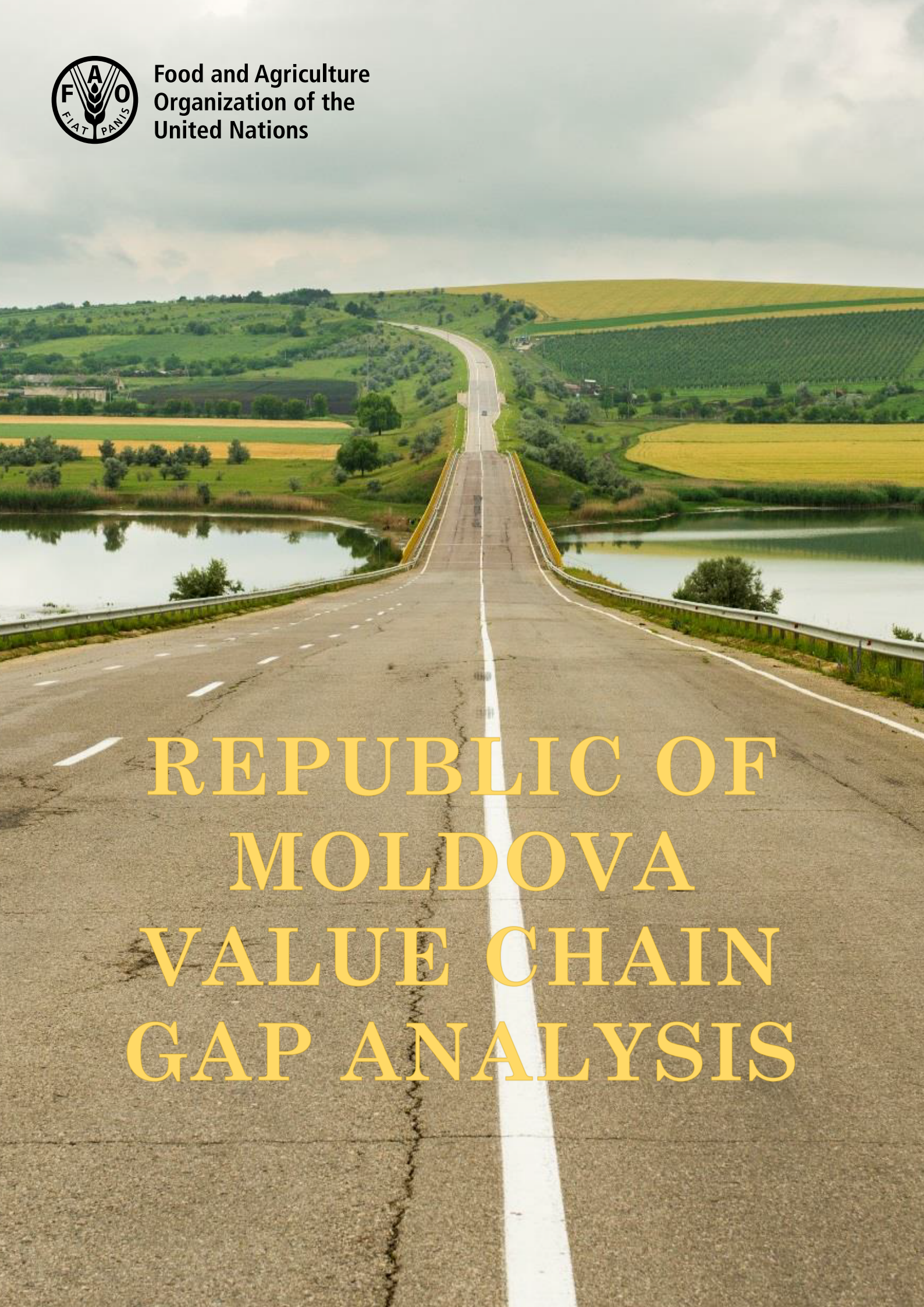




Food and Agriculture
Organization of the
United Nations



REPUBLIC OF
MOLDOVA
VALUE CHAIN
GAP ANALYSIS

REPUBLIC OF MOLDOVA VALUE CHAIN GAP ANALYSIS

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Food and Agriculture Organization of the United Nations

Budapest, 2018

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Abstract

Agriculture and food industry sectors have a major importance for the Moldovan economy. The Republic of Moldova has one of the highest share of rural population among the countries in Europe and Central Asia, and its agriculture sector significantly contributes to the country's gross domestic product. The Food and Agriculture Organization of the United Nations (FAO) is committed to supporting the Republic of Moldova in its efforts to increase agricultural productivity and capacity, to boost economic growth and to create additional income sources for farmers and rural families.

FAO and major donors contribute to the development of agriculture value chains. The existing studies usually focus on selected value chains, and there are fewer sources that reveal countrywide value chain development status and assess the environment for doing business for farmers.

The goal of this study is to try to consolidate the information on countrywide value chain development gathered from various open sources and based on materials developed in one field mission by FAO officers with an emphasis on the plum and berry value chains. The authors did not aim at close examination of the selected value chains; rather, this paper is a general overview that will be a reference point for future field work in the country. The recommendations provided in the report will assist the FAO country office in the Republic of Moldova in decision-making and will inform other development organisations operating in the country about major value chain development activities.

To get the results, the authors analysed the legislative history related to value chains, collected materials and statistics from open sources, conducted a field mission and interviewed stakeholders.

The first part of the report observes the overall situation in the Republic of Moldova with a focus on the agriculture sector, reviewing related legislation, the environment for doing business for farmers, and trade. The paper examines existing support measures for agriculture and covers the banking sector and trade policy. The second part examines value chain actors and overviews the selected value chains of plums and berries. The final part provides recommendations.

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Introduction

According to FAO’s terminology, adopted from Kaplinsky and Morris (2001), a sustainable food value chain (SFVC) is defined as “the full range of farms and firms and their successive coordinated value-adding activities that produce particular raw agricultural materials and transform them into particular food products that are sold to final consumers and disposed of after use, in a manner that is profitable throughout, has broad-based benefits for society and does not permanently deplete natural resources.” (FAO, 2014)

This work is a part of a series of studies on the value chain development gaps and the environment for doing business for farmers done by FAO’s Regional Office for Europe and Central Asia, Regional Initiative on Improving Agrifood Trade and Market Integration.

The research presented in this report is based on a review of existing literature, statistical data from open sources (FAOSTAT, WB, UN Comtrade), national data (Statistica Moldova), legal data (FAOLEX), and materials collected in a field mission.

The main methodological approach of this study is a value chain gap analysis developed by John O’Connell, FAO agrifood economist. The approach aims to assess the constraints to growth and provide solutions to develop more efficient, inclusive, and sustainable agrifood value chains. In addition, some elements of traditional value chain analysis methodology are used.

This study includes a context analysis chapter (Chapter 1), which provides background information about the country’s recent history, its economy, and its agriculture sector. Chapter 2 reveals some of the value chain actors. Chapter 3 overviews plum and berry value chains. Chapter 4 presents development programmes from international organisations in the Republic of Moldova. Chapter 5 provides conclusions and recommendations.

I. Context analysis

a. Recent history of country

The Republic of Moldova is a country in Eastern Europe, bordered on the west and southwest by Romania and on the north, south and east by Ukraine. There are two main rivers: the Dniester and the Prut. The Dniester flows through the eastern part of the country, separating Bessarabia and Transnistria. The Prut River forms the Republic of Moldova's western boundary with Romania.

The total population of Moldova is around 3.5 million people (2016). More than half of the population (54.9 percent) live in rural areas. Almost 32 percent of the total population are employed in agriculture. The ethnic composition of the country, as of the 2004 census, is as follows: Moldovans (75.8 percent), Ukrainians (8.4 percent), Russians (5.95 percent), Gagauzians (4.4 percent), Romanians (2.2 percent), and others.

The Republic of Moldova is a lower-middle-income economy. It has made significant progress in reducing poverty and promoting inclusive growth since 2006. The economy has expanded by an average of 5 percent annually, driven by consumption and fuelled by remittances. The share of remittances amounts to about a quarter of the gross domestic product; this is among the highest shares in the world. The share of unemployment in the country is at a relatively low level; about 5 percent of the population are unemployed (as of 2016).

The population of the capital, Chisinau, is 725 000 people.

The Republic of Moldova declared its independence in 1991 and joined the Commonwealth of Independent States. In 1993, the Republic of Moldova introduced a national currency. In 1994, a new constitution was adopted, proclaiming the country's neutrality and granting special autonomy status to Trans-Dniester and the Gagauz region.

The Republic of Moldova is a parliamentary representative democratic republic. The prime minister heads the Government, and numerous parties are allowed. The Government exercises executive power. Legislative power is vested in the parliament. The judiciary is independent of the executive and the legislature. The president is elected by the parliament for a four-year term. The president, on

consulting with the parliament, designates a candidate for the office of prime minister. The current president is Igor Dodon. He is the first president chosen directly by the people and not by parliament in 16 years. A former minister of economy, Mr Dodon has led the Party of Socialists since 2011.

Figure 1. Map of Moldova.



Source: UN

The current prime minister is Pavel Filip. In January 2016, Pavel Filip became the Republic of Moldova's third prime minister in the course of a year; the previous two were brought down by a financial scandal. Mr Filip is part of the two-party pro-European-Union coalition that has functioned since 2016.

Disputes, conflicts and mass protests:

- 1) 1992–present. “Frozen” Transnistrian conflict. A short war between March and July 1992 followed Dniester region secession from the Moldavian Soviet Socialist Republic (SSR) in September 1990. *Protracted conflict*. This region was formally an autonomous area within Ukraine before 1940, when the Soviet Union combined it with Bessarabia to form the Moldavian SSR. A contribution to Moldovan GDP of an industrialised Transnistria amounted to about 40 percent. A conflict led to the creation of a three-party Joint Control Commission (Russia, Moldova and Transnistria). In 2006, Transnistria voted to confirm its independence and created its own constitution, flag, national anthem and coat of arms, as well as a military, police, postal system and currency. However, it remains unrecognized.
- 2) 2004–2005. Disputes over compulsory Russian language and Cyrillic script. Economic sanctions were imposed on Transnistria.
- 3) 2006. Disputes over Russian gas and Transnistrian independence.
- 4) 2008. Disputes over easing Romanian citizenship application for Moldovans.
- 5) 2010–2011. Parliament fails to elect a president.
- 6) 2012–2014. Disputes over Russian gas supplies and imposed sanctions on Moldovan agricultural exports because of the European Union association agreement conclusion.
- 7) 2014. A huge banking fraud uncovered (losses from which amounted 12.5 percent of the annual gross domestic product), which led to another political crisis and credit crunch.
- 8) 2015–2016. A series of anti-government protests. In early presidential elections in November 2016, Igor Dodon wins.

Instabilities and internal challenges:

- Transnistrian limbo since 1990.
- Transparency and accountability are crucial concerns.
- Political uncertainty, administrative capacity, bureaucratic interests, 100-percent dependence on the import of energy resources.
- Large vulnerable groups of people fully depend on the remittances from their family members abroad.

b. Agriculture

i. General issues: GDP and Employment

Agriculture is one of the most important sectors in the economy of the Republic of Moldova, featuring fruits, vegetables, wine and tobacco. The country largely relies on the remittances (over USD 1 billion annually) from the Moldovans working in Europe, Russia and other EU member countries.

Though the share of agricultural input in the country's gross domestic product (GDP) in the past 10 years has steadily decreased, the agricultural sector still provides about 15 percent of the country's GDP. Over 30 percent of the employed population are engaged in agriculture. Agricultural exports amounted to 40–45 percent of total goods exports in 2010–2014. The share of imports of these goods varies between 15 and 18 percent of total goods imports. Agriculture is mainly rain-fed and relies less on irrigation.

A major element of the agricultural system reforms after the Soviet Union's dissolution was the land-privatization process that took place between 1998 and 2000. More than 1 million residents became landowners. The adjustment process was challenging and long-lasting. Currently, around 90 percent of agricultural lands are in private ownership. The main problem is a high segmentation of land. Farmers' lands are too small to be able to efficiently produce agricultural goods.

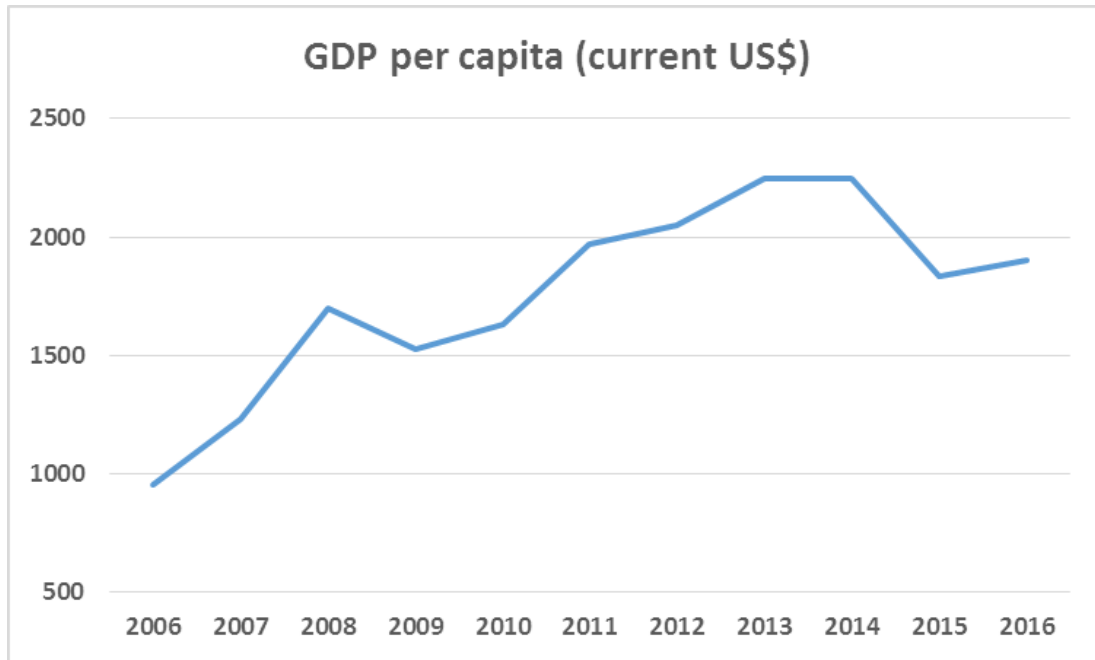
Figure 2. Current GDP, 2006–2016.



