

EXTERNAL FACTORS' IMPACT OVER THE AGRICULTURAL SECTOR OF THE REPUBLIC OF MOLDOVA

Victor MOROZ, Anatolie IGNAT

National Institute for Economic Research, 45 Ion Creanga Str., MD 2064, Chisinau, Republic of Moldova, Phone: +37369 148 808, Fax: + 37322 743 794, E-mails: vmoroz27@gmail.com, anatolie.ignat@gmail.com.

Corresponding author: vmoroz27@gmail.com

Abstract

Over the past ten years, Moldova's economy has gone through significant structural changes. The main drivers of growth have been retail and wholesale trade and other services, including the financial sector. The migrant's remittances have become one of major source of capital formation. The article examines how the impact of external factors has affected productivity and structure of the agricultural sector in the Republic of Moldova. To capture a comprehensive picture of the rural transformation this study integrates analysis into the different quantitative and qualitative surveys during last ten years. In small transition economies the diagnosis of the structural transformations is based on scarce data and incomplete information. In order to investigate the actual state of agri-food sector were used specific methods and techniques: statistical and economic analysis of macro economic indicators, semi-structured interviews of key stakeholders, analysis of the impact of public policies on the agricultural sector. The main conclusion of this paper is that the agricultural sector has undergone major structural changes, including fragmentation of land, rural depopulation, degradation of irrigation systems, and rapidly changing trade conditions in traditional markets. Public and private policies should exploit innovations and technology transfers, as well as improving professional skills of the labour force employed in agriculture.

Key words: agriculture, agri-food sector, agri-food trade, agricultural policies

INTRODUCTION

Over the past two decades, Moldova's economy has gone through significant structural changes. The service sector has been the largest contributor to the economic growth, while tradable sectors, namely agriculture and manufacturing, have stagnated. Moldova's recent macroeconomic performance has been volatile, reflecting exposure to global economic and climatic risks.

The agricultural sector is characterized by large exposures, which often, but not exclusively, comes from climate phenomena. There are different types of risks faced by agriculture in several European countries, including the Republic of Moldova.

Trade policies promoted by the Republic of Moldova are mostly oriented towards product diversification, knowledge transfer and promotion of new competitive goods with high added value for domestic and foreign markets. The current situation in the

international trade with agri-food products placed the Republic of Moldova in a difficult position [2].

In this context, the paper presents an analysis of agri-food sector and external trade, impact of external factors over the national economy, opportunities for the sustainable development in rural areas and possible solutions to increase resilience to agro-food foreign trade shocks.

MATERIALS AND METHODS

Given the recent challenges to the development of the foreign food trade, the following research methods were used: economic analysis of macro economic indicators, export analysis of main groups of agri-food products, food security analysis, and analysis of the impact of public policies on the agri-food sector.

The main sources of primary information for this paper were used publications and databases of the National Bureau of Statistics

of Moldova, the official site of National Agency for Payments and Interventions (AIPA), Ministry of Agriculture and Food Industry, Ministry of Finance, UN Comtrade data base. As a secondary source of information a number of articles and studies prepared by local and foreign experts were used.

RESULTS AND DISCUSSIONS

Over the past ten years, Moldova's economy has gone through significant structural changes. The service sector has been the largest contributor to economic growth, and

tradable sectors, namely agriculture and manufacturing, have stagnated.

According to data from 2013 the share of the industry sector in the GDP was of about 14%. The contribution of agriculture was of about 12%, and service sector contributed with about 59%.

The main drivers of growth have been retail and wholesale trade and other services, including the financial sector. The transport and communications sector has also been strong. Agriculture and industry as share of GDP have been on a steady decline, falling from 56 percent in 1995 to about 13.8 percent in 2013 (see figure 1).

