# Agricultural University Plovdiv FACULTY OF ECONOMICS DEPARTMENT OF MANAGEMENT AND MARKETING

# NIKOLAY IVANOV STEFANOV

# IMPACT OF CAP ON THE COMPETITIVENESS OF SMALL FARMS

#### **ABSTRACT**

of a dissertation for awarding an educational and scientific degree
"Doctor" in a scientific specialty
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Scientific adviser: Assoc. Prof. Dr. Petar Borisov

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### Plovdiv, 2021

The dissertation was discussed and focused on the defense of an extended meeting of the Department of Management and Marketing at the Faculty of Economics, Agricultural University of Plovdiv.

The dissertation is a doctoral student in the same department.

The defense of the dissertation will take place on May 21, 2020 at 13.00 in the CDL hall of the Agricultural University - Plovdiv.

#### I. General characteristics of the dissertation

# 1. Relevance and motives for choosing the topic

A characteristic feature of the structure of agricultural holdings in Bulgaria is its dual nature. This essence is expressed in the presence of a large number of small farms cultivating a small part of the utilized agricultural area (UAA) and a small number of large farms cultivating a significant part of the UAA. Small farms are important in terms of employment in rural areas and they play the role of social buffer in the context of the economic crisis. In these farms a significant part of the production is used for own consumption, which limits the income from agricultural activity and the opportunities for investment and development. Following the completion of the CAP phase 2007-2013, an assessment of the impact of the CAP on the development of the agricultural sector was carried out. The results of the ex-post evaluation of the CAP show that more than 2/3 of the financial aid set aside to support agricultural holdings has been used by the large structures in the sector. This raised the question of how to balance the structure of the agricultural sector through the implementation of the CAP phase 2014-2020. Many researchers on the problem of the deepening dualistic structure of agriculture have proposed that the new CAP make it possible to increase the share of small farms with access to financial assistance and to ensure an increase in the number of medium-sized farms. The idea is, through the implementation of the CAP, to achieve wider access for small farms to financial and other assistance to ensure their competitive development. This raised the question of how to balance the structure of the agricultural sector through the implementation of the CAP phase 2014-2020. Many researchers on the problem of the deepening dualistic structure of agriculture have proposed that the new CAP make it possible to increase the share of small farms with access to financial assistance and to ensure an increase in the number of medium-sized farms. The idea is, through the implementation of the CAP, to achieve wider access for small farms to financial and other assistance to ensure their competitive development. This raised the question of how to balance the structure of the agricultural sector through the implementation of the CAP phase 2014-2020. Many researchers on the problem of the deepening dualistic structure of agriculture have proposed that the new CAP make it possible to increase the share of small farms with access to financial assistance and to ensure an increase in the number of medium-sized farms. The idea is, through the implementation of the CAP, to achieve wider access for small farms to financial and other assistance to ensure their competitive development. Many researchers on the problem of the deepening dualistic structure of agriculture have proposed that the new CAP make it possible to increase the share of small farms with access to financial assistance and to ensure an increase in the number of medium-sized farms. The idea is, through the implementation of the CAP, to achieve wider access for small farms to financial and other assistance to ensure their competitive development. Many researchers on the problem of the deepening dualistic structure of agriculture have proposed that the new CAP make it possible to increase the share of small farms with access to financial assistance

and to ensure an increase in the number of medium-sized farms. The idea is, through the implementation of the CAP, to achieve wider access for small farms to financial and other assistance to ensure their competitive development.

By increasing the competitiveness of small farms can increase employment and achieve many side effects in rural areas of the country such as the development of related industries, increasing incomes, reducing the risk of agricultural activity, improving the skills of the workforce by acquiring experience and knowledge, implementation of innovations in production, etc.

# 2. Conceptual thesis of the dissertation

In the present dissertation research the thesis is defended that the Common Agricultural Policy (CAP) creates conditions for increasing the competitiveness of small agricultural holdings. Leading sub-theses in the research are:

- The CAP sets a framework that defines the competitiveness potential of small farms;
- The CAP affects the competitiveness of small farms and their adaptability to market requirements.

# 3. Purpose and tasks of research

**The goal** of the present dissertation is to establish the impact of the CAP on the level of competitiveness of small farms.

In order to achieve the set goal, the following tasks are solved:

- 1. The nature of small farms and their competitiveness are clarified;
- 2. The nature of the CAP and its role in achieving and increasing the competitiveness of small farms is clarified;
- 3. A conceptual framework for assessing the impact of the CAP on the competitiveness of small farms is being developed;
- 4. The impact of the CAP on the competitiveness of small farms is analyzed and assessed;
- **5.** The needs that small farms experience on the way to their competitive development in the conditions of the new CAP are analyzed.

### 3. Subject and object of the dissertation research

**Object** of the research are the small agricultural farms operating on the territory of Bulgaria.

**Subject** research on the impact of the CAP on the level of competitiveness of small farms.

# 5. Research approaches and methods

In the study, the systems approach is perceived as basic.

