the number of organic producers decreased from 152 in 2019 to 144 operators in 2020 (Graph 3.1.1) the development of the sector is pronounced by increasing the processed areas to 29352.06 ha in 2020. This fact has directly led to increased interest in becoming a part of organic farming through production, processing, import and export of organic products (Graph 3.1.2).

Compared to previous years, the number of operators in organic farming in the Republic of Moldova is decreasing, but overall, we easily notice a continuous development of this sector. This growth is largely due to support from international projects such as UKZUZ, The Global Environment Facility (GEF), USAID, People In Need. This fact greatly emphasizes the importance of practicing organic farming.

Graph 3.1.1: Dynamics of growth of operators in organic farming in 2015-2020



In *Graph 3.1.2.* we see the percentage of operators by categories for 2020.



	Production	Apiculture	Processing	Commerce
% of operators	68%	18%	8%	6%
Nr. of operators	98	26	11	9

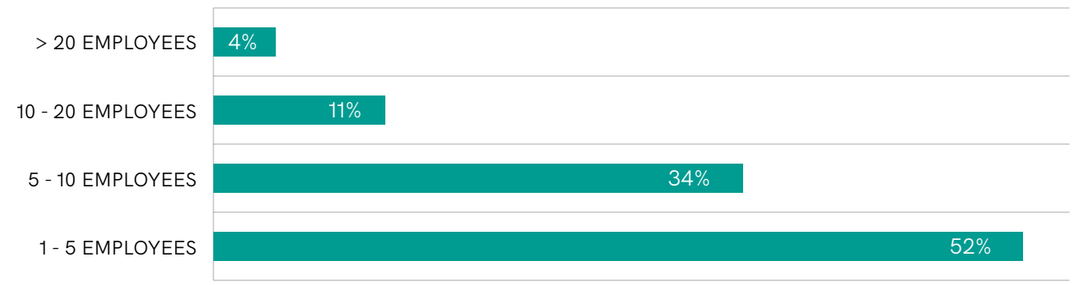
3.2 Number of employees involved in organic production

The main tasks of modern agriculture are to provide society with competitive, healthy products at acceptable prices, in order to meet the ever-increasing quantitative and qualitative needs of the population, but also to capitalize on export requirements.

A common problem in both organic and conventional agriculture remains the shortage of qualified and responsible staff in this field. The interest of young generations in agriculture remains steadily declining, which is a pressing problem for farmers.

In the organic farming system, the number of employees in each enterprise differs depending on the total area managed, the agricultural work carried out and the period in which they are trained. For this reason, the number of employees differs during the year, as a large part are trained seasonally, when carrying out the work of harvesting, processing and storage of the harvest. As for the number of permanent employees in an agricultural enterprise, this value largely depends on the area of the cultivated land and the complexity of the enterprise; on average, 7-9 people are permanently employed in an enterprise that owns 300 ha of arable land. (Graph 3.2.1).

Graph 3.2.1: Share of the number of employees



Following the survey conducted among organic operators, the number of employees permanently involved in organic production proved to be different from 2019. (Table 3.2.2)

- Organic operators, who have 1-5 employees, according to agricultural areas: 12 organic operators with areas between 1-10 ha; 5 organic operators with the surface between 10-50 ha, 5 organic operators with the surface between 50-100 ha and 8 organic operators with the managed surface between 100-500 ha (mainly towards 100 ha). In total, there are 29 companies in this category in 2020, compared to 18 companies in 2019;
- Organic operators, who have 5-10 employees: 3 organic operators with an area between 10-50 ha, 5 organic operators with an area between 50-100 ha and 8 organic operators with a managed area between 100-500 ha (mainly 200+ ha). Compared to 2019, in 2020 there are 13 more operators with this number of employees.
- Organic operators, who have 10-20 employees: 2 operators with areas between 50-100 ha, 3 operators with areas between 100-500 ha and 3 operators with areas larger than 500 ha. +2 companies joined this category compared to the analysis in 2019.
- Organic operators, which have more than 20 employees: 1 operator with an area between 100-500 ha and 1 operator with areas larger than 500 ha.

Tab 3.2.2 *Number of permanent employees registered in agricultural businesses from organic farming sector*

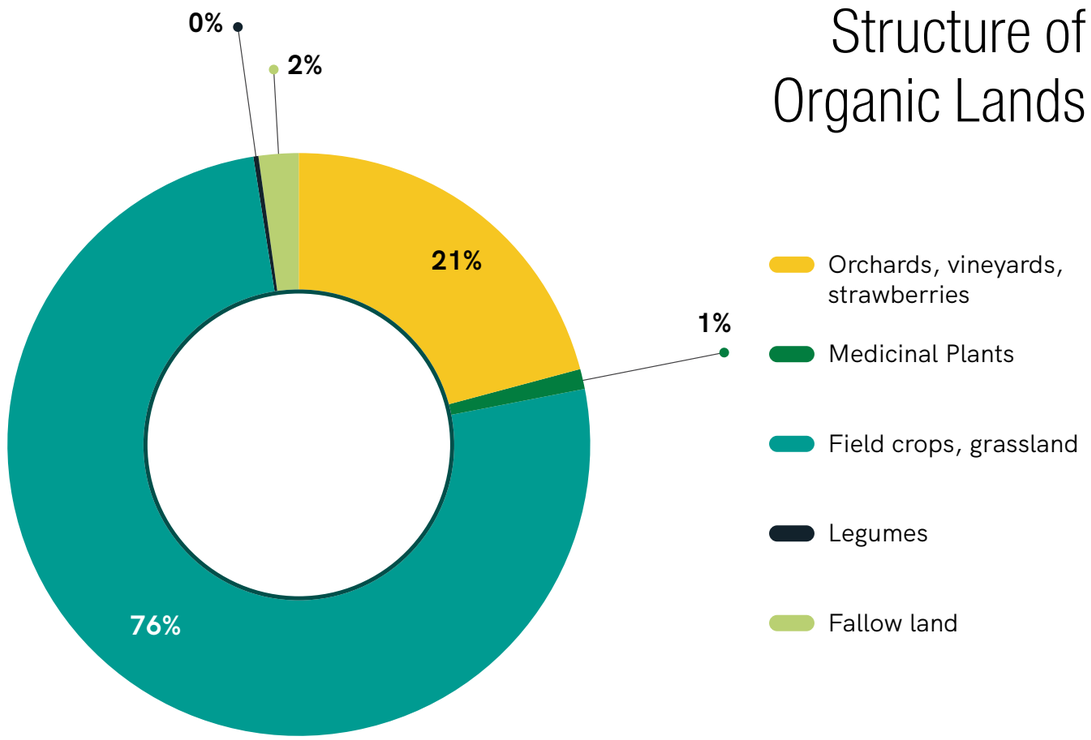
Area, ha	Companies with 1-5 employees	Companies with 5-10 employees	Companies with 10-20 employees	Companies with > 20 employees
	2020	2020	2020	2020
1-10	12	0	0	0
10-50	5	3	0	0
50-100	4	5	2	0
100-500	8	11	3	1
> 500	0	0	1	1
Total %	**52%**	**34%**	**11%**	**4%**

Source: Greta Hoffman from Pexels.com

3.3 Pattern of production on organic farms

In the Republic of Moldova, the large areas are processed in favor of annual cereal crops, namely 22 242.1 ha or 76% of the total organically processed land (Graph 3.3.1).

Graph 3.3.1: Percentage distribution of areas by crops in the value chain of organic farming, 2020.

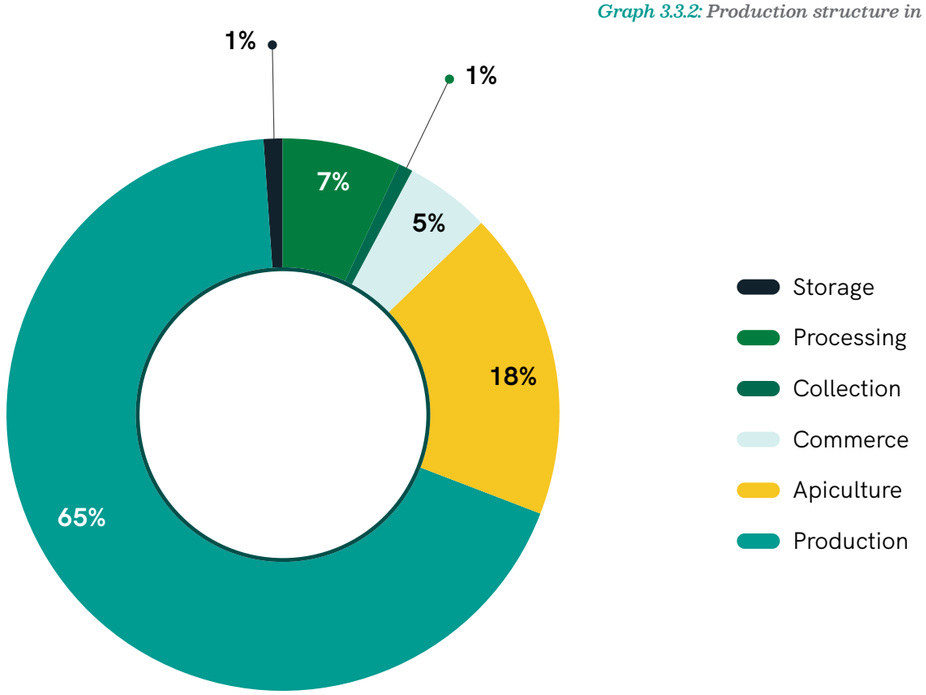


In most localities, small and medium ecological agricultural enterprises predominate, such as:

- vegetable production farms specialized in the production of raw materials of vegetable nature, cultivation of field crops, vegetables, perennial plantations, medicinal plants, flowers and even dendrological plantations;
- mixed households (farms): specialized in vegetable production and beekeeping.

From the following diagram, we notice that the production structure in the Republic of Moldova has the largest share of the production sector 68% with 7% less than in 2019, followed by beekeeping with 18% double compared to 2019, processing 7% or with 2% less than in the previous year and the trade activity being less developed in this field, but increasing compared to 2019 by 1%, so in 2020 it has 5% (Graph 3.3.2).

Graph 3.3.2: Production structure in 2020

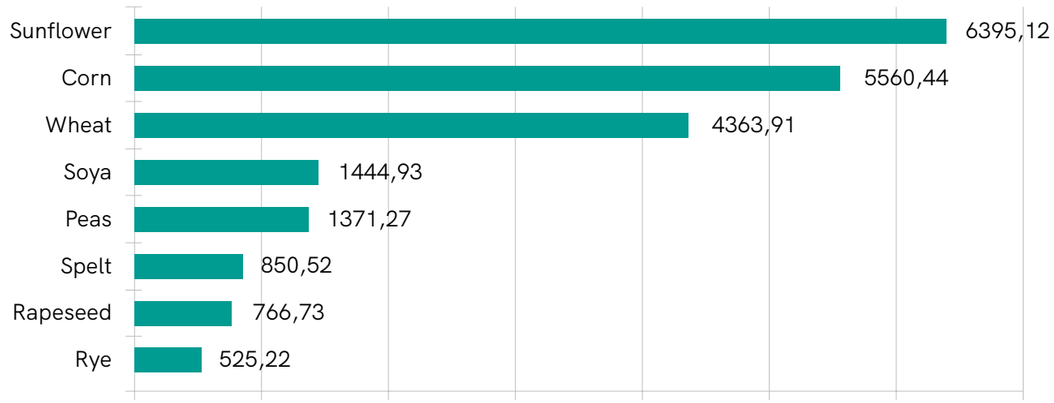


3.4 Key commodities in organic agriculture

Due to good natural conditions for production, relatively low production costs and the proximity of the EU (by its quality) to the most important market for organic products in Europe - the range of crops is very diverse. After organic cereals, special attention is paid to the cultivation of nuts, dried fruits, sunflower seeds, sunflower oil, legumes such as soybeans and peas and organic wine.

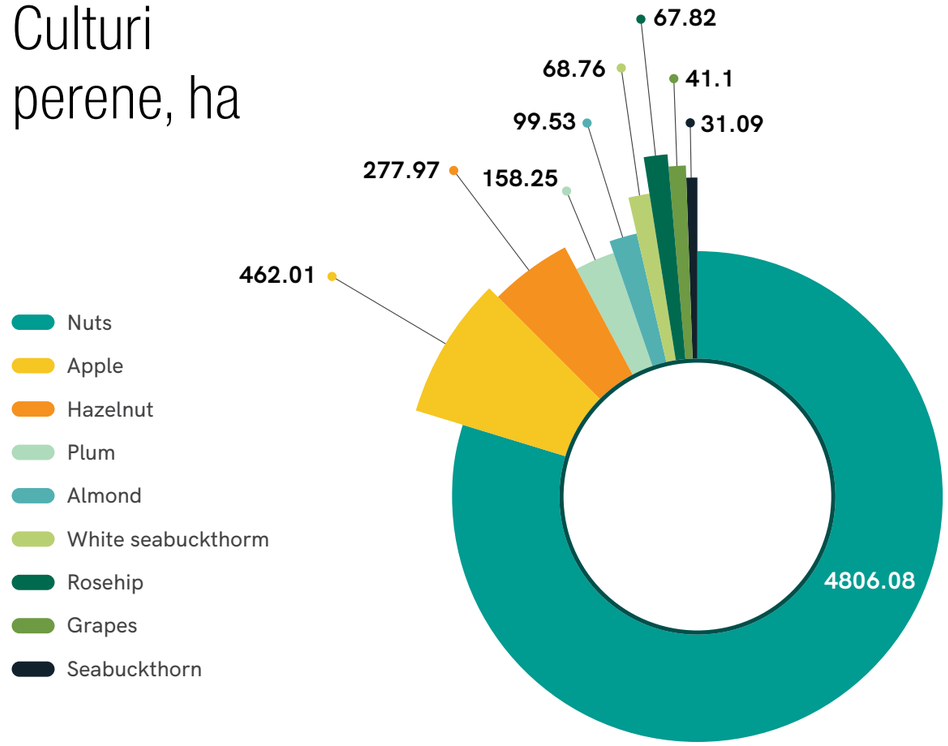
From the analysis of graph 3.4.1 we easily notice the preference of producers in sunflower cultivation, more precisely 6 395.12 ha or 29% of the total cereal crops. Followed by corn with 5 540.44 ha or 25% and 4 363.91 ha of wheat with 20%.

Graph 3.4.1: The ratio of ecological areas planted with annual crops



As well as in 2019, walnut is the most cultivated variety of perennial crops. Thus, in 2020 we have registered walnut orchards with an area of 4,806.08 ha with 201 ha more than in 2019, followed by apple 462 ha with 11 ha less than the previous year and plums on an area of 277.97 ha, decreasing by 92 ha in 2020.

Graph 3.4.2: Report of ecological areas planted with perennial crops in 2020



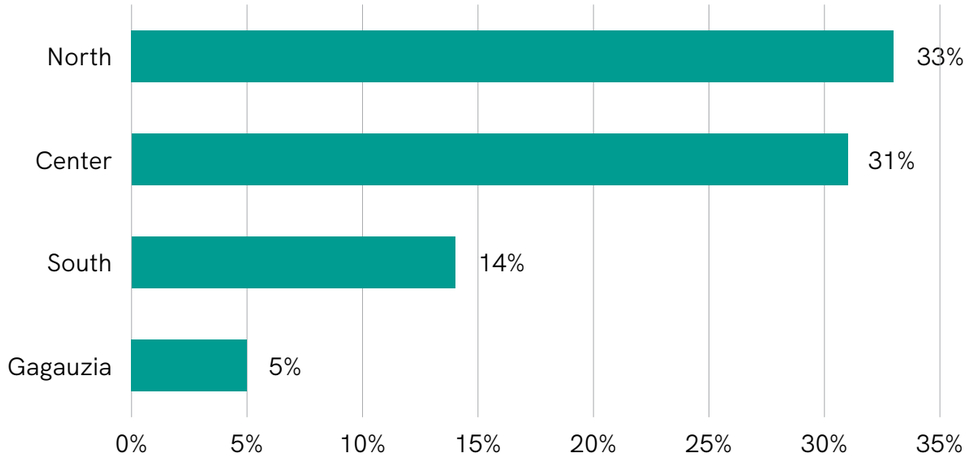
3.5 Organic producers

Out of the total number of 144 operators in the organic farming sector, the number of organic producers in 2020 decreased by 8 companies compared to the previous year. This is due to the merger of small and medium-sized producers.

Thus, if we analyze the data from the "Atlas of Organic Agriculture" on producers in the Republic of Moldova by location, then the share of 33% is held by the northern area, immediately followed by the central area with 31%, southern with 14% and ATU Gagauzia by 5% (Graph 3.5.1).

Photo source: CNFA archive. Study visit to GT Maria Darii

Graph 3.5.1: Share of organic producers by regions



3.6 Organic processors

In 2020, the organic products processing sector continues to be at an early stage of development. For the most part, the majority of processors are also producers who grow on the fields they manage - the organic raw material for processing, thus ensuring a complete cycle from production to processing.

The dried and dehydrated fruit industry in the Republic of Moldova is changing, focusing on high quality products, sold for current consumption or used in the manufacture of confectionery, pastry, bakery, even if the local market is limited.

One of the most well-known ecological processors in the Republic of Moldova is the "Ygrick-Group" Farm, being a family business that was created in order to produce and sell products with high nutritional value. In 2020, the company initiated the construction of a processing and storage hall with an area of 2000 sq.m., of which 1000 sq.m. space for processing rooms. The remaining available area is mostly used for storage as well as office space. The hall was finished in 2021 and is in the process of arranging the necessary equipment to be 100% functional. At the moment, the company has over 30 ha of land, on which perennial crops are grown, such as walnuts, almonds and sea buckthorn. Agricultural products obtained from household lands are processed and marketed. From the respective products are obtained: almond oil, walnut oil, almond flour, all being sold under the Biantti brand.

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Email: golban.igor7@gmail.com; biantti.md@gmail.com;

Web: www.biantti.md

The RoseLine company specializes in cultivating rosehips. RoseLine founded the rosehip plantation in 2013, in the northern part of the Republic of Moldova (Țaul village), in a region famous for its fertile chernozem. Currently, the plantation area is over 70 hectares, with a tendency to expand, until 2023 to reach 150 hectares of rosehip plantation. The volume of the annual harvest reaches about 150 tons of the entire area. In addition to growing rosehip, the company also processes the obtained material.

The company has developed a unique technology for separating fresh grains and cleaning them from seeds and hairs until dry. A by-product of the activity of this company are rosehip seeds, which are the raw material for oil production - being a product in demand in the cosmetics industry.

"UNDERSTANDING THAT SOME METHODS OF MODERN AGRICULTURE ARE TOO AGGRESSIVE, I REALIZED THAT THERE IS A NICHE FOR HIGH QUALITY PRODUCTION, GROWN AS IT WAS INTENDED BY NATURE - ORGANIC.

WE GROW CAREFULLY AND LOVE OUR ROSEHIP, SO THAT WE CAN OFFER YOU EVERYTHING IT CONTAINS THE BEST."

