

Bulgarian Agriculture: Ten Years of CAP – Results and Future Challenges After 2020

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Abstract

The paper is an outcome of IAE researches, revealing the significance of agriculture for the national economy, the trends of development of the main production sub-sectors, the restructuring, the efficiency and the financial stability of farms, according their size and specialization.

The purpose is to make an assessment of the impact of direct payments implementation, the coupled support under CAP and the main RDP measures. The expected impacts of the new CAP 2014–2020 mechanisms have been analyzed and the possible challenges with CAP 2020+.

The methods of descriptive, comparative and regressive analyses have been used. The data are from reports of the Ministry of Agriculture, Food and Forestry and State Fund “Agriculture”, the appraisals for RDP, the monitoring and the periodicals of the FADN for the period 2007–2016.

It was postulated that the significance of the agricultural sector, expressed by its share in the GDP, diminishes despite the slight increase of GVA from the agriculture. The number of farms has strongly decreased, mainly of small livestock and mixed farms. The production efficiency increases as a result of the considerable increase of incomes from subsidies. Without them the profitability norm is low or negative and threatens the farms’ reproduction.

The direct payments scheme (SAPS) helps the net income increase in the farms, but causes an unbalanced development of agriculture. The sectoral sustainability is not guaranteed, as producers are oriented towards activities with highest subsidy rather than the best future.

The coupled support has a positive impact on subsidies’ reallocation to sectors with a small size of land. It does not lead to an increase in the production which is necessary for Bulgaria, but only increases incomes. The CAP 2014–2020 avoids some distortions but does not change the logic of subsidization.

The significant RDP financial resources boost the recovery of agriculture, but the allocation of funds by priority is insufficiently justified and leads to discrepancies between the objectives and results.

Shortcomings of the implementation of CAP and RDP provoke significant challenges to the CAP 2020+. In our opinion, Bulgaria should present a different point of view and propose mechanisms and incentives providing improvement of the production structure (raising animal production); increasing the competitiveness of production and the efficient resource use; allocation of larger share of funds for modernization of livestock farms and facilitating the procedures, focusing only on the most important environmental problems (e.g. erosion soil), inclusion of a part of the requirements for environmental and wildlife protection as an obligation for all farmers receiving subsidies. SAPS subsidies should be changed, taking into account other factors in addition to land size.

Key words: agriculture, CAP, RDP, SAPS

Българското земеделие: десет години ОСП – резултати и бъдещи предизвикателства след 2020 г.

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Резюме

Статията е посветена на резултати от изследвания на ИАИ, открояващи значението на земеделието за националната икономика, тенденциите в развитието на основните производствени подотра-

сли, реструктурирането, ефективността и финансовата стабилност на земеделските стопанства по размер и специализация.

Целта е да се направи оценка на ефекта от прилагането на директните плащания и обвързаната подкрепа по ОСП, и основните мерки на ПРСР. Анализират се очакваните ефекти от въвеждането на новите механизми в ОСП 2014–2020 и възможните предизвикателства пред ОСП 2020+.

Използват се дескриптивен, сравнителен и регресионен анализ. Данните са от отчети на МЗХ и ДФЗ, оценките за ПРСР, наблюденията и периодичните издания на Системата за земеделска и счетоводна информация (СЗСИ) за периода 2007–2016 г.

Констатира се, че значението на аграрния отрасъл, изразено чрез дела в БВП, намалява, въпреки че БДС от земеделието леко нараства. Броят на земеделските стопанства силно се понижава, основно при дребните животновъдни и смесените стопанства. Ефективността на производството нараства в резултат от значителното увеличение на доходите от субсидии. Без тях нормата на рентабилност е ниска или отрицателна и застрашава възпроизводството на стопанствата.

Схемата за директни плащания на площ (СЕПП) спомага за увеличение на нетния доход в стопанствата, но тласка земеделието към небалансирано развитие. Устойчивостта на отрасъла не се гарантира, тъй като производителите конюнктурно се ориентират към дейности, носещи най-висока субсидия, а не най-добра перспектива. Обвързаната с производството подкрепа има положително въздействие за преразпределение на субсидиите към сектори с малък размер земя. Тя не води до нарастване на производството, което е необходимо за България, а само повишава доходите. ОСП 2014–2020 отстранява някои изкривявания, но не променя логиката на субсидирането.

Значителният финансов ресурс на ПРСР стимулира възстановяването на земеделието, но разпределението на средствата по приоритети е недостатъчно обосновано и води до разминавания между цели и резултати.

Недостатъците в приложението на ОСП и ПРСР поставят значими предизвикателства пред ОСП 2020+. Според нас, България следва да представи различна гледна точка и да направи предложения за механизми и стимули, осигуряващи нарастване на производството на животинска продукция, повишаване на конкурентоспособността на производството и ефективното използване на ресурсите, заделяне на по-голям дял от средствата за модернизация на животновъдните стопанства и облекчаване на процедурите за това, акцентиране само на най-важните екологични проблеми, включване на изискванията за опазване на околната среда и дивата флора и фауна като задължение за всички стопани, получаващи субсидии. Субсидирането на площ следва да се промени, като освен размера на земята се отчитат и други фактори в стопанството.

