

IMPACT OF AGRICULTURAL POLICY ON GRAIN SECTOR IN BULGARIA

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Abstract

The paper aimed to evaluate the impact of agricultural policy in Bulgarian grain sector between 2007-2020. The analysis is based on data by Annual Agricultural Reports, farmer survey, experts of branch organizations and state structures. The grain sector is crucial for Bulgarian agriculture because it cultivates around 50% of utilized agriculture area (UAA) in the country. The agricultural policy in the sector has rapidly amendment and the new period faces the sector with major challenges. Implementation of parameters of new agricultural policy is a challenge for all EU Member States. Through direct payments Common agricultural policy (CAP) will continue to be an important factor for the development of agriculture in Bulgaria, but it will not support the grain sector as before. According the main findings are proposed some optional policy recommendations..

Key words: grain sector, funding, financial mechanisms, impact, policy recommendations

INTRODUCTION

Generated gross added value (GAV) by economic activities in Bulgaria in 2007 was 46,401 million BGN at current prices, and in 2012 amounted to 66,642 million BGN (34,073 million euros) at current prices (1 Euro=0.511292 BGN)[9]. Agricultural sector accordingly constitutes 6.2% and 6.4% of total GAV. The value of gross production from agricultural sector for 2012 amounted to 8,875.1 million BGN, of which 60% is formed by crop production. The largest contribution to the formation of the value of the final production of the sector in 2012 has the grain sector with 29.1%, followed by oilseeds with 10.1 % [6].

Agricultural areas for 2012 were 5,481,222 ha, or 50% of the territory and the utilized agricultural area (UAA) amounted to 5,122,983 ha, which is 46.2% of the territory of Bulgaria. Arable land in the same year was 3,294,685 ha, an increase of 2.1% compared to 2007[7]. According to data and the analysis of Agricultural Statistics[8], this is due to the increased area of wheat, corn and sunflower. Grain crops occupy 59% of the arable land in

2012 and 58% for 2007. That data shows the importance of these crops for the development of agriculture in the country.

The grain sector is characterized by uncertainty and instability, since agricultural activities are subject to weather conditions, the spread of diseases and pests etc.[11, 12]. Bulgarian grain farmers can hardly influence the market mechanisms of supply and demand [2,11,12,13].

This determines the development of a special policy aimed at the agricultural sector with specific measures, levers and mechanisms that make agriculture sustainable and profitable. These policies are implemented through economic levers, instruments (measures) which serve to achieve the objectives of agricultural policy. They are very diverse, and combine different tools that are grouped into the following types of agricultural policy suitable for grain producers [1, 4, 14,15]

- 1)Price Agricultural Policy - a policy to maintain and stabilize the prices of agricultural products.
- 2)Income agricultural policy - a policy to stabilize the income of farmers.
- 3)Policy to restrict the supply of agricultural

products.

4) Political intervention on the markets for agricultural resources (agricultural inputs).

5) Marketing policy.

6) Structural policy.

7) Food policy.

8) Regional policy and the stabilization of rural areas.

9) Ecological Agricultural Policy.

The main levers and mechanisms that are applied can be summarized as:

- System of deficit and payment.
- System of production subsidies.
- Subsidies on agricultural resources.
- Investment grants.
- Production quotas.
- Required minimum requirements for state contracts.
- Limiting the use of agricultural land for crops.
- Land reform.
- Etc.

MATERIALS AND METHODS

The main aim of the paper is to evaluate the impact of agricultural policy in Bulgarian grain sector between 2007-2020. Reaching the aim is based on the following tasks:

(i) Analysis of Grain Agricultural policy 2007-2020 based on strategy documents as Annual Agricultural Reports [8, 10, 3]

(ii) Analysis of Grain Agricultural policy 2007-2020 based on own survey of Bulgarian grain producers

(iii) Policy recommendations.

According to the knowledge of the Agricultural policy in Bulgaria directed to the grain sector are formed three main periods. The first period includes the policy in the grain sector before Bulgaria to become NMS of EU. Based on the current policies this year (2007) will be drawn a framework of activities and opportunities for application of grain farms. This year is chosen (2007) because is a transitional year and although Bulgaria is officially in the EU effects of the policy is "expected".

