

## THE ECONOMIC IMPACT OF FARM SUBSIDIES IN MOLDOVA'S AGRICULTURAL SECTOR DEVELOPMENT

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### Abstract

*Governmental support is needed to achieve and maintain the farm economic performance, which is on the long run is the key to its sustainable development. The governmental intervention into the agricultural sector was highly discussed explaining/justifying such an involvement. This is caused by some forms of market failure, when private markets are not able to function efficiently. Agricultural subsidizing policy is an important mechanism through which the government can support this sector. This paper aims to analyse the distribution and structure of governmental subsidies fund in Moldova during 2010-2018 and its possible outcome on the development of agricultural sector. The research analyses data related to the subsidies allocation dynamics and structure. The statistical data were provided by the Agency of Interventions and Payments in Agriculture, National Bureau of Statistics and Ministry of Finance. The supported subsidized measures are targeted on three main pillars: the increase in competitiveness of the agricultural sector through modernization and market integration; to ensure sustainable management of natural resources in agriculture; and to improve standards of living in rural areas. Subsidies tend to be allocated to support sectors that are already competitive and self-sufficient and does not require perhaps the governmental support for further development. The largest share of subsidies are allocated for the purchase of machinery and equipment, which does not increase the value-added of products.*

**Key words:** agricultural sector, development, farmers, subsidies allocation

### INTRODUCTION

The agricultural activity was always related to risk uncertainty. This is due to its exposure to natural factors and various hazards. Thus, farmers' incomes are uncertain and the agricultural production presents high volatility. An important tool to support the farmers activity are subsidies. Incomes related to agricultural activities are more variable than non-agricultural incomes [10]. Main economic risks for agricultural producers are related to the variation in earnings, thus subsidizing could be regarded as a management strategy that allows to stabilize income and consumption for farmers.

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market failure, when private markets are not able to function efficiently. Agricultural subsidizing policy is an important mechanism through which the government can support this sector.

Subsidies are aimed to support farmers' incomes, to stimulate the food supply and to influence the costs of agricultural products.

Nevertheless, there are several opinions that subsidies create market inefficiencies and disturb global trade. In the same time, it is believed that subsidies are benefitting mainly large landlords and to not directly farmers.

Programmes that support the allocation of subsidies to farmers contribute to stabilize agricultural markets, to support low income families, rural development, to ensure food security etc.

In Moldova, most of rural population's incomes are related to agricultural sector. The increase in the competitiveness and efficiency of the agricultural sector aimed at farm performance, would contribute to support rural

families with low incomes. However, increasing of efficiency and competitiveness of family farms is a complicated objective, as it requires serious structural changes within agricultural sector.

Subsidies allocations might help increasing farmers efficiency and competitiveness. This particularly refers to small family farms that relies on less development possibilities compared to corporate sector. Due to this is important to allocate the scarce subsidies funds to the farms that would contribute to obtain the highest return in terms of increasing viability of farms and sustainable development of rural areas. Subsidies can contribute positively to the increase of production, particularly regarding some activities that are risky [7]. In general, it is considered that “subsidies can help to maintain direct resources for more productive use in response to new technologies or changing market environment” [7].

## MATERIALS AND METHODS

In order to analyse the dynamics and structure of subsidies allocations in Moldova various indicators were used. The period analysed in this study was 2010-2018. The statistical information concerning the amount, structure and number of recipients of the allocated subsidies from the Agency of Interventions and Payments in Agriculture. Other data included in the analysis were provided by National Bureau of Statistics and Ministry of Finance. To complete the proposed objectives various methods as the analysis and synthesis of scientific literature, comparative analysis, systematization of information were used.

## RESULTS AND DISCUSSIONS

For Moldova, the agricultural sector brings about 12 percent to Gross Domestic Product (GDP) and over 30 percent together with food processing industry. Agri-food products constitute over half of total exported goods. Most of rural population in employed in agricultural activities, while 25 percent of total population is employed in agricultural activities. Nevertheless, the agricultural productivity and yield in the sector did not

register any increase and remains at a low level.