Ключови думи: земеделие, ОСП, ПРСР, СЕПП

Introduction

During the ten-years period of CAP implementation have occurred considerable structural and organizational changes, which predetermined the decreasing role of agriculture in the economy of the country and an efficiency based on the increasing subsidizing, although unequal, in all production sectors. This is the result of the chosen approach of subsidizing the agriculture in East-European states that stimulates the extensive production of cereals and industrial crops and the keeping of the livestock number at a low production and labour productivity

The purpose is to assess the impact of direct payments, of the coupled support and of main

RDP measures. The expected impacts of the new CAP 2014–2020 mechanisms implementation have been analyzed and the possible challenges of CAP 2020+.

The paper has a structure of six parts: on first place is presented the dynamics of the significance of agriculture for the national economy; in the second part have been analyzed structural changes in the sector, through the trends in the main productions; the third part is dedicated to the restructuring of economic results in the farms; fourth and fifth parts are assessments of impacts of CAP and RDP implementation. At the end are given recommendations for the design of

CAP OCPI 2020+ from the point of view of the necessities of Bulgarian agriculture.

1. Importance of agriculture for the national economy

The main indicators for the sector significance for the national economy are the value and the share of the gross value added (GVA) in the gross domestic product (GDP). As a result of subsidizing after the CAP implementation, the GVA in agriculture has increased, compared to 2007. The enlargement of the mono-crop production structure and as a result of the stronger dependence on the cereals and oil-seeds' market, the subsidies impact has decreased and the value of GVA also has diminished. Furthermore, in the last years the share of GVA in GDP decreases, in 2016 its value has dropped under 4%, for the first time (Fig. 2). The GVA share decreases also due to the higher pace of GVA decrease in other sectors of the economy compared to the agriculture, so the GDP increases distinctly, of 5% in 2015–2016.

The trends in the main outputs developments are unfavourable. Currently the gross output share from the crop growing is above 70% of the total gross output. According this indicator Bulgaria is on the second place in EU, behind Greece. Obvious is the non-balanced sector de-

velopment, which worsens after the CAP implementation. One reason is the adopted approach of subsidizing for the East-European countries, which stimulates the extensive production of cereals and oilseeds. The area of cereals reached 18–20 million of decares (Fig. 3), which is 20–30% more than 2007. At an average size of 35 million decares, the share of cereals is 50–60% of the sowing area. Industrial crops occupy about 11 million decares; there size increases of 1.5 times, compared to 2007. Approximately 95% of the area is with oilseed crops, mainly sunflower (8.2 millions) and colza (1.7 millions). Among the other industrial crops, the biggest share is for the coriander with 350 thousand decares and the tobacco, which area decreases yearly and it is grown of less than 100 thousand decares.

The implementation of coupled support in the vulnerable sectors (bovine and ovine breeding, fruits and vegetables) has led to increase of areas with fodder crops, as in 2016 they slightly surpassed the level of 2007 and their area is over 1.5 million decares. Analogical is the trend of vegetables, which areas have almost doubled after the drop in 2012–2014 and reached 581 thousand of decares. For the perennial crops there is a sustainable trend of areas decrease, of 27%.

As a result of the enlargement of areas for cereals and oilseeds and due to the increase of the

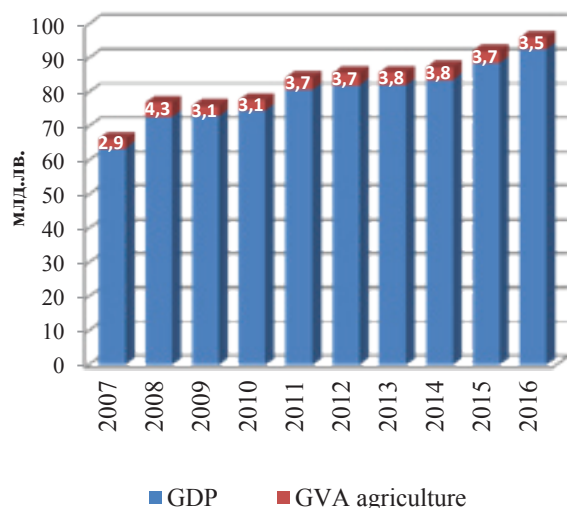


Fig. 1. GDP and GVA values in agriculture
Source: National Statistical Institute, 2007–2016.