Source: https://roseline.org/ro/despre-noi/

Contacts:

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Tel: +373 69 107 849

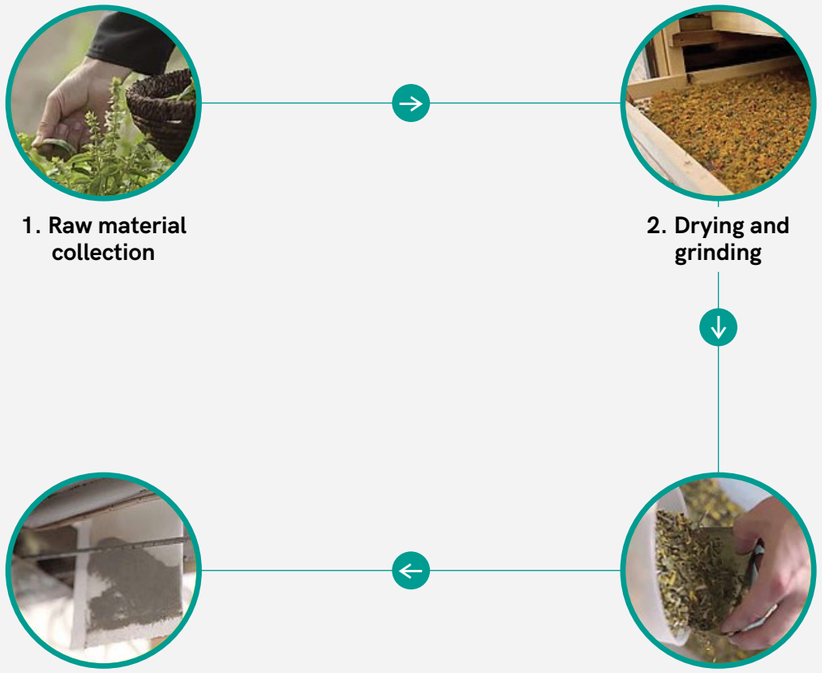
Email: office.roseline@gmail.com

Web: www.roseline.org

The Biocămara company was formed from a collaboration with the Zăbriceni Monastery, specialized in the production of dried herbal teas. Medicinal plants are grown on an area of 30 ha, certified organic. At the same time, they produce honey, various syrups, such as dandelion flower syrup and fir and pine buds. The above-mentioned products are obtained entirely by the work of the monks of the monastery. The products are sold through the sales site www.biocamara.md with the brand "Biocămara".

All the production of SRL Biocămara is arranged on the territory of the Zăbriceni monastery, Edineț district. It is here that the monks gather and process the raw material, harmoniously combining prayer with work.

The production process has 4 stages:



Source: https://biocamara.md/ro/procesul-de-productie/

Contacts:
Address: s. Zăbriceni, r. Edineț, MD-4646, Republic of Moldova
Tel: +373 794 19 947 / +373 794 19 885
Email: biocamarazabriceni@gmail.com
Web: www.biocamara.md

3.7 Organic importers

In the Republic of Moldova there are several importers of products for organic farming. This category includes companies specializing in the import of plant protection products registered in the state register. From successful examples we can list the following companies:

- **"BTU-CENTER"** is an ultra-modern company that develops micro-biological plant protection products. The company has been successfully collaborating for 3 years with "WeTrade" S.R.L.

"BTU-CENTER" is the largest producer of biological plant protection products in Ukraine, which has been producing biological remedies for over 23 years and expands their list every year. "BTU-CENTER" products are used in over 15 countries, such as (Romania, Russia, Germany, Bulgaria, Kazakhstan, Poland).

To date, 10 products for use in organic farming are approved in Moldova:

1. Actoverm Formula,
2. Azotofit,
3. Bioinoculant Rizoline,
4. Fitocyd,
5. Groundfix,
6. Metawhite,
7. Mycofriend,
8. Organic Balance,
9. Sclerotsyd,
10. Ecostern.

All products are certified by Organic Standard and soon will be included in the list of products allowed for organic farming in the Republic of Moldova, which means they can be used successfully in organic farming. "BTU-CENTER" products make it possible to produce chemically pure food. With climate change and the intensification of agriculture, every year we face more and more problems related to a very high degree of development of certain diseases or the spread of pests. This is a very clear signal that we need the protection not only of agricultural crops, but, first of all, of the soil in which the crop grows.

The company "BTU-CENTER" offers a combination of products such as Ecostern + Groundfix or Ecostern + Sclerocid, which reduce the number of pathogens and pests in the soil, but also make nutrition more accessible. If 2-3 years later the use of organic products was very rare and not widespread, at the moment we notice a very fast growing trend in the use of organic products. The need to use organic products is caused by the emergence of many species of diseases and pests resistant to chemicals, but also the desire of the world's population to consume healthier products.

WeTrade, being the most innovative company that has been dealing with conservative, environmentally friendly technologies for decades, is at the disposal of our farmers to help them cultivate high quality production, without pesticide residues with a competitive cost and a plus essential value.

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Web: www.bio.wetrade.md

WeTrade®

- **ME „Ducato-M Company Group International" SRL** is a Moldovan-Italian company, which has been operating in the Republic of Moldova since 1997. Since 2016, Ducato-M C.G.I. SRL presents on the market of the Republic of Moldova, its new partner Italian AGM SRL - manufacturer of plant protection products. AGM fertilizers are products derived from animal blood and absolutely safe from an ecological point of view, as they are subject to sterilization processes in accordance with current EC regulations.

- **ICS "JM Invest Group" SRL,** helps farmers to implement conservative and ecological plant growth technologies. One of the products offered by the company is the liquid fertilizer **AZOTER.**

- **"Proteh-Agro" SRL,** is the official and exclusive dealer of UAB Bioenergy LT (Lithuania), the company imports the following ecological products: **BioEnergy LT FOSFIX; BioEnergy LT AZOFIX; BioEnergy LT Bactoforce; BioEnergy RUINEX.**

- **SC COMBINATUL DE INGRASAMINTE CHIMICE SRL** is a company with a tradition in the production of chemical fertilizers but also a promoter in Romania and Moldova of the latest technologies for fertilization, including for organic agriculture. The company's objective is to develop and bring to market products that contain the latest technologies, products that can bring added value to farmers. Among the products predestined for use in organic farming accordance with Regulation 2018/848 are listed:

  - Fertil
  - BIOPHOS
  - SULFAT DE POTASIU
  - PROGRESS MICRO
  - ILSAMIN N90

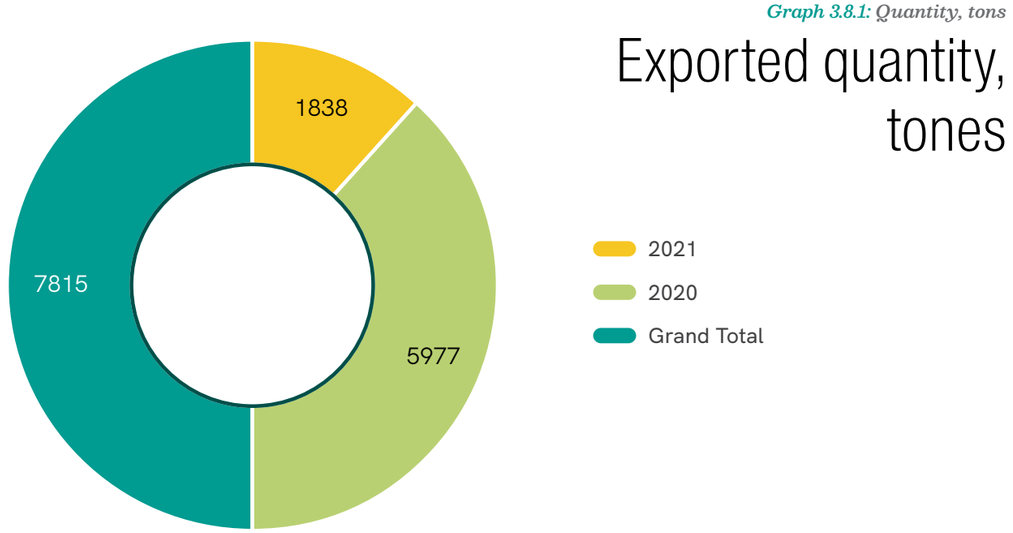
For more details about the composition and use of the products mentioned above, access: https://cich.ro/produse/bio-solide/ și https://cich.ro/produse/bio-foliare/

Commercial food stores, such as Kaufland and Metro, also belong to the category of importers of organic products. The Kaufland store has a special assortment of imported organic food, called the K-Bio assortment. Both stores, Kaufland and Metro, have a range of imported organic products ranging from organic products for personal hygiene to consumer food. *More details are available in Chapter 5 of this paper.*

3.8 Organic exporters

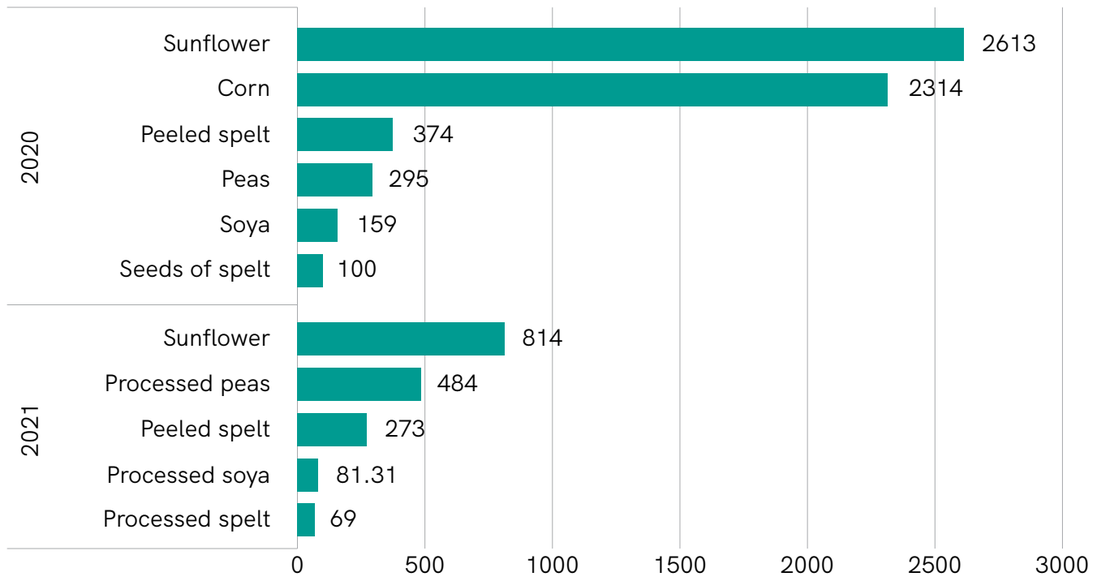
From the data obtained from the largest exporter in the country, in 2020 were exported 5 977 tons of cereal crops, and in the first 10 months of 2021 - 1 838 tons. Analyzing the current situation with the progress from 2019, where a quantity of 48 048 tons of primary and processed products was exported, we understand that the impact of the drought on the harvest was drastic. (Graph 3.8.1)

Graph 3.8.1: Quantity, tons



From graph 3.8.2 we see that the most exported Moldovan organic agricultural product remains the sunflower crop. In 2020, the largest export company in Moldova made deliveries in the volume of 2 613 tons, and in the first 10 months of 2021 - 814 tons. 2 314 tons of corn in 2020, spelt was exported in 2020 - 374 tons, compared to 273 tons in 2021; peas were exported in quantities of 295 tons in 2020, and in 2021 a quantity of 484 tons. Soybeans 159 tons in 2020 and 81 tons in 2021.

Graph 3.8.2



One of the leaders in the export of BIO products to the European Union is the Dutch mold company Prograin Organic SRL which operates in the field of cultivation, processing, storage and marketing of organic cereals, oilseeds and legumes in the Republic of Moldova.

"PROGRAIN ORGANIC" S.R.L. was founded on April 21, 2015, being the first certified company in the Republic of Moldova, which invested in the value chain of organic cereals. Together with a group of farmers from the Republic of Moldova, who believe in the value of organic farming in terms of sustainability of the agricultural sector in the Republic of Moldova, we are committed to providing you with high quality organic products, which are fully traceable from field to fork (throughout the production chain). Thus, farmers have been integrated into the value chain, starting from investments in infrastructure projects, designed to facilitate the development of the organic cereals sector. This beginning was marked by the commissioning, in June 2015, of the cereal terminal in Floresti with a storage capacity of about 2700 m2, and in July 2017, by the commissioning of the most remarkable unit - the cereal terminal in the free economic zone of the Giurgiulesti International Port, with a storage capacity of 3250 m2. Both locations are of particular importance and are intended for the reception, packaging, storage and loading of organic cereals.

In order to integrate the value chain of organic cereals, "PROGRAIN ORGANIC" S.R.L. comes to the aid of organic farmers with the following:

- Delivery of inputs for the cultivation of organic cereals (seed material, fertilizers, biological plant protection preparations);
- Assistance and monitoring of farmers in the certification of agricultural areas, cultivated in an organic system;
- Ensuring the logistics of collecting and storing organic cereals;
- Investments in organic cereals processing lines;
- Access to organic cereals markets;
- Export of production both in trucks and on seagoing vessels and barges.

"PROGRAIN ORGANIC" S.R.L. ensures the highest quality of services and products, being the first and only company in the Republic of Moldova, certified according to the GMP + B3 standard.

The company promotes the following crops: spelt, common wheat, oats, sunflower, corn, sorghum, mustard, green peas, yellow peas, soybeans, rye, chickpeas, lentils, beans, pumpkin, alfalfa, buckwheat.

Source: https://www.prograinorganic.com/

Source: https://www.prograinorganic.com/

DELIVERY PORTS:

Italy – Genoa, Livorno
Spain – Tarragona, Valencia, Barcelona
Great Britain – Felixstowe
Ireland – Dublin
Belgium – Antwerp
Netherlands – Rotterdam, Amsterdam
Germany – Hamburg, Bremerhaven
Denmark – Aarhus, Copenhagen
Sweden – Gottenburg
Norway – Oslo

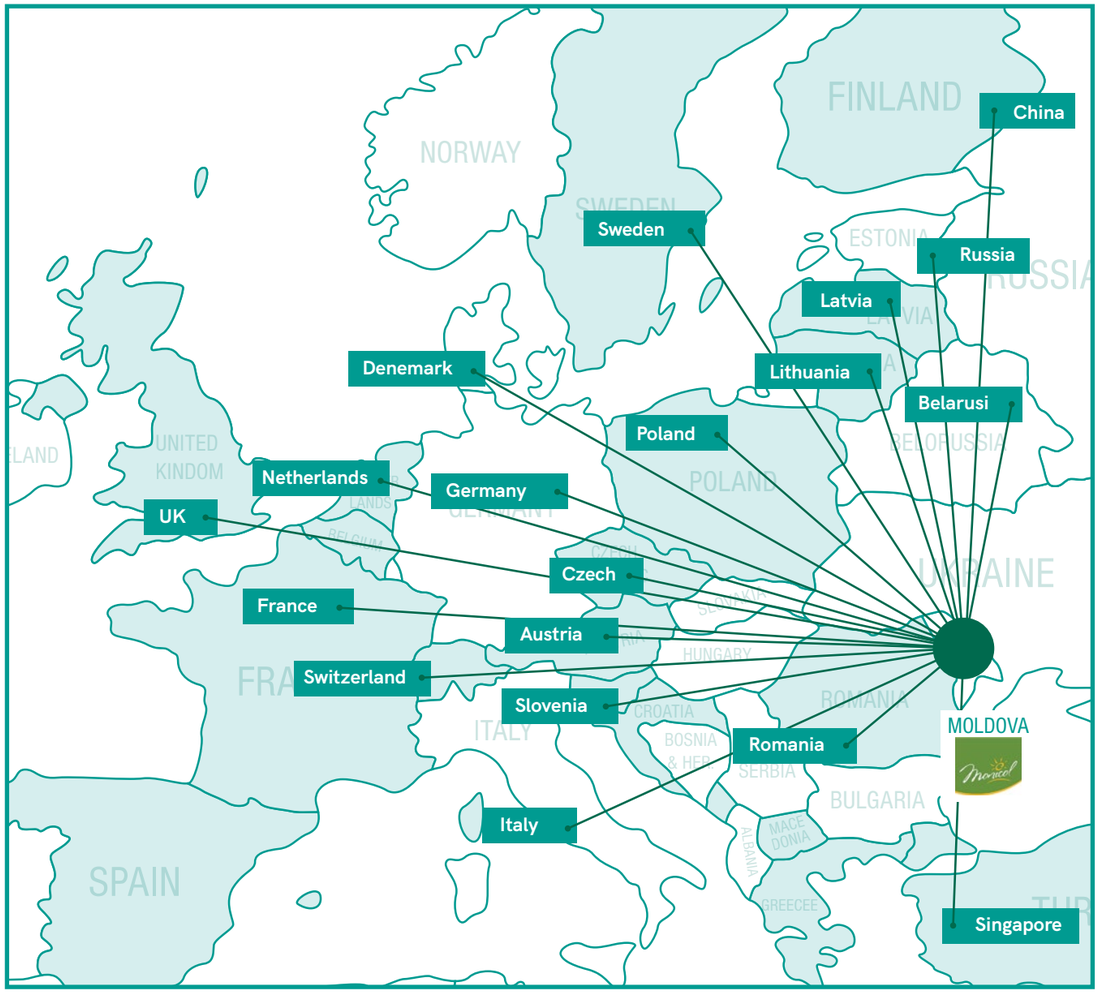
Contacts Prograin Organic SRL:
Address: mun. Chișinău, MD-2005, str. Albișoara, nr. 42, et. 3
Tel: +373 22 78 01 23
Fax: +373 22 78 01 23
E-mail: office@prograinorganic.com

Other companies that export large quantities of organic products from the Republic of Moldova include the company "AMG KERNEL" SRL, which holds the certificate for organic / organic agricultural products (BIO). Currently, the company "AMG KERNEL" SRL has in management the largest, as area, walnut orchard on fruit in the Republic of Moldova, which occupies 800 hectares.

Contacts "AMG KERNEL" SRL
MD 3001, Republic of Moldova
c. Soroca, 35 Cosăuţi Street
Tel, Fax: +373 23 03 12 59
E-mail: office@kernel.md

Monicol SRL company is one of the most important wholesale and retail suppliers of organic / conventional walnuts / nuts and dried fruits in the Republic of Moldova. Their range of dried fruit products includes prunes, cherries, pears, apples, tomatoes and more. The company was founded in 2001 and over the years has gained a good reputation, along with trust and recognition from customers.