Source: World Bank

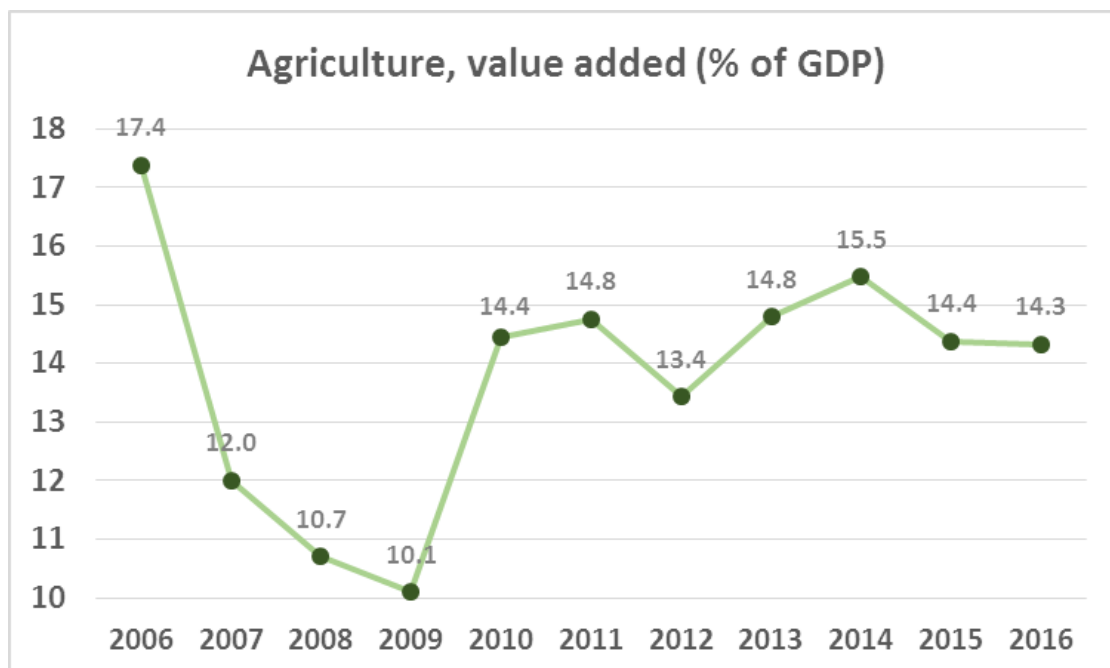
According to the latest edition of the State Agency on Waters “Apele Moldovei” of the Republic of Moldova, published in 2010, the total water volume used in the country decreased by 6.5 percent, from 849 million m³ to 793.5 million m³ between 2000 and 2008.

Figure 3. GDP per capita, 2006–2016.



Source: World Bank

Figure 4. Agriculture value added (percentage of GDP), 2006–2016.



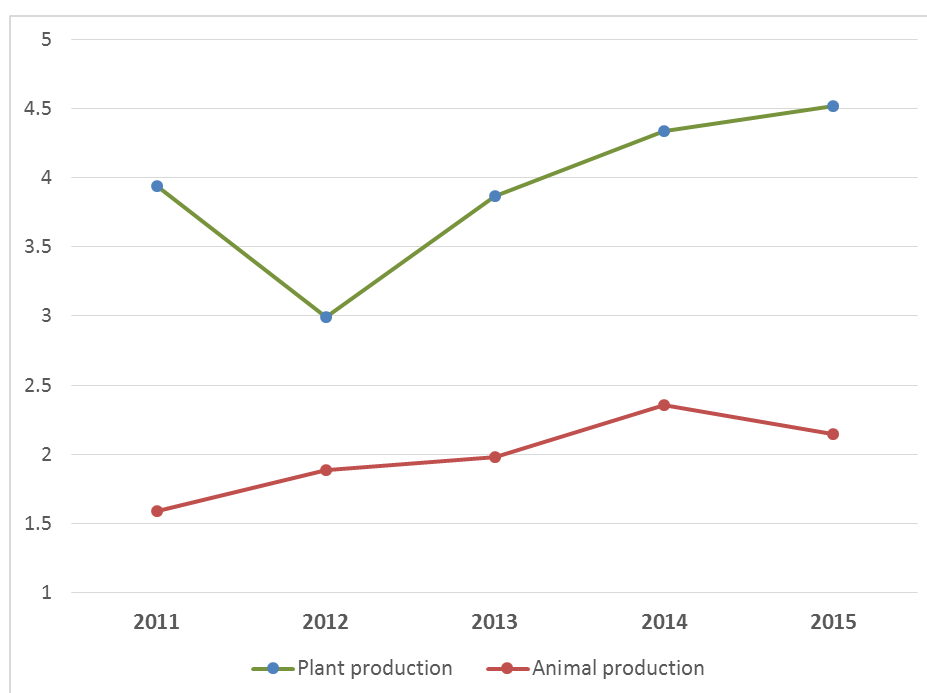
Source: World Bank

In contrast, the discharge of polluted wastewater rose from 8.7 million m³ to 14.1 million m³, an increase of 62 percent. In 2008, of the total volume of 793.5 million m³ of water used, 684.5 million m³ (86.3 percent) was surface water, and 109.5 million m³ (13.7 percent) was underground water. A total of 823 waterbodies are used for fish culture, for a total area of 20 507 ha.¹

ii. Major agricultural products

Main agricultural products are fruits, table grapes and some vegetables during the particular production season; animal products are not as prevalent. In 2012, plant production dropped but then recovered, and in the following years it significantly increased. In 2015, the plant production amounted to USD 4.5 billion. The production of animal commodities had been increasing from 2011 to 2014, and then it slightly decreased in 2015, amounting to about USD 2.1 billion.

Figure 5. Agricultural production in current prices by agricultural branches, billions USD, 2011–2015.



Source: Statistica Moldova (National Statistics Database)

Table 1 demonstrates shares of animal and plant production. One should note that the share of animal production significantly changed in the period from 2011 to 2015. While in 2011 it was only 27.9 percent, in 2015 increased to 42 percent.

¹ Source: FAO MAPS Draft Report

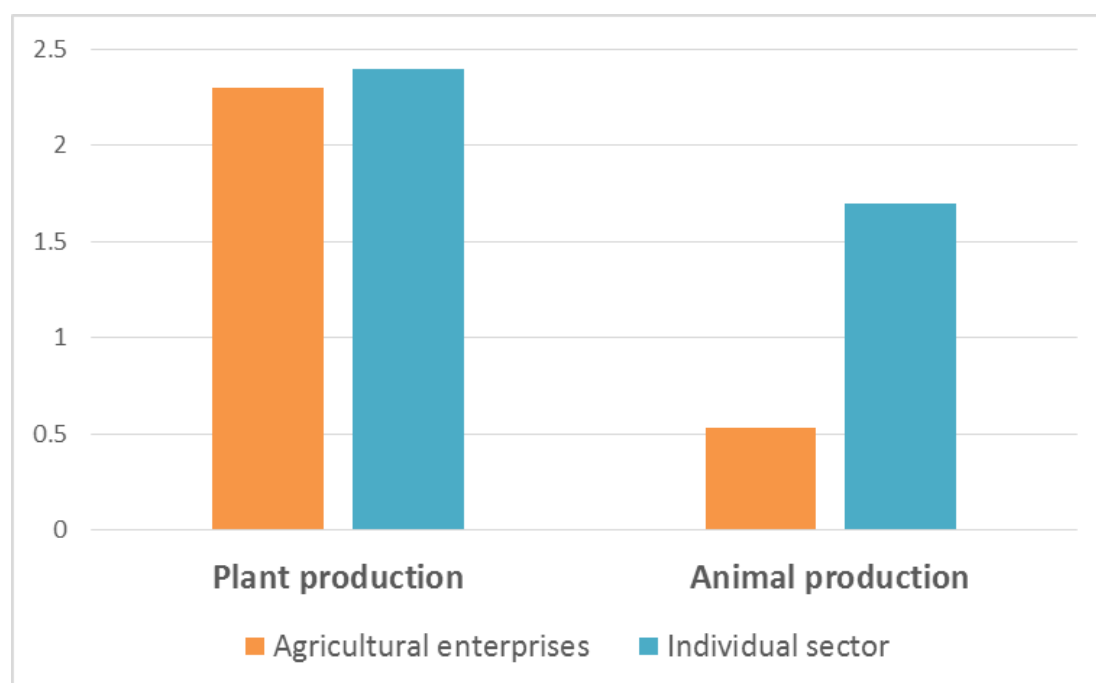
Table 1. Share of plant and animal production in agricultural output, percentage, 2011–2015

	2011	2012	2013	2014	2015
Plant production	71.7%	61.5%	72.3%	67.8%	58%
Animal production	27.9%	38.5%	27.7%	32.2%	42%

Source: Statistica Moldova (National Statistics Database)

Figure 6 shows how much plant and animal goods are produced by categories of producers. We see that agriculture enterprises and the individual sector produced a relatively similar amount of plant commodities in 2015, in terms of value. In the animal sector, the structure of production is different. The individual sector produces significantly more animal products compared to agricultural enterprises.

Figure 6. Plant and animal production in terms of value by categories of producers, billions USD, 2015.



Source: Statistica Moldova (National Statistics Database)

The major production, domestic supply, and trade in agricultural products, as well as their shares in production as of 2013, are presented in Table 2.

Table 2. Major crops and agricultural products production, domestic supply, import, export (1 000 tonnes) and their shares (of total production, percent), 2013.

Item	Production 1 000 tonnes	Net value 2004–2006, USD 1 000	Domestic supply quantity 1 000 tonnes	Share of domestic supply	Export quantity 1 000 tonnes	Export share	Import quantity 1 000 tonnes
Maize and products	1 419	76 386.1	1 294	91.2%	133	9.4%	8
Wheat and products	1 009	105 803.2	671	66.5%	333	33.0%	96
Sugar beet	1 009	34 722.2	982	97.3%	0	0.0%	0
Grapes	613	350 230.9	580	94.6%	44	7.2%	11
Milk- Excluding Butter	527	8 076.8	584	110.8%	8	1.5%	65
Sunflower seed	504	109 577.7	231	45.8%	275	54.6%	1
Apples and products	307	129 796.1	-11	-3.6%	331	107.8%	2
Vegetables, Other	246	5 509.3	235	95.5%	33	13.4%	21
Potatoes and products	239	27 431.8	270	113.0%	1	0.4%	31
Barley and products	219	16 853.1	115	52.5%	125	57.1%	22
Wine	159	149 569 ²	36	22.6%	124	78.0%	1
Sugar (Raw Equivalent)	140	807.6	63	45.0%	34	24.3%	44
Fruits, Other	99	83.6	48	48.5%	70	70.7%	19

Source: FAOSTAT

² as of 2014

c. Legal and business environment

iii. Legal environment – laws

All main areas – inputs, cooperatives, food safety, food quality and animal health – are substantively covered in Moldovan legislation. However, only a small number of laws cover science and research, and therefore this area of legislation may be improved. The legal documents related to cooperatives seem scattered. The codified law on cooperatives would solve this problem. The full list of laws, with their basic descriptions, is presented in Annex 1.

It is known that legislation and implementation may be not consistent. The application of these documents is less obvious and will be covered in the next sections.

iv. Business environment

According to the World Bank Doing Business 2017 report, the Republic of Moldova ranks 44th (out of 190 countries), placing it in the second tier of countries (along with the Russian Federation). The Republic of Moldova significantly improved its position in the previous five years (in 2012, it ranked 99). The country updated the process of obtaining a new electricity connection. Paying taxes was made easier by eliminating a requirement to submit social security documents in hard copy. However, the Government raised rates for road tax, environmental levy, and health insurance contributions paid by employers and it increased the costs of company registration. According to Moldovan legislation, all owners of land shall pay taxes. Owners of large lands shall register a legal entity.

1. Banking

The situation in the banking sector is unstable. A number of fraudulent financial activities were registered in 2012–2014. In particular, in 2014 USD 1 billion vanished from three Moldovan banks: Banca de Economii, Unibank and Banca Socială. It appeared to be a coordinated effort involving all three banks working together to extract as much loan finance as possible from the banks without any obvious business rationale.

It should be noted that business does not have access to cheap financial resources. The interest rate exceeds 15 percent. However, there is access to foreign investment, grants and subsidies. Another drawback is insufficient supply of long-term loans (no loans for more than five years are available). Collateral policies are considered insufficient because of the excess of collateral requirements. Banks

underestimate collateral. The market instruments to facilitate access to credits is insufficient (loan guarantee funds and interest subsidies).

2. Regional trade agreements

Within the framework of international trade cooperation, as of 2016, the Republic of Moldova was a member of 14 current regional trade agreements covering 46 trade partners, including free trade with countries in the Commonwealth of Independent States and the Central European Free Trade Agreement, as well as with Turkey. On 1 July 2016, the Association Agreement between the European Union and the Republic of Moldova entered into full effect. Also in place between the two entities is a Deep and Comprehensive Free Trade Agreement, which provides the framework for gradual liberalisation of trade in line with the progress achieved by the Republic of Moldova in the implementation of EU quality and food safety standards.