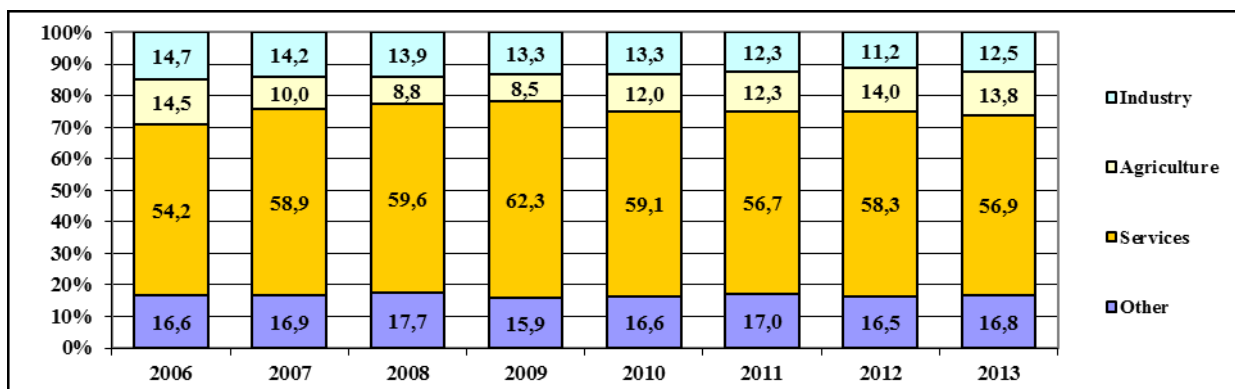


Fig. 1. Structure of the GDP by sectors, 2006-2013, %

Source: National Bureau of Statistics, 2014 [6]

In response to the vulnerabilities inherent in the remittance-driven model, the Government of Moldova has made a committed decision to pursue a strategy of export-oriented economic growth.

The national development strategy, Moldova 2020, is centered around the need to transition to a dynamic economic model based on investment and the development of goods- and services-exporting industries. Putting this model in place requires substantial increases in domestic investment and FDI, and enhancing knowledge and innovation, in order to increase efficiency and competitiveness.

Primary agriculture

Favourable climate and high quality soils historically have determined Moldova's agricultural specialization, particularly in the production of high value crops like fruits and vegetables. Agriculture contributed with almost 12.5% of the country GDP in the year 2013. About 29% of the active population of

the country was engaged in agriculture in the year 2013.

A great part of the Moldovan agricultural sector is composed of two major sub-sectors: corporate sector comprising large companies and the individual sector that includes peasant farms and household land in private property. On the one hand, small farms, especially subsistence and semi-subsistence farms generate a limited surplus of high value-added crops (fruits, nuts, grapes, vegetables, potatoes) that are mostly sold in open air agricultural markets [4].

In the same time large scale agricultural companies are specialized in the production of low value-added crops (such as cereals, oilseeds, sugar beet), and employ limited labour force due to the high level of mechanized agricultural operations. This specialization has been driven by a number of factors such as the relatively low production cost of these crops, the availability of

agricultural machinery allowing the rapid cultivation on large areas, relatively simple and cheap post-harvest facilities, as well as assured markets for these commodities.

General objective of the agri-food sector of the Republic of Moldova is formulated as the following: Increase competitiveness of the agri-food sector through modernization and market integration. Specific objectives are related to: modernization of agri-food chain in order to meet EU requirements on food safety and quality; facilitation the access to capital, inputs and output markets for farmers; reform of education, scientific research and rural extension services in the agri-food sector, and creation of integrated agriculture information system [1].

Input production

At the national scale just a few companies provide supply services for agricultural farms. The most important one is the Moldagrotehnica SA that offers a large range of ploughs, seeders, cultivators and heavy disc harrows. In recent years, the company established close cooperation with foreign companies such as: Dutch AP MACHINEBOUW, Slovenia - SIP, Germany - WIRGEN and Kijner Import-Export and Italian-MAURA.

Another supplier of agricultural equipment is the Institute of Agricultural Technique Institute (ITA) "Mecagro". The Institute elaborates technical document and policies for the development of mechanized agricultural sector and efficient use of technical means, performs scientific research and technological

designs, and develops technologies and technical means for the agricultural sector, for the production and use of the renewable energy.

Input use

Moldovan agricultural production is entirely dependent on imported agrochemicals products, seeds and fuel and this has a strong impact on the competitiveness of food products. Primary inputs such as fuel, fertilizer and chemicals for plant protection necessary for agricultural production are all imported. This dependence makes Moldovan agriculture subject to international price volatility.

Insufficient access to high quality inputs remains a constraint for competitiveness in a number of sub-sectors. Manufacturers of high value crops such as fruits and vegetables, which rely mainly on imported seeds and seedlings, appear to be most affected by lengthy and costly procedures for registration of varieties. The test requirements and registration that govern imports of seeds and seedlings are probably the most important constraints and are currently nominated by stakeholders as an obstacle for production of more competitive crop varieties due to the costs involved and delay of access. This is also an obstacle to access to inputs for the agri-food processors.

After a strong decline of mineral fertilizers use during 90s the situation was slightly improved. Thus comparing with the year 2005 the quantity of mineral fertilizers use increased more than twice in 2013 (see table 1).