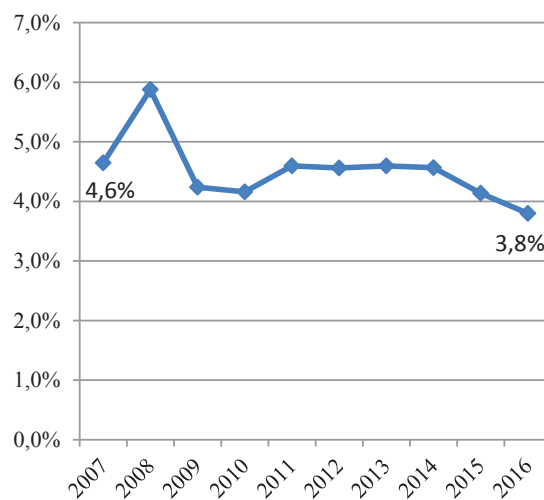


Fig. 2. Relative share of GVA and GDP

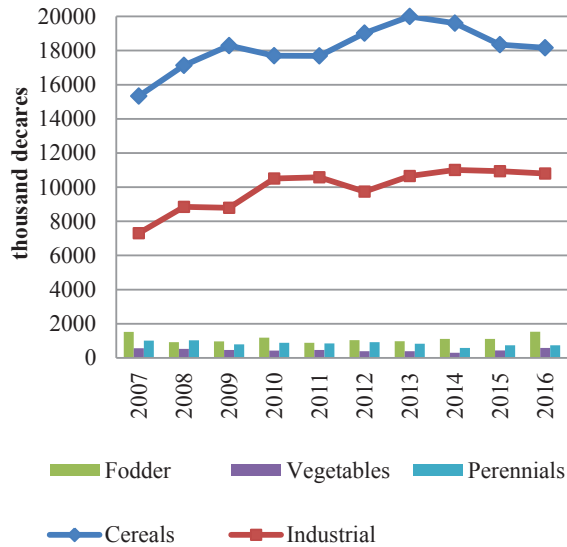


Fig. 3. Dynamics of sowing areas in the crop growing

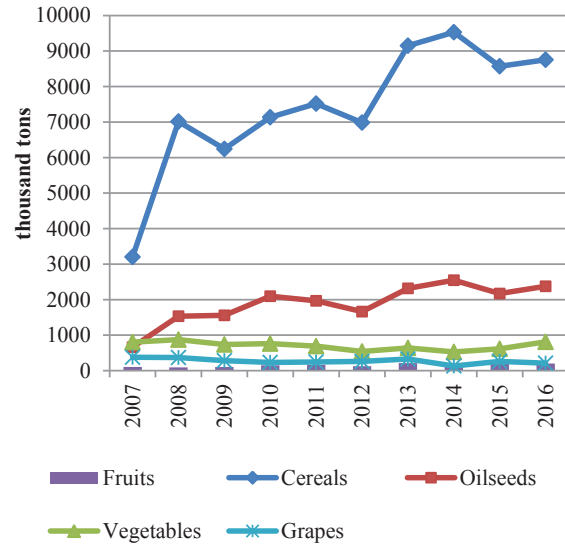


Fig. 4. Production of main crops in the crop growing

average yields, the output in both sectors increases, respectively 2.7 and 3.6 times (Fig. 4). The volume of produced vegetables and fruits is already recovered and exceeds the levels of 2007, while the grapes production decreases of 45% and it became almost equal to the fruit output, about 200 thousand tons.

In the livestock breeding the situation is more unfavourable, as the livestock number decreases for all the kinds, excluding the bovine breeding (Fig. 5). The milk cows diminish of approximately 20%, the sheep – of 8%, the goats – by a half (49%), pigs and poultry – of 30%. As a result of increased productivity, the livestock production decreases with slower pace than the diminution of animals' number. The milk quantity decreases by 13%, the meat – by 10%, mainly at the expense of the beef and sheep, while the decrease of the pork is 4%, and of the poultry – 6%.

These data reflect the situation up to 2016 when the impact of the coupled support has been reported in the biggest degree. The dynamics of the milk shows durable trend to yearly output diminution up to 1 115 million l., despite the important support for the sector. Regarding the meat production, there are fluctuations, as the biggest drop is in 2013–2014, when the total amount is about 200 thousand tons, at 212 thousand tons in 2016 (Fig. 6).

2. Farms' restructuring and efficiency

The mentioned trends in main sectors restructuring in agriculture reflect logically on the organizational structure, the production orientation and the farms' efficiency. For the period 2007–2013 their number decreases half, up to 254 thousand. The biggest diminution is shown by the pigs and poultry farms (87%), which number drops under 10 thousand. Important is the decrease of the mixed farms (59%) and of bovine and ovine farms (40%), the minimal diminution is of farms with vegetables and perennials (6–12%). The only increase is of field crops farms, but not significant, because the increase means an increase of the size of used land in already existing farms.

As a result of the increasing subsidizing, the size of the used agricultural area (UAA) has increased of 16 million decares and in 2013 reaches 46.5 million decares (according Eurostat data). The area of field crops increases 1.8 times, reaching 86% of UAA. Considerably smaller is the increase in bovine and ovine farms and of perennial crops (10–11%), in other sectors – mixed, pigs and poultry and vegetables, there is a decrease of the size.

The production orientation to extensive cereals and oilseed crops, and the simultaneous re-

duction of livestock sectors, creating higher value added, change the structure and the value of economic indicators. Due to the accelerated pace of production concentration, the gross output (which does not contain subsidies, according the FADN data), increases in all farms types, excluding the perennial crop farms. (Fig. 7).

The increase of the gross output per area unit (decare) in the crop growing farms (Fig. 8), could be explained by the increasing crops productivity and the growth of producer's prices in agriculture. The trend in the livestock breeding is different – the gross output per livestock unit (LU) di-

minishes in farms with milk cows and sheep and insignificantly increase in pig and poultry farms. This is a result of the low pace of productivity increase and of the low prices of animal products, especially of the milk.