Table 3. Most imported products in terms of value (thousands USD), 2014.

#	Item	Value
1	Food prep nes	54 815
2	Beverages, distilled alcoholic	41 061
3	Crude materials	27 396
4	Sugar refined	25 099
5	Meat, chicken	23 532
6	Chocolate products nes	22 394
7	Pastry	17 970
8	Coffee, extracts	17 932
9	Flour, wheat	16 797
10	Beverages, non-alcoholic	14 495
11	Cheese, whole cow milk	13 778
12	Beer of barley	13 638
13	Meat, pork	13 177
14	Sunflower seed	12 935
15	Tomatoes	11 852
16	Sugar confectionery	10 961
17	Food wastes	10 897
18	Tobacco, unmanufactured	10 491
19	Fat, nes, prepared	10 361

Source: FAOSTAT

3. Trade policy (import constraints, tariffs)

Imports. The Republic of Moldova's imports, excluding cigarettes and beverages, are dominated by food preparation items, sugar, chicken meat, and chocolate products. In terms of value, the Republic of Moldova also imports a lot of coffee, wheat flour, cheese and pork meat (Table 3).

In the period 2012–2016, total imports from the Republic of Moldova's main trade partners – the European Union and the CIS – followed similar paths. In 2015 imports significantly decreased from both the EU and CIS. Compared to 2015, 2016 imports from CIS did not significantly change in terms of value, amounting to USD 1.03 billion, and imports from the EU slightly increased, amounting to almost USD 2 billion (Figure 7).

Figure 8 shows the imports of agricultural products by category. One can see that in 2016, Moldova imported more live animals from the EU, while there were practically no imports from the CIS. In terms of value, the EU supplied the Republic of Moldova with more meat and meat preparations, dairy products and birds' eggs, fish, crustaceans and molluscs, vegetables and fruits, feeding stuff for animals, and beverages. From the CIS, the Republic of Moldova imported more cereals and cereal preparations, sugars, sugar preparations and honey, coffee, tea, cocoa and spices, miscellaneous edible products and animal and vegetable oils, fats, and waxes than from the EU.

In general, imports of agricultural products in 2015 amounted to 81.5 percent of the 2014 figure (USD 587 million). The largest exporter-countries to the Republic of Moldova in 2015 were Ukraine (28.5 percent of total agricultural imports to the Republic of Moldova), the Russian Federation (9.3 percent), and Romania (6.7 percent). The Republic of Moldova imported, more than anything else, fruits, citrus fruits, various food products, alcohol and soft drinks, meat and edible meat offals.

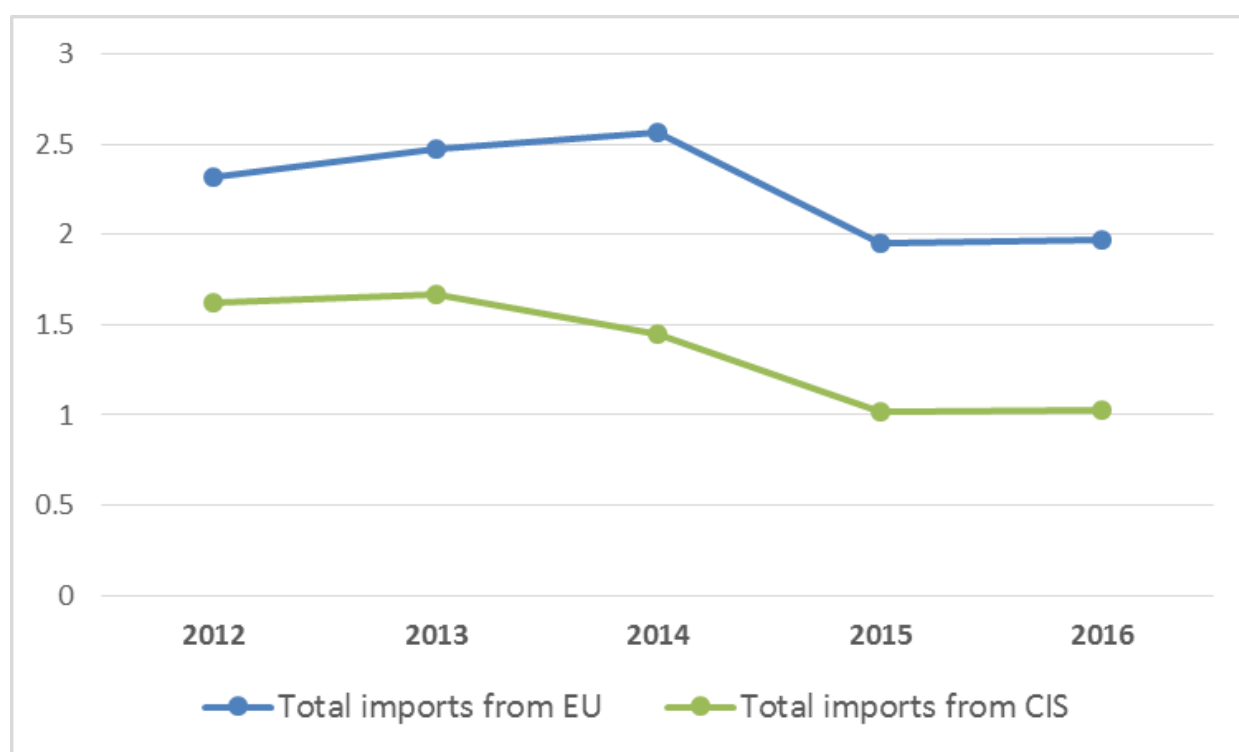
The average applied rate of import tariffs on agricultural goods increased to 13.5 percent in 2015.³ Import duties were within the limits of the Republic of Moldova's commitments to the World Trade Organization. Imported goods were subject to value-added tax and excise duties in Moldova. There were no quantitative restrictions and bans on imports of agricultural products in 2015–2016. The imports of agricultural goods from Ukraine significantly increased, which led to some restrictive measures to protect domestic producers in 2016. Tariff quotas amounting to between 200 and 1 000 tonnes were set for seven agricultural

³ 10.4% in 2014

product items imported from Ukraine to the Republic of Moldova, and duties on above-quota products were raised. These measures were abolished as of 1 January 2017.

Exports. The structure of exports was dominated by wine-making products, fruits, walnuts, sunflower and vegetable oil (See the list of top-exported crops in 2014 in Table 4). The foreign agricultural trade balance in 2015 amounted to USD -330 million. The Republic of Moldova is the fourth largest exporter of shelled walnuts in the world behind the United States of America, Mexico and China, with a volume of 9,163 tonnes and a value of USD 29.8 million.

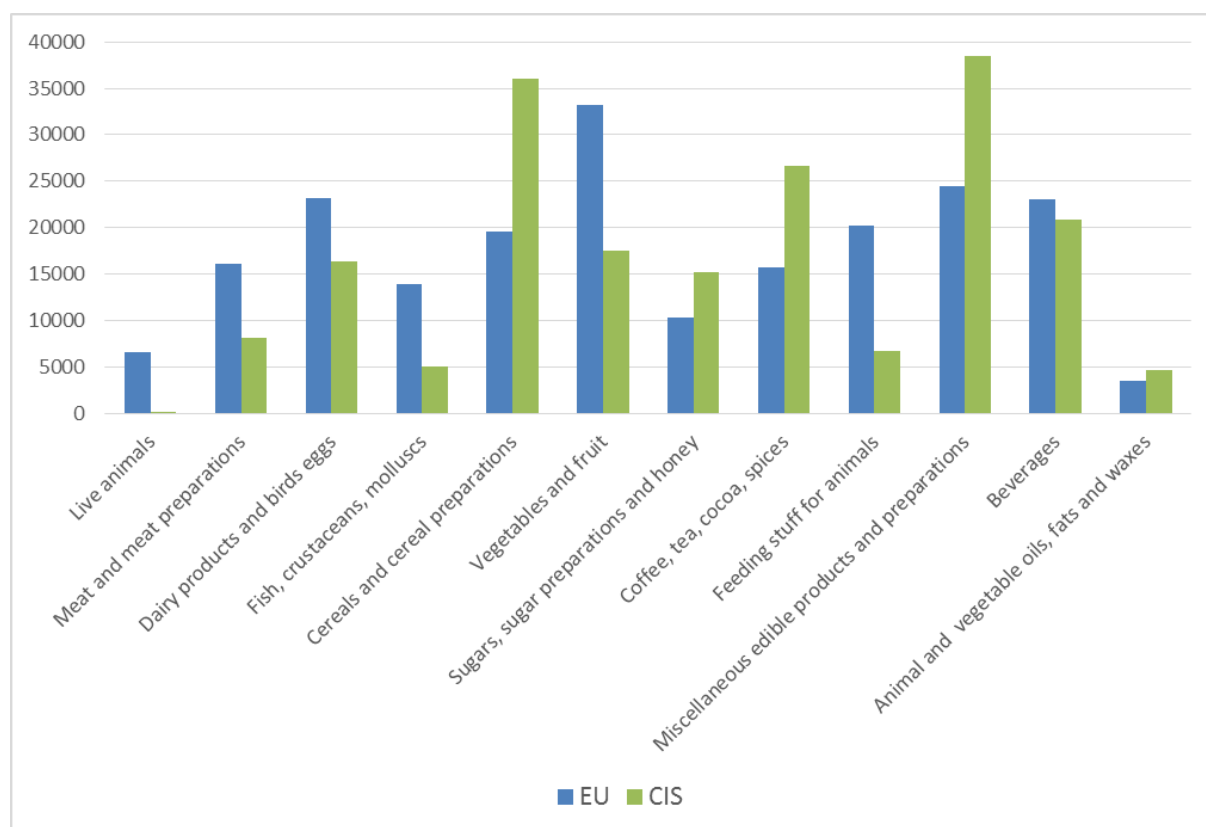
Figure 7. Total imports of all products from the EU and CIS, billions USD, 2012–2016.



Source: Statistica Moldova

Figure 10 compares the exports of agricultural products to the EU and CIS in 2016. To the EU, the most-exported products were cereals and cereal preparations, vegetables and fruit, vegetable oils and sugars, sugar preparations, and honey. The CIS mostly imported vegetables, fruit and beverages, and to a lesser extent meat, meat preparations, dairy products and birds' eggs. Regarding animal origin products, the Republic of Moldova is allowed to export into the EU market only two categories of animal products: honey and egg powder.

Figure 8. Imports of agricultural products from the EU and CIS, thousands USD, 2016.



Source: Statistica Moldova

There were no export duties, export taxes, quantitative restrictions or bans on exports in 2015–2016. The country’s export policy focused on bolstering exports, particularly by establishing free economic zones and industrial parks. In September 2015, Russia lifted a ban on supplies of a broad range of fruits from the Republic of Moldova.⁴ In 2016, the Ministry of Agriculture, Regional Development and Environment signed several memorandums of cooperation with sectoral agencies, aiming at optimizing the utilization of material and financial resources to support exports. In 2015–2016, the Republic of Moldova remained a net exporter of agrifood products.

⁴ The ban was introduced by the Russian Federation in July 2014 immediately following the conclusion of the Association Agreement between the EU and the Republic of Moldova. According to Russian authorities, the ban was justified by Moldovan-made products’ failure to comply with requirements of the Russian sanitary and phytosanitary standards.

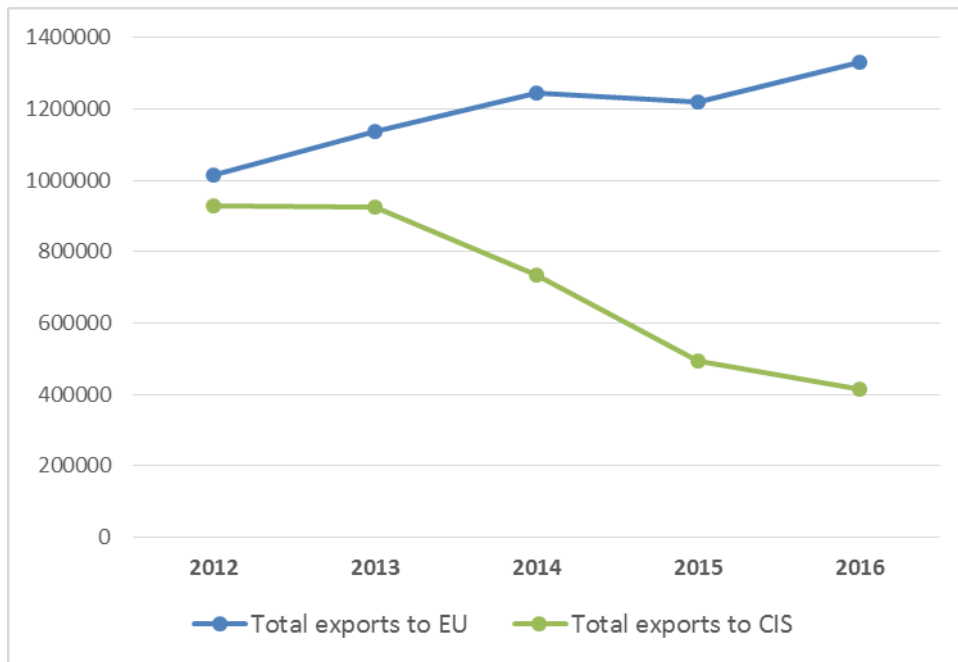
Table 4. Most exported crops and agricultural products in terms of value (thousands USD), 2014.