Table 1. Fertilizers' use in the Republic of Moldova 2006-2013 and its ratio 2013 vs. 2006, thousand tones, %

	2006	2007	2008	2009	2010	2011	2012	2013	2013/2006, %
Pure nutrients use. total	15.4	20.1	22.7	17.0	20.1	23.6	34.7	44.8	290.9
<i>N. total</i>	12.8	17.1	19.9	14.6	16.4	19.2	26.9	34.0	265.6
<i>P₂O₅. total</i>	1.9	2.0	1.7	1.6	2.4	2.9	5.6	8.3	436.8
<i>K₂O. total</i>	0.7	1.0	1.1	0.8	1.3	1.5	2.2	2.5	357.1

Source: Statistical Yearbook of the Republic of Moldova. 2014 [6]

However level of agricultural land fertilization is much lower comparing with EU and other neighbouring countries. Utilization of organic fertilizers demonstrates the same tendencies.

Food industry

Lack of horizontal and vertical coordination

of supply chains is another reason underlying the low competitiveness of the agricultural sector. The reasons causing nowadays the low prices for products include poor development of wholesale markets, low power of negotiation, changing product quality, lack of

distribution channels, poor infrastructure and limited access to foreign markets. Value chain deficiencies lead to large discrepancies between farm gate price and the consumer, resulting in low-income, low investment and persistent low quality at the farm level. The decline in the food industry is another

key factor underlying the low competitiveness of the agri-food sector. The share of food and processed beverages accounts for about 43% of the total industrial production in the Republic of Moldova, although this share was of 52% in 2004.

Table 2. Value added in agriculture and selected food industries, 2007-2012, millions MDL

Code		2007	2008	2009	2010	2011	2012	2013
A, B	Agriculture, hunting, silviculture and pisciculture	5,333.9	5,544.0	5,134.5	8,657.4	10,095.2	9,896.2	12,383.1
D15	Manufacture of food products and beverages	2,381.5	2,768.8	2,516.0	3,086.0	3,682.9	3,974.3	4,315.3
D15.1	Production, processing and preserving of meat and meat products	240.1	293.2	273.8	300.5	393.1	472.0	505.0
D15.3	Processing and preserving of fruits and vegetables	259.5	226.4	201.9	245.1	427.4	370.3	420.2
D15.5	Manufacture of dairy products	227.5	269.0	303.0	344.4	380.9	429.9	481.8

Sources: National Bureau of Statistics of the Republic of Moldova, 2014 [6]

Prices and production costs for the most important processed food products are not presented in the official statistics of the Republic of Moldova. The available generalized data from national accounts confirm the conclusion that agri-food sector produces mostly raw material and semi-processed products.

The ratio between the value added in agriculture and processing industry shows that during the recent years the value added in agriculture is higher than those created in the food processing industry more than of 2.4 times on average for the period of 2007-2012 (see figure 2).

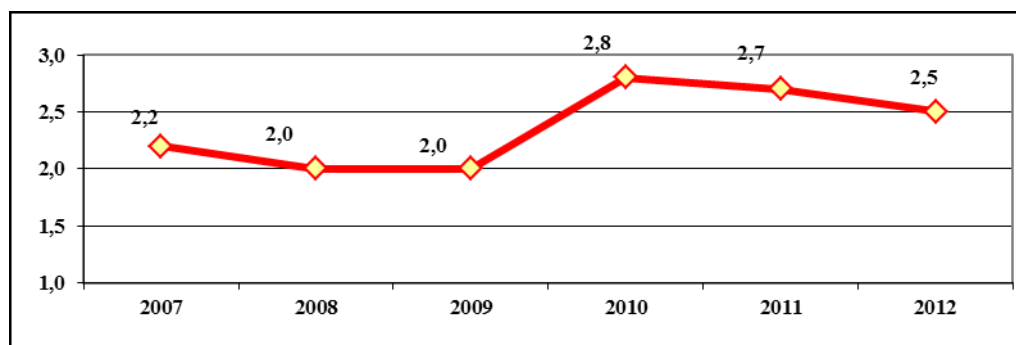


Fig. 2. Ratio between the value added in agriculture and processing industry, 2007-2012

Sources: elaborated by authors based on data from National Accounts of the National Bureau of Statistics, 2014 [6]

At the same time food processing industry has a higher productivity comparing with the agricultural production.

Consumption

At the national level Republic of Moldova is food secure. It produces its main food products, exports its surplus food, and imports what it needs to meet its food requirements. Food security indicators prove that in the Republic of Moldova the level of per capita food consumption have stabilized during the

last years. However there are some evident changes in consumption patterns. Thus in the period of 2006-2013 the consumption of cereals and bread products has been steadily reduced by about 20%. Consumption of potatoes and vegetables has been reduce even more significantly with about 40% and 35 % respectively. In the same time consumption of grapes increased twice, while consumption of meat increased with about 21% (see table 3).