The second period evaluates the first measurements adopted in the grain sector after accession in EU in few years after

accessing in EU (2012). In 2012 Bulgaria actively applies the implemented agricultural policy. Compared to 2007, the grain producers have a wide range of measures and policies of which their activity benefits. On this base is made assessment of the available policies appropriate to the grain structures.

The third period is focused in the newest agricultural policy and stress on future development of the sector. The new programming period will undoubtedly change the scope of the agricultural support. Redirecting cash resources of some other measures is also an interest of research. The paper will identify the measures that would be suitable for farms of grain sector in Bulgaria.

The collected and analyzed information is based on a survey held in two periods - 2007 and 2012. In the sample of the survey in 2007 and 2012 are researched the same grain producers. In 2015 the same producers were questioned for the new program period, before it arises officially [5]. The survey was organized by developed special questionnaire with open and closed questions and supporting interview with the owner/managers of the grain farms. The analysis is based as well on opinion of expert branch organizations and state structures. Researched sample of agricultural grain structures cultivates more than 5% of the UAA of Bulgarian grain. According to the collected data are used descriptive statistics methods which are the basis for an in-depth analysis for disclosure of the essential characteristics of grain farms in Bulgaria. As well are used qualitative methods, which refer to the adequacy of the current Bulgarian grain policy. On that base are made some optional policy recommendations.

RESULTS AND DISCUSSIONS

Analysis of grain agricultural policy 2007-2020 based on strategical documents

Analysis of agricultural policy of the grain sector before the accession of Bulgaria to EU

State support in 2007 is implemented through the State Fund "Agriculture" carried out in accordance with the Law on Support of

Agricultural Producers, The Law for implementation of the common organization of agricultural markets of the European Union and is aimed to achieve the main policy priorities in agriculture sector in accordance with the Government Programme of European integration, economic growth and social responsibility such as strategic objectives and measures in Agricultural report on the state and development of agriculture [8].

To achieve the strategic goal of "stabilization and sustainable development of the crop production" in accordance with the requirements of European quality standards in 2007 were used the following state support schemes suitable for grain sector:

-Target subsidy for the needs of agricultural institutes and regional applied centers for scientific service at the National Center for Agricultural Sciences for the production of pre-basic and basic seeds of wheat and barley. Regional centers, which are registered as farmers and implement reproductive activity, are subsidized under the terms and conditions of the existing state support. The total paid grant is 603 040 BGN for 3769 ha;

-Target credit for the purchase of seeds for wheat production - under the measure 169 grain producers were supported. The paid credit funds amount 760 077 BGN to plant 76 000 ha of wheat;

-Target credit for the purchase of fertilizers for wheat production - under the existing state support was contracted the amount of 7 623 086 BGN. The number of contracts were 432, covering 1 905 772 ha wheat;

-Funds provided under the measure "Agricultural equipment". In 2007 under this measure were bought 26 grain harvester and 84 tractors. Used funds amount 32 028 367 BGN.

-Target subsidy to assist farmers affected by floods during the production of cereal, grain, root, tuber and oilseed crops. Under the terms and conditions of the existing state support 9 farmers used this measure. The paid subsidy amounts 13,140 BGN for 131 ha totally destroyed areas.

-State support to compensate the farmer's losses for totally ruined crop due to natural disasters or inconvenient weather conditions.

Under this measure are compensated 402 farmers.

The main form of support for farmers with direct payments is Single Area Payment Scheme (SAPS). Conditions of the scheme are unchanged during the first eight years of the implementation of the CAP in Bulgaria. Eligible for direct payments are all kinds of crops, irrespective the type of produced agricultural products. The number of farmers supported by SAPS in 2007 was 78 596[10].

Analysis of agrarian policy of grain sector in 2012 in Bulgaria

Since the beginning of Bulgaria's membership in the European Union (EU) the rules of the CAP are applied by implementing the European requirements and distribution of agricultural subsidies financed by the EU budget [10].