EXPORT



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04

Pattern of production on organic farms

4.1 Plant production
4.2 Livestock production

Source: Rachel Claire from Pexels.com

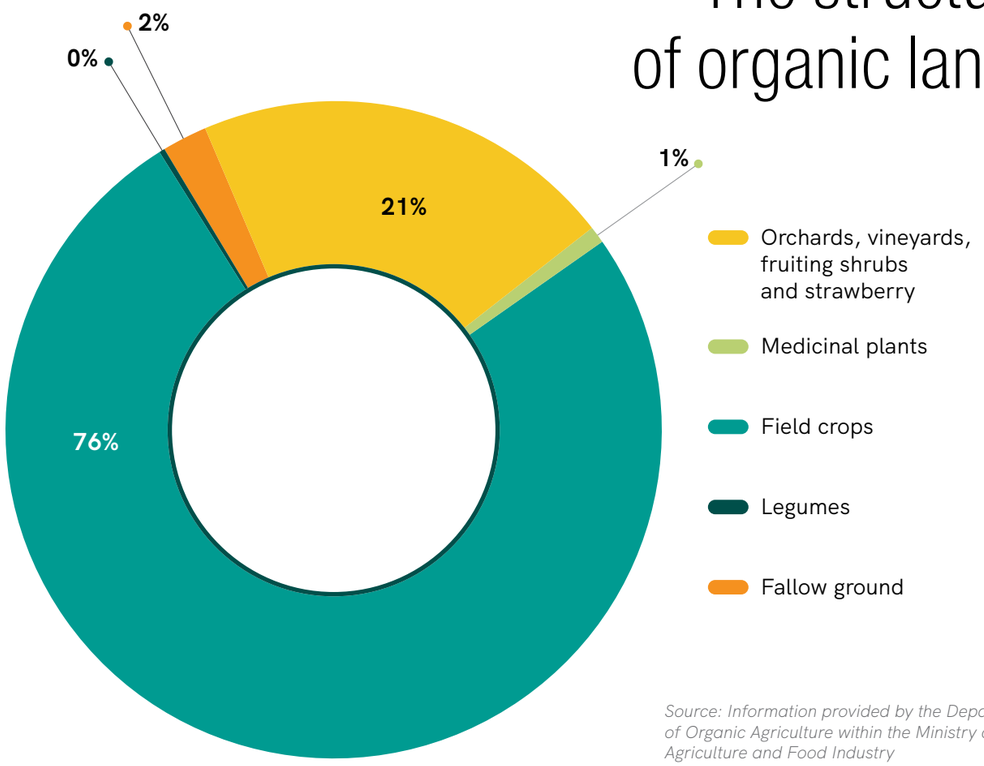
Source: Mark Stebnicki from Pexels.com

4.1 Crop production

As a result of recent climate change, more and more farmers have begun to implement organic farming practices in their households, so there is an increase in organic area in the Republic of Moldova, namely in 2020 there are 29,352.00 ha, in comparison with 28,547.45 ha registered in 2019. Thus, according to official statistics, in 2020 in the Republic of Moldova was registered an area of 29,352.00 hectares. (Graph 4.1.1)

Graph 4.1.1: Structure of certified and converted organic areas (ha)

The structure of organic lands

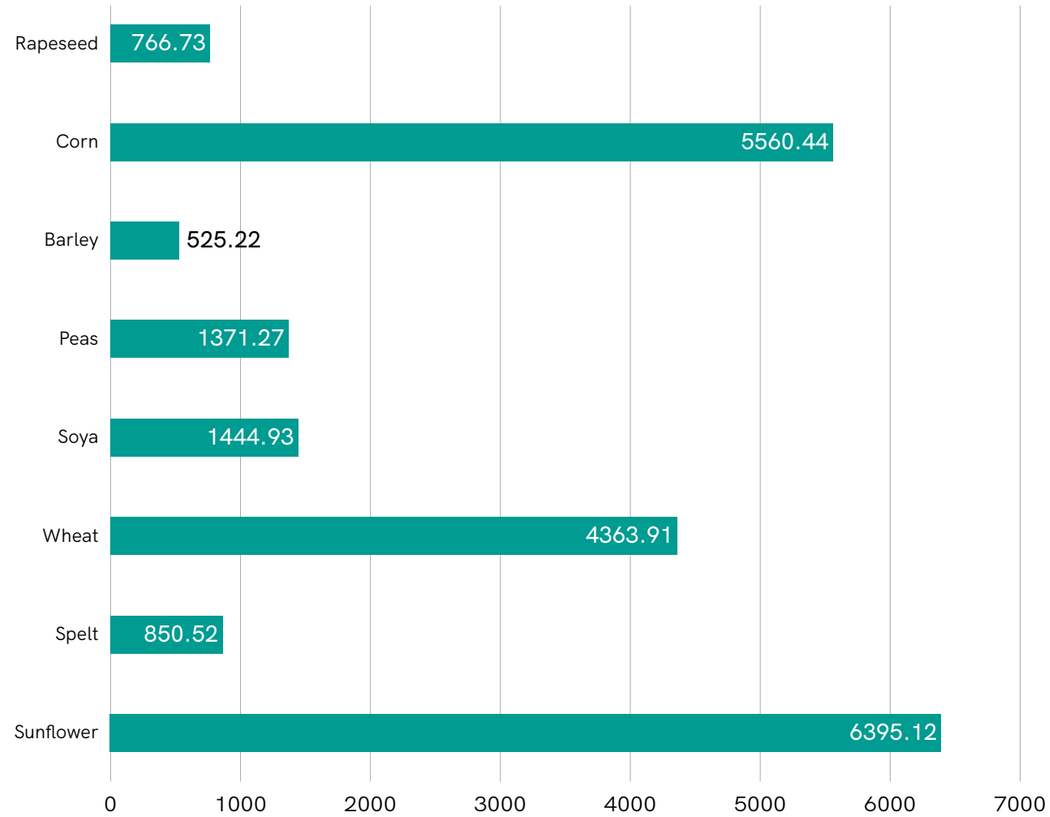


Source: Information provided by the Department of Organic Agriculture within the Ministry of Agriculture and Food Industry

The largest area was occupied by annual crops in a volume of 22055.2 ha, followed by perennial crops with an area of 5816.55 ha. Wheat, sunflower and corn are the most widespread annual crops in organic farming, together occupying 77%.

Graph 4.1.2: Structure of organic areas planted with annual crops, ha

The ratio of organic areas planted with annual crops

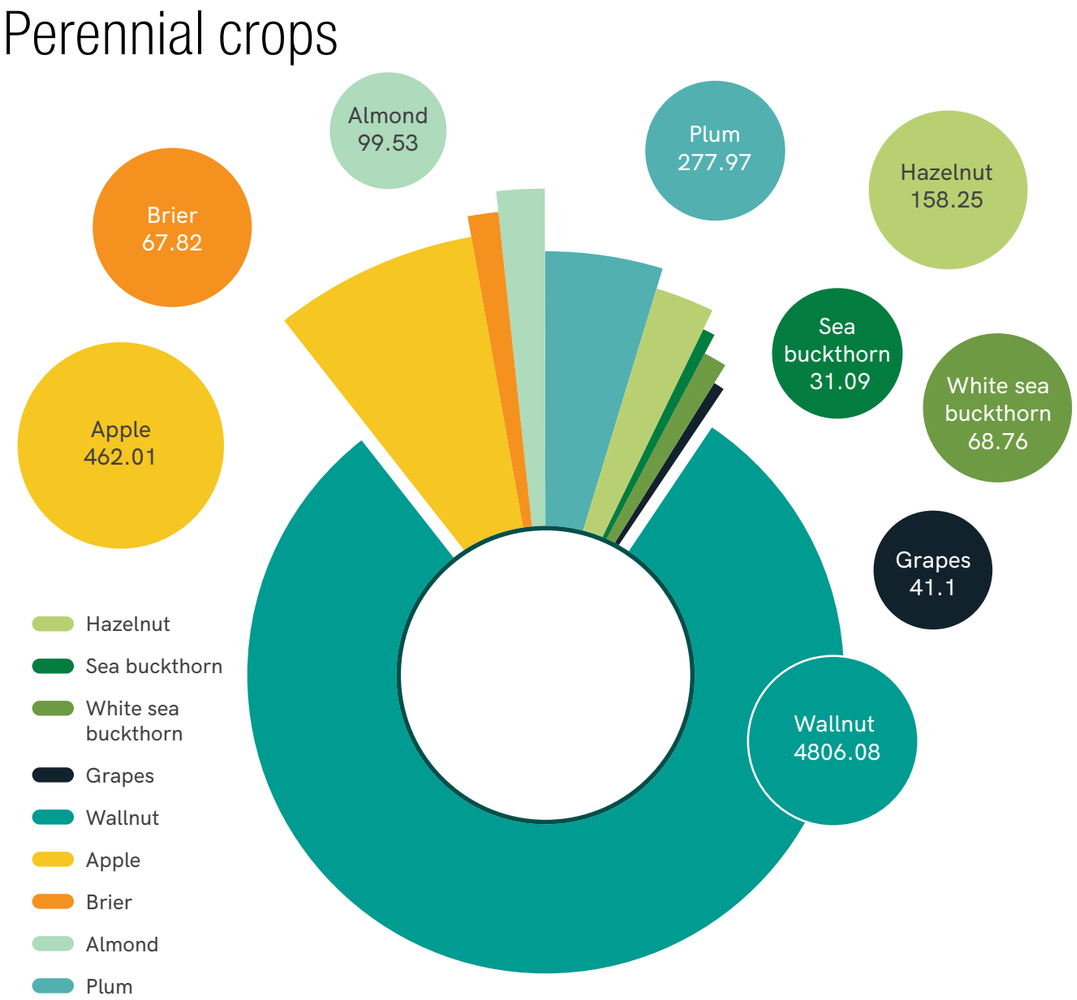


Source: Information provided by the Department of Organic Agriculture within the Ministry of Agriculture and Food Industry

In 2020, the largest areas with annual crops were occupied by sunflower (6 395.12 ha), followed by large areas of corn cultivation with 5560.44 ha, as well as large areas were recorded for wheat crops with 4 363.91 ha (Graph 4.1.2).

From the group of perennial crops, grown in an organic system, the largest areas are recorded in the cultivation of walnuts, apples, plums and medicinal / aromatic plants (Graph 4.1.3). Compared to the areas occupied by organically grown annual crops, perennial crops have much smaller areas. The range of organic products for plant protection approved for the conditions in the Republic of Moldova is small, this makes it difficult to monitor diseases, pests and weeds.

Graph 4.1.3: The structure of organic surfaces planted with perennial crops



6.2 Animal production

The livestock sector plays an important role in organic farming. Manure provides valuable organic fertilizers for soil revitalization and nutrient supply to crops.

- Ruminants and other herbivores effectively use on-farm fodder, which is essential for crop rotation, preservation of humus and effective weed control.
- Farm-produced straw can be used as animal bedding. Straw binds nutrients from animal feces and urine. The resulting manure is a good soil improver and a long-term fertilizer.

In the Republic of Moldova, the livestock sector underwent major changes with the reforms of the 90s, which led to the number of animals of all species being drastically reduced.

Revitalizing the sector requires time, money and investments. Even if the state policy comes to support investments in this sector, this also tells us the subsidy policy that comes with 50% support for farmers subsidizing investments both for the construction/reconstruction of farm, endowment of equipment and procurement of animals. The support from the state is allocated after investments and the conditions for potential beneficiaries are stipulated in the Regulation on the conditions, order and procedure for granting the means to the National Fund for the Development of Agriculture and Rural Environment approved by GD 455/2017.

In order to support producers in the livestock sector, the policy of the Ministry of Agriculture, Regional Development and Environment comes with new measures and starting with 2021, the subsidy mechanism was implemented, direct payments per animal. In this regard, the Regulation on granting direct payments per animal by GD 836/2020 was approved.

Thus, according to the provisions of GD 836/2020, farmers can benefit from the following amounts per animal:

Measure 1: cattle	Sub-measure 1.1 Cows of specialized breeds for milk and mixed production 7000 lei	Sub-measure 1.2 Cows of specialized breeds for meat production 7000 lei	Sub-measure 1.3 Heifers over 12 months 5000 lei
Measure 2: sheep	Sub-measure 2.1 Sheep from specialized breeds for milk and mixed production 500 lei	Sub-measure 2.2 Sheep of specialized breeds for meat production 500 lei	Sub-measure 2.3 Ewes over 12 months 300 lei
Measure 3: goats	Sub-measure 3.1 Goats 500 lei	Sub-measure 3.2 Goats over 12 months 300 lei	

Source: Kat Jayne from Pexels.com

Pursuant to MADRM Order no. 27 of February 15, 2021, between April 1 and June 4, 2021, AIPA started the process of receiving applications for direct payments per capita.

The direct payment per head of animal is granted only once a year, for the owners of cattle, sheep, and goats.

Animals registered and operated on zootechnical farms located outside the built-up area, maintained in a minimum herd, are eligible for payment:

- 10 heads of cows and heifers,
- 50 heads of sheep and ewes specialized for milk production,
- 30 heads of sheep and ewes specialized in meat production,
- 30 heads of goats.

To this end, AIPA received 416 applications for direct payments per head, of which 197 - for keepers of cattle, 128 - for sheep and 91 - for keepers of goats. 322 owners of single animals will benefit from direct payments per animal.

Analyzing the applications for subsidies at territorial level we can see that most applications for direct payments were submitted by agricultural producers in Hincesti (45 applications), Orhei (27 applications), Glodeni (24 applications), Taraclia (23 applications) Soroca and Cahul (of 21 applications per district), etc.

Direct payments per capita will be allocated from the National Fund for the Development of Agriculture and Rural Environment and will contribute to stimulating the growth and maintenance, according to preliminary data, of:

- 13623 cattle (of which 3550 - heifers over 12 months, 9046 cows of specialized breeds for milk and mixed production and 1027 cows of specialized breeds for meat production);
- 27590 sheep (of which 3640 - sheep over 12 months, 20894 sheep of specialized breeds for milk and mixed production and 3060 sheep of specialized breeds for meat production);
- 10571 goats (of which 1317 - goats over 12 months and 9254 other goats).

However, in addition to the support provided by the Government of the Republic of Moldova, there are several key points that define the weak development of the organic livestock sector in the Republic of Moldova, such as:

- Animal husbandry is not a profitable activity in Moldova, there are very few conventional animal farms.
- There is no market for organic products certified with the Moldovan organic standard.
- If someone wanted to certify a farm with international standards for export purposes, then they could not export, because Moldovan animal production is not certified for export to the EU market In the Republic of Moldova there are a limited number of animal farms (except poultry farms, industrial production of meat and eggs). As the number of animals decreases annually and animal farms are not economically efficient, there have been no prompt requests for farm certification. In this context, the government has put on the agenda the development and promotion of both the organic and conventional livestock sector in the Republic of Moldova.

05

Organic food trade

5.1 Demand
5.2 Distribution
5.3 International comparison

Source: Michael Burrows from Pexels.com

Source: from Pexels.com

5.1 Demand

The dramatic change in lifestyle and diet from restaurant to kitchen has created a sharp increase in demand for organic production worldwide. Due to the pandemic, which has affected the health of the population directly through infection and indirectly through the sedentary lifestyle, people are increasingly aware and interested in maintaining health, including the consumption of healthy products. In addition, the disasters created by climate change increase the interest for a sustainable agricultural development and the environment.

Rising demand for organic products is an inevitable trend for the next years. Globally, the prices of organic products are about 20% higher compared to conventional analogue products, but, depending on the type of product, the price can be even 90-95% more expensive. That is why organic production is a profitable and supported business at EU level, as well as in the Republic of Moldova.

Even though we still have a low level of information about the health and environmental benefits of organic products, the citizens of the Republic of Moldova are becoming more and more interested in Eco food. Stores in the country are testing several imported organic products and have even started to arrange shelves specially designed for these products. At the same time, the number of local producers offering high-quality organic food has increased, so Moldovans have the products they need to lead a healthy lifestyle.

Experts believe that due to the favorable natural and agro technical conditions, there is a chance that Moldovan farmers can actively participate in the overall development of Moldovan agriculture by reconsidering organic farming as an important source of income, and this opportunity should not be missed. In order to benefit from these opportunities, it is necessary that farmers in the Republic of Moldova, who want to practice this type of agriculture, adopt specific technologies required by the rules and regulations of organic production and comply with the requirements imposed by the European Union, so the products obtained will be competitive on the foreign market.

The market of organic products in the Republic of Moldova is still modest, and one reason is that citizens do not know the benefits of organic products for health and environment, plus, consider them expensive, while Western consumers are followers of consuming this type of product on a large scale. One motivation for this consumption habit may also be that people in well-developed countries are much better informed in this field and have high per capita incomes. High prices for organic products make the access of consumers in the Republic of Moldova to such products quite limited, compared to access for consumers in well-developed countries.

In the European Union, for example, the share of organic land is 7.5 times higher than the share of organic land in Moldova. However, there is an underproduction of organic products in the EU, which allows European certification bodies to certify areas and products directly in other countries.

5.2 Distribution

On the market of the Republic of Moldova we find 3 types of distribution: Direct sales (from manufacturers), specialized retail and supermarket chains.

Direct sales. There are 2 markets specialized in the sale of organic products in the Republic of Moldova: EcoLocal and IarmarEco. The weekly **EcoLocal Farmers Market**, which brings together over 30 local companies with Eco products every week and attracts not only local buyers, but also those from abroad, is a very efficient fair for marketing, promotion and capitalization of organic products.

The IarmarEco 2021 event was organized by the **EcoVisio** organization. Held in several localities in the country and on different occasions, this event provides consumer access from different parts of the country to organic local products.

These markets offer a great opportunity for buyers to meet directly with vendors and ask any questions. Even if the selection of certified organic products is not so large, here we can find vegetables, hazelnuts, fresh fruits / potted plants and certified wines.

There are also non-thematic events, attended by some organic producers: Kids Expo, Târgul Gustului, Farmer - exhibitions organized by Moldexpo, but also Cămara Fest - a fair that gathers 70-80 local producers on weekends, 2 times per month.

There are several home delivery services for organic or garden vegetables, such as Ecovillage Farms (NGO Catalyst) and Ecoparadis (Vasile Niculita).

Some manufacturers certify, deliver products ordered from the online store

Biantti - https://biantti.md/
Biocămara - https://biocamara.md/
Equinox - https://equinox.md/

Specialized retail trade. Many entrepreneurs have tried to develop businesses of specialized organic stores, but, unfortunately, they did not last long. However, those who remain, combine shopping for healthy, local and organic products with a cafe. A good example is Sincer Gastromarket, which targets the category of people between 20 and 40 years old. One store was opened in 2019 and another in 2020, which sells about 120 certified organic products. With great regret for the consumers, one of the stores ceased operations at the end of July 2021. Sincer operates with a large number of Moldovan brands, as well as with the German brands Bohlsener Mühle, Naturata and Bioplanète.

In September 2021, the certified organic producer Bio Cămara opened another exclusive store of its own ecological products in the city of Bălți (26a Decebal Street). The first store of this kind has been active for some time in the city of Edinet. In the future, he plans to open such a store in Chisinau, but also in other districts such as Ungheni. The entrepreneur claims that in the new store in Balti will be exhibited organic products of the Biantti brand, in particular, different types of seeds and oils from them. However, the door remains open for other farmers who have high-quality environmentally certified products.

Regarding online stores, at the moment, we have 4 units specialized in organic products, either local or imported:

Arome Bio - https://aromebio.md/
Natur - https://natur.md/
IarmarEco - https://iarmareco.md/
MOVCA Bio Food - https://biofood.md/

There are also platforms that support all domestic producers, including those certified ecologically, such as: https://madein.md/.

Supermarket chains.

With the advent of the pandemic, the turnover of supermarkets jumped for the first time over 50% of the formal retail trade. In Chisinau, about two-thirds of piece sales were generated in supermarkets in 2020, as open-air markets were closed for three months due to quarantine. Entrepreneurs who want to place organic products on the market, whether local or imported, will not be able to bypass supermarkets.

Currently, only larger stores have a strategy for organic products: Kaufland, Fourchette, Metro și Nr1.

Kaufland has the largest number of organic products, but none Moldovan. For one year, they imported over 700 different products. All products are on separate organic shelves. Most are sold under the company's own label (Kaufland Bio), followed by Hipp (baby food) and the Romanian brand "BIO All Green" belonging to the Romanian company BIO LOGISTIC SRL. In order to promote organic farming and consumption in Moldova, Kaufland should offer certified organic fruits and vegetables, as well as the possibility for local producers to have a bigger chance to be present in stores.

No. 1 has a remarkably high share of organic products (over 180 types of products). Although the store offers a separate shelf for them, organic products are also integrated into the main assortment. The German label Biogreno is the main brand followed by Hipp.

Metro Cash & Carry came up with the idea of setting up its own organic shelf in the fruit and vegetable department with 25 types of fruits and vegetables, all imported from Spain. Unfortunately, this shelf is not very popular, given the fact that very small quantities are imported.

The Ukrainian Fourchette network stands out for listing many available Moldovan organic brands (Biocămara and Roseline tea, Equinox wine), with just over 30 types of organic products on the shelf.