Table 3. Human consumption per capita and its variation 2013 vs. 2006, 2006-2013, kg, %,

	2006	2007	2008	2009	2010	2011	2012	2013	2013/2006, %
Cereals	173.5	146.7	160	152	152.4	148.6	141.0	137.4	79.2
Sunflower	1.6	0.7	0.7	0.7	0.8	0.8	1.0	1.5	93.8
Potatoes	87.6	58.8	58.0	59.3	56.7	59.8	52.3	52.7	60.2
Vegetables	131.9	75.8	99.1	106.3	109.6	114.6	78.2	85.9	65.1
Fruits	35.8	24.1	36.7	30.5	34.3	34.6	34.3	35.1	98.0
Grapes	3.0	3.8	4.4	4.1	6.4	8.1	6.4	6.4	213.3
Meat	38.3	36.0	32.3	29.5	35.6	37.9	39.7	46.2	120.6
Eggs	167.5	177.1	141.1	161.7	184.9	189.6	155.7	165.0	98.5
Milk and milk products	177.3	175.4	155.0	168.9	175.3	170.2	170.8	166.0	93.6

Sources: National Bureau of Statistics of the Republic of Moldova, 2014 [7]

Another aspect of the consumption patterns is reflected by the level of daily calorie intake that shows an increasing trend since 2008 after a decline during the period of 2006-

2007. There are also some other interesting trends that show a proximation of daily calorie intakes in rural and urban areas (see figure 3).

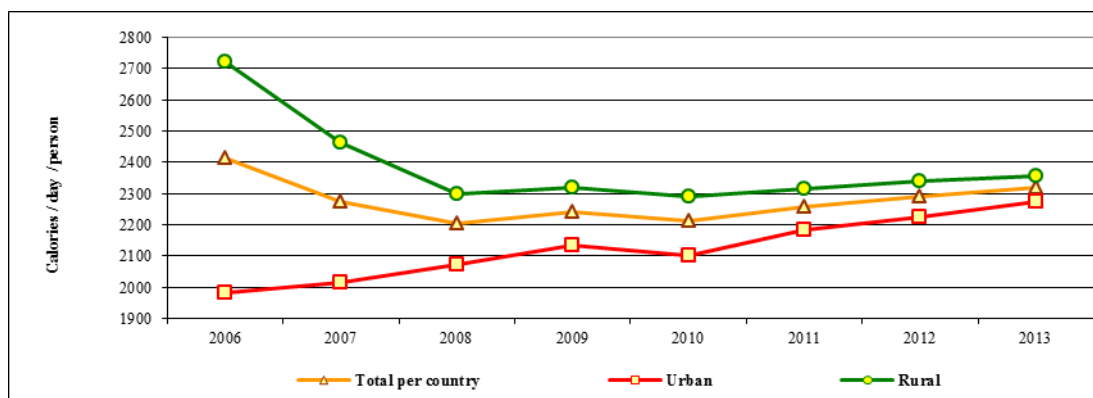


Fig. 3. Average calorie intake in the Republic of Moldova in rural and urban areas, calories / day / person, 2006-2013

Source: National Bureau of Statistics of the Republic of Moldova, 2014 [7]

The nowadays food security challenges in the Republic of Moldova have two major dimensions. The first dimension seeks to maintain and increase the country's ability to face the national food demands through assurance of the internal food production, import of the food products that can not be produced efficiently in the country, and exports of products that have a comparative advantage.

The second dimension is related to the reduction of the increasing inequalities and expansion of the poverty among the majority of the households of the Republic of Moldova that is manifested by inadequate and unstable food supplies, lack of purchasing power, weak institutional support networks, weak food emergency management systems and unemployment.

In addition to natural risks, commercial risks largely influence the level of food security in

the Republic of Moldova. The evolution of prices in Moldova follows the trends of international food prices, agricultural products and resources for agricultural production in relative terms. Like other small countries with low income, Republic of Moldova faces additional challenges when making an effort to refocus and modernize the sector of primary production and processing industry in order to supply the local market with basic food products.

The level of food self-sufficiency of the country is rather high, however in several years it decreases to a critical degree due to severe droughts (see table 4).

Agri food export

The Republic of Moldova is part of a range of foreign trade agreements that creates opportunities for commercial relations with 93 countries. The main trade partners for export of major groups of agri-food products are

Russia, Ukraine, Belarus, Romania, Italy, France and Spain. The evolution of agri-food exports during the last years has a stable increasing trend. However, the recent

sanctions imposed by the Russian authorities could affect negatively country's agri-food export, economic stability and food security.