The methods used in conducting the study are:

- System analysis (analysis of the object presented as a system). The main objectives of its implementation in this case are to derive and justify the main trends in the development of the studied phenomena and processes.
- Situational analysis. Its application will make a description of the condition of the surveyed enterprises at a certain time or for a certain period. Depending on the needs of management through a system of indicators will characterize the state of competitiveness and financial condition of the enterprise in the sector.

- Comparative analysis. It makes certain conclusions about the place of the enterprise in the respective sector in terms of financial condition, investment activity, market presence, etc. For this purpose, comparative assessments of the main parameters of competitiveness of enterprises in the sector are made.
- Diagnostic analysis. It is used for an in-depth study of the conditions and factors that led to the established condition of the enterprise. When conducting it, first of all, the main indicators will be determined, which give a generalized characteristic of the competitiveness of the enterprise. The main factors that are considered to determine the level of competitiveness will then be identified.
- Statistical methods. Through these methods the properties of the studied population are investigated and the research hypotheses are tested.
- Constructive method. This method will be used to develop a structure (model) for the application of certain management approaches and tools in the operation of business units. Through this method the individual elements are assembled into a single whole, thus creating an opportunity for the realization of synergistic effects.

**Study period**- 13 years. The present study analyzes the competitiveness of the Ministry of Foreign Affairs in the period 2007-2020, the period in which the previous CAP (2007-2013) and the current CAP (2014-2020) operate. The indicators characterizing the condition of the studied objects are calculated for the indicated period. The present study is limited in time, place, methodology and scope. Specific approaches and methods are used due to the opportunities they provide for analysis and solving the research tasks of the dissertation. An attempt has been made to answer the most important questions, without believing that they have been completely exhausted and developed.

# 6. Main literary and information sources

The dissertation is developed using: scientific publications and works of Bulgarian and foreign authors; MAFWE data, Agrostatistics Directorate, Rural Development Directorate, Compensatory Measures Directorate, data contained in the MAFWA Agrarian Report, Eurostat data and the system of agricultural accounting information as well as a number of normative documents of the European Commission and the Republic of Bulgaria. Most of the information was gathered through surveys among farmers managing small farms.

Empirical information about the research is also provided by sample surveys and in-depth interviews conducted at the enterprise level on questionnaires prepared by the author.

The specialized software product SPSS and statistical package of MS Excel were used in the processing of the empirical information.

### 7. Volume and structure of the dissertation

The dissertation is presented in an introduction, six chapters and a conclusion, located on 166 pages, used literature and appendices. The study is illustrated with 22 figures, 5 diagrams and 16 tables.

#### 8. Content of the dissertation

Introduction

<u>Chapter I. Conceptual framework for assessing the impact of the CAP on the competitiveness of small farms</u>

1. The concept of small farms

- 1.1. Theoretical formulations
- 1.2. Indicators for setting the threshold for small farms
- 1.3. Definition of a small agricultural holding
- 1.4. Theoretical model of a small farm
- 2. Competition, competitive advantages and competitiveness of small agricultural holdings
- 2.1. Competition
- 2.2. Competitive advantages
- 2.3. Competitiveness of the small agricultural holding
- 3. The role of the CAP in developing the competitiveness of small farms
- 3.1. Origin and development of the CAP
- 3.2. CAP approach and tools for intervention of the agricultural sector
- 3.3. Specific intervention instruments for small farms within the framework of the CAP application
- 4. Methodological approach for assessing the impact of the CAP on the competitiveness of small farms
- 4.1. Assessment of the competitiveness of the Ministry of Foreign Affairs
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- 4.3. Organizing a survey
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Chapter II Influence of the CAP on the level of competitiveness of the MFA

- 1. Impact of the CAP and state support for achieving the competitiveness of the agricultural sector
- 2. Analysis of the support for small agricultural holdings under the CAP 2007-2013
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- 5. Conclusions

Chapter III. Identification of the needs of the Ministry of Foreign Affairs for development of their competitiveness in the conditions of the CAP

- 1. Strengths and weaknesses as opportunities and threats for the development of the competitiveness of the Ministry of Foreign Affairs
- 2. Potential for development of the competitiveness of the Ministry of Foreign Affairs
- 3. Basic needs of the Ministry of Foreign Affairs for development of their competitiveness

Conclusion	
Literature	

# II. Main content of the dissertation

#### Introduction

A characteristic feature of the structure of agricultural holdings in Bulgaria is its dual nature. This essence is expressed in the presence of a large number of small farms cultivating a small part of the utilized agricultural area (UAA) and a small number of large farms cultivating a significant part of the UAA. Small farms are important in terms of employment in rural areas and they play the role of social