The gross agricultural output increased in the examined period and constituted about 32637 million MDL in 2018. About 70 percent of the Gross Agricultural Output (GAO) is generated from plant production, while the share of animal sector has been constantly declining after the 90s (Fig. 1).

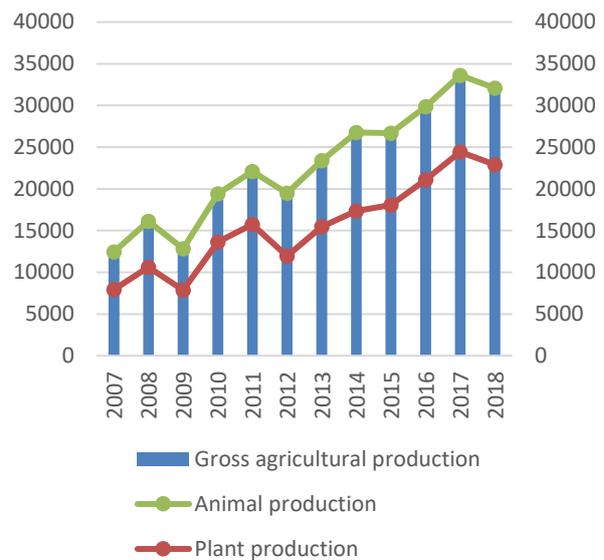


Fig. 1. The development of Moldova’s agricultural sector Source: based on data from National Bureau of Statistics

The agricultural sectors still registers a very slow increase in its gross value-added. Despite the fact that increased the agri-food exports, maintaining a positive balance for the agri-food trade, an increase in exports of low value added products as cereals, seeds and oleaginous fruits is observed [1, 2, 11].

While the exports structure is based mainly on few commodities groups as: fruits, cereals, seeds and oleaginous fruits, oils and fats, sugar, alcoholic drinks. In the same time, Moldova has net imports on several commodities groups related to meat and dairy sector. This situation could be a problem not only to the agricultural sector development but also to country’s national food security.

The government promoted different programs and strategies to support and promote growth and competitiveness increase in the agricultural sector. In 2010 was founded Agency of Interventions and Payments in

Agriculture (AIPA). The main objective of the Agency of Interventions and Payments in Agriculture is to support the development and promotion of the agricultural policy through the increase of allocated subsidies to farmers [4]. The main task of the AIPA is managing the agricultural subsidizing fund. Previously such task was executed directly by the Ministry of Agriculture and Food Industry (currently Ministry of Agriculture, Regional Development and Environment) [3].

The decision of funds allocation is yearly approved by Governmental decision based on the latest Law 276/2016 of subsidizing principles of agricultural producers from Moldova, adjusted to European experience [5]. The aim of recently promoted agricultural

policies and strategies was competitiveness enhancement [6]. Nevertheless the expenses for agriculture remain at a very low level. From the allocated amount about one third is spent on research, education and extension, food safety.

During 2008 for farmers were allocated 900 million MDL, about 2.5 times more funds than its level in 2010. However, the amount of allocated subsidies to farmers is quite small and represent around 0.5 percent from GDP or less. Despite the fact that the amount of allocated budget expenditures for agriculture increased in their total value during 2011-2018, the share of agricultural expenditures in governmental budget decreased in recent years (3.5 percent in 2018).

Table 1. Subsidies allocation in Moldova

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Subsidies, millions MDL	400	400	400	462,8	564,7	610	700	900	900
Expenses for agriculture in governmental budget, millions MDL	982.7	829	1,253.8	1,359.7	2,009	2,173.4	1,350	2,073	2,135.1
Share of agriculture in total expenses, %	4.1	4.5	5.8	5.7	6.8	7.2	4.5	3.5	3.5
Share of agricultural subsidies in GDP, %	0.5	0.4	0.37	0.38	0.42	0.41	0.43	0.5	0.5
Number of beneficiaries	3,749	1,088	4,457	4,012	5,133	3,801	4,321	7,800	4,357

Source: based on data from National Bureau of Statistics [13], Agency of Interventions and Payments in Agriculture, Ministry of Finance.