#	Item	Value
1	Wine	149 569
2	Sunflower seed	136 153
3	Walnuts, shelled	95 596
4	Beverages, distilled alcoholic	92 228
5	Wheat	65 879
6	Apples	47 557
7	Oil, sunflower	41 636
8	Maize	28 080
9	Barley	26 614
10	Sugar refined	23 377
11	Rapeseed	20 704
12	Grapes	17 017
13	Cigarettes	16 973
14	Pastry	14 868
15	Meat, cattle	13 566
16	Vegetables, preserved nes	10 971
17	Cherries	9 558
18	Tobacco, unmanufactured	8 341
19	Tomatoes	7 984
20	Plums and sloes	7 906

Source: FAOSTAT

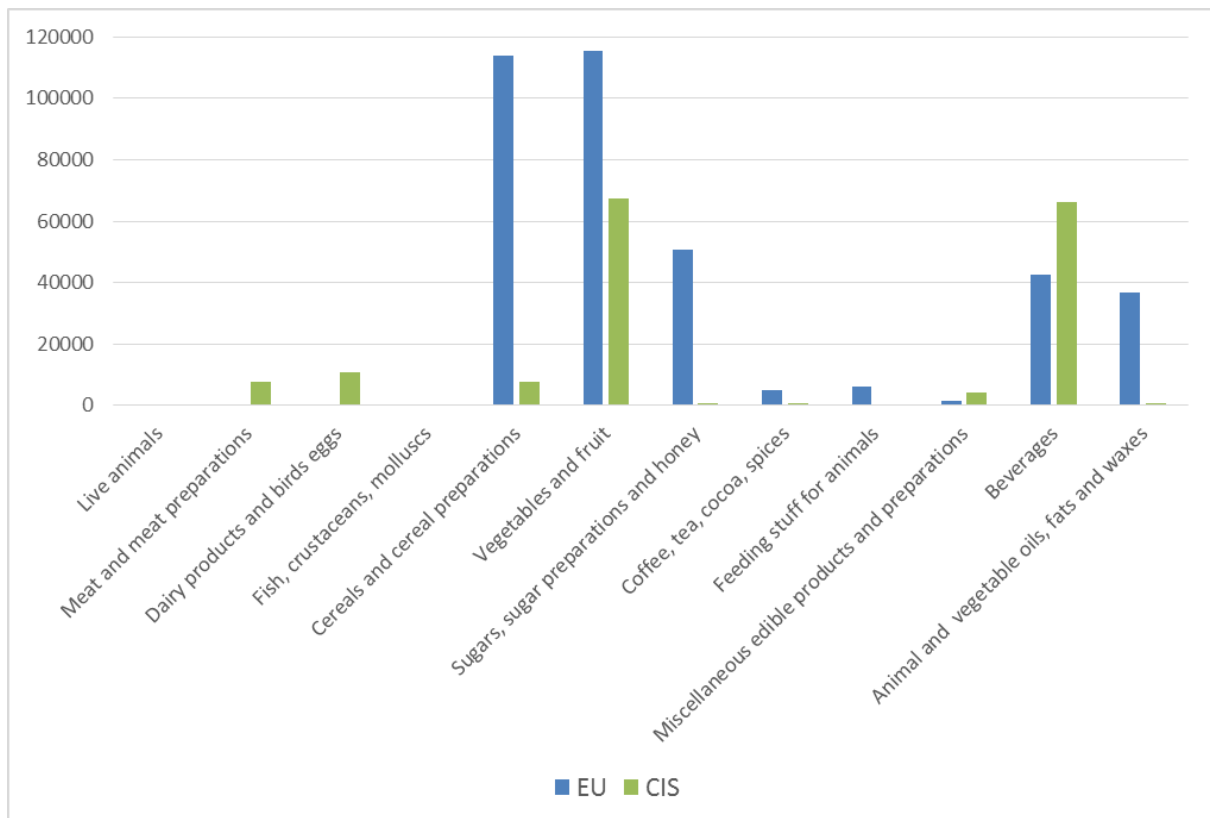
This section does not cover trade with market partners that are unconventional for the Republic of Moldova, but it is important to highlight the gap in trade policy related to agreements with potentially big markets outside Europe and the post-Soviet area. In particular, United States Agency for International Development (USAID) project implementers emphasize that having agreements with countries with different phytosanitary standards (such as India) would open new economic possibilities. USAID believes that the demand for such cooperation exists.

Figure 9. Total exports of all products to the EU and CIS, thousands USD, 2012–2016.



Source: Statistica Moldova

Figure 10. Exports of agricultural products to the EU and CIS, thousands USD, 2016.



Source: Statistica Moldova

4. Conclusions

The Republic of Moldova has a moderate business environment with a potential for improvement. Though the banking sector is considered a weak point, and high interest rates limit people's access to finance, on the international arena the Republic of Moldova acts as an open economy, not imposing any restrictions or bans. The import tariffs were maintained within WTO commitments. The Republic of Moldova is a member of 14 regional trade agreements involving 46 trade partners. The country has a complex relationship with the Russian Federation, which is mainly a subject of political issues. The Republic of Moldova actively develops the partnership with the EU within the Association Agreement. Having agreements with countries with different safety standards would open new market opportunities for Moldovan producers.

II. Value Chain Gap Analysis Findings

a. Value Chain Enabling Actors

i. Access to finance and infrastructure (public – roads, bridges, marketplaces, irrigation, electricity)

Financial and physical infrastructures are the important aspects directly related to a successful development of the agriculture sector. The financial infrastructure includes all institutions, information, technologies, rules and standards that enable financial intermediation. Poor financial infrastructures in many developing countries and in countries that are in transition cause constraints for financial institutions. Poor payment and settlement systems are believed to exacerbate financial crises (The World Bank, 2009). Low development of a physical infrastructure creates gaps and increases costs along entire value chains.

Access to finance

In the Republic of Moldova, there are several noteworthy actors who provide access to finance. Much lies on the shoulders of the Government, which concentrates on subsidising sectors through paying agencies and stimulating the development of physical infrastructure. The World Bank's Agricultural Competitiveness Project in the country provides an additional access to finance for groups of farmers.

Subsidies. The Ministry of Agriculture, Regional Development and Environment (MARDE)⁵ mainly works with farmers. Before 2011, the MARDE directly provided subsidies to farmers. Since 2011, the MARDE pays specialised institutions for collection of the information on demands from farmers. Based on the demand, the MARDE develops annual plans on what sectors to address and how much to subsidise. To receive the subsidy, farmers should develop business

⁵ As of 5 July 2017, the Ministry of Agriculture and Food Industry was merged with other Ministries and was called the Ministry of Agriculture, Regional Development and Environment.

plans. They receive subsidies for their ongoing activities. This is the difference between subsidising schemes in the European Union and in the Republic of Moldova. In the EU, farmers apply for financial support prior to starting their activities, while farmers in the Republic of Moldova apply after investing and satisfying a number of conditions. Currently, the advance-payment system is being developed by the Moldovan Government. Starting in 2020, the Moldovan Agency for Intervention and Payment in Agriculture will provide direct payments to farmers according to the surface of the agricultural land.

Paying agencies. According to the assistant FAO representative in Moldova, farmers in general are satisfied with paying agencies. Farmers usually apply online and receive a response from agencies' regional offices in just 1 or 2 days. Agency staff covers the whole country, and the procedure for application is well-described. However, there are the following limitations:

- Budgeting process is slow.
- Monitoring and control of implementation is not effective.
- Only a part of needs is compensated by paying agencies.
- Some paying agencies accept only paper-based applications.
- The information technology capacity of agencies is considered weak.

The Agency for Intervention and Payment for Agriculture, which is a public self-administered institution, was established under the Ministry of Agriculture, Regional Development and Environment. The paying agency manages the resources of the National Fund for the Development of Agriculture and the Rural Environment, along with the resources of the development partners assigned to implement the intervention measures for agriculture, in compliance with laws and state policies through subsidisation and other forms of financial support for agricultural producers. The work of paying agencies is strengthened by the World Bank and by the EU initiatives described below.

The World Bank Consolidated Agricultural Projects Management Unit implements Agricultural Competitiveness Project in the Republic of Moldova. The project was launched in the end of 2012 and began in 2014. This project is co-financed by the Swedish Government. The objective of the project is to enhance the agricultural capacity through sustainable land management and improved access to markets. The project was extended in 2016 (with additional USD 12 million) to continue investments in post-harvest production until 2019. The total budget amounts to USD 47 million. The headcount of the project is 12 people.

The Consolidated Agricultural Projects Management Unit (CAPMU) is mainly focused on agricultural paying agencies, providing grant schemes to producers, helping producers go through the application process and then – if the applications are successful – monitoring the implementation of producers; business plans. A distinguishing feature of the World Bank’s assistance is that it provides grants in advance, complementing the Government’s subsidy schemes. The World Bank works with groups of at least five individuals in horticulture or livestock; individuals are not able to apply. A group is registered as a cooperative, and the MARDE confirms its status. The group then becomes a “producer group.” Applicants should have at least three years of experience, and they should be owners of their businesses. It is not required that groups of farmers produce together, but that they sell together. Each member is in charge of selling his or her own goods. All investments belong to the group, not to individuals. If the groups comply with requirements, they go to the Agency for Intervention and Payment for Agriculture, which previews applications. An independent agency under the MARDE evaluates applications, and the CAPMU provides the support. Based on the scores, it is decided whether the applicant is able to receive a grant. Farmers should prove that they have additional co-financing beyond the World Bank grant. In addition, applications should be aligned with the proposed project’s development objective and thematic thrust. Applications also should be financially feasible, environmentally compliant, and potentially able to contribute to improvements in quality and marketability of the products.

After the grant agreement is signed, the CAPMU monitors, trains and provides individual consultancies. One should note that farmers cannot sell or exchange the equipment that was provided in the form of support. The matching investment grants finance only technological machinery and equipment for post-harvest infrastructure. The matching grants do not exceed 50 percent of an eligible investment sub-project, with a maximum ceiling of USD 350 000 per productive partnership (The World Bank, 2012). A productive partnership is eligible for only one matching investment grant under the proposed scheme. In total, the CAPMU has supported 50 groups in horticulture.

The Agency for Intervention and Payment for Agriculture benefits from a twinning project within the European Neighbourhood Programme for Agriculture and Rural Development. The project’s objectives are to enhance the capacities of the Agency for Intervention and Payment for Agriculture in managing the subsidy fund in agriculture and to prepare the institution for providing direct subsidies starting in 2020.

Access to infrastructure

The International Fund for Agricultural Development is focused on enabling access to physical infrastructure and its improvement. In addition, the European Neighbourhood Programme for Agriculture and Rural Development, in one component of its work, addresses improving infrastructure, roads and water supply. The United States Agency for International Development also focuses on water supply.

Another important actor involved in the development of infrastructure and attraction of the investments is the ***International Fund for Agricultural Development***, a multilateral financial institution and specialized agency of the United Nations. In the Republic of Moldova, the International Fund for Agricultural Development (IFAD) functions as a government-representative implementation unit. The headcount of the representation is 14 people, and the agency is relatively independent from the Ministry of Agriculture, Regional Development and Environment. IFAD does not work directly on the development of value chains but is engaged in the accumulation of investments in agriculture. IFAD currently realises the programme “IFAD VI” (IFAD, 2018), which is designed for five years and amounts to USD 20–25 million dollars (USD 500 000 for technical work, with the rest going to loans). The purpose of this programme is to help economically disadvantaged agricultural entrepreneurs from rural areas raise incomes and increase sustainability. The programme has three main components:

1. Improving resilience to climate change and developing high value-added products by:
 - a. improving the ability of agricultural producers to adapt to climate change;
 - b. increasing productivity and competitiveness, increasing the volume of investments, and making more favourable the conditions for entering the market;
 - c. providing consultation and support services in business creation and development; and
 - d. introducing technological innovations.
2. Financing of rural small and medium-sized businesses, including those created by young farmers, through:
 - a. increasing the access of rural populations to loans by offering relevant and affordable financing products;
 - b. expanding and facilitating access to financial sources;

- c. giving grants on a competitive basis;
 - d. stimulating and supporting investments by young entrepreneurs;
and
 - e. providing favourable credit conditions to agricultural enterprises.
3. Development of the industrial and social infrastructure of the village by:
- a. development of economic infrastructure in rural areas.

The first component focuses on financing measures for climate change adaptation for farmers. One of the problems the IFAD addresses is the lack of water for irrigation in the middle of the country. Within the second component, IFAD provides long-term loans to youth 18 to 25 years old. Through the third component, IFAD invests in common infrastructure (construction of 1- to 2-km road segments to connect farmers to the main road network). In addition, IFAD identifies clusters of producers who specialize in one of the products and encourages those producers to form associations.

USAID project implementers believe that the central irrigation systems have big potential for development, as they use only 5 percent of their capacity. The idea of the development of irrigation systems in the central part of the country is to use water from the Dniester and Prut rivers and direct it to the centre, through pumps. The pumps were owned by the Government, but ownership has been transferred to USAID. Each irrigation pump is able to cover over 500 hectares of land.

In conclusion, the Republic of Moldova has a sufficient number of value chain actors and programs aimed at enabling access to finance and the physical infrastructure. The Moldovan Government is working on the improvement of its subsidizing system. In particular, it is foreseen that the future system will allow farmers to receive subsidies prior to their investments, which is a big step forward. A lot depends on the continuation of the international development programmes. Only ensuring the funding from several sources can guarantee the successful outcome of the investments made by farmers. High-quality infrastructure and access to water supply in the central regions of the Republic of Moldova are also of paramount importance.

ii. Civil society – trade associations for advocacy

Civil society and farmers' associations are well represented in the Republic of Moldova. The oldest one, called the National Farmers Federation of Moldova (NFFM), was established in 1995 by associations of farmer cooperatives from 29

villages. Today, the NFFM operates through 11 regional organizations, 11 information and consultancy centres and 26 district information offices. Registered membership is 700 local farmer organizations representing over 27 000 farmers. As well as lobbying for farmer interests, NFFM states that its goal is to improve the welfare of the rural population through the realization and protection of the civil, economic, social and cultural rights of all landowners and persons practicing agricultural businesses and services. Another big formation, The National Union of Agricultural Producers' Associations, comprises 17 agricultural associations representing over 2 000 smaller group enterprises and almost 25 000 farmers managing 50 percent of Moldovan farmland. It also lobbies for smaller farmer interests and provides information and consultations to its members on attracting investment and implementing new technologies. Another federation, the National Federation of Agricultural Producers from Moldova AGROinform, was established in 2001 as a network of NGOs. It maintains nationwide coverage of 27 regional non-governmental member organizations engaging more than 4 000 member farmers. Primarily, the federation offers consultancy, training, market information and trade services.