buffer in the context of the economic crisis. In these farms a significant part of the production is used for own consumption, which limits the income from agricultural activity and the opportunities for investment and development. Following the completion of the CAP phase 2007-2013, an assessment of the impact of the CAP on the development of the agricultural sector was carried out. The results of the ex-post evaluation of the CAP show that more than 2/3 of the financial aid set aside to support agricultural holdings has been used by the large structures in the sector. This raised the question of how to balance the structure of the agricultural sector through the implementation of the CAP phase 2014-2020. Many researchers on the problem of the deepening dualistic structure of agriculture have proposed that the new CAP make it possible to increase the share of small farms with access to financial assistance and to ensure an increase in the number of medium-sized farms. The idea is, through the implementation of the CAP, to achieve wider access for small farms to financial and other assistance to ensure their competitive development. This raised the question of how to balance the structure of the agricultural sector through the implementation of the CAP phase 2014-2020. Many researchers on the problem of the deepening dualistic structure of agriculture have proposed that the new CAP make it possible to increase the share of small farms with access to financial assistance and to ensure an increase in the number of medium-sized farms. The idea is, through the implementation of the CAP, to achieve wider access for small farms to financial and other assistance to ensure their competitive development. This raised the question of how to balance the structure of the agricultural sector through the implementation of the CAP phase 2014-2020. Many researchers on the problem of the deepening dualistic structure of agriculture have proposed that the new CAP make it possible to increase the share of small farms with access to financial assistance and to ensure an increase in the number of medium-sized farms. The idea is, through the implementation of the CAP, to achieve wider access for small farms to financial and other assistance to ensure their competitive development. Many researchers on the problem of the deepening dualistic structure of agriculture have proposed that the new CAP make it possible to increase the share of small farms with access to financial assistance and to ensure an increase in the number of medium-sized farms. The idea is, through the implementation of the CAP, to achieve wider access for small farms to financial and other assistance to ensure their competitive development. Many researchers on the problem of the deepening dualistic structure of agriculture have proposed that the new CAP make it possible to increase the share of small farms with access to financial assistance and to ensure an increase in the number of medium-sized farms. The idea is, through the implementation of the CAP, to achieve wider access for small farms to financial and other assistance to ensure their competitive development.

By increasing the competitiveness of small farms can increase employment and achieve many side effects in rural areas of the country such as the development of related industries, increasing incomes, reducing the risk of agricultural activity, improving the skills of the workforce by acquiring experience and knowledge, implementation of innovations in production, etc.

Chapter I. Conceptual framework for assessing the impact of the CAP on

the competitiveness of small farms

# A. The concept of MFA

To the question "What is a small farm?" many answers can be given, depending on the context that is placed in it. Choosing an appropriate definition for small agricultural holdings (SMEs) is difficult, mainly for three reasons:

- (1) What physical or economic criterion should be used to determine the threshold?
- (2) Once the criterion has been chosen, it should be assessed whether it should be considered in absolute or relative terms. Relative expression means that it is related to the characteristics of all farms in a given area,
  - (3) What statistics are available in the country and at EU level?

Often small farms are associated with family households and farms (Gasson., 1988 (¹)), but "small farm" and "family farm" are not necessarily identical concepts (Hill, 1993 (²)). However, the link between the family and small farms exists through the amount of labor input provided by family members in agriculture. On the other hand, this connection is expressed in the importance of agriculture in the share of household income. Within the EU, family farms are particularly typical of Western Europe, where agriculture is mainly a family business. The new EU member states have a more diverse set of actors (Gorton 2009 (³)). The broad definition of a small farm is related to its size, expressed in hectares or number of animals (von Braun, 2005)<sup>4</sup>)), as the size is not necessarily a determining criterion. According to some authors, Ntsebeza and Hall (2007, p. 155 (⁵)) "small farm production capacity" differs significantly due to differences in the quality of arable land, access to resources, weather conditions, market, technological development and opportunity costs of capital and labor in the economy. Other authors (Von Braun 2005, p. 23) emphasize that

1

Gasson, R., Crow, G., Errigton, A., Hutson, J., Mardsen, T. and M., Winter (1988). The farm as a family business: a review, Journal of Agricultural Economics, 39, 1-41  $_2$ 

Hill, B. (1993). The 'myth' of the family farm: defining the family farm and assessing the importance in the European Community, Journal of Rural Studies 9 (4), 359-370  $_{\rm 3}$ 

Gorton, M., Hubbard, C. and Hubbard, L. (2009). The Folly of European Union Policy Transfer: why the Common Agricultural Policy (CAP) Does not fit Central and Eastern Europe Regional Studies

von Braun, J. (2005). Small-Scale Farmers in Liberalized Trade Environment in Huvio, T., Kola, J. and Lundstrom, T (eds.) Small-Scale Farmers in Liberaliased Trade Environment, Proceedings of the Seminar, Haikko, Finland, University of Helsinki, Department of Economics and Management, Publications no. 38, Agricultural Policy

Ntsebeza, L. and Hall, R. (2007). The land question in South Africa: The challenge of transformation and redistribution, HSRC Press

"such a precise definition" that "it is not possible to capture these institutional and technical characteristics due to the lack of internationally comparable statistics".

Small farms can be analyzed using different criteria. An example of such criteria could be farmland in hectares (UAA) or farm labor input. These indicators are highly dependent on the way crops and animals are raised. In addition, indicators related to the economic condition of a farm can be used. If small farms need to be identified in order to emphasize their need for special support measures, the economic size of the farm is the most appropriate criterion.