5.3 International comparison

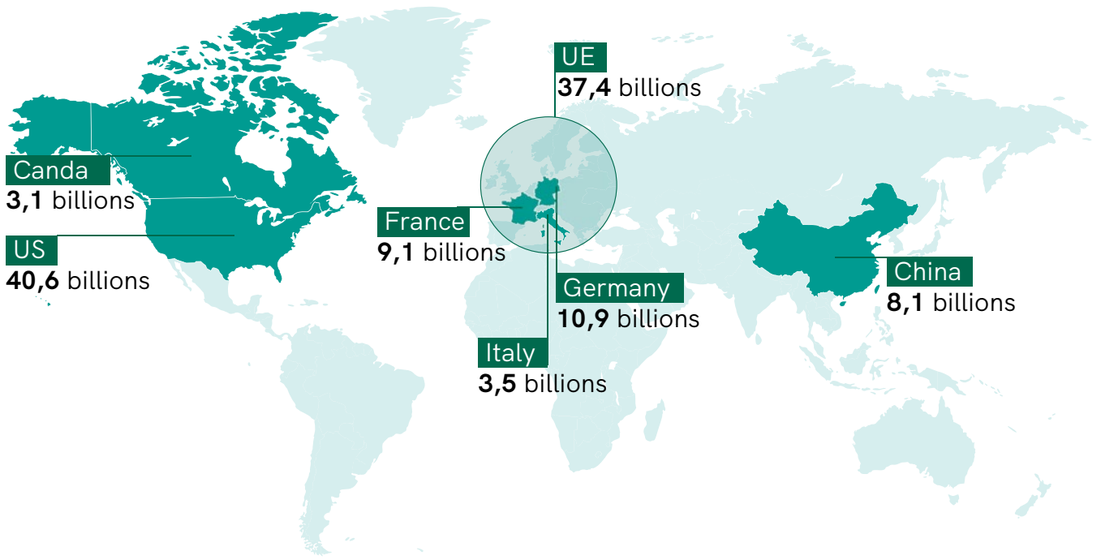
According to information presented by the European Parliament, worldwide, the US is a leader in the consumption of organic products, followed by the European Union and China. The European leaders in the consumption of organic products are Germany (10.9 billion), France (9.1 billion) and Italy (3.5 billion), while the European leaders on the share of organic areas versus conventional agricultural areas are: Spain (16,7%), France (15.1%), Italy (14.6%) and Germany (9.1%).

An interesting thing is that ecologically certified areas in the European Union increased by 33.7% from 2012 to 2018, while sales increased by just 79.8%, reaching a figure of 37.4 billion euros.

In the US, in the year of the pandemic, shoppers suddenly switched from eating in restaurants to eating fresh products in grocery stores, which generated a 12% increase in organic products in one year. According to the Organic Trade Association, it is the largest growth of an agricultural field in recent times.

WHO'S CONSUMING THE MOST ORGANIC PRODUCTS?

retail (euro) in 2018



Romania lags behind Western Europe if we talk about organic farming. According to Norofert's representatives, in 2018 Romania had only a 2.4% share of organically cultivated land in the total land used in agriculture - the lowest in the EU, but with a tendency to increase after several years of stagnation, so we see signs of improvement. Sales of organic food amounted to 68 million euros, a jumpof almost 3 million in one year. Between January and September 2020, sales of organic food increased by 18% compared to the same period last year, and the most dynamic category was baby food in jars, which increased by 72.4% compared to the same period last year, according to RetailZoom data.

Romanians continued to opt for organic food even in the year of the coronavirus pandemic. Producers and distributors are working to set up new sectors and ensure the supply of organic products, while the number of consumers is growing exponentially. More than a trend, Romanians have begun to be interested in organic food. In the context of the pandemic, the market for organic products grew by almost 18% between January and September 2020, compared to the same period in 2019, while sales of NON-BIO increased by 16%. The highest sales were registered in the category of BIO baby food jar, which increased by 72.4% in 10 months of the year, followed by butter milk 13.1% and eggs 7.5% compared to 2019. 80% of organic products sold in Romania are imported.

Consumption of organic food / person exceeded 277 euros in Denmark, 274 euros in Switzerland and 194 euros in Sweden.

In Romania, the consumption of organic food was only 3.72 euro / person.

According to a USDA study, the sale of organic products will increase by 45% in the next 5 years.

06

Support for organic farming and organic food production

6.1 Development of state support for organic farming

6.2 Subsidies for organic production

Source: Balázs Burján from Pexels.com

Source: Jahoo Clouseau from Pexels.com

6.1 Development of state support for organic farming

To support organic farming and organic food production, Moldovan state acts through various organizations such as: the Organization for the Development of the Small and Medium Enterprises Sector (**ODIMM**), the Investment Agency (former **MIEPO**), Agency for Intervention and Payments in Agriculture (**AIPA**).

The SME Greening Program, implemented by the Organization for the Development of the Small and Medium Enterprises Sector (**ODIMM**), is a State Program aims to support the development of the SME sector, approved by Government Decision no. 592/2019, which meets national priorities on greening of the enterprises, outlined in the following government acts:

1. The environmental strategy for 2014-2023 and the Action Plan on its implementation (**Government Decision no.301/2014**);
2. The low-emission development strategy of the Republic of Moldova until 2030 and the Action Plan for its implementation (**Government Decision no.1470/2016**);
3. Energy strategy of the Republic of Moldova until 2030 (**Government Decision no.102/2013**);
4. Waste management strategy in the Republic of Moldova for the years 2013-2027 (**Government Decision no.248/2013**);
5. Water supply and sanitation strategy (2014-2028) (**Government Decision no.199/2014**).

The approval of the Eco SME Program confirms the commitments of the Government of the Republic of Moldova in increasing the process of decoupling economic growth, of environmental degradation, assumed by signing the Final Declaration of the United Nations Conference on Sustainable Development "The Future We Want" (Rio de Janeiro, 20 - June 22, 2012) and the provisions of the National Development Strategy "Moldova 2030", approved by the Decision of the Government no. 377/2020, further to be transposed in the policy documents for promoting the "green" economy in the Republic of Moldova.

Agency for Intervention and Payments in Agriculture (AIPA) has an equally important role in support and development of organic farming and production of organic. AIPA is a public institution whose mission is to manage the resources of the National Fund for the Development of Agriculture and Rural Environment, as well as of the provided financial resources by the development partners for management and for intervention measures implementation in the agricultural sector.

AIPA is a reliable partner for agricultural producers, giving them the chance to grow, to become sustainable and competitive, both nationally and internationally, by accessing subsidies and support programs for the private sector in rural areas. In 2020, subsidies amounting to 6 124 604 Lei were approved and granted, with 1 720 519 Lei less compared to 2019.

The accomplishment of the mission focuses on the following fields of activity: ensuring the correct and legal development of the management operations of the funds allocated for the support of the agricultural producers; control of the use of funds allocated to the beneficiaries; participation in the elaboration of the subsidized directions; continuous monitoring of compliance with eligibility criteria and contractual conditions for granting of non-reimbursable financial assistance by grant beneficiaries; information, communication, presentation of innovations that take place in the activity process.

6.2 Subsidies for organic production

The body responsible for granting subsidies to support the promotion and development of organic farming is the Agency for Intervention and Payments for Agriculture (AIPA) which operates on the basis of Government Decision no. 20/2019.

The financial sources for subsidizing the respective sub-measure are those from the National Fund for the Development of Agriculture and Rural Environment. The distribution of the Fund's resources between support measures and sub-measures shall be determined by AIPA in consultation with the relevant associations of agricultural producers.

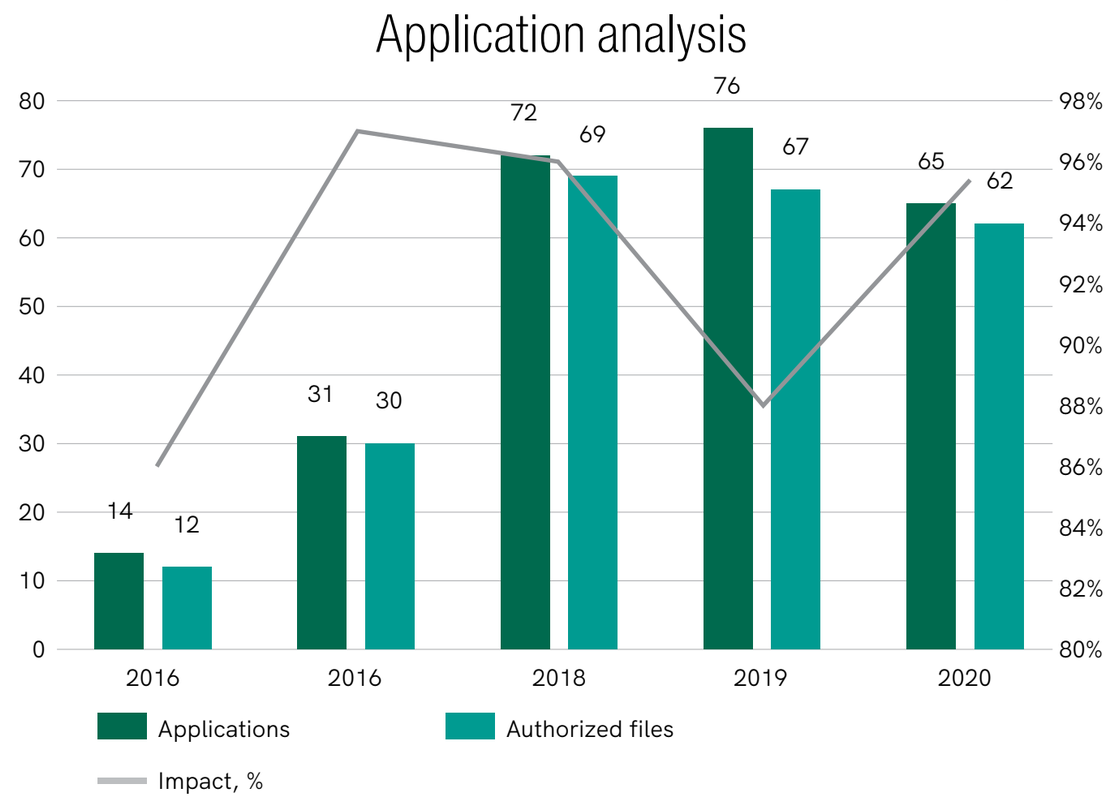
Thus, according to the Government Decision no. 455/2017, to support the promotion and development of organic farming, provides financial support under **Sub-Measure 2.5** to all producers who are registered in the organic farming system as a compensatory payment for income losses and additional costs incurred by beneficiaries who enter into voluntary commitments and engage to remain in this system of agriculture for a period of 5 years.

Analyzing the situation in 2018, we understand that the application of **Sub-Measure 2.5** subsidies is constantly increasing. Thus, out of 72 files applied with a requested budget in the amount of 7 740 877.78 Lei, 96% of the files were validated and 94% of their total value was granted, **69 files - 7 251 529 Lei.** In **2019**, the statistics show a number of files submitted similar to the situation registered in 2019, as a result 76 files with the value of 8 603 718.46 Lei were submitted and **67 files were approved - 7 845 123 Lei.** In **2020**, the statistics show a decrease of the files requesting financial support by 14%, so that the number of files registered in 2020, constituted 65 files with the value of 6 900 991 Lei and **approved 62 files - 6 124 702 Lei** (Table 6.2.1, graph 6.2.2). Currently, until September 15, 2021, 8 subsidy files amounting to 980 592 Lei were submitted. They are still in a processing state.

Table 6.2.1 *Situation of dossiers for subsidies under Sub-measure 2.5*

Year	Nr. of submitted dossiers	Nr. of authorized dossiers	Ratio between years %	The requested amount, MDL	The authorized amount, MDL	Ratio of amounts %
2016	14	12	86%	641 850,10	596 026,00	93%
2017	31	30	97%	1 880 008,23	1 590 179,00	85%
2018	72	69	96%	7 740 877,78	7 251 529,00	94%
2019	76	67	88%	8 603 718,46	7 845 123,00	91%
2020	65	62	95.4%	6 900 991,83	6 124 702,00	89%

Graph 6.2.2



Financial support is provided in the current year for grants for conversion to organic farming and for the maintenance of organic farming in the field of organic production and beekeeping (Table 6.2.3). The amount of support granted shall be calculated in the form of an amount, expressed as a fixed amount per unit area, and shall be:

Table 6.2.3 *Conversion period of the organic farming methods for the following crops*

Category	Period of conversion to organic farming methods for the following crops		
	1st year (mdl/1 ha)	2nd year (mdl/1 ha)	3rd year (mdl/1 ha)
a) orchards, vineyards, fruit shrubs and strawberries	1500	2000	2500
b) medicinal and heteroolaginous plants	1300	1600	2000
c) field crops, pastures and hayfields	800	1000	-
d) vegetables	3000	3500	-
e) beekeeping	300	-	-

The maximum value of the granted support in order to maintain the practices of organic farming will not exceed the amount of 200 thousand lei for one beneficiary.

The conversion period to organic farming methods is 2 years (for annual crops), 3 years (for multiannual crops) and 12 months for bee products.

For the purpose of the maintenance of organic farming, AIPA covers 20% of the price of sold organic products. In this respect, operator shall submit: the invoices; and a copy of the customs and complementary declaration, with the attached invoice, in case of export.

It should be noted that the subsidy beneficiaries reimburse the received amounts only if they do not keep running the organic farming system **for 5 years** period. Agricultural producers can **NOT** benefit from financial support if the conversion period is repeated for the same field.

The period for the submission of applications for subsidies under this measure is from 1 February to 31 October of each subsidizing year.

Source: Pixabay from Pexels.com

The operators willing to apply for subsidies under sub-measure 2.5. should fulfill the following **mandatory conditions:**

1. goods, eligible investment object purchased from suppliers and distributors;
2. don't have debts for the payment of taxes and fees to the national public budget at the time of submitting the application for subsidies;
3. belong to one of the associations of agricultural producers with a general or particular profile;
4. prove, by confirmatory documents, the performing of the investment (invoices, payment orders, documents for placing in service);
5. are not included in the Prohibition List of subsidies beneficiaries and are not in the process of insolvency or liquidation;
6. are legal holders of the properties in / on which the investment is made and are owners of the property that is the object of the investment;
7. for the wine sector, agricultural producers must register the owned or possessed vineyards in the Vine and Wine Register of the Republic of Moldova.

NOTE: If the operator is included in the Prohibition List of subsidies beneficiaries – the Territorial Service of AIPA will reject the application for financial support, without being registered.

The required documents for the submission of the application for subsidies for each area under this sub-measure are:

1. the application for subsidies for this sub-measure;
2. the copy of the registration certificate, with declaration on establishment attached, for the peasant households;
3. the certificate attesting the fact that the agricultural producer is a member of a professional association, under the Law no. 257/2006 on the organization and functioning of agricultural and food product markets, issued by the association and / or organization concerned;
4. copy of the financial documents for the year preceding the year of application, for legal entities, except for agricultural companies established in the year of subsidising, approved under the existing procedure by the decentralized public services of the National Bureau of Statistics; and in the case of peasant households - unified report (UNIF 14 / VEN 12 form), except for agricultural businesses established in the current subsidising year;
5. the document confirming the professional qualification of the administrator or, as appropriate, of an employee with part-time job (at least 0,5 units) in the field of investment - copies of diplomas or training certificates, with a total number of at least 24 hours, issued by the consulting companies, including international ones, but with the exception of deforestation of perennial plantations;

6. declaration on own responsibility regarding the veracity of the data and submitted documents, including the commitment not to sell / transfer for use in any form the subsidized investment, to use it according to the destination, to not grub the perennial plantations, in accordance to the specified periods;

7. the copy of the producer registration form in organic farming, for the year for which he requests the specific support;

8. copy of the contract concluded between the producer and an inspection and certification body which is recognized by the Ministry of Agriculture, Regional Development and Environment;

9. the copy of the HACCP certificate or, as the case may be, of Global Gap, GMP or ISO or of the concluded and prepaid contract with one of the specialized companies, for the purpose of certification according to the mentioned standards; for cumulatively applications for financial support under the sub-measures 1.1, 1.6, 1.8 and 2.5, in case of two and more applications, exceeding 1 million lei, by agricultural producer's assumption of the obligation to get certification during the next two years from the moment of support received and to maintain the conditions underlying the granting of the certification;

10. the copy of the certificate of conformity / authorization confirming the conversion period issued to the operator by the inspection and certification body, stating: the cultivated crop, the acreage, the number of bee families and the year of conversion;

11. the notification issued to the operator by the inspection and certification body attesting that no cause of termination or cancellation of the contract between the operator and the inspection and certification body has occurred and that the operator is still integrated into the control system of the body concerned;

12. copy of the document confirming the sale of organic products, permitted on the territory of the Republic of Moldova;

13. the operator's commitment by which he undertakes to remain in the organic farming system for a period of 5 years from the date of request for support.

07

Breeding and recommendation of varieties suitable for organic farming in the Republic of Moldova

Source: Kasuma from Pexels.com

Source: Akil Mazumder from Pexels.com

Current development of priorities in agriculture within Europe lead us particularly thinking of the EU Biodiversity Strategy and the "Farm to Fork" Strategy (F2F) which, among other things, require greater diversity in the species and varieties grown, and an expansion in organic acreage (up to 25%), as well as simpler registration and trade in so-called amateur, old, and organic varieties.

The vast majority of farmers within the EU use organically grown seed from standard "modern" varieties, which were originally cultivated for conventional farming, where chemical intensification inputs are used. For organic farming, however, it is necessary to test these varieties once again, to see how they will fare in organic conditions. In Moldova, we focus on the most important group of crops in the EU, which is cereals. Important characteristics for cereals include: good seedling emergence, vitality of young plants, and good tilling, plants that have good leaf coverage of the soil, and thus compete well with weeds. Furthermore, the ability, despite limited nourishment, to form reasonable quality grain with a high protein content and a high and stable falling number. Good plant health is important, with resistance to fusarium head blight (danger of mycotoxin = DON), septoria, rust and mildew.

Besides testing classic varieties in organic conditions, the EU is also going in the direction of supporting the development of special organic varieties, which are deep-rooting, have greater ability to take up water and nutrients, as well as having the characteristics mentioned above. We have also tried these in Moldova (Swiss organic varieties developed by Peter Kunz). The question is, however, the availability of certified seed of these varieties in Moldova. Support and preference for organic varieties, and so-called organic heterogeneous materials, is included in the new regulation on organic production, which comes into force on 1.1.2022: Regulation (EU) 848/2018 of the European Parliament and of the Council on organic production and labelling of organic products and repealing Council Regulation (EC) No 834/2007.

Organic heterogeneous materials are not new varieties, they are a mixture of several various populations of the same variety, and should be more amenable and more resistant to extreme weather and infections, which are becoming more prevalent in farming. Research in this field is in the early stages, and is based mainly on the experience of non-government organisations which are allowed to trade these "heterogeneous reproductive materials" as seed, under the new regulation.

In conclusion, several years of testing varieties should result in a list of recommended varieties, which will be authorised and published by an independent state institute. Apart from the results of the long-term trial, the recommendation will also take the site into consideration, and a final recommendation will be made on the basis of the results from all test sites. For this purpose, it will be necessary to establish a committee for the recommendation of varieties, which will determine basic characteristics f individual varieties as value for cultivation and use (VCU), and their parameters that must be fulfilled in order for the variety to be recommended. On conclusion of the project (after evaluation of the vegetation year 2020/2021), this independent list will be published, wherein varieties will be categorized (**recommended**, preliminarily recommended, and possibly other varieties). Characteristics, and theirparameters, will be set in a similar way for Moldova as they are in other European countries – i.e. yield, grain quality (bakery values), and the plants' state of health during vegetation. The list of recommended arieties will then be updated and published annually.

A specific problem for the internal market in Moldova is that grain purchasing price does not take quality fully into consideration (bakery values). Thus, organic varieties are at a disadvantage, as organically grown crops tend to produce lower yield, but are of higher quality and better state of health. On the other hand, raw materials for export, such as wheat, are purchased only if they fulfil bakery parameters. Otherwise, grain is purchased at a lower price as feedstuffs. A further publication will be a List of recommended varieties of winter wheat and spelt wheat for organic growing in Moldova.

For in depth insights about the evaluated parameters, its results and the procedure itself, please refer to the source: *"Recommendation of varieties for organic agriculture in the Republic of Moldova, winter wheat, spelt wheat, results of pilot trials 2020"* published in 2021 within the project Institutional support within organic agriculture in the Republic of Moldova, by the Central Institute for Supervising and Testing in Agriculture.

Photos from local field days 2021 orgainsed with the support of our project by Comisia de Stat pentru Testarea Soiurilor de Plante.