The Fruit Producers and Exporters Association Moldova Fruct is a non-commercial, non-governmental and non-political organization founded in 2006. The association unites small, medium and big producers, exporters, and input suppliers of a variety of apples, table grapes, peaches, cherries, plums, tomatoes, and other fresh and processed products. In the beginning, the association consisted of only five fruit producers; currently there are more than 160 members. Main activities include lobbying, promoting fruits on traditional and alternative local and international markets, training, and technology transfer, as well as the development of the internal capacity of the members, within the framework of team building. Five people work full-time. Among part-time specialists are foreign experts from the Netherlands and Italy. Membership fees account for 80 percent of the association's budget. Small entrepreneurs (with less than 10 hectares) pay 50 percent of fees, while medium and large (more than 10 hectares) pay 100 percent. Since 2014, the association has been receiving external financial support.

The association collaborates with international value chain development actors, the Ministry of Agriculture, Regional Development and Environment, and paying agencies such as AIPA (the Agency for Agricultural Intervention and Payments). It implements two joint projects with the United Nations Development Programme – one on Transnistria, and another one on trade. They collaborate with USAID within the high-value agriculture project. In 2014, USAID helped the association develop lobbying capacities. USAID assisted in the development of

irrigation systems and invested in the construction of the road in the north of the country. The association publishes quarterly leaflets that contain announcements on Government programmes, investment opportunities and practical guides for farming.

Thus, the basic links among donors, associations and NGOs in the Republic of Moldova are established. USAID notes that the associations in the country are formed top-down, which motivates stakeholders to raise awareness among farmers on the forms and benefits of cooperation and association.

b. Production Support Actors

iii. Knowledge sources

In the 1990s, the non-governmental organizations enabling value chains were financed by donors. Currently, the nation-wide extension service provider is the National Agency for Rural Development (ACSA). Contracted by the Ministry of Agriculture, Regional Development and Environment, the NGO has been operating since 2001. ACSA manages a network of 35 service providers, including representative farmer organisations, and contracts about 425 consultants, out of which 75 are regional consultants and 350 are local. Activities are primarily funded through direct contracts provided by the Government and donors. ACSA has no full-time staff; it hires consultants or national experts on demand. It delivers training, bypassing the extension advisor. The Ministry of Agriculture, Regional Development and Environment pays 50 percent of extension services. Applying for subsidies requires additional costs. Farmers usually find no rationale in applying.

One of the research institutions involved in value chain development is the Agrifood Economics and Rural Development department of the National Institute for Economic Research. The institute has solid experience in conducting value-chain development studies. In particular, it has examined value chain vegetables in cooperation with IFAD. The institute successfully cooperates with international research institutions in Romania, Czechia, Poland and Slovenia, and its employees are equipped with the up-to-date analytic techniques. Eighteen people work in the department of Agrifood Economics and Rural Development. The institute is under the double auspices of the Ministry of Economy and the Academy of Sciences of Moldova. The institute's representative claims that after a project is approved by

the ministry and academy, it is implemented independently. The length of approval is approximately one month. It should be noted that the institute has limitations for accepting contracts paid in a foreign currency.

Another institution that provides knowledge is the Marketing, Statistics and Rural Development department of the Ministry of Agriculture, Regional Development and Environment. The department is vested with a wide range of responsibilities, such as the development of regulations and measures on export promotion and support of the infrastructure, and diversification of non-agricultural activities in rural areas. The department develops and maintains the internal statistical system for operational monitoring of the agricultural situation in the country, which aims at providing quick updates (www.agromaia.cia.md). The department also coordinates the implementation of Leader approach pilot projects.

It should be noted that the majority of international value chain actors called the access to research and knowledge challenges to the development of agricultural value chains in the Republic of Moldova. The value chain actors proposed incorporating university research units into the extension services. The ENPARD representatives noted that NGOs and donors do not involve research institutions and universities, and the research sector is bypassed by donors.

Despite many efforts to provide information to farmers, smallholders and family farms still require more access to market information and to information about similar producers in their areas. A demonstrated incomplete awareness prevents farmers from a careful assessment of the situation and complicates the formation of cooperatives. The open-access platform with operational market information aimed at small farmers would be a great asset. Such information should be available both online and offline. The offline materials could be distributed through extension services operating in relevant regions. Matching system that would suggest to producers candidates for the formation of cooperatives would be desirable. In conclusion, it is very important that knowledge be conveyed directly to the farmers.

III. Sample Value Chain Overview – Plum and Berries

a. Field investigations of the value chains

The Government of the Republic of Moldova has an interest in improving the plum and berry sectors. Concerning plums, developing the dry plum production is considered necessary. The Government believes that the berry sector has a big potential, especially for small farmers primarily located in the central parts of the Republic of Moldova. Fresh plums are more common in the traditional market, while dry plums are produced mainly for export. Based on the expressed interest, four plum, table grape and berry farms were investigated. This chapter reveals the main findings from the short field visit to the plum and berry farms. The authors did not aim at comprehensive examination of the value chains. The main goal was to assess the status of the sectors and identify areas for future work. The following farms were visited and studied by the authors:

1. Plum and table grape farm, Cobusca veche, 300 hectares;
2. Berry, plum and table grape farm, Madgacesti, 1.5 ha of berries and 20 ha of plums and table grapes;
3. Plum farm, Nisporeni, 45 ha; and
4. Plum and table grape farm, area around Varzaresti and Seliste villages, 15 ha of plums and several more of table grapes.

1) Plum and table grape farm, Cobusca veche. The vineyards and orchards of this farm has spread around over 300 hectares. The farmer has a precooling facility, a cold storage facility and a drying facility. The headcount of his farm is 35 people. When harvesting, he employs 12 more people. A highly qualified agronomist works full-time on the farm, providing consultancy and being responsible for implementing growing techniques and setting up the equipment. The technologies and equipment used on his farm are mainly Romanian and

Ukrainian. The trees on this farm are planted in compliance with modern agronomic methods (Figure 11). The grafting technique is successfully used on the far (Figure 12).

The capacities of the farm's additional facilities are utilized. Precooling and cooling facilities help a farmer sell the goods when prices are more favourable. Fresh fruits, which are not sold, are processed in the drying facility into prunes and raisins. The owner is planning to farm out some space in his precooling room and cold storage facility to other producers. The farmer benefits from all national and international programs that give subsidies and loans. The subsidies include a 50-percent grant; the farmer also purchased imported processing equipment without paying the VAT and got a 20-percent overall tax exemption.

Figure 11. Plum and table grape farm: The trees growing on the hill are planted in correct rows



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Challenges mentioned by the farmer included a snowfall in April that seriously damaged his crops, arguments over building a waste-disposal site next to his farm, fewer export opportunities (because of the Russian-Ukrainian tension), and insufficient labour. According to him, the labour supply in the area is limited. In conclusion, this farm is efficient, and the farmer is planning to expand and build new facilities.

2) Berry farm, Madgacesti. The farmer is a small producer. He owns 1.5 ha of berries and 20 ha of plums and table grapes. His orchard is young; the first year of harvesting was 2017. He does not have full-time employees. He works on the farm with his family. He hires people only for harvesting (there is a harvesting company). The farmer does not possess or use any additional facilities. The farmer has never applied for financial support. The farmer said that the internal berry market was overcrowded, so he exported berries to Russia in small containers that were ready for retail. When he cannot sell the production to a market directly, he sells it to dealers. He mentioned that blackberries were more profitable. The farmer conducted the soil analysis in Ukraine. Regarding trainings, he has never received one and has never been offered to be trained. The farmer highlighted that he would be better off in the association but that there were no other berry producers around and he had not established connections with any berry producers (Figure 13). Berry processing nearby is also not available.

Figure 12. Grafting technique used on the plum and table grape farm



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3) Plum farm, Nisporeni. The reporting officers visited a medium-sized plum farm of 45 ha. Agriculture is a traditional activity of this farmer's family. All members of his family are engaged in the farming. They have a precooling facility, a cold storage facility and a drying facility. They completely renovated the facilities that were used before the disintegration of the Union of Soviet Socialist Republics, successfully using governmental subsidies (through the paying agency

AIPA), ENPARD support, and bank loans. The interest rate of the loan amounts to 18.5 percent. The total length of the loan is three years. The facilities were built by Moldovan specialists, and the cooling equipment is German. The farmer does not consider processing to be profitable. The farmer cannot expand his production because of the very high transaction costs associated with buying land in the Republic of Moldova (because of the extremely fragmented lands; see Figure 14).

The farmer understands the necessity of improving his packaging in order to access new market possibilities, including exports. Among other challenges mentioned, there were volatile prices, expensive access to facilities, and the absence of regular customers.

Figure 13. Berry farm: The farm is remote from other berry producers and processors



@FAO/Pavel Kiparisov

4) Plum and table grape farm, area of Varzaresti and Seliste villages. The farmer is a small producer. He grows plums on 15 ha and has several more hectares for table grapes. He only has a drying facility. The farmer believes that the dry products market is more promising. He hires workers for harvesting. He does not apply for subsidies, but he is aware of the Government programs. The farmer aims at expanding his farm but says that land fragmentation is the real obstacle.

Figure 14. Fragmentation of land in Moldova: Small plots of lands are possessed by several owners



The land plot in the highlighted frame is possessed by the farmer. The farmer wants to expand his orchard by buying poorly cultivated land plots around his allotment, but he cannot because of two main obstacles:

- a) Neighbouring owners are reluctant.
- b) The administrative costs of buying land plots smaller than 5 ha are higher than the costs of purchasing the land.

Other challenges mentioned by farmers:

- a snowfall in April 2017 that sufficiently damaged crops;
- availability of labour;
- volatile prices;
- expensive access to facilities;
- absence of regular customers;
- fewer export opportunities because of the Russian-Ukrainian tension;
- overcrowded internal berries market; and
- processing not being considered profitable

b. Conclusions

Observations. Depending on their farm's size, farmers work with their families or employ others. All farmers have to employ more people during harvesting. Two farmers have facilities for cold storage, precooling and drying. One farmer has only a drying facility. All of the farmers are aware of the national and international programs that give subsidies and loans. The subsidies may include a 50-percent grant, and farmers enjoy VAT forgiveness on imported processing equipment and a 20-percent overall tax exemption. Each hectare of agriculture land can be supported by up to USD 2 350 per year. However, it is more difficult for smaller farmers to access supporting programmes because they require the availability of funds and prior investments. Two farmers benefited from subsidies. Bigger farmers are planning to expand their orchards and build new facilities. However, other farmers face difficulties expanding their production because of the very high transaction costs associated with buying land in the Republic of Moldova. The reason is the extreme land fragmentation. Successful farmers may end up in a situation where their orchards are surrounded by dozens of land plots of smaller size, which significantly limits their ability to buy these lands.

Status of value chains. The plum value chain is generally in a satisfactory condition. In 2017, the harvest was significantly affected by snowfall in the spring, but surviving crops and farmers' additional activities allowed farmers to sustain the unforeseen circumstance. Precooling, cooling and processing facilities are adequate for larger farmers, but additional facilities are needed to assist smaller farmers and farmers' associations. Those farmers who use these facilities have purchased them from abroad with help of matching grants.

The berry value chain is less robust and not yet fully-fledged. Volatile prices and an overcrowded internal market do not let farmers make profits. Lack of associations and poor marketing prevent farmers from successful exports. It is also evident that the berries sector has less attention and support from the Government and major donors. Producers of berries are lacking processing facilities in close proximity to their farms.

The common major gaps in Moldovan plum and berry value chains are:

1. Land is fragmented.
2. Planting material is of a low quality with viruses (95 percent of the planted material used in the Republic of Moldova for berries)
3. There is insufficient labour in rural areas.

4. Access to finance is limited for poor farmers and excessive for wealthier farmers.
5. There is an absence of regular customers.
6. There is a lack of farmers' cooperatives and associations.

IV. Value Chain Development Programmes

a. Major Donor-lead Value Chain Development Programmes

Currently in the Republic of Moldova there are several major donor-lead value chain development programmes. One is the **European Neighbourhood Programme for Agriculture and Rural Development (ENPARD)**, and another one is the **United States Agency for International Development (USAID) High Value Agriculture Activity**.

The ENPARD project is implemented by the Italian company Agrotec, the USAID project is implemented by Chemonics International. The ENPARD project started in November 2016. It is a 30-month project amounting to EUR 2.6 million (USD 3.3 million). The project focuses on the budget support (vocational education and extensions services) and on the implementation of the strategy. The project has five main components: policy development, services (extension, training, education, research), use of natural resources (conservation, agriculture land consolidation), job creation in rural areas (diversification), and improving living conditions (infrastructure, roads, water supply). There are three international full-time experts implementing the project, and they plan to hire three more junior experts. Chemonics International implements the High Value Agriculture Activity project, which is scheduled to last five years and which amounts to USD 21 million. There are 25 people working on the implementation. They conduct studies on the following topics: work-force skills assessment, analysis of value chains in various sectors (apple, stone fruit, berries, honey, wine), and varieties. The USAID project focuses on four areas of work: labour policy, groundwater, varieties, and requirements for fertilizers. ENPARD does not work with farmers, but they work with the Ministry of Agriculture, Regional Development and Environment. On the contrary, USAID works with farmers directly, using a facilitated approach. The

ENPARD staff believe that the donors in the Republic of Moldova are not very much interconnected. The USAID project implementers emphasize the necessity of more focused work of the ministry with the private sector. It should be noted that USAID sees a potential in the development of hazelnuts.