It is difficult to set a single threshold for small farms for all EU member states. The threshold may be set to determine the smallest farms whose UAA, when sorted by size, reach up to 20% of the total UAA in a Member State. This approach takes into account national specificities and is thus best suited to describe the different structural models existing in the EU-27. The absolute value of the threshold is different in each Member State, which makes it difficult to compare farms in different Member States. In addition, the problem of determining the relative value of the threshold remains (for example, the threshold can be determined in such a way as to identify the smallest farms covering 10% of the UAA - or 15%, 20%, etc.). The main problem in the identification of the Ministry of Foreign Affairs is the lack of data. Actually,

There are two main official sources of data at EU level, the Farm Structure Survey (FSS) and the Agricultural Accounting Information System (FADN). They have some restrictions on the coverage of small farms. FADN in accordance with Regulation (EU) № 1217/2009 - covers only market holdings, ie farms large enough to serve as the main activity for the farmer and to provide a level of income sufficient to support the household. The smallest farms are not monitored by this system. According to the general requirements for FSS (Regulation (EU) № 1166/2008), agricultural holdings are covered in which the utilized agricultural area is one or more hectares. Farm holdings in which the area used for agricultural activity is less than one hectare are also included, if they produce a certain part for sale or if their production unit exceeds certain physical thresholds. Given these requirements, the smallest farms are excluded from the survey, even if they produce self-sufficiency goods or produce a small part for the market. In this part of the dissertation we use only data from the FSS and the above limitations must be taken into account. The EU has adopted four indicators for determining small farms: utilized agricultural area (UAA), the amount of labor input, the level of own consumption and the economic size of the farm, even if they produce goods for self-sufficiency or produce a small part for the market. In this part of the dissertation we use only data from the FSS and the above limitations must be taken into account. The EU has adopted four indicators for determining small farms: utilized agricultural area (UAA), the amount of labor input, the level of own consumption and the economic size of the farm. even if they produce goods for self-sufficiency or produce a small part for the market. In this part of the dissertation we use only data from the FSS and the above limitations must be taken into account. The EU has adopted four indicators for determining small farms: utilized agricultural area (UAA), the

amount of labor input, the level of own consumption and the economic size of the farm.

To determine the typology of farms as MFA we use the following grounds:

- 1. The Ministry of Foreign Affairs as a legal form manifests itself as a farm of a natural person or a sole proprietorship, but the opposite is not always necessary;
- 2. The income from agriculture of the Ministry of Foreign Affairs is part of the total income of the agricultural household of the manager of the Ministry of Foreign Affairs;
- 3. In most cases, the share of income from the Ministry of Foreign Affairs in the structure of the total income of the agricultural household occupies a relatively high relative share.

Conditionally, agricultural holdings can be divided into several groups according to their economic size, which is measured in euros and represents the total standard production volume (TPS). It shows the potential of the farm, but not its financial results. The reason for comparing the total income of the rural household and the SPO is that by their nature they are income from different sources. In accordance with the data in the publication "Household Budget in Bulgaria", NSI, in 2010 the average amount of the total income of a rural household in 2010 amounted to BGN 7742 (EUR 3958). This amount includes all household income, including the estimated in-kind income from agriculture during the year. As the main source of income for small farms is agricultural activity, we consider it right to take the total household income as a threshold around which the farm in question can be considered as a small farm. As a result of the analysis of semi-market farms (6) determines the share of income from agriculture in the structure of the income of the agricultural household in the amount of 82%. This gives us a basis to calculate an approximate amount of income from agriculture for agricultural household in the amount of 3245 euros (3958 \* 82% = 3245 euros). Therefore, the MFA limit can be accepted up to 4,000 euros (SPO).

The average size of farms according to the SPO in Bulgaria is  $\epsilon$  6,640. Medium-sized farms are not the subject of the present study, but we consider it necessary that agricultural holdings in the amount of EUR 4,000 to 8,000 should not be placed in the group of large farms. They would also be subject to a specific support policy under the CAP. The other farms in the group over 8,000 euros fall into the group of large farms.

# B. Methodological approach for assessing the impact of the CAP on the competitiveness of small farms

The measurement of the level of competitiveness in the dissertation research is carried out at both macro and micro level. A deductive approach is used to identify the patterns that occur in the studied objects in terms of their

IAI, 2010

Nikolov D. and team, "Socio-economic sustainability of semi-market farms",

<sup>6</sup> 

competitiveness. Due to the lack of sufficient data on the state of sectoral competitiveness, the method of expert assessment and the survey method are used.

The analysis of the validity of the dissertation thesis takes place in two successive stages:

- > Assessment of the competitiveness of small agricultural holdings;
- > Assessment of the impact of the CAP on the competitiveness of the sector and on the competitiveness of small farms.

Assessment of the competitiveness of the Ministry of Foreign Affairs. It has already become clear that competitiveness is a complex and complex economic category. This causes difficulties in determining the indicators for its evaluation. In the specialized literature there is no single opinion on the number and composition of the indicators for determining the competitiveness of the Ministry of Foreign Affairs. This stems mainly from the differences in the authors' opinions on the nature of the economic category competitiveness. On the one hand, there is a desire to maximize the characterization of the competitiveness of the Ministry of Foreign Affairs. This leads to an excessive increase in the number of proposed evaluation indicators, which in turn makes their practical use difficult. On the other hand, there is a desire to develop a separate indicator with which to easily and quickly give a summary assessment of competitiveness.