Table 4. Self-sufficiency rate (%), 2006-2012

	2006	2007	2008	2009	2010	2011	2012	2013
Cereals	99.2	70.6	143.4	105.0	117.8	115.6	60.8	150.3
Sunflower	145.0	65.5	178.0	121.4	156.6	195.9	143.8	326.3
Potatoes	91.7	67.0	93.4	89.4	100.4	116.2	66.6	89.8
Vegetables	103.5	84.8	110.1	98.6	104.2	100.5	93.3	102.4
Fruits	195.8	227.0	222.2	213.9	207.7	237.7	245.2	264.2
Grapes	102.4	106.8	102.6	104.3	104.6	102.8	103.9	103.7
Meat	67.8	84.5	67.8	86.7	86.0	86.1	81.5	69.8
Eggs	112.7	101.6	100.0	100.3	98.8	95.4	102.2	98.0
Milk and milk products	97.5	95.0	97.1	95.0	94.1	92.0	84.7	86.8

Sources: National Bureau of Statistics of the Republic of Moldova, 2014 [7]

The state policy in the sphere of foreign trade is carried out through the customs tariff (the application of import tariffs) and non-tariff regulation (in particular, through quotas and licensing), also through the introduction of special duties (special, antidumping and countervailing) for foreign trade activity in accordance with the legal framework and international treaties, signed by the Republic of Moldova.

The state is ensuring that installed protective measures, restrictions and prohibitions in the

field of foreign trade activities correspond to the reasons behind the need for their introduction. The preference is given to those protective measures, restrictions and prohibitions that cause minimal damage to the implementation of this action and do not contravene to international standards.

The most important export groups of products for Moldova agricultural sector are "Edible fruits and nuts", "Alcoholic and non-alcoholic beverages", "Oil seeds" and "Vegetable oil" (see figure 4).

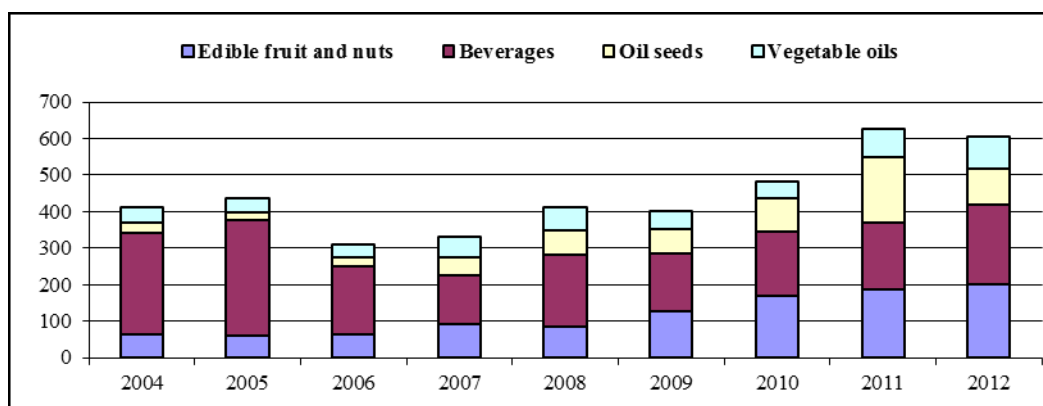


Fig. 4. Most important exported products in the Republic of Moldova 2004-2012, millions USD
 Sources: National Bureau of Statistics, 2014 [7]

The main export destination countries for these groups of products are Russia, Ukraine, Belarus, Romania, Italy, France and Spain. Out of these four major groups of products only two, namely "Oil seeds" and "Vegetable oil" were not included in the restriction list imposed by Russian authorities. While external trade with other two groups of products was seriously affected by these

restrictions. This leads to the question to what extent these restrictions threaten the stability of the Moldovan economy. Despite a drop in exports to Russia by almost one quarter during the first half of the year 2014 (compared to the same period of the year 2013), total Moldovan exports grew by 3% over the same period. Among the most important categories of

imported food products one can mention tobacco, alcoholic drinks, meat, fish and dairy products.

The agri-food exports from the Republic of Moldova to Russian Federation in the period 2013-2014 were marked by a continuous decreasing trend, ending in the October 2014 with a total embargo for the export of such food categories as “02 Meat”, “04 Dairy products”, “07 Vegetables” and “08 Fruits” (see table 5).

Among the most important groups of agri-food products exported from the Republic of Moldova to Russian Federation in 2013-2014 are “08 Fruits” and “07 Vegetables”, followed by “02 Meat” and “04 Dairy products”. A specific particularity of the Moldovan agri-food exports to Russian Federation is the irregular character of deliveries that cannot be explained only by seasonality of the agri-food production.