The Moldovan Government and the European Investment Bank (EIB) designed the **Wine Sector Restructuring Program** to address the structural weaknesses of the Moldovan wine industry. In 2010, EIB granted the Republic of Moldova a loan of 75 million EUR⁶ for this purpose. The project's aim is to contribute to the country's wine industry through the redressing and promotion of the wine protected designation of origin and protected geographical indication (Wine Moldova, 2018). To achieve the purpose and objective, wine companies and those related to the industry (such as those that produce packaging, labels, corks and other accessories) and educational and research institutions will receive support.

In addition, in July 2017 the EIB launched the programme “Technical assistance to support the implementation of the ‘**Fruit Garden of Moldova**’ operation, and the beneficiaries Small and Medium-sized Enterprises (SMEs).”

b. FAO Value Chain Development Activities

1. Plums and berries value chains analysis

Currently the FAO is conducting a study outlining the findings and recommendations for the development of the berry and plum value chains in the Republic of Moldova. The study aims to:

- Review berry (blackberry, raspberry, strawberry, blueberry) and plum value chains.
- Examine end-markets for berries and plums.
- Design questionnaires and conduct surveys of selected actors within the berry and plum value chains. Opinion should be sought from the production level (farmers), processing, traders, and Governments (local and central) on current issues and opportunities in the value chains.
- Design the value chain map and identify target groups in both sectors.
- Examine constraints and opportunities.

⁶ Approximately USD 93 million.

- Provide recommendations and strategies for improved competitiveness and growth for producers of berries and plums and for the Moldovan Government.

2. Strengthening the capacity of smallholders in berry production

In addition, FAO is developing a big two-year project “Strengthening the capacity of smallholders in berry production”. The project will identify the needs and priorities of the berry production sector in view of improving programmes for the development of national capacity. Through the training of national professional staff, extension service providers, farmer organisations and NGOs, the project will build a basis for capacity development for smallholders. This Technical Cooperation Programme will support the establishment of demonstration fields for introduction and implementation of innovative technologies and increase farmers’ access to knowledge and services for the implementation of innovative practices. The project will provide guidance through farmer trainings and workshops on the fundamental elements needed for the review and/or updating of berry production systems. In addition, the project will aim at developing manuals and guidelines on berry production and protection methods for several types of berries for dissemination among farmers, farmer associations, extension service providers and the Ministry of Agriculture, Regional Development and Environment (MARDE).

c. Conclusions

All major donor-led projects have physical representation in the country, which increases the overall output. Each of the donors has a different approach. ENPARD works with the MARDE, USAID works with farmers, and FAO combines both approaches. FAO has less funding in the Republic of Moldova while still being able to cover gaps that are not addressed by NGOs and donors. The problem with the interconnection of donors in the country was identified. The current analysis of business environment for farmers conducted by FAO officers tries to recognize the breaches that are not covered by donors and provide targeted support to the agriculture sector.

V. Conclusions and Recommendations

a. Conclusions – Status and Constraints of the Development of Value Chains

General Observations:

- Structural duality: A relatively small number of large corporate farms and a large number of small family farms co-exist.
- The specific feature of the large-scale food industry is underutilization of its production capacities and lack of investments.
- The fragmentation of land into small plots does not allow for the intensification of production and the strengthening of the scale effect.
- The possibilities for investing on Transnistrian territory are limited.

Business environment:

- There is insufficient supply of long-term loans.
- The interest rates are extremely high (over 15 percent).
- There are insufficient collateral policies (excess of collateral requirements).
- There is insufficient access to credits (loan guarantee funds, interest subsidies).
- The agricultural business is unstable, and, because of political and economic volatilities, the population view it as risky.

Market opportunities:

- The feed supply for the animal sector allows for the expansion of production, but that does not happen because production costs are high.

Farm and post-farm issues:

- Because of storage limitations, farmers sell products quickly for a cheaper price.
- Farmers and processors are not able to sell all the food fresh; therefore they sell canned products.

- Cold storage allows farmers to sell products later, when prices are favourable.
- The easiest and most effective processing is freezing.
- It is believed that the berry sector has big potential, especially for small farmers primarily located in the central parts of the Republic of Moldova.
- Vegetables have no sectoral programmes.

Export:

- Because of the lack of associations, small- and medium-sized farms experience difficulties entering international markets individually.
- Farmers experience limitations in exporting animal products because the quality of their products does not meet the international standards.
- Berry sector producers are believed to be ready to export.
- The number of drying facilities is increasing, which may lead to an increase in exports to Asia and the United States.
- Plums are exported for processing within the EU quota for fresh plums (in three years, the Government of Republic of Moldova will be able to revise the quota).
- The Government is focusing on improving the quality of wine to equalise the share of exports to the EU and Russia to 50 percent each.
- Access to the Russian market is limited because of the bans.

Cooperatives:

- Production cooperatives act as a form of land renting more than as a form of an integration of agriculture producers.
- Another problem is insufficient awareness among farmers about the importance of mutual support and assistance for the development of cooperatives and other forms of associative activity.
- The associations are formed top-down.
- There are the following limitations for forming cooperatives and associations:
 1. large distances between the farms of a similar type; and
 2. reluctance of farmers to form the associations.

Extension services and research

- According to some value chain actors, the Moldovan network of extension services is satisfactory.
- Farmers are not ready to pay for the extension services.
- Knowledge providers experience a lack of human resources. They argue that a lot of smart people tend to leave the country.

- The agricultural education in the country is considered to be of an unsatisfactory quality.

b. Recommendations for Future Value Chain Development Assistance

i. Legal Environment

- There is quite a big number of laws related to cooperatives. What is more important is not the number of laws but their systematic and easy application. Therefore, it may be appropriate to revise the list of laws to eliminate conflicts and repeats, or to create a single law (codified).
- The administrative procedure of selling small plots of land should be simplified. Farmers who wish to expand usually face barriers associated with high costs of purchasing land, in terms of both time and money. The benefits inherent in the acquisition of small plots of land fall behind the costs of the administrative process. *The Law No. 488-XIV on expropriation for public needs*, which has never been widely applied, may be considered a tool for assisting the land-consolidation process.
- Research and science legislation may be reviewed and improved to create the basis for the integration of research units into extension services.

ii. Business Environment

- Subsidising system
 - Applying for governmental subsidies requires additional costs. Farmers usually find no rationale in applying, therefore the administrative procedure of application should be simplified.
 - Subsidies should be provided prior to farmers' investments, instead of after; when subsidies are provided after investment, only the wealthy tend to get them.
 - Support of non-agricultural business is also required to prevent people from leaving the rural area.
- Banking system
 - Access to long-term loans should be provided. Investment loans in the Republic of Moldova are usually for a period of three to five years, which is not enough for funding perennial plantations or post-harvest equipment such as cold storage facilities.

- The annual interest rate should be decreased for farmers (through subsidising a part of the interest).
- Collateral insurance
 - Collateral requirements should be simplified.

iii. Post Farm

- Berry producers are mainly small, which makes it difficult for them to export. They could improve this situation through the formation of cooperatives or associations. However, it is difficult to start cooperatives because of little awareness among farmers, weak ties between them, and their disunity in space. Therefore, a launch of the programme on increasing awareness among farmers would be desired. The programme may include trainings and the distribution of leaflets and prospects.
- For berry production, the accessibility of nearby processing is of paramount importance.
 - Two producers of juice have products that use berries. The opportunity for increasing the sales of berries should be examined.
- Trade agreements with countries with different phytosanitary standards (e.g. India) is a missed opportunity.
- Awareness among farmers should be raised regarding the use of precooling, cooling and drying facilities, as well as storage facilities.

iv. Access to Knowledge, Finance, Infrastructure, and Civil Society

- The lack of information is not only a problem in the berry sector. All agricultural producers should have access to market information. The open-access platform aimed at small farmers should be developed. Market information should be available both online and offline (regularly distributed through extension services in all regions of the Republic of Moldova).
- A matching system for recommending candidates for cooperatives formation may be established. This can be an online platform that identifies closely located agribusiness entities and, based on developed criteria, suggests a form of association to users.
- University research units should be incorporated into the extension services.

- Additional capacity is needed for the conduction of genetic testing of plant material to support the improvement of breeds of berries, plums and other crops.
- Knowledge should go directly to farmers.
- Paying agencies should develop IT capacities and improve their monitoring and implementation systems.

v. Specific Value Chains Requiring Further Study/Support

- Berry value chain, including collecting baseline data
- Plum value chain, including collecting baseline data
- Tomato value chain
- Hazelnut value chains (proposed by USAID)

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ANNEX 1 – Laws and regulations impacting Moldovan agriculture

Annex 1 provides an overview of the legislation and policy documents related to agricultural value chains in the Republic of Moldova. The annex covers what in our opinion are the most fundamental documents; however, the legislation is constantly being updated, policies change, and new laws are adopted. This section is based on the FAOLEX data.

Law	Description
Core	
<i>Constitution (2010)</i>	<p>According to the constitution, the right to food is explicitly protected. Private property is protected by the law indifferent to the position of a person. Foreign citizens and stateless persons will not acquire a right to ownership over a plot of land. No person can be expropriated except in cases when social welfare is in question, which is to be determined legally and when a proper indemnity is paid in advance. The right to inheritance of private property is guaranteed.</p> <p>In the constitution, there are no specific provisions as regards natural resources, energy, agricultural and rural development, livestock, fisheries, and forestry. The constitution contains no provisions regarding rights to water.</p>
Land use and management	
<i>Land Code (1999)</i>	<p><i>Land Code</i> embraces an extremely comprehensive range of issues relating to land use and management. According to the code, the environmental preservation and protection of land enjoys a priority over other activities (art. 5); land operations causing a negative impact on agricultural, forest and other areas outside allocated land plots are inadmissible (art. 31); and land plots for folk crafts and trades, market-gardening and horticultural associations can be allocated by the local administration (arts. 38-40). The Land Code was amended in 2002, 2004 and 2007. The amendments related to the improving of cadastre and land registration. The last amendments specified that state and</p>

	<p>municipal enterprises, institutions, and organizations would be allotted public land and municipal land. The amendments also regulated the quality of allotted lands: For industrial and residential construction and for other non-agricultural and non-forestry purposes, the entities would receive poor-quality and un-forested land.</p>
<p><i>Law on normative price and procedure of sale and purchase of land (No.1308-XII of 1997)</i></p>	<p>It should be noted that only “natural persons that are the nationals of the Republic of Moldova and legal persons without foreign investments” are able to purchase land in Moldova.</p>
<p><i>Law No. 488-XIV on expropriation for public needs</i></p>	<p>This law allows the transference of property and property rights from private ownership to public property to produce public benefit works of national or local significance after fair and prior compensation for damage. Objects of expropriation: (a) immovable property such as plots of land, subsoil, waterbodies and forests; (b) right of ownership to flora and fauna. Public utility for which expropriation is required: (a) geological exploration and prospecting of subsoil; (b) mining; (c) energy production; (d) sewerage, water and gas supply; (e) construction for environmental protection; (f) waterworks for water level regulation in rivers and water reservoirs, and also for reduction of flooding; (g) works for the prevention of soil erosion; and (h) plots of land for public housing construction, organization of public parks, storage, and burial of waste.</p>
<p><i>Ministerial Decree No. 1075 validating the Regulation on agricultural land consolidation (2007)</i></p>	<p>This Ministerial Decree regulates arrangements undertaken by the owners of agricultural land, central governmental bodies and local self-government, territorial cadastre offices, and legal and natural persons for the purpose of rational and efficient management of agricultural land. It regulates the actions by the subjects of the process of agricultural land consolidation through elaboration and realization of the agricultural land consolidation project. The aforesaid project of agricultural land consolidation shall include complex arrangements with a view of creation of compact land plots and sustainable in the course of time and also rational use thereof. Purchase and trade, exchange of agricultural land, and other arrangements undertaken by natural and legal persons outside the consolidation project and without the participation of local self-government shall not be considered consolidation of agricultural land and shall not enjoy state incentives conceded in accordance with the legislation currently in force.</p>
<p>Strategies</p>	

<p><i>National Strategy on Agriculture and Rural Development for the period 2014-2020</i></p>	<p><i>Objective 1.1.</i> Modernization of the agrifood chain meet EU requirements on food safety and quality. Priority support is needed in modernization and restructuring of farms specialized in the production of traditional agricultural produce – fruits and vegetables, milk and meat. Agrifood processing businesses need to be supported by investing in modern technologies to meet EU food safety and quality requirements. Cooperation should be enhanced between agrifood primary producers and agribusiness downstream operators (processors, wholesalers, retailers) to increase income opportunities and provide access for Moldovan agrifood products to national and international markets.</p> <p><i>Objective 1.2</i> Facilitate access to capital, inputs, and output markets for farmers. Investment support programs presently in place offer important tools for improving farmers’ access to capital. Measures to focus on: efforts to create a functioning framework for collateral commodity transactions (guarantee fund, warehouse receipts); efforts to stimulate land market, thus turning land into a more liquid and attractive asset to banks; and efforts on reducing agricultural risks by both mitigating risks and insuring against them. An open regime for the import of seeds and seedlings, as well as for fertilizers and pesticides, would improve farmers’ access to modern technology and help them compete with EU farmers. Farmers’ integration into supply chains through facilitating linkages to downstream operators, including processors wholesalers and retailers, and producer associations could enable, among other things, improved access to post-harvest infrastructure and to facilitate their access to the market.</p> <p><i>Objective 1.3</i> First, it is necessary to support the restructuring and modernization of the education base to meet market demand. Second, agricultural research should strengthen its relationship with the private sector, including the possibility of creating public-private partnerships. Third, extension services should be upgraded to meet the needs of the agrifood business sector, cooperating with agricultural research and education. It is necessary to use synergies within the three areas.</p>
<p>Association</p>	
<p><i>Association Agreement between the European Union and the European Atomic Energy Community and their Member States, of the one part, and the Republic of Moldova, of the other part, 2014</i></p>	