08

Science and research in the area of organic farming

8.1 Financing of research

8.2 International projects

8.3 Innovations

8.4 Organic Eprints

Source: Kindel Media from Pexels.com

Source: Thisisengineering from Pexels.com

8.1 Financing of research

In the Republic of Moldova there is no special funding program related to research in organic agriculture. Such a state program was run in 2007-2008, but due to lack of financial means this program was stopped. Fragmentary research on organic agriculture is carried out by some scientific institutions in the Republic of Moldova.

Thus, the **Research Institute of Field Crops „Selecția"** implements a research program in the field of organic farming through long-term field experiences, with various crops and systems of tillage and fertilization of the soil, without the chemicals use for diseases, pests and weeds control.

The Public Research Institute for Field Crops "Selectia" was officially established on January 1, 1944 in the former USSR, in Balti district, Republic of Moldova. The institute has undergone four organizational changes since its establishment. Currently, the scientific activities and production processes of the Institute are:

- Development of new varieties of field crops, including hybrids, which are resistant to major diseases and pests; are able to tolerate adverse environmental changes and have a high quality of cereals;
- Production of foundation seeds and multiplication of certified seeds by subcontracting with private seed farms;
- Development of ecological technologies for the production of field crops, which ensure the saving of non-renewable energy resources;
- Development of new, sustainable agricultural systems to improve soil fertility and the production of organic products.

During the 74 years of activity of the institute, 349 varieties and hybrids were developed, of which 160 were officially recognized, including but not limited to 17 varieties of winter wheat, 15 varieties of autumn barley, 16 varieties of peas, 18 varieties of soybeans, 12 varieties of beans, 18 hybrids of sunflower, and 6 varieties of sugar beet.

Selection Laboratories

1. Laboratory for breeding and cultivation technologies of cereal crops
2. Laboratory for breeding, seed production and cultivation technologies of leguminous and fodder crops
3. Laboratory for breeding, seed production and technologies for cultivating technical crops
4. Production quality analysis group
5. Plant protection laboratory
6. Laboratory of Agrotechnical Technologies and Systems

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Telephone: +373 23 13 31 51 (Reception)
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The Institute of Genetics, Physiology and Plant Protection (IGFPP) is a public law institution in the field of research and innovation, with the Ministry of Education and Research as its founder. It was founded in 2005 by the merger of the Institute of Genetics of the ASM, the Institute of Plant Physiology of the ASM, the Branch for Aromatic and Medicinal Plants of the Institute for Scientific Research for Corn and Sorghum "Porumbeni". The directions of activity had a deep and lasting development. The theoretical bases of research in genetics and plant breeding were confirmed by the establishment of the Institute of Ecological Genetics in 1985, which later in 1991 was renamed the Institute of Genetics of the ASM. Research in plant physiology and biochemistry was consolidated within the Institute of Plant Physiology and Biochemistry, founded in 1960, and renamed in 1991 in the Institute of Plant Physiology of the ASM.

The Institute of Genetics, Physiology and Plant Protection (IGFPP) implements a wide range of biological measures for diseases and pests control.

IGFPP research directions:

- **Fundamental direction:** Genetic control of valuable quantitative and qualitative traits, elaboration of new principles for increasing and quantifying hereditary variability, study of genetic-physiological diversity and conservation of plant genofound, genetic-physiological mechanisms to conduct the production process. Interaction mechanisms of useful and harmful species in agrocenoses and their potential amelioration in regulating the population density of economically important pests of agricultural crops.

Source: The institute of Genetics

- **Practical direction:** Elaboration of new principles, technologies and breeding biotechnologies; creation of varieties and hybrids with productivity, quality and increased ecological resistance to different agricultural systems; elaboration of physiological procedures for optimization and ensuring the stability of the production process in intensive, organic (ecological) and high precision agriculture; the development of environmentally friendly means for the plant protection from diseases, pests and procedures for their application in organic and conventional agriculture

Objectives:

- Genetic - molecular organization of the genome and elaboration of procedures for increasing and evaluating variability in crop plants.
- Development of biotechnologies in plant improvement, creation of varieties and hybrids with increased productivity, quality and ecological resistance.
- Elucidation of the mechanisms of functioning of physiological, biochemical and structural systems in the ontogenesis of plants grown in optimal conditions and ecological stress to ensure high levels of productivity and resistance.
- Completion, complex evaluation, in situ and ex situ conservation, documentation of plant genetic resources.
- Biology, systematics and peculiarities of the interaction of pathogens, pests in relation to the host plant in natural and anthropogenic biocenoses.
- Development and evaluation of the effectiveness of plant protection products and biological agents in combating and controlling harmful organisms in ecologically harmless plant protection systems.

IGFPP Laboratories:

1. Molecular Genetics Laboratory
2. Plant Resistance Genetics Laboratory
3. Applied Genetics Laboratory
4. Plant Biotechnology Laboratory
5. Plant Genetic Resources Laboratory
6. Aromatic and Medicinal Plants Laboratory
7. Laboratory Physiology of Fruit Plants and Fruit Maturation
8. Plant Biochemistry Laboratory
9. Natural Bioregulators Laboratory
10. Phytopathology and Biotechnology Laboratory
11. Phytosanitary Prognosis and Analysis Laboratory
12. Laboratory of Entomology and Biocenology
13. Phytopharmacy and Ecotoxicology Laboratory
14. Integrated Plant Protection Laboratory

Details about these laboratories can be found on www.igfpp.md/LaboratoareleIGFPP

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8.2 International projects

Laboratory of Phytopatology and Biotechnology as a part of scientific subdivision of the Institute of Genetics, Physiology and Plant Protection represents a scientific research structure specialized on the identification of plant diseases causative agents, development and implementation of microbial products for plant protection.

Mission of the laboratory in the framework of the academic activities is investigation, innovation, counseling and technology transferring, as well as counseling of the decision-making bodies, empowering companies and government agencies to actively promote sustainable and inclusive development by elaborating and implementing modern biotechnologies for phytosanitary problems solving and organic agriculture promotion.

National and International cooperation

The laboratory members give lectures on the „Virology" for the 3rd year students of the Faculty of Biology and Pedology of the Moldova State University, as well as the normative course for the fourth year students from the Faculty of Horticulture of UASM.

In cooperation with colleagues from the Institute for Plant Protection in Tehran (Iran), research on baculoviruses (VPN and VG) in insects from the Noctuidae family identification was carried out. The laboratory staff presented a plenary report at the International Congress on Plant Protection carried out in Tehran.

In the framework of the MRDA/CRDF MBI-3003 grant investigations on elaboration of baculoviruses identification methods. This could be used for baculviruses preparations elaboration.

Lista proiectelor/granturilor obţinute în străinătate

1. The INTAS grant "Development of production technologies of biological means to protect the environment" signed together with the Research Station for invertebrate pathology (Saint-Cristol-Lez-Ales, France) and the Institute of Biological Protection in Darmstadt (Germany). The investigations were financed in the amount of 30 thousandEUR.

2. The INTAS project between the same institutions "Microbial preparations for plant protection in sustainable agriculture", financed by INTAS in the amount of 20 thousand EUR.

3. The MRDA / CRDF grant "Baculoviral Preparations for Environment Protection in Sustainable Agriculture" with the University of California (Davis, USA) in the amount of 40 thousand USD.

Source of information: www.igfpp.md/IGFPPLaboratories/ The Laboratory of Phytopathology and Biotechnology

Two scientific researchers from the Research Institute for Field Crops "Selectia" recently participated in an international training held in Bari, Italy. The training was organized as part of a project to strengthen knowledge management for greater development efficiency in some countries from Eastern Europe, North Africa and Central Asia implemented by ICARDA and funded by IFAD. International partners such as CIHEAM-Bari, PROCASUR, Virginia Tech, NARS, governments, academic institutions and agricultural extension services from Moldova, Morocco and Sudan are also involved in the project.

The main accent was on an innovative approach to the functions of knowledge transfer for the creation of new companies, cooperation with universities and the business system, and the management of intellectual

property rights. All sessions were combined with best practice guidelines. The main subject was to stimulate the exchange of knowledge and rural solutions that proved to be best practices, to strengthen the capacities of public institutions related to knowledge management and the involvement of stakeholders. An important objective is to focus the transfer of knowledge towards the financial inclusion of women and young people in rural areas, natural resource management and climate resilience, productive agricultural technologies.

According to the organizers, universities and research institutions are designed to provide higher education and research, but they tend to engage in a dialogue with civil society to contribute to social, cultural and economic development. They are called upon to build bridges between business, civil society and territories by stimulating competitiveness.

Source of information: www.selectia.md

Source: Selectia

8.3 Innovation

The priority task of the agricultural sector of any country, including the Republic of Moldova, is to provide the population with quality food products. The selection of plants and new animal species in this sector occupies a priority place, because the creation and implementation in production of new, more productive and adapted varieties is the cheapest and most accessible way to obtain the increase of production. Especially this is expressed in extreme climatic conditions and the pandemic situation caused by COVID-19. Improving the quantity and quality of cultivated production serves as a basis for good human health. The production of seeds of a high biological quality allows ensuring the food security of the country, especially in the conditions of the pandemic with limited imports from abroad.

In this regard, the IP Research Institute for Field Crops "Selectia" has implemented a project reducing the pandemic situation with COVID -19 by expanding new varieties of autumn wheat and barley of high quality adapted to climate change.

The aim of the project is to create new varieties of winter wheat and barley, with an abundant harvest, their adaptation to the conditions of climate change and their implementation in the agricultural sector of the Republic of Moldova.

Objectives:

1. Selection of parental forms for hybridization stages and study of their drought resistance. 79 hybrid combinations were made for common winter wheat and 24 for autumn barley. Hybrid seeds and their parental forms will be sown and studied in the field of F1 hybrids for 2022.
2. Study and select the lines created in the selection field for inclusion in the orientation field. In the selection field, 250 homozygous lines were selected for winter wheat and 180 for autumn barley.
3. 450 perspective lines for winter wheat and 200 perspective lines for autumn barley in the orientation field were studied and selected.

Based on bilateral collaboration with some European institutions, it is possible to exchange initial germplasm genetic material and high-performance methods for plant breeding. Comparative tests of domestic and different selection varieties from different European countries are currently being carried out to determine the most tolerant to drought and high temperatures. It allows to accumulate at the institute germplasm in wheat culture in the amount of 450 samples from 16 different countries.

Table no. The result of the testing of the homologated varieties and of perspective of common wheat at ICCC "Selectia" (Comparative field of competition, precursor - Lucerne).

№	Name of the variety	Productivity t/ha				Deviation of % from st.	Height of the Plant cm	Nr. of grains 1m²	Grain mass in ear	Gluten		Mass of 1000 grains (gr.)
		2018	2019	2020	average					%	UDK	
Semi intensive varieties												
1	Meleag-st.	7,13	5,75	1,87	4,92	_	93	428	1,52	24	73	33,1
2	Căpriana	6,28	5,80	1,65	4,58	93	95	410	1,50	26	61	40,2
3	Creator	6,83	6,40	1,66	4,96	101	95	494	1,49	32	95	36,1
4	Vestitor	6,83	6,28	1,62	4,91	100	91	456	1,73	25	60	35,6
5	Clasic	6,73	6,40	1,87	5,00	102	102	536	1,50	27	72	38,7
6	Savant	6,83	6,60	1,57	5,00	102	100	442	1,55	29	76	40,1
7	Amor	6,73	5,45	1,83	4,67	95	92	478	1,46	25	63	37,0
8	Aport	7,63	6.18	2,09	5,30	108	90	488	1,74	26	41	38,7
9	Tiras	7,53	7,08	1,91	5,51	112	88	510	1,30	28	60	35,6
	Media	6,95	6,22	1,79	4,98	101	94	471	1,53	27	67	37,2
Intensive varieties												
1	Fenix	7,25	5,50	1,73	4,83	98	85	436	1,26	23	45	34,0
2	Rod	6,98	6,40	1,89	5,09	103	88	450	1,50	27	65	39,5
3	Lăutar	7,60	5,55	1,92	5,02	102	86	456	1,39	27	64	35.6
4	Acord	7,38	6,23	1,93	5,18	105	83	422	1,36	26	56	36.7
5	Talisman	7,35	5,83	1,71	4,96	101	80	492	1,36	25	58	36,7
6	Numitor	7,10	6,10	1,77	4,99	101	75	454	1,47	24	73	37.4
7	Simbol	7,98	5,58	1,49	5,02	102	76	542	1,40	24	65	30,6
	media	7,38	5,88	1,78	5,01	102	82	465	1,39	25	61	35.8

Source: Jan Kroon

Production of approved and prospective varieties of autumn barley in the years 2018-2020 (average).

No	Name of the variety	Production t/ha	% compared to martor	Veget. Period (days)	Height of the plant	Rez. at falling (bal)
1	Excelent-martor	4,80	100	233	88	4,2
2	BȚ - 14/02	4,60	95,8	236	92	4,2
3	Radana	4,60	95,8	230	82	4,5
4	Elegant	4,80	0,0	233	84	4,0
5	Brumar	5,10	106,3	233	86	4,5
6	Tezaur-martor	4,60	100	233	88	4,2
7	Scînteia	4,80	104,3	235	84	4,0
8	Auriu	4,70	102,2	233	89	4,2
9	Stelar	4,90	106,5	236	90	4,0
10	Nicoli	5,05	109,8	232	88	4,0

At the ICCC «Selectia», based on a targeted selection of parental forms by hybridization, a rich material for autumn wheat and barley was created, which is updated and supplemented every year. In different breeding units, the material is subjected to the study, evaluation and selection of the best lines according to the variety model developed. The final stage is the comparative testing of the varieties, which includes 74 numbers of the most promising breeding lines for winter wheat and 40 numbers for autumn barley. Based on the results of a 3-year study, in the reporting year, 2 perspective lines for common winter wheat under the name Odor and Belșug and a perspective line for autumn barley under the name Nicoli were selected, which were prepared and submitted in the State Commission of the Republic of Moldova for 2021.

8.4 Organic Eprints

Organic Eprints is an international archive with open access to electronic documents related to organic food and agriculture research. The archive contains together works with bibliographic information, abstracts and other metadata. It also provides information on organizations, projects and facilities in the context of organic farming research.

Objectives

The main objectives of the Electronic Archive are:

- to facilitate communication about organic research,
- to improve the dissemination and impact of research results and
- to document the research effort.

In line with these objectives, the archive is designed to facilitate international use and cooperation.

Rules of use

The archive will accept documents, both published and unpublished, such as scientific papers, theses, reports, book chapters, newspaper articles, videos and project descriptions. The only acceptance criterion is that the documents are relevant for research in organic farming and suitable for communication and that the sources are correct. All languages are accepted, but an abstract in English is encouraged.

Metadata (author, title, date, etc.) is freely accessible to all, and documents can be freely downloaded, stored, and printed in according to the correct use. However, documents cannot be made public on other online sources. Instead, linking to online archive pages is encouraged.

Access: https://orgprints.org/

Publications in the Republic of Moldova

- *"Recommendation of varieties for organic agriculture in the Republic of Moldova, winter wheat, spelt wheat, results of pilot trials 2020"* published in 2021 within the project Institutional support within organic agriculture in the Republic of Moldova, by the Central Institute for Supervising and Testing in Agriculture. (ÚKZÚZ)
- Boincean Boris. Publication: *IN TIME TESTED SEEDS FROM FARMERS.* CHIȘINĂU 2020 Source: www.selectia.md
- Boincean Boris. *Farming on chernozems. Adaptive soil management*. CHIȘINĂU 2020 Source: www.selectia.md
- High - *performance varieties for the agricultural sector:* catalogue. Chişinău: Print-Caro, 2020. 95 p. ISBN987- 9975-56-742-8. Source: www.igfpp.md/publicatii
- BOTNARI, V. *Symptoms and the spread of diseases conditions on tomatoes:* guide. Chişinău, 2020, 48p. (in edition). Source: www.igfpp.md/publicatii
- ALEXANDROV, E., BOTNARI, V., GAINA, B. *Rhizogenic grapevine interspecific varieties. Peculiarities of cultivation: practical recommendation.* Chişinău, 2020, 68p. (in edition). Source: www.igfpp.md/publicatii
- GAVRILIŢA, L., NASTAS, T., TODIRAŞ, V. *Use of biological means in reducing the density of the moth complex in the grain storage:* methodical guide. Chișinău, 2020. 40 p. (in edition). Source: www.igfpp.md/publicatii
- Boincean Boris. *Organic Agriculture Guide (field crops).* Chişinău, Eco-Tiras, 2018 (in Russian and Romanian).
- Boris Boincean and David Dent. *Farming the Black Earth. Sustainable and Climate-Smart Management of Chernozem Soils. Springer Nature Switzerland* AG, 2019, 226 p.
- Boincean Boris, *Alfalfa Organic Cultivation*.

09

Promotion of the organic sector in Moldova

Source: Zen Chung from Pexels.com

Source: Sarah Chai from Pexels.com

Promotion of the Organic Sector in the Republic of Moldova

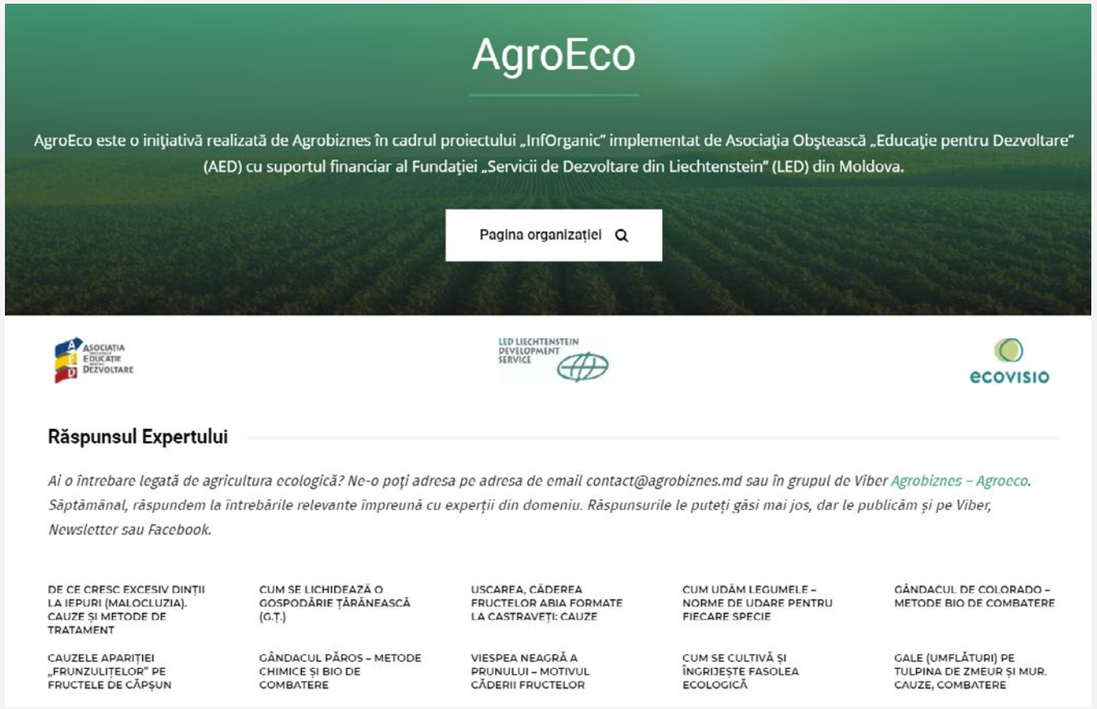
Moldova is in a phase of transition in terms of promoting organic farming among both producers and consumers.

One of the most important media platforms for promoting organic agriculture has become the Agrobiznes.md portal. In 2019, with the support of the Public Association for Education for Development (AED), the AgroEco page was created on the site, which includes relevant information about organic or sustainable production, success stories of certified organic producers or during the conversion period, brochures about organic farming developed in projects, info graphics, videos and other useful information.