Table 5. Volume of monthly exports to Russia at two-digit level (in tons), annual and monthly variation (in %)

	02 Meat	04 Dairy	07 Vegetables	08 Fruits
July 2013 (tons)	151.11	140.00	900.83	12,461.18
August 2013 (tons)	259.54	112.02	22.08	31,560.20
September 2013 (tons)	360.10	115.93	107.42	37,159.01
October 2013 (tons)	538.95	60.00	66.61	48,787.05
July 2014 (tons)	466.25	180.00	439.98	7,585.70
August 2014 (tons)	88.85	0.00	245.46	2,866.87
September 2014 (tons)	101.12	20.00	199.15	3,692.31
October 2014 (tons)	0.00	0.00	0.00	0.00
Annual variation August 2013/14	2.92	-	0.09	11.01
Annual variation September 2013/14	3.56	5.80	0.54	10.06
Annual variation October 2013/14	-	-	-	-
Monthly variation July/Aug 2014	5.25	-	1.79	2.65
Monthly variation August/Sept 2014	0.88	0.00	1.23	0.78
Monthly variation Sept /Oct 2014	-	-	-	-

Source: own calculations based on UN Comtrade data base (<http://comtrade.un.org/data/>) [8]

Export of the meat to Russia is irregular and covers mainly chilled and frozen beef. The meat exports to Russian Federation were completely stopped in October 2014 as a result of the non-tariff protection measures.

The meat export is insignificant amounting to an average value of about 300 tons per month. The predominant kind of exported meat is beef chilled or frozen. Considering that the Republic of Moldova is a net importer of meat and the quantity of the meat exported to Russia is insignificant it can be concluded that restrictions on meat export to Russia will not affect significantly the trade between two countries.

The production of vegetables in the Republic of Moldova ensures mainly the internal needs of the country. Export potential of vegetable products is rather insignificant. The self-sufficiency rate for vegetable production varied from 103.5% in 2006 to 93.3% in 2012. The deficit of vegetables mainly in the out of season period is covered by imports

from Turkey. Export of vegetables to Russia is irregular and covers mainly potatoes and tomatoes. The volumes of vegetables exported to Russia are not important and their share in total Russian imports of vegetables is insignificant. Some efforts these exports could be shifted to other destination points.

The fruit production in the Republic of Moldova is very important not only for the internal needs of the country but it also offers large opportunities for fruit exports. Export potential of the fruit production is very high. The self-sufficiency rate for fruit production varied from 195.8% in 2006 to 245.2% in 2012. The surplus of fruits was exported mostly to Russian Federation. Export of fruits to Russia are covered mainly by “0808 - Apples, pears and quinces”, “0809 - Apricots, cherries, peaches incl. nectarines, plums and sloes” and “0806 - Grapes”. Russian federation was a main market for Moldovan fruit exports. Non-tariff restrictions imposed by Russian authorities affected severely this

sector with negative economic and social impacts.

Main agricultural policy instruments and measures

In 2009-2013, the government mobilized from the state budget with the support of donors a value of approx. 2.2 billion lei for support of the agricultural production. The most important ten areas of agricultural production were selected for subsidization and namely: a) Stimulation of agricultural credits, b) Stimulation of the risk insurance in agriculture, c) Establishment of perennial plantations, d) Vegetable production on protected land, e) Procurement of equipment for agriculture, f) Procurement of equipment and renovation of livestock farms, g) Purchase of high breed animals, h) Development of

post-harvest infrastructure, i) Land consolidation, j) Farmland irrigation.

The total amount of subsidies allocated to the agricultural sector increased in 2013 to 462.5 millions MDL comparing with 400 millions MDL in the period of 2010-2012. However, despite of this slight increase the share of agricultural subsidies in national GDP is decreasing constantly since 2009 to the level of 0.46%

One can mention that this value is much lower than in neighbouring countries.

Direct producer support measures in the RM are rather limited and refers to only three items, namely: a) support for purchase of pedigree livestock, b) stimulation of the risk insurance in agriculture and c) stimulation of the agricultural irrigation (see table 6).

Table 6. Direct producer support measures (millions MDL), 2004-2013

Support measure	2006	2007	2008	2009	2010	2011	2012	2013
Support for purchase of pedigree livestock	1.0	3.5	3.2	3.4	4.8	4.7	8.1	23.4
Stimulation of the risk insurance mechanism in agriculture	2.7	16.3	27.2	25.5	9.9	-	34.9	41.3
Stimulating agricultural irrigation	NA	NA	13.0	10.0	9.3	2.0	NA	2.1

Sources: National Agency for Payments and Interventions in Agriculture, 2014

On farm restructuring support measures covers five specific areas like: a) subsidizing investment in establishment of perennial plantations, b) investment subsidies for vegetable production on protected land, c)

stimulation of investments and purchase of machinery and equipment, d) stimulating investment in equipment and technological renovation of livestock farms, and e) interest rate subsidy for long-term loans (see table 7).