<p><i>Law No. 276 on the principles of subsidising agricultural producers, 2016</i></p>	<p>This law is a part of a twinning project that aims at the development of congruence in the regulatory principles of the Republic of Moldova and the European Union. The law has the following objectives:</p> <ul style="list-style-type: none"> • modernization of the agrifood chain to meet European Union standards for food safety and quality requirements; • improvements in access for farmers to capital markets, means of production and finished products; • reforming the system of education, research and advisory services in the agricultural sector and the establishment of an integrated agricultural information system; • introduction of modern management practices in agricultural land and water resources; • introduction of production technologies and environment-friendly, environmental products, as well as the preservation of biodiversity; • climate change adaptation and mitigation for agricultural production; • investments in physical infrastructure and infrastructure services in rural areas; • increases in employment opportunities in non-agricultural sectors and increases in rural incomes; and • improvements in the participation of the local community in rural development. <p>The act provides for the establishment of a national fund for the development of agriculture and rural areas to finance investments mentioned in the objectives and support measures of the national strategy for the development of agriculture and rural areas. The fund will be formed from annual appropriations of the state budget as well as from other sources, including programmes of the European Commission.</p>
<p>NGOs</p>	
<p><i>The Law on non-governmental organizations Nr. 837 of 17 May 1996 (the Official Monitor of RM Nr. 6/54 of 23.01.1997)</i></p>	<p>This law is also worth highlighting given the role of NGOs in the development of the agriculture sector.</p>
<p>Inputs (seeds, fertilizer, artificial insemination)</p>	
<p><i>Decree No. 33 of the Ministry of Agriculture and Processing Industry validating the Regulation on licensing in the sphere of agricultural production and processing industry (1999)</i></p>	<p>This law establishes the modalities of issuing licences by the Ministry of Agriculture and the processing industry for the following activities: (a) in the sphere of agricultural production – production of planting material of fruits, berries and grapes; production and trade of seeds of vegetables, potatoes, field crops, melons and gourds; production and trade of biological material of animal origin; stockbreeding; manufacturing and trade of fertilizers; and (b) in the sphere of the processing industry – processing of tobacco, manufacturing and trade of liquors. The</p>

	<p>applicants must submit the following documentation: (a) application; (b) registration certificate of the economic entity; and (c) tax inspection certificate attesting the lack of arrears. Licences shall be issued for the period of three years except for the manufacturing, storage and wholesale trade of liquors, for which the duration of licence shall be one year.</p>
<p><i>Law No. 506-XIII on phytosanitary quarantine (2000)</i></p>	<p>establishes the principles of organization and carrying out phytosanitary quarantines on the national territory.</p>
<p><i>Law No. 915 on the protection of plant varieties (2000)</i></p>	<p>governs relations arising from the creation, use, registration and legal protection of plant varieties and breeders' rights; it shall apply to botanical genera and plant species the list of which shall be approved by the government. The scope of this law is to recognize and protect the rights of plant varieties certified by the grant of a variety patent.</p>
<p><i>Law No. 728-XIII on fruit growing (2002)</i></p>	<p>states that the Ministry of Agriculture and Food Industry shall be the authorized institution in the sphere of fruit growing. Once in ten years all the fruit and berry plantations shall be registered and recorded in the national register. Only certified fruit and berry planting material shall be authorized for trade and planting of fruit and berry varieties. Anti-erosion arrangements and pest control shall be carried out obligatorily by all producers of fruits and berries. Packaging, labelling, transport and storage of fruits, berries and planting material shall be carried out in compliance with standards.</p>
<p><i>Law No. 612-XIV on plant protection (2003)</i></p>	<p>establishes legal, economic and organizational grounds for plant protection.</p>
<p><i>Ministerial Decree No. 360 validating Regulation on import and export of seeds and planting material (2002)</i></p>	<p>establishes terms and conditions of import and export of seeds and planting material for the purpose of the protection of internal market against the introduction of uncertified seeds of poor biological quality, unregistered plant varieties and hybrids, and also for the protection of the national selectionists.</p>
<p><i>Law on phytosanitary preparations and fertilizers (2004)</i></p>	<p>provides creation stock of phytosanitary preparations and fertilizers and ensures the safe utilization thereof. Agricultural raw materials and foodstuffs treated with phytosanitary preparations must comply with hygienic standards corroborated by hygienic certificate. Agricultural raw materials and foodstuffs not complying with national standards shall be subject to confiscation and destruction. Imported agricultural raw materials and foodstuffs shall be obligatorily accompanied by phytosanitary and compliance certificates.</p>

<p><i>Order No. 231 of the Ministry of Agriculture and Food Industry validating the Regulation on utilization of phytosanitary means for the improvement (2003)</i></p>	<p>establishes sanitary and hygienic requirements for processes related to storage, transport and utilization of phytosanitary means for the improvement of soil fertility that shall be compulsory for all legal and natural persons using pesticides and fertilizers.</p>
<p><i>Ministerial Decree No. 390 validating Regulation on sale of seeds, planting material, fruit, berry and vine planting material (2004)</i></p>	<p>regulates trade of seeds and planting materials. It establishes that seeds and planting material must comply with standards. Exclusively seeds and planting material shall be authorized for sale that comply with the following criteria: (a) plant varieties and hybrids of agricultural species recorded in the National Register of Plants; (b) certified by the State Seed Inspection; (c) covered by quality certificate; (d) imported seeds and planting material in possession of international quality certificate and quarantine authorization issued by the chief of the State Phytosanitary Quarantine Inspectorate. Seeds and planting material destined for sale must be packaged and labelled in accordance with the standards currently in force.</p>
<p><i>Law No. 659-XIV on seeds (2005)</i></p>	<p>establishes legal, economic and organizational grounds for production, quality control, trade and use of seeds of agricultural crops and regulates relations between the state institutions, producers and consumers of seeds. The Ministry of Agriculture and Food, the State Committee for Testing of Plant Varieties and the State Seed Inspectorate shall be the authorized state institutions in the sphere of seed growing. Production and trade of seeds shall be licensed. Producers of seeds must have at their disposal agricultural land, personnel, equipment and storage facilities. Only seed species recorded in the National Register shall be authorized for seed growing, selection and production. Seeds put into circulation shall be labelled in accordance with the established standards. Seed stock shall be set up for the assistance to the agricultural producers in case of natural disaster. Seed quality control and the issuance of certificates shall be carried out by the State Seed Inspectorate.</p>
<p><i>Decree No. 195 of the Ministry of Agriculture and Food Industry validating the Regulation on State Seed Inspection, 2005</i></p>	<p>states that State Seed Inspectorate shall be the authorized state institution subordinated to the Ministry of Agriculture and Food Industry carrying out quality control of seeds and planting material of agricultural crops. The main tasks of State Seed Inspectorate shall be: (a) carrying out common policy in the sphere of seed growing and breeding and seed quality control; (b) elaboration and introduction of seed quality standards; (c) creation of quality seed banks; (d) testing of new seeds and plant varieties;</p>

	(e) registration of seeds and plant varieties; (f) inspection of sown areas destined for seed growing; and (g) issuance of international import and export certificates for seeds and planting materials.
<i>Order No. 198 of the Ministry of Agriculture and Food validating Technical rules and regulations for production, testing, certification and trade of planting material of fruit species (2015)</i>	contains the totality of compulsory rules and technical conditions for production, virological testing, quality certification and trade of planting material of fruit species. Technical rules and regulations shall have the scope: (a) to enforce legislation on plant production; (b) to supply the producers of fruits and berries with sound planting material; (c) to conserve precious characteristics of species; and (d) to ensure compliance of planting material with national and international standards. Technical rules and regulations shall establish: (a) common requirements for all the producers of seeds and planting material of fruit species; (b) technology for the production and propagation of sound planting material; (c) categories of planting material; (d) virological testing; and (e) certification.
Cooperatives	
<i>Civil Code (2005)</i>	Part 3 contains information about cooperatives. It should be noted that the Civil Code of the Republic of Moldova refers not to cooperative principles but to corporate principles: “A cooperative is a voluntary association of individuals and legal entities organized on corporate principles in order to protect and ensure the joint actions of its members by economic and other legitimate interests.” Article 174 contains the concept of the “authorized capital” of cooperatives: “The cooperative has a non-permanent share capital, which is the sum of all the shares of members of the cooperative provided for in its charter.” In civil codes of other post-Soviet countries, “authorized capital” is not mentioned. Another distinguishing feature: special requirements for new members. Article 176 stipulates that the cooperative is open for new members to join but that the charter of the cooperative may establish special conditions for admissions of new members. Transactions with non-members: The Republic of Moldova imposes a cap of 50 percent of sales on transactions with non-members. If this cap is exceeded, the cooperative may lose its status and all associated preferences. The Moldova Tax Code maintains an exemption of agricultural service cooperatives from VAT on transactions with members (2013, Part III, Ch. 4, art. 103(1): 22).
<i>Law 1252 on consumer cooperation (2000)</i>	
<i>Law 73 on enterprise cooperatives (2001)</i>	

<i>Law 1007 on production cooperatives (2002)</i>	Agricultural production cooperatives should have no less than 50 percent of its annual production output constituted by agricultural commodities.
<i>Law of Production Cooperatives (2008)</i>	As part of the goal of maximizing member benefits, some countries explicitly include a provision that guarantees preferential prices to members. <i>The Republic of Moldova</i> includes a provision that prohibits “granting any preferential rights to cooperative members.”
<i>Ministerial Decree No. 977 on registration of peasant farms (2001)</i>	regulates keeping of the register of peasant farms and the modalities of their registration. The scope of the register shall be to collect and store data and information related to the functioning of peasant farms.
<i>Ministerial Decree No. 23 validating Regulation on registration of agricultural land classified as loan capital of agricultural cooperatives (2006)</i>	regulates registration of agricultural land of members of a cooperative classified as loan capital and other land owned by members of the cooperative.
Food Safety	
<i>Law No. 411-XIII on protection of public health (1996).</i>	This law establishes the principles of protection of public health and the duties of governmental bodies in this sphere.
<i>Law No. 652-XIV on certification (1999)</i>	establishes legal grounds for certification of produce, equipment, processes and technologies for ensuring the protection of human life, health and the natural environment. It also determines the rights and duties of the certification process. National compliance marks shall be used for compulsory and voluntary certification within the national certification system. Suppliers of produce shall have the following duties: (a) certify produce included in the national list of products subject to certification; and (b) label certified produce with the national compliance mark.
<i>Decree No. 5 of the Ministry of Public Health on improving hygienic certification of foodstuffs (2006)</i>	lists the foodstuffs and regulates their mandatory certification.
<i>Law No. 590 on standardization (2001)</i>	establishes legal, social, economic and organizational grounds for standardization. Standards shall be classified as: (a) national standards; (b) international and intergovernmental standards; (c) corporate standards; (d) technical conditions; (e) rules and regulations in the sphere of standardization, metrology and certification; (f) classifiers of technical and economic information;

	and (g) technical regulations, including sanitary and hygienic regulations, applicable to the spheres of ecology and energy. Law No. 420-XVI on technical regulations (2007) regulates the content, elaboration, publication and application of technical rules and regulations to protect the domestic market from commodities that do not conform to standards.
<i>Ministerial Decree No. 1469 validating the list of produce subject to compulsory certification (2004)</i>	establishes that compliance of produce with the national standards shall be attested by compliance certificates issued by the authorized certification body or by a compliance declaration issued by the producer after compulsory compliance assessment of the produce.
<i>Veterinary and Sanitary Regulation for processing and trade of fish products (2004)</i>	
<i>Order No. 262 of the Ministry of Agriculture and Food Industry validating food safety standards for fish products (2005)</i>	sets forth sanitary and veterinary requirements for the processing and trade of fish products destined for human consumption.
<i>Decree No. 06.10.3.67 of the Ministry of Public Health and Welfare validating sanitary and epidemiological norms and requirements for materials used in food processing industry (2005)</i>	The decree is about materials contacting with foodstuffs, including food processing equipment and machinery and packaging and labelling materials. These materials shall have a high level of physical and chemical resistance; shall not alter eating qualities and nutritional value of foodstuffs during processing, storage and transportation; shall not confer toxicity to foodstuffs; and shall ensure the protection of foodstuffs against contamination during processing, storage and transport. Packaging materials and food processing equipment shall be clean and disinfected. Recycled paper shall be prohibited for use as packaging material. Beeswax shall be authorized for use as cover for cheese. Re-use of disposable packages shall be prohibited.
<i>Law No. 57-XVI on vine and wine (2006)</i>	regulates viticulture and wine-making, issues of vine planting material and production of table wine, technical vine and wine-based products. An important amendment was made in 2007 that modified Article 31 – now, finances of a special fund shall be used for partial subsidies to natural and legal persons that have planted vineries on a total area of 5 ha or more. It specifies that the aforesaid subsidies shall be applicable exclusively to planting material registered in the official register of plant varieties .
<i>Ministerial Decree No. 911 validating the Regulation</i>	establishes that beginning from 1 July 2008, VAT shall not be applicable to the import and trade of the following grains and