Based on the defined immanent characteristics of the competitiveness of the Ministry of Foreign Affairs, we determine a system of indicators through which to analyze and assess competitiveness.

This system includes two groups of indicators - factorial and performance.

- Factorial indicators determine the potential of the Ministry of Foreign Affairs for competitiveness. These are factors that are defined as the engine of competitiveness.
- *Performance indicators* are those that determine the achieved degree of competitiveness of the Ministry of Foreign Affairs. They are also used as a tool for comparative analysis of competitiveness in the various MFAs by specialization.

Through statistical testing of hypotheses, the main hypothesis explaining the dependence of the factors determining the competitiveness of the Ministry of Foreign Affairs is proved or rejected. In the present dissertation research the hypothesis is defended that the Common Agricultural Policy (CAP) creates conditions for increasing the competitiveness of small agricultural holdings.

Table 1 shows the indicators for assessing the competitiveness of small farms that are the subject of analysis.

Table 1. Indicators for assessment of the competitiveness of the Ministry of Foreign

Affairs

Indicators for assessing

Characteristic features of competitiveness	SOURCE	Indicators for assessing the competitiveness of the Ministry of Foreign Affairs
Competitiveness of production - products are competitive when produced in higher quality with minimum production costs compared to those of competitors.	Ribov M .; Chobanyaneva I .; Danailov D .; Marinov G .; Minko V. Krichevsky M .; Ivancevich J .; Lifitz I.	Manufacturing costs;
Production efficiency.	Drucker P .; Petkov L .; Sergeev A .; Avila H .; Porter M.	Efficiency of direct costs; Revenue efficiency; Labor productivity; Profitability
Degree of adaptability to changes in the environment	Pettigrew A .; Galbraith C .; Rumelt R .; Lockshin L .; Twomey D .; Barinov V.	Liquidity, indebtedness, solvency
Profitability of production	Buckley P .; Pride W .; Paunov M.	Cost-effectiveness; Profitability of sales; Return on investment
Market power - the size of market share or cash income	Lipsey RE, Kirpalani VH; Van Duren ;, Armstrong and Collopy; Tirole J .; Bloodgood J. and Katz JP	Dynamics of cash income; Competitive Advantage Index;
Price leadership - the ability of the Ministry of Foreign Affairs to produce and sell its product at lower costs compared to its competitors; opportunity to realize economies of scale; Product differentiation - consumption of additional benefit compared to the benefit obtained from the consumption of competing products.	Zikmund W .; Kleiman L .; Emilova I .; Gorynia M .; Owen N .; Paunov M.	Market growth; Dynamics of the selling price of the production
Existence of innovative activity, new production technology to lead to higher productivity and minimization of production costs	Terptsra D .; Chankova L .; Ikherd J. and Jansen J.	Number of innovative products; Costs for raising the qualification of the working staff;
Generating and operating a new value along the chain.	Johannessen, J., Olsen, B., Priem, RL	Value added growth, Gross margin

Source: Adapted, Borisov, 2018.

Assessment of the impact of the CAP on the competitiveness of the Ministry of Foreign Affairs. Common framework for monitoring and evaluation. The 2013 reform of the Common Agricultural Policy (CAP) establishes a common monitoring and evaluation framework (CFM) in order to measure the results of the implementation of the CAP for the period 2014-2020, to show its achievements and to improve its efficiency. For the first time, this framework covers both the first pillar (direct payments and market measures) and the second pillar (rural development), as well as the horizontal measures (eg cross compliance) of the CAP.

In the Horizontal Regulation (Regulation (EU) M 1307/2013). It is established that the framework for monitoring and evaluation of the CAP for the period 2014-2020 should assess the implementation of the CAP in relation to its three general objectives:

- 1) sustainable food production with a focus on agricultural income, agricultural productivity and price stability;
- 2) sustainable management of natural resources and climate action, with a focus on greenhouse gas emissions, biodiversity, soils and waters;
- 3) balanced territorial development with a focus on rural employment, growth and poverty in rural areas.

ORMO provides key information on the implementation of the CAP (monitoring), as well as on its results and impacts (evaluation)<sup>7</sup>. The framework quantifies actions in Member States (final products), describes achievements and verifies the achievement of objectives.<sup>8</sup>. The Commission, together with the Member States in an expert group, designed the CSDP and developed a list of indicators, which were selected on the basis of intervention logic, based on general to specific objectives and interventions, and set out in various implementing acts.

*Indicators*. Five types of indicators have been identified to assess the implementation of the CAP:<sup>9</sup>

- 45 context indicators describing the overall operational environment of the policy;
- 84 indicators for final products measuring activities that are directly related to policy interventions;

Further information is provided in the "Technical Guide on the CAP Monitoring and Evaluation Framework 2014-2020" (2015).  $\ensuremath{\$}$ 

Further information is provided in the CAP Monitoring and Evaluation Framework 2014-2020 (2015).  $\ensuremath{^{\rm Q}}$ 

Commission Implementing Regulation (EU) № 834/2014.