Table 7. On farm restructuring support measures, (millions MDL), 2004-2013

Support measure	2006	2007	2008	2009	2010	2011	2012	2013
Subsidizing investment in establishment of perennial plantations	23.6	26.1	47.1	76.1	52.0	41.4	37.4	88.7
Investment subsidies for vegetable production on protected land (winter greenhouses, greenhouses, tunnels)	NA	NA	5.6	2.5	4.0	6.2	6.1	14.5
Stimulation of investments and purchase of machinery and equipment	NA	5.0	38.6	40.8	46.7	97.0	103.2	141.2
Stimulating investment in equipment and technological renovation of livestock farms	14.0	14.8	23.0	22.5	2.8	12.0	7.8	27.3
Interest rate subsidy for long-term loans	-	-	-	-	-	3.3	25.3	39.3

Sources: National Agency for Payments and Interventions in Agriculture, 2014

Even more insignificant are some other types of support measures like: supporting the promotion and development of the organic agriculture and stimulating investment in development of post-harvest and processing infrastructure (see table 8).

Budgetary and other transfers to agriculture

Adjustment of the agribusiness sector of the

Republic of Moldova to EU requirements and standards harmonization is not only legislative but also requires considerable efforts related to the actual implementation of technical standards, security, technology, standards, management and control systems (HACCP, GAP, ISO), which requires considerable financial resources.

Table 8. Other type of support measures, (millions MDL), 2004-2013

Support measure	2008	2009	2010	2011	2012	2013
Supporting the promotion and development of the organic agriculture	2.0	4.0	2.2	0.8	NA	NA
Stimulating investment in development of post-harvest and processing infrastructure	7.0	15.0	11.3	27.9	20.0	69.8

Source: National Agency for Payments and Interventions in Agriculture, 2014

In this context, the greatest challenge for MAFI is to synchronize actions and apply the tools of financial support (including national budget, sources from donors, EU support) to achieve the major objectives of the sector: increasing competitiveness, modernization and restructuring, as well as support for rural development.

The total value of the State budget expenditures for the sector of agriculture,

forestry and pisciculture has an increase up to MDL 1,386 millions in 2013 after a decrease from MDL 1034 millions in 2009 to MDL 697 millions in 2011. The most important allocation goes to the group 11.01 Agriculture and 11.05 Activities and services in the field of agriculture, forest management, fish farms and household water unassigned to other groups (see table 9).

Table 9. State budget expenditures for the sector of agriculture, forestry and pisciculture, (thousands MDL), 2009-2013

	2009	2010	2011	2012	2013
11 Agriculture, forestry, fishing and water management	1,034,123	857,734	843,463	1,272,735	1,386,298
11.01 Agriculture	792,518	616,735	603,42	697,994	719,549
11.02 Forestry	28,897	9,624	10,518	7,165	11,984
11.03 Pisciculture	0	0	0	20	0
11.04 Water Management	19,463	15,973	19,703	17,101	13,201
11.05 Activities and services in the field of agriculture, forest management, fish farms and household water unassigned to other groups	170,847	193,592	184,928	519,102	607,700
11.10 Administrative Organs	22,398	21,811	25,072	31,353	33,863
General total	1,034,123	857,734	843,463	1,272,735	1,386,298

Sources: Ministry of Finances, 2014 [3]

The share of the Fund of subsidies for agricultural production in the total value of the State budget expenditures for the sector of agriculture, forestry and pisciculture has a decreasing trend from 54.1% in 2009 to 33.4% in 2013 (see figure 5).

The negative tendency the share of expenditures for agriculture in the countries'

GDP can be clearly followed in the period 2009-2013. The share of subsidies for agricultural production decreased almost twice from 0.9% of GDP in 2009 to 0.5% in 2013, while the share of state budget expenditures for agriculture, forestry and fishery in the GDP had a more moderate decrease from 1.7% in 2009 to 1.4% in 2013.