In 2012 the following state support schemes which are suitable for grain were:

SAPS. After 2007 a particularly strong impact has SAPS on the development of production structures and sub-sectors in agriculture. It provides different levels of support leading to increase of the differences in the development of agricultural structures - production, productivity, profitability, opportunities for restructuring and modernization. Grain sector and oilseed particularly are privileged because they handled the largest share of the UAA of Bulgaria. In 2012 through SAPS are administered 84,078 applications for support. From the total budget amounted to 923 560 thousand BGN, 905,975 thousand BGN are authorized. The area declared under the scheme is over 3.6 million ha and the amount of support per single area was 264.44 BGN / ha.

Rural development program (RDP) measures suitable for grain sector:

-Measure 111 "Vocational training, information and diffusion of knowledge".

- Measure 112 "Setting up of young farmers". The analysis of progress in achieving the objectives shows that the number of young farmers supported under measure 112 to 2012 represents 95% of the target. Grain producers supported under the measure were 16%.

- Measure 121 "Modernization of agricultural holdings". Measure 121 was applied very

successfully in terms of investments in crop production - 71% of the eligible public expenditure and 80% of paid project funds. Sub sector "Field crops" has the highest share - 60% of the eligible public expenditure and 71% of the paid funds.

- Measure 141 "Semi-subsistence farms undergoing restructuring". This measure can help small farm to become market oriented, as well in the grain sector.

- Measure 142 "Setting up of producer groups." This measure has a low interest and no grain producer used it in the studied period.

- Measure 214 "Agro-ecological payments" in the section "Entering crop rotation". In 2012 under this measure were used 21 256 thousand BGN.

State support. According to different condition of Bulgarian agricultural sector and subsectors MAF is trying to implement such state support schemes, which will make Bulgarian farm sustainable and profitable. In 2012 were developed nine new state schemes implemented in the following areas:

- Support for investments in agricultural holdings linked to the primary production of agricultural products;

- Support aimed at the conservation of genetic resources, local animal breeds and plant varieties adapted to specific natural conditions;

- Support related to risk management and crisis aimed at countering and compensation of damages in case of natural disasters or inconvenient weather conditions, and in diseases of animals and plants;

- Support aimed at encouraging the participation of farmers in national and international agricultural exhibitions and exchange of experience;

- Support from the type of "de minimis" to cover operational costs in a relatively small size.

Other support mechanisms. Another mechanism for support of the sector is through "Market intervention support," which aims to ensure stability on the markets. The intervention procedure is consistent with the rules of financial support for CAP and applies a common and durum wheat, barley, maize

and sorghum. In 2012 producers were not interested in the applied schemes "Purchase of grain" and "Grain storage" and they are with no funding till the end of the programming period [10].

Analysis of agricultural policy of grain sector in Bulgaria in the new programming period (2014-2020)

There will be significant changes in the next programming period, both in terms of the policies and in refining the measures, which are included.

One of the changed parameters is connected with support schemes. It will be introduced multi-layered structure of direct payments in the period 2015-2020. The main part of the direct payments will be allocated on the basis of agricultural area eligible for conditions and used for agricultural activity. This will be implemented through the application of the basic payment scheme. Member States which have implemented SAPS have the opportunity to continue to apply temporary of the scheme until 2020.

The basic principle of subsidizing for both alternative schemes is the same and does not depend on the type of crops cultivated, but on the size of agricultural area. The main difference is that under the Basic payment scheme except agricultural area should be provided also appropriate number of payment entitlements, which are distributed mainly in the first year of the scheme. Green component is included in direct payments and it increases the environmental contribution of the CAP[10].

Farmers who are eligible to receive payment under the basic payment or single area payment scheme are required to comply such agricultural practices that are favorable for the climate and the environment (green requirements). Green requirements are:

- Crop diversification,

- Maintenance of permanent grassland and availability of environmentally focused areas,

- Member States must allocate 30% of their direct payments to finance green payment.

Implementation of new parameters of direct payments is a challenge for all EU Member States. Through direct payments CAP will continue to be an important factor for the

development of agriculture in Bulgaria.