The data on Fig. 9 and 10 gives idea of the dynamics of changes of costs for lease and amortizations, which increase pace is the highest, compared to other costs. Both kinds are capital costs, but amortization costs are used for restoring of buildings, equipment and biological production means, appertaining of the farms, while the lease is an income for the owners of agricultural land,

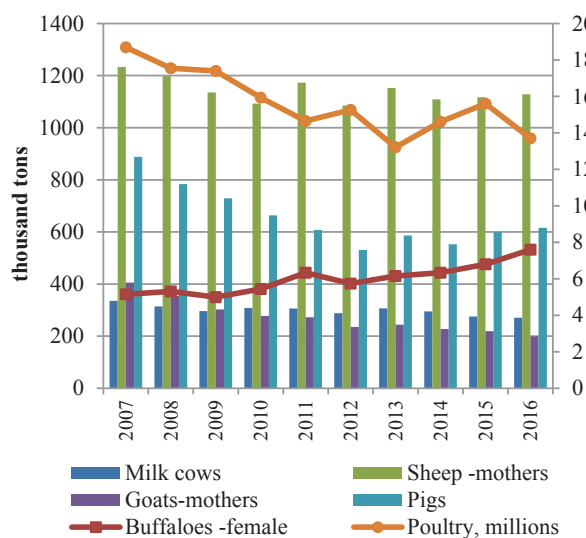


Fig. 5. Dynamics of livestock number, per kinds
Source: FADN, MAFF, 2007–2016.

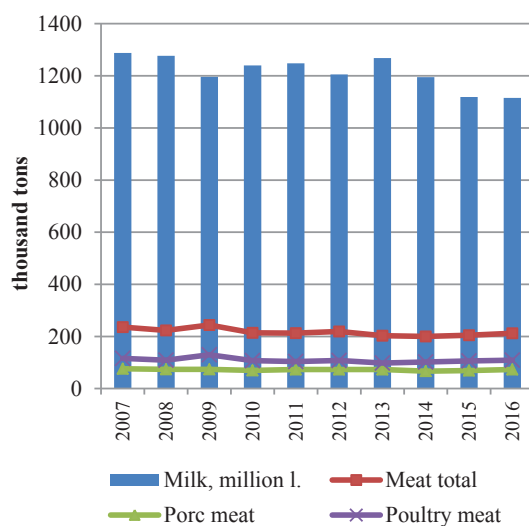


Fig. 6. Output of main livestock products

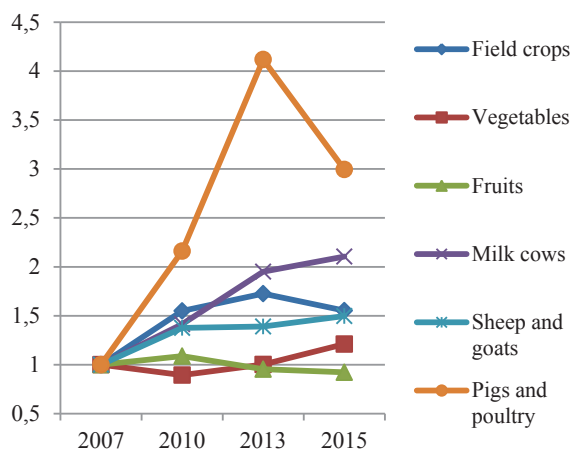


Fig. 7. Dynamics of gross output per farm
Source: FADN, EU, 2007–2015.

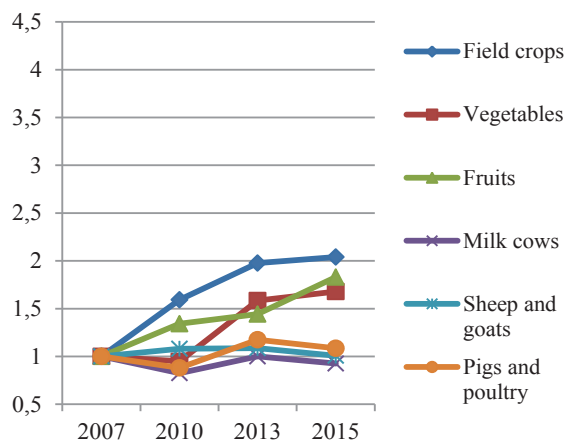


Fig. 8. Dynamics of gross output per decare / LU

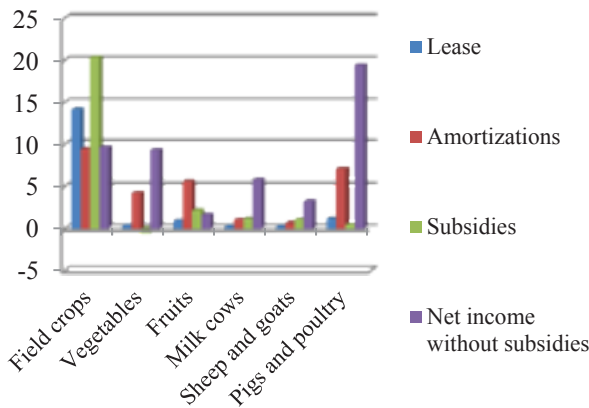


Fig. 9. Costs, subsidies and net income, 2007
 Source: FADN, EU, 2007, 2015.