Agrobiznes collaborates with specialized associations and organizations such as the Alliance of the Value Chain in Organic Agriculture of Moldova (MOVCA), the Public Association for Development Education (AED), the Farmer-to-Farmer Program in Moldova and others to collect useful information related to changes in the organic farming sector and opportunities available to farmers, but also to join efforts to promote organic farming. Up to this point, over 300 articles, recommendations, success stories and news have been placed on the AgroEco page. Through the platform, producers are promoted, both among other media platforms and among consumers.

In 2021, Agrobiznes launched the Agrobiznes Library - the first digital agricultural library in Moldova. Within it, useful information is placed, and in partnership with existing associations and projects for the farmers are available studies, analyzes, as well as brochures related to sustainable, organic or high-performance agriculture. Among the project partners are the Alliance of the Value Chain in Organic Agriculture of Moldova (MOVCA), the Public Association for Education for Development (AED), UCIP IFAD, USAID / APM, ACED and AMIB.

Agrobiznes still aims to promote Moldovan organic farming, both in the country and abroad.



Source: Macro Photography from Pexels.com

10

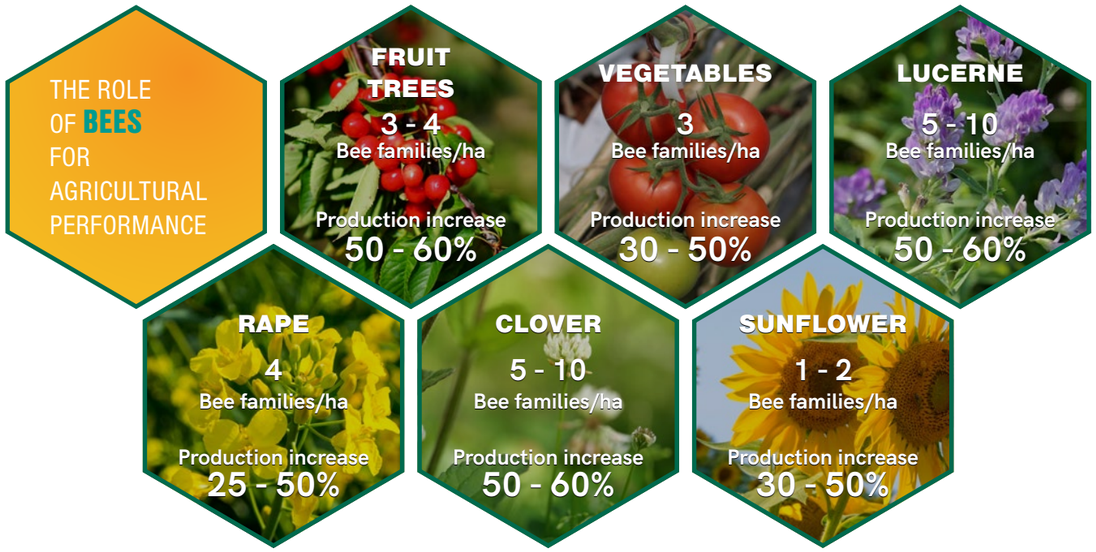
Beekeeping. Current state in Moldova.

Source: Johann Piber from Pexels.com

10.1 Apiculture in the Republic of Moldova. General Data

Beekeeping is an activity appreciated by human society. Although bees are known mainly for honey production, their economic role in nature is to pollinate hundreds and thousands of flower plants and to ensure the placement of the seeds and the appearance of fruits. Thus, we can highlight the role of bees for performance in agriculture, which is to increase the production from 25% to 50% (Fig 1).

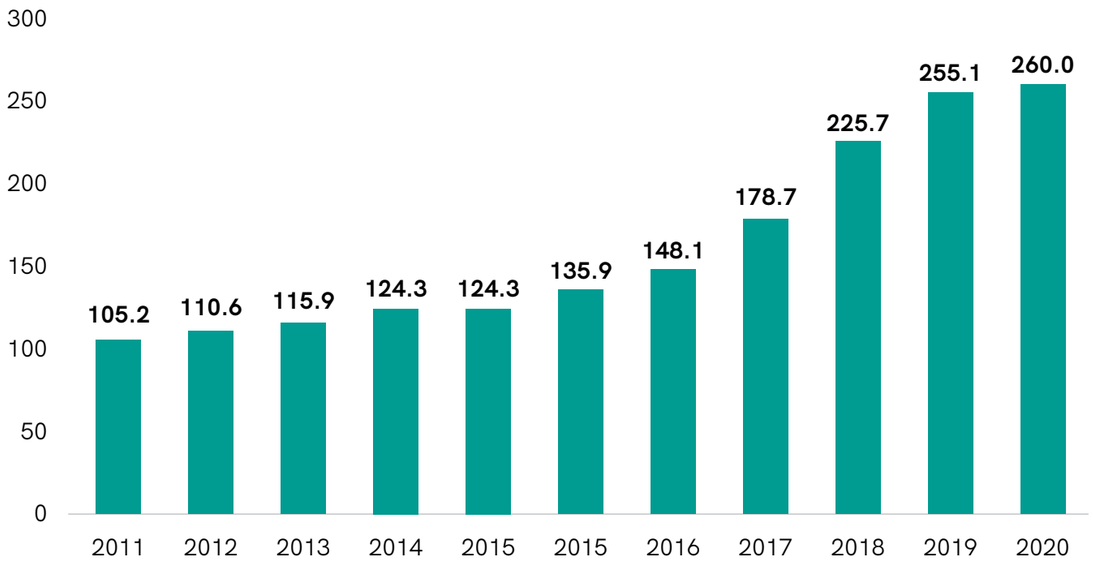
Fig.10.1.1 *The role of bees for agricultural performance*



Source: The National Association of Beekeepers of the Republic of Moldova

In 2020, according to ANSA data, in the Republic of Moldova there were more than 7800 registered apiaries. The number of bee families in recent years has increased to 260 thousand by 2020 (Graphic 10.1.1).

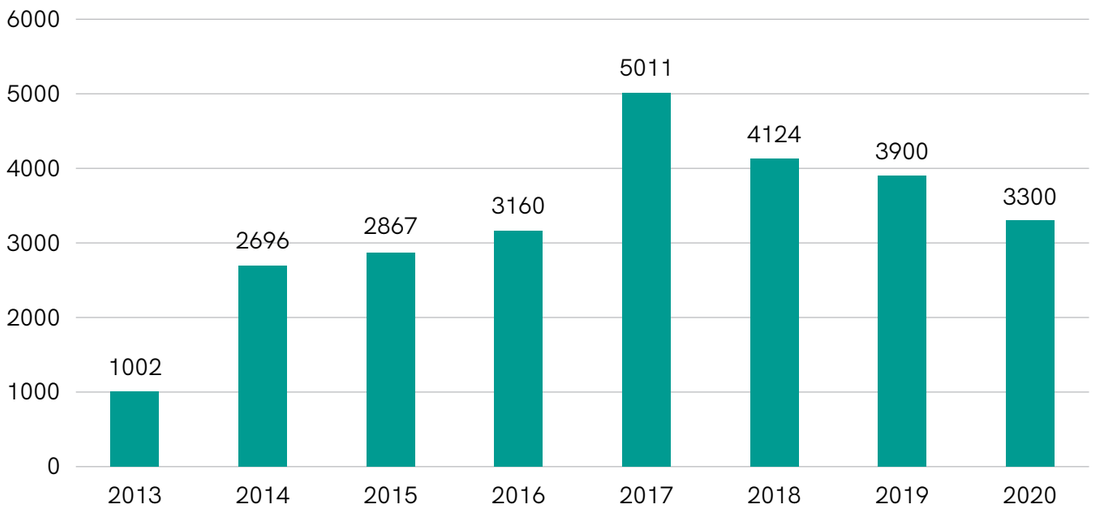
Graph 10.1.1: The number of bee families in the period 2011-2020, thousand pieces.



Source: The National Program for the Development of Beekeeping in the Republic of Moldova 2020-2026, ANSA data

In 2020, about 3,500 tons of bee honey were produced, from which 3,300 tons were exported (Graphic 10.1.2). The European Union is the main market for the local honey.

Graph 10.1.2: Total export of honey from the Republic of Moldova in the period 2013-2020, tons



Source: The National Program for the Development of Beekeeping in the Republic of Moldova 2020-2026, ANSA data

The strength of the Moldovan beekeeping sector is in the high quality of the local honey, whether it is monofloral (acacia, linden, buckwheat, etc.) or polyfloral. After dynamic growth in 2013-2017 the volume of exports is decreasing due to the sector's inability to position Moldovan honey on a higher level than the level obtained in low-cost oriented countries (sometimes at the expense of quality), such as Ukraine and China. The practice of certified organic beekeeping could be a solution that would help beekeepers obtain a fair price for their efforts.

10.2 What does organic beekeeping mean?

Nowadays, beekeeping in the Republic of Moldova is facing many challenges not only due to the problems of climate change and the use of pesticides in agriculture, but also the pandemic crisis. In this context, organic beekeeping is an important alternative to traditional beekeeping practices.

Organic beekeeping is the process of raising bees in unpolluted areas. In order for beekeeping to live up to the definition of organic, bees must be raised using natural materials, methods and feeding, by taking care of the bees' health and lowering their stress levels. It is important to avoid the use of conventional veterinary products and pesticides as they can weaken the bees' immune system, increasing the chances of developing diseases.

Advantages of organic beekeeping:

1. A growing market - honey and organic products are easier to sell, because they offer more health benefits;
2. Competitive price - organic honey and related products have a higher market price than traditional honey;
3. A guarantee of quality honey - customers who buy certified organic honey are confident in its quality;
4. Development of a beekeeping business in harmony with the environment.

Constraints for conversion to organic beekeeping:

1. Limitations on the area of the location of the apiary - it is difficult to find a place to carry out beekeeping that meets the standards at any time of the year;
2. Limitations on the treatment of diseases - the treatment of bee families in organic beekeeping involves the reduced use of some medicines. Consequently, treatment options for diseases are more limited;
3. Cost and transition time from traditional to organic beekeeping - the cost of equipping the apiary, the cost of certification, etc.
4. Regular recording of all the work performed in the apiary - organic honey production involves keeping detailed records at all stages of production, processing and retail.

The Republic of Moldova has taken an important step in the transition from traditional to organic beekeeping since 2018. In order to encourage beekeepers to produce organic honey and export it to the international market at a competitive price, with the support of USAID's High Value Agriculture Activity in Moldova, two companies working which are collecting, processing and exporting honey, have facilitated the conversion to organic farming of some beekeepers with whom they established long-term partnerships.

In 2020, with the help of HVAA and Apicola Lux CC, ten beekeepers successfully passed the conversion period and were certified for organic honey production. Additionally, 13 beekeepers received certificates confirming the second year of conversion for organic honey production. The company Apicola Lux CC, which will later sell organic honey, was certified for the production of honeycombs for organic beekeeping, being the first company in the Republic of Moldova certified in this field.

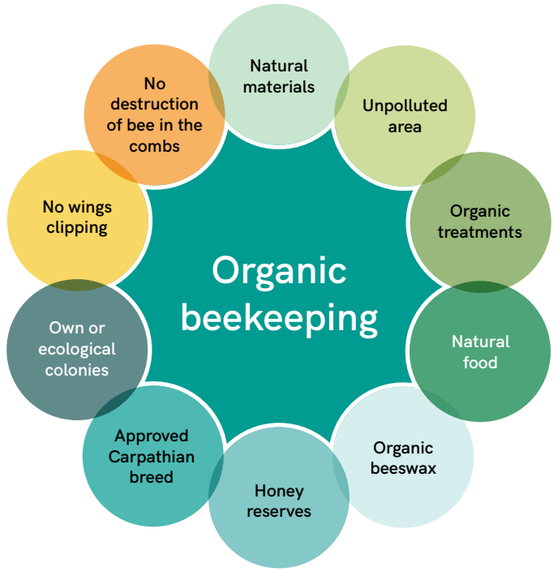
In 2021, the company Regina Naturii obtained the organic group certification (with internal control system) for its group of 6 beekeepers and intends in the following years to expand to about 50 beekeepers.

10.3 Obtaining bee products according to requirements for organic certification

In recent years there has been a tendency of mankind to consume organic food. It is known that a wide range of products such as honey, pollen, pasture, propolis, wax, royal jelly, apilarnil, bee venom, etc. can be obtained from bees. It could be mentioned from the beginning that absolutely all products obtained from bees, according to their origin, are meant to be organic. Bees collect these products from nature, they alone are gentle insects, very sensitive to any environmental pollution. However, with the appearance of the *Varroa Jacobsoni* mite, a series of treatments are undertaken by bee families, with the use of chemical, synthetic and other veterinary medicines, which can leave residues in the hive products.

Once in our country are registered organic agricultural enterprises, you can also practice organic beekeeping due to the fact that beekeeping is a component of agriculture. But in the case of organic production, certain severe conditions are placed in the organization and development of works with bees. First of all, the honey plant area where the bees will collect nectar and flower pollen is researched. Organic agri-food processing is approved by Government Decision no. 149 of 10.02.2006 or of the specific regulations of the export market (EU, USA, etc.). This area must provide bees with resources of nectar, pollen and sweet secretions throughout the active season, mainly from organically produced crops or, where appropriate, from spontaneous flora and forests. If the fields with agricultural crops are treated with pesticides or other chemicals, then in this area no organic products can be obtained so the activity in beekeeping is directly reorganized.

Grafic 10.3.1: Practices in organic beekeeping.



Source: The National Association of Beekeepers of the Republic of Moldova

From the organic point of view, it is desirable for beekeeping to take place in its natural and ecological form. The following are the general principles in organic beekeeping:

- **Hives**

When switching from traditional to organic beekeeping, several steps are needed. First of all, the shelters for bees, hives, is recommended to be made of natural material: organic wood (Picture 10.3.2), reed, straw with clay, etc. which does not present a risk of contamination for the environment and hive products. In order to prolog the exploitation period of the wooden hives, they will be painted with organic paint or they will be greased with linseed oil. It is forbidden to soak or paint the inside of the hive with synthetic materials. Plywood of different colors are installed on the front wall, so that the bees can orient themselves more easily. Bees are more likely to distinguish between white, yellow and blue. It is allowed in the summer months to use plastic mesh to limit the laying of the queen and to control the *Varroa* mite.

Poza 10.3.2: Location of apiaries and hives in organic beekeeping

Source: The National Association of Beekeepers of the Republic of Moldova

The beekeeper shall provide the authorities or control bodies with a map at an appropriate scale, including the location of the beekeeper. If areas are not identified in accordance with the requirements of organic production, the beekeeper shall provide the control authority or control body with appropriate documents and evidence, including appropriate analyzes, if necessary, attesting that the areas accessible to the bees in the given market meet the conditions laid down in this Regulation.

The following information on the activity of the beekeeper with bees shall be entered in the pristine register:

- food use;
- type of product;
- the quantities offered;
- the families in which the food was administered;
- date of administration.

The area where the catch is located is registered together with the identification of the hives both at the local public authorities and at the profile association. The inspection body or authority shall be informed of the movement of the hives to the harvesting sources within a mutually agreed timeframe.

- **Cleaning and disinfection of hives** - only heat treatment by flaming or hot water is allowed. The interior of the hive is cleaned mechanically.

- **Wax and honeycombs**

A very important thing is to change all the honeycombs in the farm with honeycombs made of pure, organic wax (obtained by unpacking the honeycombs with honeycombs, lids) or from the honeycombs built by bees on the construction frame and in the hollows in the hive. If we do not have such wax, you will be able to buy artificial honeycombs made from organic wax at authorized companies. These works are carried out during the conversion period, which is offered to the beekeeping unit for a period of two or three years. During this time, the beekeeping unit must be equipped with beekeeping equipment and inventory made of stainless material, to have a room where beekeeping products are processed that meet the requirements of organic production. (Picture 10.3.3)

Honeycombs built by bees are kept in special rooms at low temperatures, in these cases the wax moth does not attack the honeycombs. If the honeycombs are kept in empty cabinets or hives, you should protect them from being attacked by the wax moth. For their protection they will be processed with sulfur dioxide or small table salt will be pressed in time. Other means of biological control may be used in the treatment of spare combs. Before entering the family nest, the honeycombs in the reserve will be ventilated for about 15-20 minutes.

- **Location of the apiary**

The place for the location of the apiary is chosen in the area where nature is not polluted, away from the routes with intensive traffic, factories, livestock farms and other production units, which would pollute the nectar and pollen of plants. The apiary should be protected from cold air currents and heat on hot days. Have a drinking water supply where your bees will not drown, a vessel where water will continuously drip through the tap on a zigzag, slightly sloping plank. The apiary should be fenced along the entire perimeter and from the northern part, where there may be drafts, it is good to organize a forest strip or waterproof fence not less than two meters tall. The area within the flight range of bees must have sufficient sources of nectar, pollen and sweet secretions for their survival (Picture 10.3.2).

If it is practiced to transport bees to the pastoral, a well-determined plan is drawn up in advance with the addresses of the temporary hearths. The harvesting sources should be from the category of organic lands.

- **Breeding and origin of bees**

It is recommended to exploit the Carpathian bees approved in the country, because they are adopted to the local climatic and floristic conditions. They have demonstrated over time a good resistance to wintering and disease, have a rapid development in early spring and productively capitalize on existing main crops. Carpathian bees were introduced in the country after the 1980s, from the Trans Carpathian region, Ukraine (Mucacevo). Based on imported Carpathian queens, a series of breeding apiaries were founded in the former Moldovan SSR. Following the mass crossings in the republic, the population of bees of different generations was created, Moldovan Carpathian bees, which provide beekeepers with various bee products. An important factor is that the bees of this breed ensure the pollination of fruit trees, which bloom in early spring and during this period the bee families easily reach the optimal power of 6-8 algae (Photo 10.3.3).

Photo 10.3.3: Homologated Carpathian breed

At the moment in the Republic of Moldova there are 13 beekeeping farms that produce breeding beekeeping parent material and deliver to beekeepers in the country.

Table 10.3.4: The list of breeding farms certified organic by the Ministry of Agriculture and Food Industry of the Republic of Moldova

Nr.	The name of the household that owns the breeding farm	Locality	Contacts	Animal breed	The expiry date of the attestation
1	Limited Liability Company **„Senatron"**	v. Dănceni, district Ialoveni	+373 79 584 363	Carpathian	October 2021
2	Household entrepreneurship **„Sacara Petru Ion"**	v. Sagaidacul Nou, district Cimișlia	+373 69 297 976 apissacara@gmail.com	Carpathian	April 2022
3	Household entrepreneurship **„Sîngereanu Nicolae Alexandru"**	v. Zorile, district Orhei	+373 69 200 750 singereanunicu@gmail.com	Carpathian	July 2023
4	Limited Liability Company **„Făguraș de aur"**	v. Șipca, district Șoldănești	+373 68 819 981 sandic.stefan@gmail.com	Carpathian	July 2023

5	Limited Liability Company **„Albinărie"**	v. Ulmu, district Ialoveni	+373 69 194 701 anagadarag@rambler.ru	Carpathian	July 2023
6	Household entrepreneurship **„Pîslaru Albinuța"**	v. Cotihana, district Cahul	+373 69 188 332 apisud@mail.ru	Carpathian	July 2023
7	Household entrepreneurship **„Butnaru Ion Mihail"**	v. Lucăceni, district Fălești	+373 69 859 490 butnaru_90@mail.ru	Carpathian	August 2023
8	Limited Liability Company **„Bee Plant"**	v. Comrat, district Comrat	+373 78 888 815, +373 60 879 798 romaasd@mail.ru	Carpathian	October 2023
9	Limited Liability Company **„Apisterra"**	v. Ruseștii Noi, district Ialoveni	+373 69 488 431 apisterra.srl@yahoo.com	Carpathian	May 2024
10	Peasant Household **„Șterban Vasile Tudor"**	v. Onișcani, district Călărași	+373 78 754 722 sterban.vasile@mail.ru	Carpathian	May 2024
11	Limited Liability Company **„Apibio Regina Mierii"**	Forest Detour Ghidighici, Canton nr.7, district Strășeni	+373 69 323 067 valentinaceb@yahoo.com	Carpathian	July 2024
12	Limited Liability Company **„Apimelifera"**	v. Mingir, district Hîncești	+373 69 511 229 bozianu@gmail.com	Carpathian	July 2024

Source: (Data are updated annually and are presented on the website of the Ministry of Agriculture and Food Industry of the Republic of Moldova)

Newly formed families in the same apiary must come from organic families, in case swarms or families from other households are purchased, these units must be organic.