<sup>7</sup> 

- 41 performance indicators: 16 performance indicators for the first pillar, measuring the direct and immediate effects of the interventions and 25 performance indicators for the second pillar (of which 19 correspond to indicators for the objectives);
- 24 target indicators (of which 19 correspond to result indicators) used to set quantitative targets at the beginning of the programming period;
- 16 impact indicators measuring the impact of policy interventions in the longer term and beyond the immediate effects (of which 13 are also included in the set of context indicators).

For each of the indicators, information sheets were prepared containing the definition, as well as the data sources, the level of geographical breakdown, the periodicity and the time parameters of the reporting. <sup>10</sup>In addition, sub-indicators were also included when it was considered that a breakdown was necessary, for example by sector or category. The framework currently includes a total of more than 900 sub-indicators.

**Data sources.** The indicators are defined in such a way as to use, as far as possible, existing channels for data collection<sup>11</sup>in order to avoid creating additional administrative burdens for beneficiaries and Member States. The wide variety of data sources used for the overall CTMR includes notifications from Member States, statistics at European level provided by Eurostat<sup>12</sup>, data collected by the European Environment Agency.

For the first pillar, end-product indicators are available through the Agricultural Market Management and Monitoring Information System (ISAMM), the Audit Tracking Audit System (CATS database) and the Refund Cost Information System. in agriculture (AGREX). Data for 2015, 2016 and partially for 2017 are available.

As regards the second pillar, monitoring data are collected through the annual implementation reports submitted by the Member States in June each year for the previous year. These reports include the values of the end product indicators, results and targets. In addition, Member States had to submit extended annual implementation reports in 2017 (and 2019), including additional information based on evaluation activities. Additional information on expenditure is collected on a quarterly basis through the declaration of expenditure for the European Agricultural Fund for Rural Development.

10

Fact sheets are available here.

11

Most sustainable development indicators are also part of the overall monitoring and evaluation framework.

Agricultural statistics, agri-environmental statistics, land cover and land use statistics (including the LUCAS survey), regional statistics, social statistics, trade statistics, etc.

Regarding rural development, data are available for the indicators for 2015 and the end of 2016.<sup>13</sup>

The use of existing data sources and the level of detail required for some indicators have an impact on time parameters and the periodicity of data availability. For example, data based on Eurostat survey data on the structure of agricultural holdings are collected once every three years and are available one and a half years after the reference year. Similarly, some environmental indicators are based on periodic surveys - for example, those related to soil quality are collected at 5-year intervals, with the latest information available for 2012.

The ORMO system provides an opportunity to assess the application of the CAP and its impact on the agricultural sector as the indicators assess not only the competitiveness of the sector, but also: the effective management of natural resources, socio-economic development of rural areas, green investment, biodiversity conservation, the adaptation of the sector to climate change, etc. In the framework of the present dissertation research indicators are used, which determine and measure the relation financial support (subsidizing the production in the small agricultural farm) and achieving competitiveness of the Ministry of Agriculture.

A systematic approach is used to assess the contribution of subsidies to the competitiveness of farms. The indicators used are grouped into two categories - (1) indicators assessing the input of the system, namely the level of subsidization of production on the farm and (2) indicators assessing the output of the system - this is the competitiveness of the farm. The first group of indicators includes the following: amount of SAPS payments received, agri-environmental payments, NATURA 2000 payments, payments for less-favored areas and investment subsidies. The second group of indicators includes: (1) gross margin (Nikolov, et al., 2012)<sup>14</sup>; (2) net operating income (Basev, 2009)<sup>15</sup> and (3) profitability of subsidies paid (ratio between subsidies received and gross output received) (Meadows, 1999)<sup>16</sup>.

The following questions are sought by regression analysis:

- What is the strength of the impact of subsidies on the competitiveness of farms?

13

Member States are due to submit data for 2017 on 30 June 2018. These data were not yet available at the time of writing. 14

Nikolov D., H. Basev, Iv. Janakieva, T. Radev (2012). Farm management. A guide to a successful business in agriculture. Publishing group Bulgaria, Sofia. s. 248.

Basev, H. Assessment of the effects of the application of the EU CAP on agricultural holdings. Economics and Management of Agriculture, Sofia, 1/2012. p. 14 - 30 16

Meadows, D, 1999. Indicators and Information for Sustainable Development. Hartland Four Corners, Vermont: Sustainability Instituty.

- What is the relationship between the subsidies received and the competitiveness achieved by the holdings?
- Does increasing subsidies increase the competitiveness of farms?
- What is the sensitivity of the competitiveness of farms to changes in subsidy levels?

In the regression model, the amount of subsidies received is defined as a factorial indicator. The following three indicators are used for performance indicators in the model - gross margin, net income and profitability of paid subsidies (see Figure 1).

Data from the Agricultural Accounting Information System (FADN) are used to construct the regression model and its analysis. According to the bulletin of the FADN (bulletin 269 / 02.2016) the data that are published are average results. A special weighing system is used to calculate the results. It is based on the principle of "free extension": the weight calculated for the holding applies to all holdings in the stratum (extrapolation coefficient). The individual weight is equal to the ratio between the number of holdings of the same stratum (SZSI area x type of specialization x economic size) in the observation field and in the sample. The representative sample of the FADN for 2013 includes 1950 marketoriented agricultural holdings, selected on the basis of their specialization and economic size.