New scheme (redistributive scheme payment) for direct payments is created as a result of CAP reform 2014-2020. The scheme is voluntary for states and sets a higher single payment per hectare for the first hectares of each farm, eligible for support under the basic payment scheme or SAPS. The size of these first hectares is determined by each state, but cannot be larger than 30 hectares of the average farm size.

MAF concept provides in addition to the implementation of the Redistributive payment scheme to be applied also progressive reduction and ceiling of the subsidy that could receive a farmer. It will be applied a tool to reduce payments and subsidy ceiling to one beneficiary. Reduction is 5% of the amounts between 150,000 EURO and 300,000 EURO and 100% for the payments over 300 000 EURO. The aim of this reduction is to avoid disproportionate amounts to go to a small number of large beneficiaries.

This kind of change will affect the grain producers as they are the main beneficiaries of the program, and many of them have enough large UAA to be affected by the change of the CAP. A large number of grain and oilseed farms will be adversely affected. The payments for "small" farms are also changed. Small farmers applying for this support may receive a subsidy which amount of 500 to 1,250 EURO per farm/per annum.

The other measures in the new programming period are almost the same like these in the previous with small differences in names and allocations, such as the new measure called "The scheme for small farmers" in the previous period was called "Semi-subsistence farms undergoing restructuring", the new measure "Young farm holders" in the previous period was called "young farmer" etc.

Analysis of grain agricultural policy 2007-2020 based on own survey of Bulgarian grain farmers

Agricultural support in 2007 and 2012 differs due to Bulgaria's membership in the EU. That is why the periods are presented separately and compared. As well in this part of the paper the focus is directed to the coming new programming period 2014-2020 and opinion

of the stakeholders of the policy implementation and the impact of it on the grain sector.

Survey results - received funding

In 2007, 24% of farms have applied for "Target credit for the purchase of seeds for wheat production". The funds were received by 83% of the farmers or 20% of survey sample.

The received amount is 100 BGN per hectare. The total volume is 2,000 hectares or 20,000 BGN. For receiving fund under measure "Target credit for the purchase of fertilizers for wheat production" have applied 13% of holdings and received 100% of them. The funds received were 3.90 BGN per hectare, total 4790 BGN. There is no grain farmer during this period who applied to target subsidies "to assist farmers affected by floods" even there were evidence of flooding. The explanation why they did not apply was pointed mainly that on one hand the too long and sophisticate procedure and on the other hand the funding is insufficient.

During 2007 the government compensated 7% of grain holdings for losses of totally ruined crop due to natural disasters or adverse weather conditions. UAA which is compensated amounted to 35 ha, and farmers received 9,150 BGN.

Farms in the survey have received under the program "Agricultural equipment" during 2007-2012 equipment as follow: 2 grain harvesters, 6 tractors and 1 tool equipment with a total investment value of 348,565 BGN, of which funding amounted 94,545 BGN. Compared with all farmers received agricultural equipment the farms in the sample respectively received 7.1 % of all tractors and 7.6 % of the grain harvesters.

SAPS are the most common instrument of the agricultural policy in Bulgaria. Studied farms received in 2007 - 15,405,959 BGN, and in 2012 - 24,140,595 BGN. Two of the farms had to return part of the received funds (7,589 BGN), due to inaccuracies in the cadastral maps of the crop land.

The funds of SAPS, according to respondents are used for payment of land rent and purchase of raw materials and fertilizers. Received amount is double between the

surveyed periods (2007-2012), which is due on one hand of the increased area for the period and on the other hand, the increased payment per hectare to 264 BGN for 2012.

The interviewees were asked to revise the SAPS in the period 2014-2020 from their point of view as grain producers. The farmers evaluated the policy change possibilities for grain sector as shown in table 1.

Table 1. Scenarios of possible policy change of SAPS in Bulgaria

Possible change	Positive impact	Negative impact
The payment per ha of SAPS to be linked with rental payment	82.5%	17.5%
The payment per ha of SAPS to be linked with current fuel price	65%	35%
The payment per ha of SAPS to be linked with UAA and to be decreasing with increasing of UAA	0%	100%
The payment per ha of SAPS to be linked with UAA and to be increasing with increasing of UAA	92.5%	7.5%

Source: Own survey; Sample: farmers which cultivated 5% of UAA of grain in Bulgaria.