Beekeeping management

- It is not allowed to mutilate bees, cut the wings of queens;
- It is allowed to kill the old queen or one that does not show good qualities by replacing it with another young one;
- The destruction of the male offspring is allowed only to diminish the infection with *Varroa Jacobsoni;*

Feeding bees

For a normal development in the nest of the bee family there must be no less than 8 kilograms of honey and one or two honeycombs with pasture. A beneficial effect on spring development is obtained from stimulant feeding with the addition of nutritional additives. In the case of organic beekeeping, the administration of sugar syrup or other artificial additives is not allowed. The bees feed on their own honey, collected from nature or provided with nectar sources throughout the active season. Stimulating feeds are made with natural honey obtained on their own farm.

Natural swarms as well as newly formed families must be fed according to those mentioned above. Artificial feeding is allowed only in difficult cases, when climatic conditions do not ensure the secretion of nectar for a long time. The bee feed is prepared from honey obtained in the beekeeping unit or from other organic production units. If there is no other alternative, the bees will be fed with organic sugar syrup to save them, but care should be taken not to store them in the hive reserve, to be used only to feed the brood and bees in the nest.

A more important period is the preparation of bees for winter rest. In the autumn, the beekeeper must provide the bee families with sufficient reserves for this difficult period, so that the bees can survive safely until the first sources of nectar and pollen appear in the spring of the following year. From the first main harvest, the beekeeper must reserve a few honeycombs with honey to place in the bees' nest when preparing for the winter. In difficult cases you will be allowed to replace no more than 10% of the total amount of food with additional feed. In addition, the syrup prepared from the honey obtained on the own farm is administered until the accumulation of at least 1.5 kg for an alley.

The products obtained in the organic beekeeping unit

Removing the honeycombs from the hive is done by removing the bees using a fine bee brush so as not to traumatize the bees or the air blower. The use of synthetic repellents is not allowed for bee removal. The use of a smoker loaded with vegetable waste is allowed.

Harvesting honey

Honey is a bee product obtained by processing and processing flower nectar or manna by bees and stored in honeycomb cells to feed the hive population. The transformation of nectar into honey takes place due to the biochemical and physical process. In order to obtain a kilogram of honey, 5 kg of nectar are needed, and in order to collect 1 kg of nectar, the bees have to perform from 20,000 to 100,000 flights.

Honey from bees can be extracted after each productive harvest of nectar. When the beekeeper wants to obtain a richer assortment of honey, the extraction is carried out after the flowering of each harvesting source. For example: after the flowering of willow, cherry, apple, maple, etc. The moment of extraction is appreciated by the beekeeper, when the honey is capped not less than ¾ from the surface of the honeycomb. In the production bodies or in the shops it is recommended that the honey be completely capped, then the honey is definitely matured, it contains 18-20% humidity.

To obtain a high-quality honey it is recommended:

- To use shops or production bodies;
- Honeycombs that are intended for storing honey should not be after the growth of the brood. Only white and newly built honeycombs will be used;
- It is not allowed to remove honeycombs with larvae for honey extraction.

Honey can be obtained of several types:

- honey in honeycombs and sections - delivered in honeycombs built and filled by bees;
- centrifuged and filtered honey - extracted using centrifugation;
- pressed - obtained by pressing honeycombs;
- drained - drained freely from the combs, the substance lysocin is maintained.

Opening (operculum) - is a mixture of honey and wax, obtained after opening the combs, before spinning. Put in clean glass jars, which are filled to ¾, fill the rest with honey and close tightly. Store for a maximum of one year in a dry place, in the dark and cool. The cap should be chewed like a gum, even after the honey has run out of it, because the wax contained to release substances with a strong role as a lubricant for blood vessels, while helping to optimize the functioning of the heart.

All products obtained and intended for sale must be properly packaged, labeled with the apicultural economic unit, the date of production and the confirmation of the organic product.

Conditioning and storage of honey

After filtration and maturation, the honey containers are hermetically sealed and stored in specially designed places (no foreign odors, dry, temperature around 15°C, away from a direct light source.

It is not recommended to store honey in rooms where the temperature exceeds 35°C, there is a danger of raising the hydroxymethylfurfural (HMF) content index. If this value is ≥40mg /kg (maximum permitted limit), honey is classified as industrial or returned to bees (this parameter has no influence on public health) but is an indicator of quality.

Traceability of honey

Any container containing honey, regardless of its capacity, must have on its body (not on the lid) an indication to ensure traceability.

- Harvest identification - honey that comes from the same apiary and is harvested at the same time;
- Identification of the batch and assortment - honey from different harvests or from a mixture of different honeys, intended for bottling.

Labeling of honey

Each package of honey must bear a label stating:

- Trade name of the product;
- Assortment (honey of the name of the plant from which the bees collected the nectar; acacia, lime, sage, etc. Polyfloral honey (from several plants or homogenized);
- Shelf life (max. 2 years after the date of bottling);
- Net weight;
- Name and address of the beekeeper;
- Country of harvest;
- Mentions of organic production;
- Quality criteria can be mentioned if they can be verified and if they bring an improvement compared to the basic product. Authorized nutritional and health claims are used.

Honey in honeycombs and sections

For honey in honeycombs, store frames or mini-frames specially made for this purpose are more often used. For honey in sections are used sections of different models and shapes, made of wood or food grade plastic.

When obtaining honey in sections, very strong families are used, intense and long-lasting nectar harvests. The aim is to make the sections completely covered.

Source: The National Association of Beekeepers of the Republic of Moldova

Maintaining hygiene and bee treatments

In the beekeeping activity on organic principles, it must be taken into account that only strong and healthy families must be kept, who are able to maintain their health and fight pests. First of all, more attention will be paid to the selection works, where only resistant and productive bee families will be used for their reproduction. In the sense of natural selection, the death of some families affected by some diseases can be accepted.

In the spring, after the end of the winter period, all wintered families will be transferred to clean, disinfected and dry hives. The living conditions and activity of bees will be strictly observed according to the specific rules and recommendations.

In the fight with the *Varroa* mite, you will use the zootechnical methods, the frame-trap for the elimination of the drone brood from the hive, the organization of the brood-free period during the summer, the application of thermal treatments or with organic preparations, such as acids (formic, oxalic, lactic, acetic), phytotherapeutic and homeopathic products as well as menthol, thymol, eucalyptol or camphor.

Indications by authorities contrary to the above methods must be legally justified.

If, despite all preventive measures, some bee families become ill or infested, they must be treated immediately and if treatment with synthetic allopathic veterinary medicinal products is applied, during such a period ill bee families can be placed in isolated apiaries. All wax (honeycombs) will be replaced with wax from organic beekeeping. Subsequently, the conversion period of one year is applied to these families.

Each time veterinary medicinal products are used, the type of product shall be clearly indicated, including the pharmacologically active substance mentioned, details of the diagnosis observed, method of administration, duration of treatment and withdrawal period. These data shall be communicated to the inspection body or authority before the collected bee products are placed on the market as products obtained by organic methods.

10.4 Conversion and recognition of a beekeeping unit on organic principles

The transition to organic beekeeping is gradual.

Stage I. The conversion begins with the feeding for the winter and lasts a total of 12 months.

The use of prohibited materials is forbidden and the measures indicated in the directive for organic production will be taken.

Stage II. After the three-year period all the tools used in the work with bees, the beekeeping equipment, the packaging for storing honey, including honeycombs, are replaced.

A certification is possible if the first conversion step is already completed.

If the beekeeping establishment which has made the application already operates in accordance with the organic principles of beekeeping and exploitation, certification may be made immediately if the measures applied so far can be confirmed de facto and documentary.

11

Organizations and associations involved in the organic farming sector

11.1 Ongoing projects and programs on support of organic farming sector

Source: Dimitry Zub from Pexels.com

Source: Greta Hoffman from Pexels.com

11.1 Ongoing projects and programs on support of organic farming sector

Various international projects in organic farming are being implemented in the Republic of Moldova. These are mostly carried out in scientific cooperation, local and with various European countries and globally.

Name of the institution	Central Institute for Supervising and Testing in Agriculture from Czech Republic (ÚKZÚZ)
Brief history	ÚKZÚZ is an administrative authority and specialized body of the public administration subordinated to the Ministry of Agriculture of the Czech Republic. It is an organizational unit of the state system.
Donor	Czech Development Agency (CZDA)
Main objective, outcomes and activities	**The objective** of this project is the support of organic farming sector in the Republic of Moldova in accordance with the EU requirements. The project purpose is to increase the capacity, the transparency and the credibility of state Institutions in the field of organic farming. **The outcomes of the project are as follows:** 1. Reinforcement of the institutional structure in the field of organic farming 2. Establishing of an operational system for unified approval of inputs to organic farming 3. Strengthening of the competency of local laboratory in the field of organic farming 4. Establishing of system for recommendation of organic agro-technological procedures, species and varieties
Proiecte și activități curente	Suportul instituțional în agricultura ecologică din Republica Moldova

Rezultatele anului 2020	I. Supporting elaboration and publishing of the following publications: ● Bulletin on organic agriculture in the Republic of Moldova 2020 – Romanian and English versions (Bulletin available in electronic and paper form format) ● Publication on Winter wheat - results of pilot trials for the recommendation of varieties for organic farming in the Republic of Moldova 2019 – Romanian and English versions (Publication available in electronic and paper form format) ● Publication on Plant Protection products and fertilizers allowed for use in organic farming 2020 – Romanian version (Publication available in electronic and paper form format) II. Supporting participation at an international event INTERNATIONAL CONGRESS AND FAIR ON ORGANIC FARMING BIOFACH IN NUREMBERG - (11-15. 2. 2020) – representative of the Ministry of Agriculture, Regional Development and Environment and of the National Agency of Food Safety III. Legal and technical support to harmonization of draft Law on organic agricultural food products – to MARDE and MOVCA IV. Assistance to the National Centre for Verification and Certification of Plant Production and Soil (ring test FAPAS) V. Assistance to the State Commission for Variety Testing and Research Institute for Field Crops (trials, establishment of the system of recommendation)
Parteneri	Ministry of Agriculture, Regional Development and Environment (MARDE) National Agency for Food Safety (ANSA) State Centre for Certification and Approval of Plant Protection Products and Fertilizers (PESTICIDE) National Centre for Verification and Certification of Plant Production and Soil (CARANTINA) State Commission for Variety Testing (COMMISSION) Research Institute for Field Crops (SELECTIA)
Adresa sediului	Hroznová 2, 656 06 Brno Czech Republic
Date de contact	Project manager: Ing. Ludmila Šípková Tel.: (+420) 733 612 566 E-mail: ludmila.sipkova@ukzuz.cz Project coordinator: Cristina Colun Tel.: (+373) 690 92 150 E-mail: coluncristina@yahoo.com

Name of the institution	MOVCA "Moldova Organic Value Chain Alliance" Moldova Organic Value Chain Alliance
Brief history	MOVCA is a non-governmental organization, non-profit, representative of agricultural producers, farmers' associations, distributors, importers, exporters, consultants, wholesalers and active supporters of organic farming and is the first and only representative association of the Organic Farming sector in Moldova. Since 2015, MOVCA has actively supported the development of the organic farming sector by pursuing the organizational mission, which consists of: promoting organic farming; increasing the consumption of ecological products; improving soil quality; supporting the green economy; contributing to the protection of the natural environment; increasing the number of organic producers and consumers.
Main activities	Organic Agriculture, Lobby and Advocacy, Trainings and workshops
Projects and current activities	**"Into the Sun"** project with the financial support of the EU4Business initiative of the European Union.
Results of 2020	1. Development of **E-learning Educational Portal in Organic Agriculture** for farmers training to achieve the Project overall objective: Promoting the application of harmless and environmentally friendly agricultural technologies. The project is active, having 17 modules, 40 video lessons. The success of this project is defined by 1900 from the initial target of 1000 unique registered users. The expected output is informing and training of students from agricultural institutions from all over the country (State Agrarian University from Chișinău and State University "Alecu Russo" from Bălți, Centers of Excellence and Agro-Industrial Colleges). **http://studii.movca.md/** 2. Successful online switch of the training program **Sub-measure 2.5. – Supporting the promotion and development of organic farming**. Training program„ Organic farming system" aimed at training of farmers from organic farming system, potential organic farmers and to everyone interested in practicing organic farming. The primary objective of the training program "Organic farming system" is to provide theoretical and practical knowledge, enabling beneficiaries to train and exercise the skills needed to overcome information gaps in organic farming practicing. 3. 2. Online participation, for the 4th time, of Moldovan farmers at the largest exhibition of organic products in Europe **Biofach**, which takes place annually in Nuremberg, Germany. The organization of the event was financially supported by USAID / CNFA Farmer-to-Farmer program.
Partners	ÚKZÚZ, CNFA Moldova, Invest Moldova, Association Education for Development, People In Need Moldova, Ecovisio, Educational Centre PRO DIDACTICA, MAIA, FiBL, Research Institute for Field Crops „Selecția", Agrarian State university.
Headquarter	50 Căpriana street, Office 207, Chișinău, Moldova
Contact data	projects@movca.org

Name of the Organization	CNFA Moldova USAID Farmer-to-Farmer Program in Moldova (F2F Moldova)
Brief history	Combining cultural exchange and sustainable economic development, the USAID F2F program provides technical assistance to farmers, farm groups and agribusinesses in developing and transitional countries to promote improvements in food processing, production and marketing – on a volunteer basis. CNFA is an F2F implementer for over 20 years
Main focus	Organic Agriculture, Dairy/Livestock
Projects and current activities	CNFA's USAID F2F program for the Southern Africa Region provides American volunteer technical resources, responding to the local needs of host-country farmers and organizations, to increase rural incomes in the core countries of Malawi, Mozambique, Madagascar, Zambia, Zimbabwe, Moldova. The program will provide 53 US experts to undertake assignments to the Republic of Moldova. The purpose is to provide technical assistance to Moldovan producers, processors, service providers, their associations, and other beneficiaries in the country, to close the "knowledge gap" constraining their development. By working along multiple points along the two value chains, the volunteers will contribute to strengthening commercial linkages among the various actors. Support to agricultural education at universities will contribute to long-term competitiveness of the organic agriculture and dairy/livestock sectors. The trainings will focus on association development, internal and member communication, advocacy, marketing, extension and education, food safety and quality, new product development and access to export markets, education, forage production, and pasture management.
Results of 2020-2021	*Volunteer-led activities:* Number of volunteer assignments: 18 in-person, 12 online (remote) Number of beneficiary organizations assisted: 11 Areas of assistance: ● advanced financial management ● needs assessment ● strategic planning ● veterinary services improvement ● organizational development ● support to participation in trade shows ● communication ● marketing strategy for the organic agriculture e-learning platform ● pocket guides development ● e-learning platforms management ● best practices in cover cropping ● best practices in hot composting ● best practices in crop rotation ● web page development *Non-volunteer led activities:* ● Legal support to updating the organic agriculture law ● Data analysis support to the Ministry of Agriculture Organic agriculture value chain assessment Capacity development ● Organic Agriculture Value Chain Analysis ● Capacity Development Support ● Support to the organic agriculture e-learning platform administration ● Support to creating the e-commerce platform for the organic farmers
Partners	Association Education for Development, People In Need Moldova, EBRD Advice for Small Business
Headquarter	50 Căpriana Street, Office 225, Chișinău, Moldova
Contact data	nmocanu@cnfamoldova.org

Name of the institution	Association Education for Development (AED)
Brief history	The Association Education for Development (AED) is a non-governmental, apolitical, and nonprofit organization founded in 2017. The AED team is the same team that implements the CONSEPT project (2008 – present), EdAgri (2012-2018), InfOrganic Moldova (2019-2022), SECI (2019-2021).
Main activities	The mission of AED is to support the development of education, focused on the learner and green economy needs. AED collaborates with public institutions, civil society and development partners. AED's motto: *The quality of education determines well-being. AED promotes quality education.*
Projects and current activities	*InfOrganic Moldova 2020-2022:* through non-formal education contributes to the creation of a digital community, providing open access to information and instructional materials for the development of the sustainable agriculture sector, including organic in the Republic of Moldova Components: contributes to the collaboration of the main stakeholders in the sector (quarterly round tables), elaborates informative materials (articles, brochures, infographics, videos, pocket guides) with open access on a main website (https://agrobiznes.md/agroeco), but also disseminate on the websites of the actors in the sector (MADRM, Ecovisio, MOVCA, etc.); provides support to national experts and capacity building to development of practical materials. *Solar Energy Competence Initiatives (SECI), 2020-2021:* project develops programs for continuous training and education of installers for Renewable Energy Sources technologies (RES); develops curricula, teaching materials for students and teachers; develops assessment tools for installers of solar photovoltaic systems and solar thermal systems; supports the strengthening of partners and economic operators in the RES sector by identifying requirements for qualifications and involvement in the development of materials; contributes to the improvement of workshops in partner institutions for the training of RES installers. *Strengthening the Vocational Education and Training in Moldova (CONSEPT IV), 2019-2021:* complements the efforts of actors in the vocational education and training sector (VET) through intervention at school level (15 vocational schools, colleges, centers of excellence), meso level (Department of Continuing Education, TUM) and at macro level (MECR). Components: continuous training of VET teachers and managers; organizational development; student participation in decision-making; quality promotion in evaluation; support for teachers in the use of media and digital tools; improving the students' dormitories.