Scheme 1. Regression model. Source: Own.

Type of relationship studied	Factorial indicator	Performance indicator
Influence of the amount of subsidies received on the gross margin	Subsidies received (BGN)	Gross margin (BGN)
Influence of the amount of subsidies received on net income	Subsidies received (BGN)	Net operating income (BGN)
Influence of the amount of subsidies received on the profitability of subsidies	Subsidies received (BGN)	Profitability of subsidies

**Organizing the survey.** In order to gather the necessary information, the following research activities are used to calculate the above indicators (see Figure 2):

- preparation of a questionnaire to study the condition and needs of small farms;
- conducting a survey and focus groups of agricultural producers in Veliko Tarnovo (March 17, 2019);
- conducting a survey conducting focus groups of agricultural producers in the city of Kardzhali (June 4, 2019), the city of Plovdiv (June 5, 2019) and the city of Sliven (June 6, 2019);

- processing of primary data from questionnaires and focus groups, as well as building a database (10.06.-13.06.2019);
- analysis of the strengths and weaknesses, opportunities and threats for the development of small farms in Bulgaria (June 14 June 17, 2019);
- identification of the main needs for increasing the competitiveness of small agricultural holdings in the future (14.07-17.07.2019);
- identification of the specific needs related to the restructuring of agricultural sectors, characterized by a large number of small agricultural holdings (14.08-17.08.2019).

The database of the Rural Development Directorate and the Compensatory Measures Directorate at the Ministry of Agriculture and Food - Sofia was used as a source for the sample formation. The obtained general population consists of 10,542 organizations that meet the criteria defining them as the Ministry of Foreign Affairs on the territory of the country. In the formation of the sample, the method of simple random sampling was used, as its constituent units were selected by irreversible selection. The sample size is 140 small agricultural holdings.

Scheme 2. Planned number of surveyed small farms by regions and size of the focus group. Source: Own.

Area	Number	Survey period
Veliko Tarnovo	31	03/10 - 03/17/2019
Kardzhali	33	06/01 - 06/04/2019
Plovdiv	46	04.06 05.06.2019
Sliven	30	05 - 06 - 06/06/2019
Total:	140	
Focus group 1 (Plovdiv)	48	14.07-17.07.2019
Focus group 2 (Sliven)	30	14.08-17.08.2019

Organizing a SWOT through a discussion in focus groups. The SWOT-analysis method is among the most popular in the scientific literature, which is used in assessing the factors determining the competitiveness of the Ministry of Foreign Affairs (Dimitrova, 2013), (Koprivlenski, 2011), (Yavuz, Baycan, 2013), (Rachid, Fadel, 2013), (Mehmood, Hassannezhad, Abbas, 2013). The technique of SWOT-analysis requires knowledge of all specific factors that have a direct and indirect impact on the competitiveness of the Ministry of Foreign Affairs in order to analyze them in detail so that the organization can easily adapt to their requirements. In the present dissertation research the idea is defended that the agricultural producers are the ones who fully know the internal factors of the business environment, which determine the future development of the Ministry of Foreign Affairs.

The strengths and weaknesses as well as the opportunities and threats arising from the external business environment are determined on the basis of the results of the discussions, conducted in two focus groups by the owners of the Ministry of Foreign Affairs in the dissertation research.

Scheme 2 shows the methodological approach for determining the financial problems and potential solutions for the development of the financial competitiveness of dairy enterprises.

# • Stages of diagnosis and strategic orientation

The first stage(A.) of the application of the methodological approach consists in the identification of the strengths / weaknesses as well as the opportunities and threats to the Ministry of Foreign Affairs, arising from the performed dissertation research. Focus groups of agricultural producers (MFA) discuss and determine the strengths and weaknesses as well as the opportunities and threats to the competitiveness of the MFA. Group discussions (focus groups) are used as a method in the research, which allows in-depth study of the research topic, while using the advantages of the group effect. During the discussions, by spontaneously thorough discussion of pre-determined conclusions from the dissertation research, a circle in small groups of people is clearly formulated, what are the strengths and weaknesses of the Ministry of Foreign Affairs and what opportunities and threats does the external environment provide for their future development. The discussions are organized and directed by a moderator (doctoral student), who asks the questions for discussion, observes the equal participation of the persons, directs in new interesting directions, spontaneously expressed by the participants.

In the second stage(B.) aims to construct a SWOT-matrix, which is the result of discussions in focus groups. The most frequently mentioned strengths / weaknesses as well as opportunities and threats in the derived focus groups find a place in the matrix. This matrix is subsequently used as a technique to identify two very important elements in the strategic orientation of the factors determining the competitiveness of the Ministry of Foreign Affairs, namely: 1) what are the most important strengths, weaknesses, opportunities and threats and 2) what is the interaction of the strengths and weaknesses with the indicated opportunities and threats.