The number of subsidies recipients increased gradually (7,800 in 2018) or by seven times more since 2010. Yearly, the agency has debts in paying the approved subsidies to farmers. In 2018, from 900 million MDL allocated, 221 million MDL were allocated for paying the approved subsidies in 2017 and only 631 million are directed for the current year payments (Table 1).

The subsidy fund did not have clearly established support measures to farmers but more a variable character [3]. Despite the fact that little changes occurred in the aim of the subsidy fund, its main goal identifies with the Strategy for the development of agriculture and rural sector 2014-2020 which has as main objective “the increase in competitiveness of the agricultural sector through modernization and market integration; to ensure sustainable management of natural resources in agriculture; and to improve standards of living

in rural areas” [9]. However, over the last years the subsidy fund were oriented towards three main pillars: enhanced competitiveness through restructuring and modernization; sustainable management of natural resources; and improved investment conditions in rural infrastructure and for agricultural enterprises. The main promoted pillars identifies with the Strategy for the development of agriculture and rural sector 2014-2020 [6, 8, 9].

Despite the fact that the subsidies allocations structure remained unchanged, its distribution among main pillars and components is uneven. Almost 80 percent of the fund is allocated to only four support measures: purchasing of agricultural equipment and machinery (26%), development of the processing and post harvesting infrastructure (27%), investing in the establishment of new multiannual plantations (19%) and crediting agricultural producers (6%) (Table 2).

Most of the allocated funds are directed to the first pillar: increase on competitiveness of the agri-food sector through modernization and market integration. The three measures under first pillar in 2018 that received most applications are for purchasing agricultural equipment and machinery (33.8%), crediting agricultural producers (25.5%) and investments for establishing, modernization

and clearing of multiannual plantations (20%). The most subsidies funds in 2018 required from farmers were for investments in the development of the processing and post harvesting infrastructure (314.8 million MDL). The authorized payments for this measure still had the largest share in 2018, but the approved amount is twice less than the required subsidy (170 million MDL).

Table 2. Distribution of allocated subsidies by financed measures, million MDL

Subsidized measures	2010	2011	2012	2013	2014	2015	2016	2017	2018
Production of vegetables and fruits on protected fields	6.9	2.9	10.6	14.4	50.9	9.3	14.5	12.6	5.6
Stimulating the investments for establishing, modernization and clearing of multiannual plantations	80	38	74.3	88.6	93.9	29.9	136.4	183.8	125.5
Stimulating investments for purchasing agricultural equipment and machinery	91.8	45.9	165.14	141.7	117.9	51.6	110.6	236.5	167.1
Stimulating investments in the use and technological renovation of livestock farms	2.7	8.08	16.9	27.3	47.2	35.6	34.8	56.8	26.0
Stimulating the purchasing of pedigree cattle and the maintenance of their genetic fund	7.3	2.5	11.1	29.2	47.4	55.07	22.8	24.9	5.2
Stimulating investments in the development of the processing and post harvesting infrastructure	29.1	19.6	43	69.8	141.2	113.4	108.7	204.7	170.2
Crediting agricultural producers	2.8	23.5	40.6	39.2	15.8	12.3	76.3	78.13	37.9
Insuring risks in agriculture	18.82	11.2	37.8	41.2	29.3	24.8	9.1	4.5	5.5
Stimulating the establishment and operation of agricultural producer groups	-	-	-	-	-	-	-	0.4	1.1
Stimulating promotion activities on foreign markets	-	-	-	-	-	-	-	0.04	-
Agricultural land consolidation	-	-	-	0.046	0.059	0.01	0.01	0.03	-
Stimulating investments in purchasing irrigation equipment	-	-	-	-	-	58.8	-	37.2	23.7
Stimulating agricultural producers through reimbursement of irrigation costs	10.0	1,9	-	2.1	-	1.1	-	-	0.1
Stimulating investments for purchasing equipment No-Till and Mini – Till	-	-	-	-	-	-	-	-	49.4
Promotion and development of ecological agriculture	4.1	5.3	-	-	-	-	0.5	1.9	1.0
Improvement and development of rural infrastructure	-	-	-	-	-	2.1	4.1	12.2	9.0
Consulting and training services	-	-	-	-	-	-	1.0	1.2	0.2