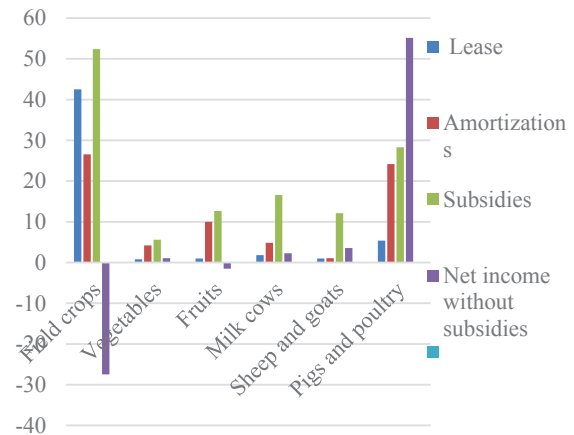


Fig. 10. Costs, subsidies and net income, 2015

which “outflows” from agriculture to the consumption sphere or to other sectors of economy and it is “net” cost for the farms. This cost does not participate in the land fertility reproduction, which needs complementary expenses. Thus, the analysis of the lease and its maintaining in optimal limits has big importance for the final economic outcomes in the farms.

In most of old EU member-states there are special regulations for the land size, as the most typical example is Netherlands, where the maximal limits are regulated normatively, depending on the soil category and the direction of use. At the free rent formation in Bulgaria the payed funds for the analyzed farm types have increased four times (7 times for all the farms). This is due to the low level of the rent up to 2007, the increase of the farm size, the increase of subsidies and the obligatory provision of grasslands for the grazing livestock. The highest increase pace is shown by the farms with milk cows and sheep (6–7 times), exceeding the rent in farms with fruits and vegetables, which was higher in 2007 and increases in much slower pace. The biggest impact on the final results has the rent in field crops farms, increasing three times and is slightly below the subsidies level, which are 52 thousand BGN in 2015, on average per farm.

Amortizations increase mainly in farms with milk cows (4.6 times), pigs and poultry (3.4 times) and field crops (2.8 times). Apart the increase of farm size, significant is also the new equipment

and probably, the increase of main herds’ value in the milk cattle breeding, for which are made amortization fees.

Despite the gross output increase in agriculture, per decare, the overtaking pace of growth of the total costs strongly lowers the level of the net income, without subsidies included. If in 2007 all farms realize net income without subsidies, in 2015 the situation has changed and most of farms should work at a loss. The most unfavourable is the situation for the field crops, where the diminution of the net income without subsidies is almost 4 times, for the fruit plantations – 2 times, for the vegetables – 90%. In livestock farms the state is better, for the milk cows there is a decrease (60%), while the income increases for the sheep and the grainy animals. The subsidies amount is highest for the field crops, but the subsidies are significant for the pig and poultry farms, despite the high level of the net income without subsidies. After a more detailed analysis of subsidies sources, it is clear that the predominant part of funds are under RDP, which imposes a supplementary research of arguments for this funding.

The integral indicator for efficiency – the relation between profitability norm and production costs – showed that in 2007 all farms have realized profitability without subsidies, while in 2015 the profitability has negative value in field crops farms and fruit farms and minimal value for vegetables and milk cows’ farms (Fig. 11).

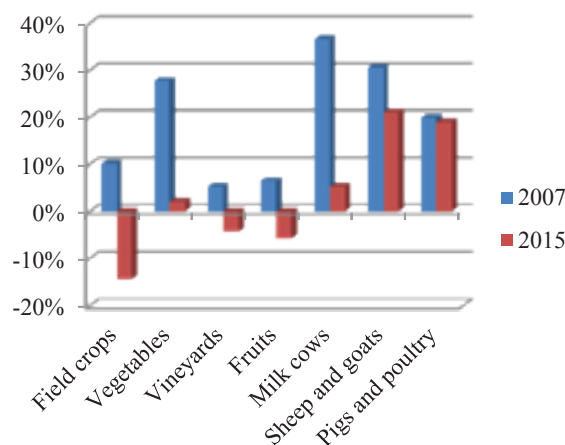


Fig. 11. Profitability norm without subsidies
Source: FADN, EU, 2007, 2015.

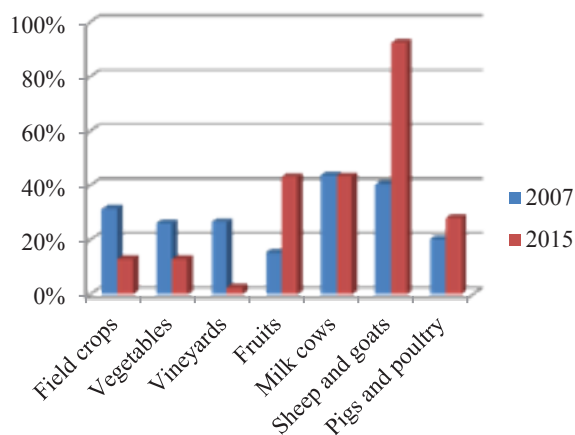


Fig. 12. Profitability norm with subsidies

The profitability norm with included subsidies (Fig. 12) has decreased, compared to 2007 in the field crops farms, remained unchanged in milk cows' farms and increased in farms with sheep and goats and with pigs and poultry. It could be affirmed that for the sheep and goats there is an over subsidizing, due to the considerably higher rate of national complementary payment per unit in 2015, amounting 90 BGN, instead of planned 37 BGN. Moreover, a considerable part of farms with sheep and goats are located in mountain or other less-favoured area and they receive support under RDP. We should take in consideration also the fact that the net income, on which base is evaluated the profitability norm (according FADN data), contains the remuneration payable for unpaid family labor, and since it is the main factor in sheep farming, this contributes to a higher lev-