Results of 2020	*InfOrganic Moldova 2020-2022:* A main online platform with relevant information in the field of organic agriculture is available - https://agrobiznes.md/agroeco. The communication and exchange of information is improved at the quarterly round tables organized with the sector stakeholders. A variety of information and instructional materials on organic agriculture are developed and disseminated: 5 videos and 2 brochures from the Swiss Institute for Organic Agriculture Research (FiBL) translated into Romanian and Russian (the basics of organic farming, protection in fruit growing, vegetable growing, green manures, etc.); 2 pocket guides elaborate with the USA university experts support (F2F/ CNFA, MOVCA) and local experts; 9 videos and 9 infographics created (Agrobiznes, Ecovisio); 62 articles, success stories/interviews and experts answers offered online in the specially created section AgroEco. 920 people communicate and benefit from the support of experts in the Agrobiznes AgroEco Viber group. *Solar Energy Competence Initiatives (SECI II), 2020-2021:* The skills of teachers who train specialists in the field of renewable energy (photovoltaic systems, solar thermal systems and heat pumps) have been strengthened. There were developed materials, course materials for teachers, technical equipment was installed for teaching purposes and a capacity development plan in these areas have been developed. *Strengthening the Vocational Education and Training in Moldova (CONSEPT IV), 2019-2021:* Vocational training and management is more qualitative and efficient in 15 vocational schools, colleges, centers of excellence. With the support of CRIC NGO the Students Councils are stronger and more actively advocating for change in the partner institutions. AED, TUM through Department of Continuing Education, ProDidactica NGO offers a modern training program for VET teachers and managers, including project-based and portfolio-based learning, the use of digital tools (Google Suit). Modern classrooms were equipped with media tools in 3 institutions (Center of Excellence in Food and Processing Services, Vocational School No. 7 Chisinau and Vocational School No. 1 Cahul). The learning and assessment process are based on modern qualifications, being developed 3 new Qualification Standards (electrician in construction, installer of heating systems and solar equipment, installer of ventilation and air conditioning equipment). Initiatives of the sectoral committees (textiles, gastronomy) are supported, which contribute to modern skills of the practical teachers from the VET institutions and of the future specialists.
Partners	Ministry of Education, Culture and Research (MECR); Ministry of Agriculture, Regional Development and Environment (MARDE); Ministry of Economy and Infrastructure (MEI); Energy Efficiency Agency (EEA); Technical University of Moldova (TUM); NGO Pro Didactica; NGO Child Rights Information Center (CRIC); Switzerland Research Institute for Organic Agriculture (FiBL); Farmer-to-Farmer/CNFA USAID Program; Agrobiznes; EcoVisio NGO; Moldova Organic Value Chain Alliance (MOVCA).
Headquarters address	25 Banulescu Bodoni Street, office 21, Chisinau, Republic of Moldova
Contact data	+373 22 221 950, +373 22 232 239 info@aed.ong, http://www.aed.ong/

Name of the institution	People in Need Moldova
Brief history	People in Need is a non-governmental international organization established in 1992 in Prague, Czech Republic, which provides assistance to regions affected by conflicts or natural disasters and promotes respect for human rights. Being one of the largest NGOs in Central Europe, People in Need supports the development of countries through advocacy activities of human rights and democracy, activities to strengthen the social and educational sector, but also awareness and information actions. During its existence, the organization has provided support to the population of 54 countries, and currently People in Need operates in 32 countries. PIN has been working in Moldova since 2003, for empowering people to change their lives for the better. During its activity in the country, the organization has contributed to the development of the following sectors: ● Sustainable livelihoods and environment ● Social protection and inclusion ● Good governance.
Main activities	Within the sector „Sustainable livelihoods and environment", People in Need Moldova has established two main focus areas – development of organic agriculture and supporting small and medium business in North Development Region.
Projects and current activities	Project „Development of sustainable organic agriculture in the Republic of Moldova" (Donor: Czech Development Agency)

Results of 2020	The People in Need Moldova team obtained the following results: ● Establishment of "Ecoferm", the first cooperative of organic farmers in the country, strengthening members capacities of this cooperative, including by donating composting equipment ● Supporting the participation of MOVCA members at the international exhibition BioFach 2019 in Germany ● Organizing the training on "Composting - soil enrichment through the recovery of organic waste" in Văscăuți village, Florești rayon, for farmers interested in organic farming ● Organizing three study visits for farmers interested in organic farming - two visits to Poltava, Ukraine, and one visit to Călărași district, Romania ● Organizing two Field Day events:1) „ Fertilization in organic farming", on demonstration plot of „Micu & Co" farm from Olișcani village, Șoldănești rayon; 2) „Protection and foliar fertility of plants" on demonstration plot of „Hiliuțanul" farm from Hiliuți village, Râșcani rayon ● Organizing the workshop for journalists on "Organic Products: from myth to tasting" (Chișinău) ● Conducting the practical lesson for students from agricultural specialties in the demonstration plot of "Hiliuțanul" farm from Hiliuți village, Râșcani rayon ● Carrying out the information campaign on organic farming, through social networks, where two animated spots were promoted – 1) What is an organic product? and 2) Why are organic products better ? ● Editing the publication „The Art of Manure Composting"
Partners	MOVCA, Prograin Organic, EcoLocal
Headquarter	20 Toma Ciorbă street, office 7, Chișinău, MD-2004, Republic of Moldova
Contact data	Tel.: +373 69 43 44 11 E-mail: info.moldova@peopleinneed.cz Silvia Bicenco, country director – silvia.bicenco@peopleinneed.cz

Name of the institution	"EcoVisio" Association
Brief history	On April 13, 1999, the Ecological Association of Children and Youth of Moldova (AECTM) was founded in Chisinau, through the efforts of a group of courageous teachers led by Nina Strepan. They have been organizing creative and non-formal actions aimed at popularization of ecology in schools for several years. In 2013, the association restarted its activity and was transformed into "EcoVisio", led by a small group of enthusiasts from Germany and Moldova, some of them being the children of the founders of AECTM. Since then, we have been working to reach the potential of Moldova as a model region of sustainable development, and to help people achieve positive changes. Our vision for the future of Moldova and the entire region is an active society, a healthy environment and a prosperous and equitable economy. Our mission is to bring this future as close as possible to the present, through educational activities, the theoretical and practical promotion of sustainable living, the creation and development of communities, and the support of initiatives that share our vision.
Main activities	"EcoVisio" is dedicated to realizing the full potential of our region as a model of sustainable development. To this end we run educational and empowerment programs, bring together key actors and foster ecological and social innovation. We promote active citizenship, environmental and economic resilience, social entrepreneurship and rural development by nurturing a growing community of change makers in Moldova. Our work is channeled into six thematic areas (or topics): Climate, waste, agrifood, communities, education, social entrepreneurship, each a key-element of what we believe constitutes a model-region for sustainable development. Thus, by focusing on these six main topics, we are able to build a clear pathway towards our vision for Moldova.
Projects and current activities	In the field of agriculture: Rural Agroecology Resilience Hub Project, supported by the Global Environment Facility Grant Program. (2019-2021) Twinings for a Prosperous Organic Agrifood Sector in MD and EU, with EuroChambers support (2021-2022)
Partners	MOVCA; AED; EcoLocal; SGP/GEF; SIDA; IM Swedish Development Partner; EkoConnect
Headquarter	71 Alexei Mateevici street, office 5A, Chișinău. Republic of Moldova
Contact data	+373 68 249 296 Daniela Fornea

Name of the institution	Jaman SRL (Agrobiznes)
Brief history	The Agrobiznes project was created in 2012 to inform farmers about the opportunities of the agricultural sector, to offer them recommendations, thus avoiding multiple impediments faced by the agricultural sector. The project is intended to provide the necessary information so that the transition to efficient or sustainable agriculture can be made as soon as possible.
Main activities	Agrobiznes purpose - to contribute to the development of the local agricultural sector, including the ecological sector, by providing correct information, based on scientific arguments, but also to ensure the transfer of technologies through publications. At the same time, the continuous presentation of opportunities related to the implementation of sustainable technologies, contributes to the promotion of organic farming.
Projects and current activities	Agrobiznes currently has ongoing projects carried out in partnership with several organizations: AgroEco - project launched in 2019 within InfOrganic in order to promote organic farming practices; AgroMeteo - project for small farmers to facilitate their access to information on the risk of disease and pests; AgTech - project launched to promote high-performance agriculture.
Results of 2020	In 2019, the AgroEco project was launched, where several objectives were achieved, including the promotion of ecological practices on the territory of the Republic of Moldova. At the same time, the Studies project was launched to present the opportunities for studying and starting businesses in the agricultural field, including an improved flow of information delivered to farmers.
Partners	USAID/APM, UCIP/IFAD,
Headquarters address	Chișinău, Studenților street 9/11, Tekwill
Contact data	+373 60 770 035, luminita.crivoi@agrobiznes.md

Name of the institution	The National Association of Beekeepers of the Republic of Moldova (NABRM)
Brief history	The National Association of Beekeepers of the Republic of Moldova, founded in 2006, is a non-governmental, apolitical, non-profit public association established at the initiative of territorial associations working in the field of beekeeping and united to promote and develop the beekeeping sector. Today NABRM brings together 29 association members, being the most represented Association in the beekeeping sector.
Main activities	Beekeeping. Business development. Lobby and Advocacy. Training. Partnerships
Projects and current activities	1. The project **"Development of regional centers for beekeeping training and consulting within NABRM",** financed by the USAID's High Value Agriculture Activity in Moldova (HVAA). The aims of the project are: ● To facilitate the access of beekeepers from the regions of the Republic of Moldova to qualified assistance in beekeeping in order to develop their capacities to start a beekeeping business, as well as for the efficient management of a beekeeping by opening 3 more Beekeeping Training and Consulting Centers (CICA) in Căușeni, Edineț and Chișinău municipality. ● To familiarize beekeepers with seasonal work in the apiary by organizing training sessions within the CICA; 2. The project **"Development of services provided by NABRM for beekeepers",** financed by the USAID's High Value Agriculture Activity in Moldova. The aims of the project are: ● To help beekeepers to register their business and identify sources of funding for beekeeping business, including applying for grants, through 5 informative videos; ● To facilitate communication between beekeeper, farmer and local authorities by creating and popularizing the web application **BEEPROTECT.MD**; 3. Organizing People for Bees Campaign with the slogan Act. Save. Bee Matters; 4. Organization of 2 Beekeeping Fairs 2021; 5. Organizing training courses for beekeepers who want to submit the file to programs financed from the state budget: subsidies and subsidies in advance; 6. Support in attracting non-reimbursable funds and preparation of financing files for beekeeping business.

Results of 2020	1. The project **"Demonstration and training activity for the implementation of vertical hives"**. The aim of the project was to encourage beekeepers to develop successful business using modern beekeeping equipment. In this sense, 20 beekeepers were the beneficiaries of 80 new vertical hives. At the same time, the beneficiaries participated in training sessions divided into 6 modules: stimulating bee families in spring and preventing diseases; the specifics in the hives on the frame ¾; pastoral care and its peculiarities; the specifics of nutrition and stimulation of bee families; preparing families for hibernation on the frame of ¾; the main diseases and peculiarities of seasonal treatments in frame hives ¾.The project was implemented with the financial support of the USAID's High Value Agriculture Activity in Moldova 2. The project **"Development of regional centers for beekeeping training and consulting within ANARM"** was funded by the USAID's High Value Agriculture Activity in Moldova. Inside the project: ● 3 CICAs were created in the North - Soroca, Center - Ialoveni and South - Cahul; ● The Guide for the detection and effective control of the Varroa Mite was developed; ● There were organized seminars on the efficient management of seasonal works in the apiary; 3. Was organized 2 Beekeeping Fair; 4. Training courses were organized for beekeepers wishing to submit the file to programs financed from the state budget: grants, grants in advance; 5. Support was provided in attracting grants and completing funding files for beekeeping business.
Partners	USAID's High Value Agriculture Activity in Moldova. Ministry of Agriculture and Food Industry of Moldova. The Honey Exporters Association (HEA). TEKWILL. The Republican Union of Agricultural Producers Associations "UniAgroProtect". The Moldova Organic Value Chain Alliance (MOVCA). Vocational schools in Bubuieci commune. The State Agrarian University of Moldova. The National Agency for Food Safety (ANSA). ULE "Moldapis" Beekepers Association . The Ukrainian Association of Queen Breeders. National and regional media. National Agency for Rural Development (ACSA).
Headquarters address	Căpriana Street 50, Chisinau ASEM building, block C, 2nd floor, office 203.
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Source: The State Agrarian University of Moldova

The State Agrarian University of Moldova (UASM) is a structural unit of the higher education system in the Republic of Moldova, subordinated to the Ministry of Agriculture and Food Industry of the Republic of Moldova.

The mission of the State Agrarian University of Moldova is:

- training for agriculture and rural space competent and competitive specialists on the national and international labor market and people of high culture;
- carrying out the fundamental and applied scientific researches necessary for the modernization of agriculture and the improvement of the standard of living of the working people from the villages;
- providing consulting and technology transfer services to farmers, as well as creating opportunities for lifelong learning on study programs related to the activity in rural areas;
- promotion and implementation of extension services.

Objectives

- to become a first-rate institution of society and to be the highest structure of the nation;
- European integration of all academic structures and university activities;
- to be the main higher education institution in the country, which trains highly qualified specialists not only for agriculture, but also for the food industry and other activities in rural areas;
- to be always through the university extension with the local farmers, and to make him feel that UASM is also their university.

Faculties / departments

Currently, within the State Agrarian University of Moldova, the studies are organized in 6 faculties, 13 departments, including the military department, which operates independently of the nominated faculties:

Faculty of Agronomy	• Department of Agronomy andenvironment; • Department of Animal Production Management and Food Safety;
Faculty of Horticulture	• Departament of Horticulture; • Department of Forestry and Plant Protection;
Faculty of Veterinarian Medicine	• Departament of Fundamental and Clinical Science; • Departament of Food Safety and Public Health;
Faculty of Cadastre and Law	• Department of Fundamental and Clinical Sciences; • Department of Food Safety and Public Health;
Faculty of Economics	• Department of Economics, Marketing and Socio-Human Sciences; • Department of Accounting, Finance and Informatics; • Department of Business Administration and Modern Languages;
Facultatea inginerie agrară şi transport auto	• Department of Engineering in agriculture and car transport; • Department of Electrification of mechanical agriculture and design bases;

Research centers / laboratories

In 2020-2021, the research centers and laboratories of UASM, as well as other structures, continue their activity.

- Solid Biofuels Laboratory;
- Scientific-Pedagogical Laboratory;
- Horticulture Laboratory;
- Laboratory of Technology for Storage and Processing of Agricultural Products;
- Scientific Research Laboratory in Infectious Diseases in Animals and Birds;
- Meat Production Technology Laboratory, Branded Pork;
- Apiculture Laboratory;
- Hydro-Improvement Laboratory;

- SMART-CAFFE co-creative space;
- Didactic farm.

UASM currently collaborates with 133 Higher Education, Research Institutions and pilot companies with agricultural profile from 26 countries of the world: Azerbaijan, Austria, Belarus, Bulgaria, Czech Republic, Estonia, France, Germany. Greece, Georgia, Kazakhstan, India, Italy, Latvia, Lithuania, Morocco, Macedonia, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Turkey and Ukraine. We mention the fact that the Partnership established on the basis of these agreements has become a sustainable platform, with the acceptance of UASM in several international projects (Erasmus+ - 9, Transfrontierere -2, AUF -2 and others -3), which are implemented at UASM.

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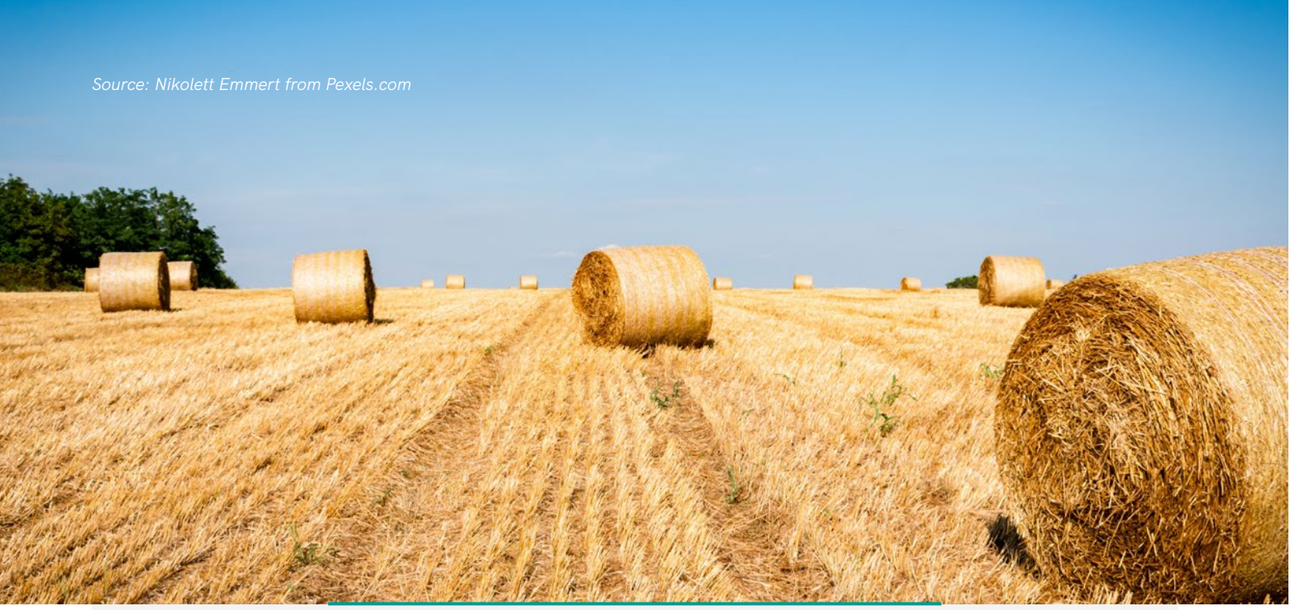
Calendar for operators from organic farming sector for 2022 and annual local and international events

Source: Anastasia Shuraeva from Pexels.com



Source: Nikolett Emmert from Pexels.com

No.	Event	Category	Venue	Period 2021	Frequency
1	Made in Moldova	Exhibition	Chisinau, Moldova	January	Annual
2	BioFach	Exhibition	Nuremberg, Germany	February	Annual
3	Round table with stakeholders from OF sector	Meeting	Chisinau, Moldova	February	Quarterly
4	„Ecolocal" Farmers Market	Fair	Chisinau, Moldova	March - December	Week-end
5	MoldAgroTech / Farmer	Exhibition	Chisinau, Moldova	March/ October	2 times per year
6	''Organic Farming'' International conference	Conference	Chisinau, Moldova	June	Annual
7	Field days	Training	Moldova	June, August	Annual
8	MoldAgroTech/ Farmer	Exhibition	Chisinau, Moldova	October	Annual
9	IarmaEco	Fair	Chisinau, Moldova	October	Seasonal
10	Moldova Business Week	Conference	Chisinau, Moldova	November	Annual
11	Farmer's day	Event	Moldova	November	Annual

"Fabricat în Moldova" (Made in Moldova), over the years, it has become the most popular exhibition platform, which shares the main market development trends of the products and services in the Republic of Moldova. Becoming the largest national exhibition, it can rightly be called the mirror of the Moldovan market, the image of the business community, the meeting place of both specialists and business representatives. Throughout the 18 editions, the most important and large-scale events have taken place during the exhibition, receiving positive feedback from local producers, being widely publicized and highly appreciated.

The national exhibition "Made in Moldova" - 2020, entitled "Home! Authentic! Indigenous" brought together 460 entrepreneurs from different branches of the national economy, being visited by 61 500 persons, according to a conducted review by the Chamber of Commerce and Industry of the Republic of Moldova (CCI). At the same time, starting with the 2020 edition, for the first time, there was a special location of organic products. The aim was to inform consumers in this country that in the Republic of Moldova there are organic products and that these are manufactured by our Moldovans.

BioFach - Cereals, wines, fruits, nuts, teas, oil and other local organic agricultural food products were presented to approximately 50 000 visitors of the largest international exhibition of organic products **BioFach** 2020, which takes place in Nuremberg, Germany. It is the third consecutive year when the members of the Association "Moldova Organic Value Chain Alliance", the most representative business association in the organic sector in the Republic of Moldova, was participating in this international trade fair dedicated to certified organic products. Almost 3300 exhibitors from over 140 countries around the world participate in BioFach annually. The exhibition takes place in the second half of February. All products exhibited at Biofach must comply with the European Regulation on organic farming.

EcoLocal „Farmers' Market" is founded by a group of volunteers and local producers, who willing to contribute to the welfare of the local population. The market supports local food businesses, certified organic farmers and producers, artisanal and traditional processors who market their products in an authentic format. The market is held weekly, 4 times a month, on Saturdays between 9:00 - 13:00.

The EcoLocal market was established based on the following principles:

- To provide local ecologic products and high quality local handicrafts.
- To educate consumers and promote the benefits of local, organic and other food products that would support the local economy.
- To encourage more local producers to go to certified organic farming system
- To develop on the basis of non-profit activity, with the support of participants, partners, state institutions and of donors support in the field.

IarmarEco - the Fair of Ecological Opportunities and Social Entrepreneurship - is a social and cultural event that brings together main actors of environmental and social world of Moldova. It is a unique combination of a fair, facilitated networking and interactive presentations / lectures on the topic of ecological and social activism in Moldova. The goal of IarmarEco is to inform the public about the possibilities of changing the daily routine to a more active, healthy and conscious - overall, sustainable - lifestyle. Moreover, the fair helps the representatives of environmental sphere (environmental NGOs, enterprises, companies, state institutions) develop a common vision and communicate it to the public, as well as introduce the concept of green & social entrepreneurship.

The impact of IarmarEco is much larger than the impressions, skills and products acquired by its visitors: the event has a mission of building trust among NGOs, public, entrepreneurs and state institutions, the process that leads to emergence of new ideas leading to sustainable development of our country, and their implementation.

Source: Johannes Strötker from Pexels.com

IMPRINTS

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Moldova Organic Value Chain Alliance

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