Source: based on data from the Agency of Interventions and Payments in Agriculture.

According to the latest Agricultural Census data [12], in Moldova 99 percent from 902,214 agricultural holdings belong to small size farms with a share of 97 percent in the total agricultural area. Nevertheless, at subsidies

allocation large agricultural holdings (with over 100 hectares) prevail in the distribution of funds. Small farms benefit only from 30 percent of subsidies. Thus, a more equal distribution and support of small farms sector

is needed in order to enhance the competitiveness and insure better incomes for families from rural areas.

Also, subsidies tend to be allocated to support sectors that are already competitive and self-sufficient and does not require perhaps the governmental support for further development. Instead it should be directed towards sectors with low value added that require more support to achieve growth. Such support refers particularly to the animal production (milk and meat sectors). The allocated subsidies are oriented mainly to vegetables, fruits, cereals while animal production is basically neglected. Despite the fact that there is offered support measures for the development of the livestock sector, these investments are not attractive and avoided by agricultural producers. As a consequence, a decrease in the money allocated for the above mentioned support measures, from 94.6 million MDL in 2014 to 31.2 million MDL in 2018 is noticed.

Also, the largest share of subsidies are allocated for the purchase of machinery and equipment, which does not increase the value-added of products. Moreover, these investment refers mostly to the acquisition of tractors (27% of all subsidized equipment units). For this measure particularly benefit the large corporate farms, which already have a clear advantage comparing to small-scale farms.

A quite large increase in the subsidizing fund of crediting agricultural producers is observed. This measure is supposed to facilitate the acquisition of inputs and does not contribute to a greater competitiveness of the agricultural sector nor it is sustainable in the long run. This measure is more needed for small farmers that are lack of financial opportunities compared to large scale producers.

The current targeting of the subsidizing fund aims more at supporting inputs production of wealthier farmers. Thus, the objectives and offered support measures should be revised and oriented to offer financial opportunities to smaller agricultural producers.

From the promoted support measures in the long run, some of them have achieved little results. Among these are risk insurance measure and the irrigation subsidy. Both

measures had been inefficient and benefitting wealthier farmers.

An important concern of the subsidizing fund in that yearly a large share of the annual budget are directed to pay the debts to farmers approved subsidies from previous year that could not be covered because of the exhausted financial resources. As a result, accepted farmers requests on subsidies finish on a holding list that are prioritized within next year budget allocations.

## CONCLUSIONS

The agricultural sector of Moldova is characterized by a high level of exposure to natural factors and weather conditions, it has low productivity level, the agri-food trade balance is positive but does not reflect the market demand, the employment rate quite high while labour productivity is low.

The aim of recently promoted agricultural policies and strategies was competitiveness enhancement. Nevertheless the expenses for agriculture remain at a very low level. From the allocated amount about one third is spent on research, education and extension, food safety. Over the last years the subsidy fund were oriented towards three main pillars: enhanced competitiveness through restructuring and modernization; sustainable management of natural resources; and improved investment conditions in rural infrastructure and for agricultural enterprises.

The subsidies allocations structure remained unchanged, its distribution among main pillars and components is uneven. Almost 80 percent of the fund is allocated to only four support measures: acquisition of agricultural equipment and machinery (26%), development of the processing and post harvesting infrastructure (27%), investing in the establishment of new multiannual plantations (19%) and crediting agricultural producers (6%)

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