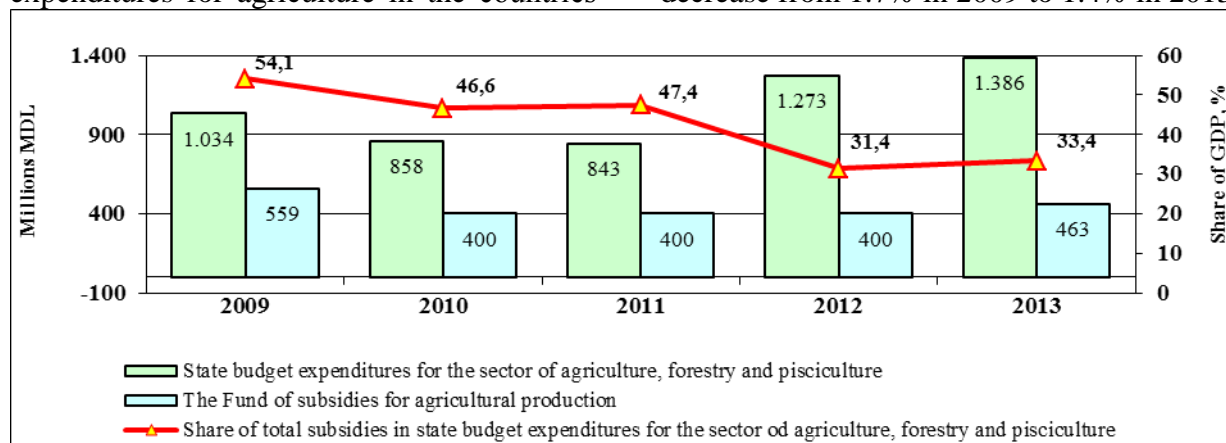


Fig. 5. The total value of State budget expenditures for the sector of agriculture, forestry and pisciculture, the Fund of subsidies for agricultural production and the share of total subsidies in the State budget expenditures for the sector of agriculture, forestry and pisciculture, 2009-2013, MDL millions, %

Source: own calculation based on data from National Bureau of Statistics and AIPA, 2014 [5, 6]

CONCLUSIONS

The critical situation of the agriculture within the rural transformation and national economy context with its structural features requires substantial governmental and financial interventions oriented at the reduction of natural risks that could affect the rural communities, as well as at generating necessary savings and investments in agriculture.

Maintaining the production capacity of agricultural land is a strategic national security concern. Therefore is important to implement modern efficient technologies in agriculture in order to increase soil fertility, ensure food security and strengthen the resilience of the agri-food sector toward external shocks.

The agro-food sector in the Republic of Moldova is characterized by weak links between primary agricultural production, processing industry and trade sector, underutilization of the production capacities, lack of investments, outdated equipment and standards.

There are positive trends in the development of the agri-food sector of the Republic of Moldova during the last years. However the vulnerability of this sector to natural, economic and commercial risks remains to be very high.

The current situation in the international trade with agri-food products placed the Republic of Moldova in a difficult position. Exchange of sanctions between a number of Western countries and the Russian Federation provides multiple restrictions on the conduct of economic activities, including international trade that makes it necessary to review existing economic policies.

The volume of subsidies for agricultural production is insufficient and can affect negatively the country's resilience to external shocks.

Prohibitions and restrictions on the part of the Russian Federation on the import of agricultural products from the Republic of Moldova are forcing the government to urgently diversify export markets and to take

measures to strengthen the economic security of the country.

The food sector of the Republic of Moldova needs specific actions in order to stimulate development of the high value agriculture through creation of product sales centres, strengthening quality control, organizing regional wholesale markets, assisting producers to sell their products, development of market infrastructure at central level, development of the post harvest and market infrastructure.

ACKNOWLEDGMENTS

The authors wish to express their appreciation to the FP7 project "AGRICISTRAD" team for their efforts, and valuable inputs and comments.

REFERENCES

- [1]Government of Moldova, 2014, National strategy on agriculture and rural development for the period 2014-2020. Approved by the Government Decision no. 409 from June 4, 2014
- [2]Ministry of Agriculture and Food Industry. Official web site: <http://www.maia.gov.md/>
- [3]Ministry of Finance. Official web site: <http://www.mf.gov.md/>
- [4]Moroz, V., Ignat, A., Lucasenco, E., 2014, Small and large farms in the Republic of Moldova: Trends and Perspectives. In: Management Theory and Studies for Rural Business and Infrastructure Development, Vol. 36. No. 4:902-912, 2014
- [5]National Agency for Payments and Interventions in Agriculture, 2014, Official web site: <http://aipa.md/>
- [6]National Bureau of Statistics, 2014, Statistical yearbook of the Republic of Moldova, Chisinau
- [7]National Bureau of Statistics, 2014, Statbank database. Official web site. Access: <http://www.statistica.md/>
- [8]UN Comtrade data base. Accessed: <http://comtrade.un.org/data>