el of profitability. The significant growth of the profitability norm for the fruit farms is characteristic for the last 2–3 years and it is due to the increase of a specific coupled support for improvement of the fruit quality and increase of the production for processing.

3. Impacts of CAP implementation

The support under the first CAP pillar includes: 1) direct payments on area unit and on farm (young farmers, small producers; 2) coupled support as national complementary payments and specific support with EU funds and 3) market support. The predominant part of the funds is distributed for direct payments, which after 2015 include, apart SAPS, redistribution payments, green payments, schemes for young farm-

Table 1. Amount and structure of subsidies under the First CAP pillar

| Subsidies | 2014, million EUR | 2015, million EUR | Relative share, 2015 | 2015/2014 |
|--|-------------------|-------------------|----------------------|-----------|
| I Direct payments | 589 | 585.5 | 69% | 99% |
| II Coupled support: | | | | |
| 1. National complementary payments | 161 | 82 | 10% | 51% |
| 2. Specific support crop growing | 37.2 | 56.2 | 7% | 151% |
| 3. Specific support livestock breeding | 33 | 61 | 7% | 185% |
| III Market support | 40 | 62 | 7% | 155% |
| Total | 860.2 | 846.7 | 100% | 98% |

Source: Agricultural report, MAFF, 2014–2016.

ers and for small agricultural producers. In 2015 the direct payments slightly decreased, compared to 2014, as the total amount of the support under the First CAP pillar decreased by 2% (Table 1).

Despite the expectations for a mitigation of the polarization of direct payments, through the implementation of redistributive payments of CAP 2014–2020, the achieved results are insignificant. There is a diminution of the relative share of beneficiaries, receiving under 500 EUR (Fig. 13) and increase of the share in other groups,

mainly of these receiving 500–5000 EUR. At the same time, the share of paid funds in the different groups (Fig. 14) has barely changed. About 43–44% of payments go to 1% of the beneficiaries, 2% in the most numerous group (under 500 EUR), and the most considerable increase is of the share of funds for the group 5–10 thousand EUR – 3%.

The coupled support of the national complementary payments diminishes almost double in 2015 in comparison to 2014 (Fig. 15), which is

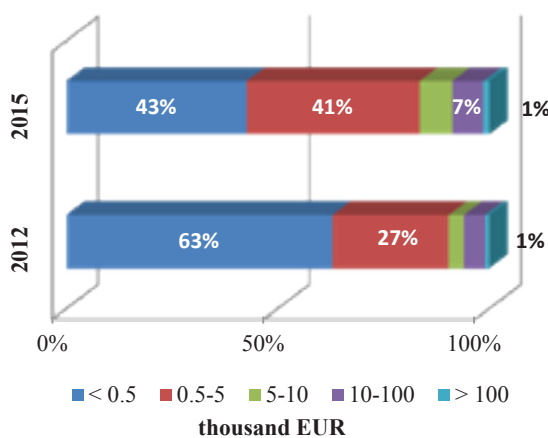


Fig. 13. Distribution of beneficiaries according to the payments amount

Source: <https://ec.europa.eu/agriculture/sites/.../annex1>

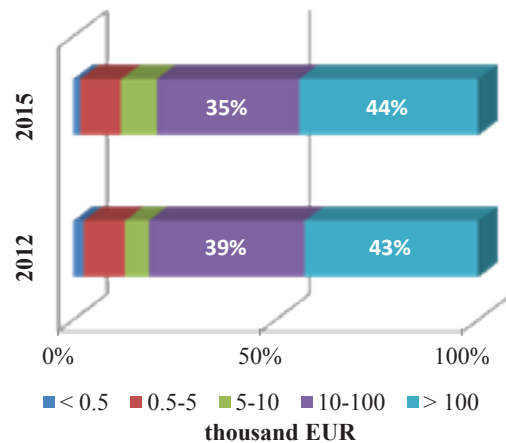


Fig. 14. Relative share per groups according to the amount

Source: <https://ec.europa.eu/agriculture/sites/.../annex1>

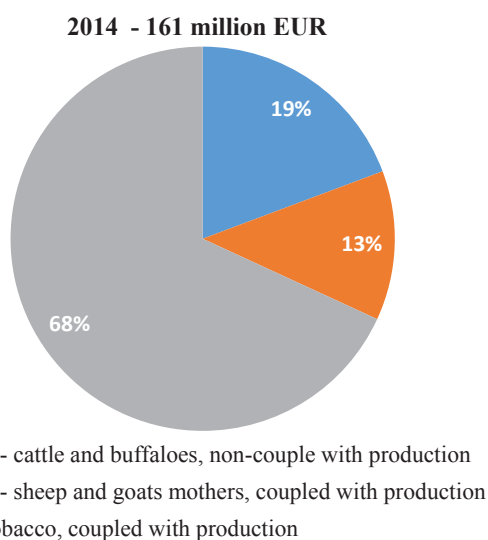


Fig. 15. Distribution of national complementary payments under measures, 2014

Source: Agricultural report, MAFF, 2016.