<i>on import and trade of grains and derivates thereof (2007)</i>	cereals and derivates thereof: (a) wheat and meslin; (b) rye; (c) barley; (d) maize; (e) wheat flour; and (f) rye flour. Quality indices of imported grains, cereals and derivates thereof shall comply with quality requirements set by the national legislation. Quality control shall be carried out by accredited laboratories and shall be confirmed by quality certificate issued by the State Inspection on Cereals and Baking Industry.
<i>Ministerial Decree No. 51 validating the Regulation on the National Agency on Food Safety (2013)</i>	validates the regulation on the National Agency on Food Safety , establishing its principal functions, rights and duties in the sphere of food safety, and also the organization of its activity. The main functions of the agency shall include: (a) safety of foodstuffs; (b) traceability; (c) risk analysis; (d) biological, chemical and physical safety of foodstuffs either of animal or of non-animal origin; (e) supervision over processing of foodstuffs and hygienic requirements at food processing enterprises; (f) supervision and control over genetically modified organisms; and (g) registration of entrepreneurs of the food sector.
Food quality	
<i>Law No. 1453-XII on protection of consumers' rights (1993)</i>	This law, one of the fundamental laws regulating food quality, establishes that consumers shall be provided with potable water according to the established standards and shall have access to reliable information on the compliance of potable water with current standards. Labels of foodstuffs shall bear the inscription of the manufacture and expiration dates, ingredients and composition. Foodstuffs shall bear also the inscription of the deadline for vending thereof. Labels of agricultural commodities must contain information on the presence therein of hazardous substances within the established limits.
<i>Ministerial Decree No. 1297 on protection of consumers (2002)</i>	further develops the previous law. It states that the supply of foodstuffs, including import, to the internal market shall be carried out exclusively in the presence of a compliance certificate and hygienic, veterinary and/or phytosanitary certificate (in case of necessity) issued by the authorized institution of the Republic of Moldova. Foodstuffs for personal and family consumption are exempt from this procedure. The trade of foodstuffs, except for fresh vegetables and fruits, shall be carried out by economic entities registered in accordance with the national legislation. The import of animals and products of animal origin shall be authorized from member states of the International Office of Epizootics. The trade of foodstuffs without production and expiry dates specified on the label shall be prohibited.
<i>Ministerial Decree No. 883 regarding arrangements for the protection of consumers (2006)</i>	This decree establishes that the import of meat-based products shall be authorized exclusively for further processing for the purpose of manufacturing of meat-based foodstuffs in accordance with contracts concluded with the Ministry of Agriculture and

	Food. The import of unpackaged and unlabelled meat and poultry products without information on producers and importers, frozen meat-based products, refrigerated foods not conforming to standards, and products with an expiry date less than two-thirds of the period established by the producer shall be prohibited.
<i>Law No. 78-XV on foodstuffs (2004)</i>	establishes the legal framework of the process of foodstuff manufacturing, processing and distribution, regulates the basic conditions concerning the circulation of these products and inclusively provides the safety of this process, in order to protect the population's health and consumers' interests in foodstuffs and to promote an equitable practice in the foodstuff trade. This law also concerns some packaging issues.
<i>Decree No. 06.10.3.67 of the Ministry of Public Health and Social Protection and of the Chief Sanitary Inspector validating the Sanitary and epidemiological rules and regulations on the use of packaging and labelling materials in food industry (2005).</i>	A more substantial regulation for safe packaging.
Geographical Indications and Trademarks	
<i>Order No. 131 of the State Intellectual Property Agency (AGEPI) regarding application of the Law No. 588-XIII on trademarks and geographical appellations (2003)</i>	ensures the legal protection of the place of origin of commodities.
<i>Law No.66-XVI on protection of geographical indications, names of place of origin and guaranteed traditional products (2008)</i>	This law contains provisions related to the registration, legal protection and use of geographical indications, names of place of origin and guaranteed traditional products. The State Agency on Intellectual Property (AGEPI) shall be the authorized state institution in the sphere of legal protection of geographical indications, names of place of origin and guaranteed traditional products in the national territory. Legal protection shall be carried out in accordance with the registration of geographical indications, names of place of origin and guaranteed traditional products by the agency.
<i>Ministerial Decree No. 610 validating the Regulation on submittal, expertise and</i>	This ministerial decree establishes administrative procedures for the submittal, expertise and registration of geographical indications, denominations of the places of origin of commodities

<p><i>registration of geographic indications, denominations of the places of origin of commodities and guaranteed traditional products</i> (2010)</p>	<p>and guaranteed traditional products. The application shall be submitted to the State Agency on Intellectual Property (AGEPI) by the applicant or the applicant's legal representative. Since 2012, the agreement between the European Union and the Republic of Moldova on the protection of geographical indications of agricultural products is in force. This agreement applies to the recognition and protection of geographical indications that originate in the territories of the contracting parties. The agreement concerns both established geographical indications and the addition of new geographical indications.</p>
<p><i>Law No. 38-XVI On protection of trademarks</i> (2008)</p>	<p>regulates relations originating in the process of registration, legal protection and use of trademarks.</p>
<p><i>Ministerial Decree No. 488 validating the Regulation on registration of trademarks</i> (2009)</p>	<p>establishes administrative procedures for submittal, expertise and registration of trademarks. According to it, the application shall be submitted to the State Agency on Intellectual Property (AGEPI) by the applicant or the applicant's legal representative. The application shall be filled in the Moldovan language. Each single application must regard a single trademark. The application must contain the graphic design of the trademark subject to registration and documentation attesting the right of use of the place of origin of commodities.</p>
<p>Animal health (domestic, transboundary diseases)</p>	
<p><i>Order No. 83 of the Ministry of Agriculture and Processing Industry validating Veterinary and Sanitary Regulation</i> (2000)</p>	<p>regards certification of enterprises subject to supervision by the State Veterinary and Sanitary Service and authorization for export of production of animal origin. Enterprises subject to supervision by the State Veterinary and Sanitary Service shall be authorized to operate only if certified thereby. Exporters of produce of animal origin must submit to the Chief Veterinary Inspectorate: (a) application; and (b) copies of registration certificate, taxpayer identification number and ownership certificate or lease contract for production facilities.</p>
<p><i>Law No. 755-XV on biological safety</i> (2001)</p>	<p>regulates activities related to the extraction, testing, production, use and trade of genetically modified organisms (GMOs) with the use of modern biotechnology. Human organisms shall not be the object of genetic modification. Provisions of this law shall be applicable to: (a) genetically modified microorganisms, animals and plants; (b) the deliberate release into the environment of GMOs; (c) marketing of GMOs; (d) research; (e) import and export of GMOs; and (e) storage, burial and destruction of GMOs. GMOs shall be classified in four categories in accordance with the potential risk thereof for environmental and human health. Any natural or legal person must submit written notification to the National Commission on GMOs before the release of GMOs into</p>

	the environment for testing, research or development thereof. Authorization of the National Commission shall be required for the aforesaid activities.
<i>Law No. 371-XIII on pedigree stockbreeding (2003)</i>	establishes legal and economic grounds for pedigree stockbreeding and regulates relations between the state and the owners and users of pedigree resources. The scope of the law shall be to raise the output of high-quality pedigree stock. Pedigree stock and productions thereof such as semen, embryos, ovicells, eggs, spawn, etc., shall be considered animal pedigree resources. State certification of pedigree stock farms shall be carried out by the Ministry of Agriculture and Food Industry once in five years and the registration thereof shall be carried out in the presence of the licence for pedigree stockbreeding. The main duties of the owners of pedigree resources shall be: (a) to obtain licence for pedigree stockbreeding; (b) to create appropriate conditions for keeping, feeding and care of pedigree stock; (c) to register pedigree stock; (d) to carry out quality control; (e) to use pedigree semen; and (e) to carry out immunogenetic control of origin of pedigree stock. The State Agricultural Inspectorate carries out state supervision in the sphere of selection and animal reproduction.
<i>Order No. 175 of the Ministry of Agriculture and Food validating the Regulation on approbation of selection achievements in animal husbandry (2003)</i>	establishes that the purpose of approbation shall be validation of common methodical principles for the assessment of pedigree and productive qualities of the existing and newly selected breeds, races, strains and crossbreeds.
<i>Order No. 225 of the Ministry of Agriculture and Food validating the Regulation on the state certification of pedigree stockbreeding farms (2004)</i>	establishes that part of the state certification of pedigree stockbreeding farms shall be verification of the compliance of reproductive and genetic qualities with breed standards, genetic improvement of herd, rational use of pedigree genetic resources and raising efficiency of selection. Owners of farms not registered as pedigree stock farms but aspiring to such status shall submit application to the Ministry of Agriculture and Food requesting admission to certification procedure. Pedigree stock farms that have passed certification shall be issued a breed authenticity certificate granting the right to carry out licensed activity related to production, storage and trade of animal genetic resources.
<i>Law No. 412-XIV on stockbreeding (2005)</i>	establishes legal and economic grounds for stockbreeding and regulates relations between the state and stockowners. Any legal or natural person can undertake stockbreeding activity on condition of meeting state requirements. Numbers of head of livestock population shall be limited only by the availability of

	animal feed, waterbodies and negative environmental impact caused by manure runoff and animal waste.
<i>Law No. 115-XVI on ecologic agricultural production (2005)</i>	regulates ecologic agricultural production without utilization of chemical and synthetic means, and also trade of plant and animal production, including: (a) primary resources; (b) processed commodities for human consumption containing one or more ingredients of plant or animal origin; and (c) feed. Ecologic agricultural production shall be based on the following principles: (a) sustainable use of agro-ecosystems; (b) use of eco-friendly processes; (c) selection of plant varieties and stockbreeding methods complying with soil productivity; (d) use of modern technologies; and (e) increase of soil fertility. Methods of ecologic agricultural production shall include: (a) prohibition of the use of fertilizers, food additives and disinfection means; (b) use of elite seeds and planting materials cultivated by methods of ecologic agricultural production; (c) prohibition of the use of GMOs except for veterinary preparations and drugs. Ecologic agricultural produce shall be labelled in accordance with <i>the legislation on ecolabelling</i> . Inspection and certification of ecologic agricultural production shall be carried out by the competent inspection and certification authority.
<i>Law No. 231-XVI on identification and registration of animals (2006)</i>	establishes basic principles for identification and registration of animals. It shall be applicable to cattle, sheep, goats, swine, and equine animals, except for wild animals. Identification of animals shall be performed by specialists of veterinary service within the Animal Identification and Traceability System. Identification and traceability of animals shall include: (a) identification mark; (b) registration certificate; (c) individual animal record; and (d) electronic data storage equipment. Animals shall be identified in the following manner: (a) two ear marks for cattle; (b) one ear mark for sheep, goats and swine; and (c) transponder for equine animals and donkeys. Owners shall inform the state veterinary service within seven days of the birth, purchase (including import), expropriation (including export), death, loss or slaughtering of animals. Animals shall be identified and registered within 20 days from the date of birth.
<i>Order No. 100 of the Ministry of Agriculture and Processing Industry validating Regulation on sanitary and veterinary inspection (2006)</i>	establishes that the scope of sanitary and veterinary inspections shall be the protection of animal health; the protection of reproduction materials of animal origin; the safety of foodstuffs of animal origin at all stages of processing, storage, transportation and trade; hygienic control of animal feed; and environmental protection in the process of animal breeding and in the food-processing industry. The state veterinary inspectors shall carry out

	<p>supervision over: (a) the exact observance of veterinary and sanitary requirements and standards; (b) realization within the established deadline of anti-epizootic arrangements and protection of territory against the introduction of infectious animal diseases; (c) sanitary and veterinary situation at meat-processing enterprises and slaughterhouses; (d) the use of drugs in stockbreeding and veterinary medicine. The further legislation <i>No. 221-XVI on veterinary and sanitary activities</i> (2007) sets forth veterinary and sanitary rules and regulations, including the rights and duties of the state and of natural and legal persons in the manufacture, processing, storage, transportation and trade of live animals and products of animal origin.</p>
<p><i>Ministerial Decree No. 1203 on import and export of pedigree resources</i> (2003)</p>	<p>establishes the terms and conditions of import and export of pedigree resources for the purpose of the protection of the internal market against poor-quality genetic resources and also for the protection of the intellectual property rights of the national selectionists. Only elite-class pedigree resources listed in the national register of breeds shall be authorized for import and export. Pedigree resources shall be subject to compulsory inspection by the State Pedigree Inspectorate. Import of pedigree resources shall be carried out in the presence of: (a) licence; (b) contract; (c) certificate; and (d) authorization issued by the Ministry of Agriculture and Food.</p>
<p><i>Ministerial Decree No. 1243 validating Sanitary and Veterinary Regulation on supervision over trade of livestock and commodities of animal origin</i> (2007)</p>	<p>establishes the modalities of carrying out control over trade of livestock and commodities of animal origin. It shall not be applicable to transportation of animals. All the animals shall be subject to veterinary inspection upon their arrival to the destination station. Sanitary and veterinary inspection shall ascertain compliance of processing, storage, trade and transportation of commodities of animal origin with sanitary and veterinary requirements currently in force.</p>
<p><i>Ministerial Decree No. 1099 validating Veterinary and Sanitary Regulation on inspection of imported animals</i> (2008)</p>	<p>establishes veterinary and sanitary requirements that shall regulate veterinary and sanitary inspection of imported animals. It shall not be applicable to domestic animals. Import of animals shall be prohibited in the following cases: (a) The origin of animals is from territories and areas with the presence of animal diseases; (b) The animals are ill or suspected to be infected with infectious animal diseases; (c) The exporter does not comply with the veterinary and sanitary requirements of the Republic of Moldova; and (d) Veterinary and sanitary accompanying documentation does not comply with veterinary and sanitary requirements.</p>



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