The opinion of the grain farmers for future change of distribution of SAPS 2014-2020 is facing positive reaction of 3 of 4 proposed scenarios. The most positive reaction is directed to SAPS- increasing payment linked with increasing of UAA (92.5% of respondents). The explanation is that this will come as a natural stimulus to decrease the abandon land and increase the land consolidation. On the other hand negative impact of the sector would be if the payment is decreasing with increasing of UAA. Although the negative assessment of the farmers the government implements in 2015 redistributive payment scheme, with a progressive reduction of the SAPS. Calculations show that each farm of the survey for 2015 will receive 700,000 BGN less than the previous periods if they hold the same UAA. According to the opinion of farmers that redistribution of way of payments

of SAPS is “not encouraging but discriminatory against the grain sector”.

CONCLUSIONS

Main findings

Grain crops occupy 59% of arable land in Bulgaria in 2012 and they are holding sustainable levels through recent years up to date.

The largest contribution to the formation of the value of the Agricultural sector of final production in 2012 has the grain sector with 29.1%.

State support schemes suitable for grain producers in 2007 cover target subsidy for the needs of agricultural institutes and regional applied centers for scientific service at the National Center for Agricultural Sciences for the production of pre-basic and basic seed of wheat and barley, target credit for the purchase of seeds for wheat production, target credit for the purchase of fertilizers for wheat production, funds provided under the measure "Agricultural equipment", target subsidy to assist farmers affected by floods, state support to compensate the farmers losses for totally ruined crop due to natural disasters or inconvenient weather conditions, direct payments through SAPS.

The purpose of providing support is to increase the competitiveness of Bulgarian agricultural sector through measures focused on investments aimed to improve the efficiency of farms and the production of higher quality products, insurance and compensation of damages caused by natural disasters and adverse weather events, helping to prevent plant's and animal's diseases, protection of genetic resources in plant and livestock production, promoting animal welfare, stimulating participation in exhibitions to promote Bulgarian agricultural production and exchange of experience etc.

State support schemes suitable for grain producers in 2012 cover SAPS, part of RDP measures, state support and other support mechanisms.

In 2007-2012 is accounted double amount of funds received from the grain sector, which is due to the increased area for the period and

increased payment per hectare of the pursued policy in Bulgaria.

In the new programming period MAF concept provides to be applied also progressive reduction and ceiling of the subsidy that could receive a farmer. The aim of this reduction is to avoid disproportionate amounts to go to a small number of large beneficiaries. This kind of change will adversely affect the grain producers as they are the main beneficiaries of the program, and many of them have enough large UAA.

Grain producers in Bulgaria are well informed farmers who actively take advantage of the possible financing funds.

According to respondent's opinion for scenarios of possible policy change of SAPS in Bulgaria, if the payment per ha of SAPS is linked with rental payment, this will have positive impact on the grain sector (82.5%). At the same time they consider that if the payment per ha of SAPS is linked with UAA and is decreasing with increasing of UAA, this will have negative impact (100%).

Despite increased awareness of farmers on measures for funding in the new programming period, they will receive lower subsidies due to a change of direct payments. The concept of Bulgarian Ministry of Agriculture and Food in the new programming period provides implementation of redistributive payment scheme with a progressive reduction of the subsidy ceiling and SAPS. This kind of change will have a negative impact on grain sector as they are the main beneficiaries of the program. A large number of grain and oilseed farms will be negatively affected.

Policy recommendations

During the new program period 2014-2020 grain sector will face major changes. It will be underestimated due to the shifting the policy to other sectors. The policy recommendation is instead to apply redistributive payment scheme, with a progressive reduction of the SAPS to keep it solidary equally to all producers irrespective of the type of production and size of the farm. Other possible change is payment of SAPS (especially of the payment per ha) to be linked with current price of land under rent.

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