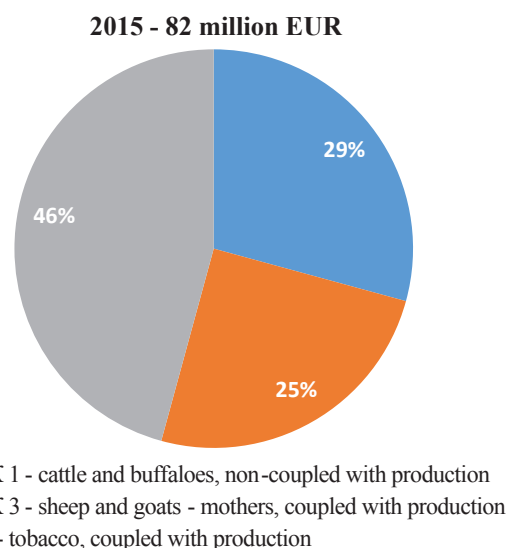


Fig. 16. Distribution of national complementary payments under measures, 2015

Source: Agricultural report, MAFF, 2016.

the result of the provision of more EU funds for a specific support for the vulnerable sectors. The decrease is mainly for the tobacco and less for the cattle, while for the sheep mothers the complementary payments slightly increase. As a result, the paid funds structure under the different measures has changed (Fig. 16).

The specific coupled support with EU funds has increased, but does not cover the decrease of the national complementary payments. The increase is 1.8 times, from 70 to 117 million EUR (Table 1), and the funds have been distributed in correlation 48:52 for the crop growing and the livestock breeding. The schemes for coupled support have changed. In the crop growing the schemes for improving the quality of fruits, vegetables, strawberries and raspberries for processing are unified in one scheme “Fruits and vegetables”. This scheme obtains 69% of the funds for the crop growing, the scheme “Cotton” – 3% and the scheme „Protein crops” – 28%.

The schemes for a specific coupled support in the livestock breeding have been simplified and unified for the milk cows and sheep mothers and new schemes for the cattle for meat and buffaloes have been introduced. (Fig. 17 and Fig. 18).

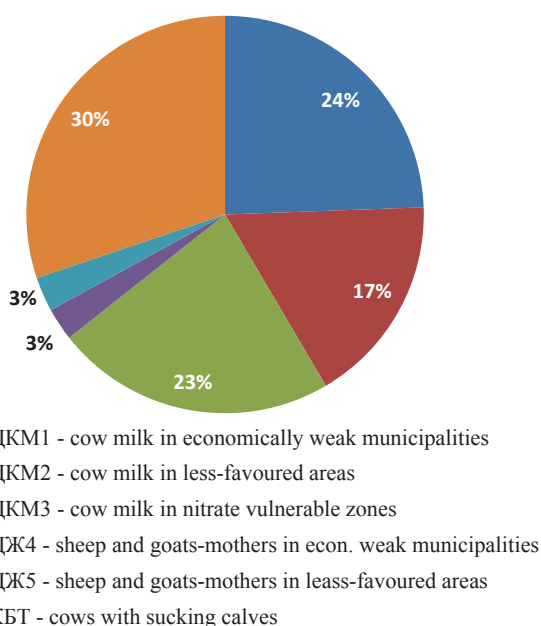


Fig. 17. Structure of funds for specific coupled support in livestock breeding, 2014

Source: Agricultural report, MAFF, 2016.

The structure of funds distribution is different – while in 2014, 94% of 33 million EUR have been provided for the support of cow milk production, in 2015 the share of milk cows in the total amount of 61 million EUR diminished to 58%, but in absolute size, it has increased. Significant is the increase of funds for a specific coupled support for the sheep-mothers (5.7 times). The previewed funds for cattle for meat and buffaloes completely compensate the diminution of national complementary payments for these livestock categories, and the total sum increased, compared to 2014. About half of the support for cattle and sheep is for animals under selection control, which guarantees the increase of the profitability and the improvement of output quality.

The market support, which in 2015 amounted 62 million EUR and is insignificant, in comparison to the funds in other sectors. It is mainly destined to stimulate the viticulture and the viniculture and to create producers’ organizations (62%), and for the extraordinary measures against the embargo against Russia – support per head for milk sale from cows, sheep and buffaloes (19%) and withdrawal of fruits and vegeta-

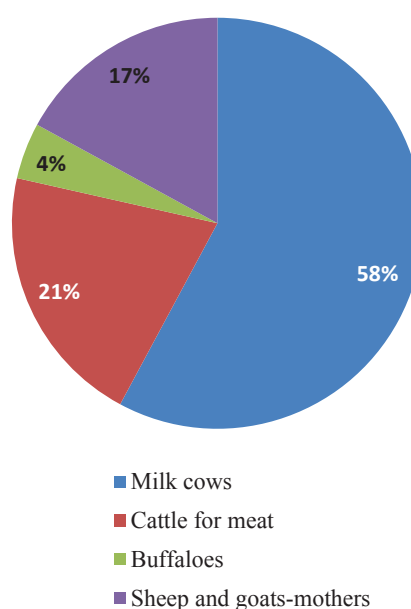


Fig. 18. Structure of funds for specific coupled support in livestock breeding, 2015

Source: Agricultural report, MAFF, 2016.

bles from the market (1%). A minimal part of the funds for market support have been separated under the schema „School fruit” and for the realization of the national program “Beekeeping”.

4. Evaluation of RDP impact

In RDP 2014–2020 the funds have diminished by 5% (155 million EUR) in comparison to the funds absorbed under RDP 2007–2013 (Fig. 19 and Fig. 20). There is a redistribution of funds per axes (priority destinations in the new RDP), with an essential reduction of costs for rural areas development (41%) and for competitiveness (30%). Otherwise, the costs for the environment have increased almost twice and represent approximately half of RDP funds. This way of costs structuring does not correspond fully to necessities of Bulgarian agriculture and does not have enough arguments for the way of priorities’ definition.

If we add to the payments under the First CAP pillar (Table 1) for 2015 the average annual support under RDP (2 918 million EUR/7 years = 416 million EUR), the total subsidies account 1 263 million EUR. At GVA from the agriculture 1 870 million EUR, this means that 1 EUR of the subsidy corresponds to 1.48 GVA.

In conclusion, the CAP impacts are the following:

- Low level of the created GVA in the sector;
- High share of support under SAPS, mainly for products with low added value;
- Considerable share of funds for environment protection without sufficient arguments for their distribution, per priorities;
- Increasing support for young farmers, leading to improvement of age composition of the employed in the sector.

Recommendations for the CAP 2020+:

- The package for support after 2020 should be distributed according the priorities of different EU countries or according the state groups;
- The funds should be differentiated in relation to the balanced development of the agriculture, which requires an increase of the GVA share from the livestock breeding;
- SAPS should be modified, aiming the restriction of the polarization effect in the subsidies distribution among the beneficiaries;
- A balance should be reached for the distribution of funds for the environment protection, in accordance with the demand and supply of public goods – for example for the improvement of water, air and soil quality;

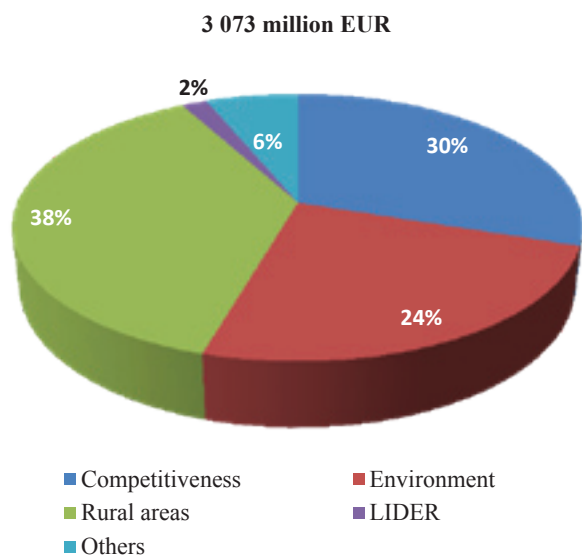


Fig. 19. Structure of funds under RDP 2007–2013, report

Source: Agricultural report, MAFF, 2016; Factsheet on 2014–2020 RDP for Bulgaria.

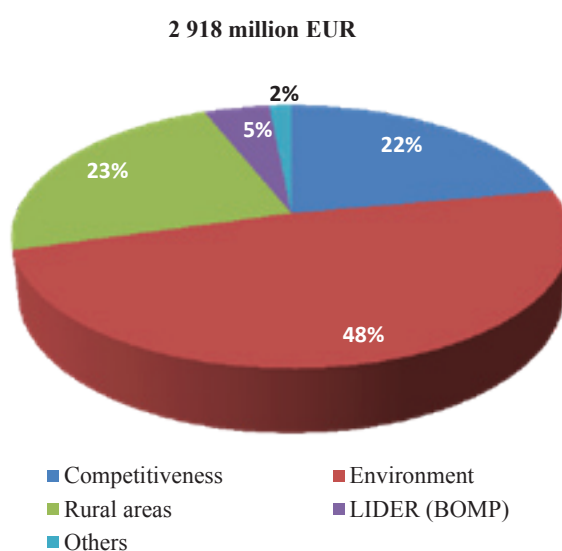


Fig. 20. Structure of funds under RDP 2014–2020, project

- To implement the coupled investment support and technological renovation in the livestock breeding with the production efficiency;

- To increase the funds oriented to the improvement of the marketing of agricultural production – for example, the creation of Centre for stimulation of agricultural output exportation, at the Ministry of Agriculture, Food and Forestry.

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