In the third stage(S.) the most significant factors for the success of the Ministry of Foreign Affairs are sought. The method of expert assessment ranks the most significant strengths, weaknesses, opportunities and threats in a SWOTmatrix. The role of experts in evaluating these four building blocks of the SWOT matrix is played by the doctoral student, his / her supervisor and an independent expert. The expert assessment organized in this way aims to determine the most significant factors for the success of the Ministry of Foreign Affairs. The organization of the expert evaluation itself includes the following: instructing the experts on how to express their expert opinion; selection and application of an assessment scale; developing a map of the expert opinion and performing the expert assessment by the respondents. Each expert independently fills in a specially created map of the expert opinion. The SWOT matrix constructed in the previous stage of the study is used as such. In this matrix, the respondent assesses the interaction of strengths and weaknesses with the identified opportunities and threats. The expert uses a 4-point rating scale, which contains the following assessments: 0 - no interaction, 1 - weak interaction, 2 - strong interaction and 3 - very strong interaction between the studied factors.

Four types of interactions between the factors in the matrix are studied as follows: (1) interaction between the strengths and the identified opportunities. In this connection of research, an answer is sought to the question: to what extent these strengths can be used to realize the identified opportunities for development of the Ministry of Foreign Affairs; (2) the interaction between the

strengths and the threats, the assessment thus derived seeks an answer to the question: to what extent can these strengths be used to protect against the threats that the external environment contains; (3) interaction between the weaknesses and the identified opportunities, thus the answer to the question is sought: to what extent the weaknesses can hinder the realization of the identified opportunities and (4) interaction between the weaknesses and the indicated threats. This link indicates to what extent the weaknesses

In the fourth stage(D.) the application of the SWOT-analysis determines what is the interaction of the factors in the SWOT-matrix. At this stage, the results of the expert evaluation are summarized. The individually completed SWOT-matrices of each respondent are aggregated in one generalized SWOT-matrix, which is a map of the summarized results of the expert assessment. The row "Sum" summarizes the individual scores in the cells by columns of the matrix. This order identifies the most significant opportunities and threats to the future development of the Ministry of Foreign Affairs. The higher the amount for the respective opportunity or threat, the more significant it is, according to experts. In the column "Amount" are the individual estimates in the cells by rows in the matrix. This column identifies the most significant strengths and weaknesses that can be used to establish the competitive advantages of the Ministry of Foreign Affairs. The higher the amount for the respective strengths or weaknesses, the more significant it is, according to experts. The generalized matrix can be used as a tool for identifying the strategic orientation of MFAs in their future development in terms of managing their competitiveness. In other words, by compiling this matrix, two useful effects are achieved - (1) the direction of the future development of the Ministry of Foreign Affairs is determined and (2) a set of alternative strategies for the development of these production structures is outlined. The strategic orientation of the Ministry of Foreign Affairs is determined by the SOR-analysis method (abbreviation of three key success factors, which are: strengths, opportunities and roadblocks). This is a method for defining a financial strategy for the future development of the Ministry of Foreign Affairs,

# Chapter II Influence of the CAP on the level of competitiveness of the Ministry of Foreign Affairs

#### Impact of the CAP and government support for the sector

In the year of Bulgaria's accession to the EU (2008) there was a sharp change in the volume of agricultural production, expressed in value. The graph shows that the production of BGN 209 million decreased to BGN 157 million in just one year (see Fig. 3). At the beginning of 2010 there was a rise in the sector in terms of agricultural production, which lasted until 2015, namely the production of BGN 157 million reached BGN 380 million, which is an increase of nearly 2.3 times . Referring to this indicator, it could be concluded that the CAP has had an extremely positive impact on production in the sector over the last 10 years.

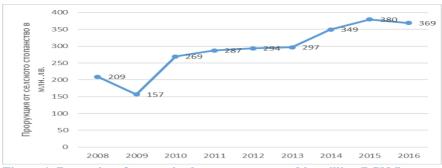


Figure 1. Dynamics of output in the sector expressed in million BGN Source: FAO / FAOSTAT data <a href="https://www.fao.org">www.fao.org</a> for the period 2008 -2016.

The expansion of utilized agricultural area (UAA) and the increase in the production of agricultural products are the factors that have an impact on the export of products produced by the sector. In the period 2007 - 2013, exports increased from BGN 217.1 million and reached its peak in 2013 to BGN 329.3 million (see Figure 4). After 2013, exports began to shrink gradually and reached values of BGN 306.9 million. Despite this downward trend in the value of exports, as a whole it has increased 1.4 times over the last 10 years. The positive trend of increasing exports in the period 2007-2013 proves that the CAP has a positive impact on the competitiveness of the agricultural sector on the international market.

Imports of agricultural products in Bulgaria in 2007 amounted to BGN 291.5 million, after the accession of our country to the EU imports fell sharply to BGN 228.8 million (in 2010). This is followed by a period of recovery and expansion of imports as it is almost equal in value to exports in 2018, namely reaching levels of BGN 303.3 million (see Figure 4). The sharp fluctuations in exports and imports are determined by the restructuring of the market orientation of the sector. As part of the EU, the country meets the high competitiveness of other EU member states in the European market. Nevertheless, Bulgarian agriculture managed to compete successfully as exports exceeded imports during the study period, which is reflected in a positive trade balance.

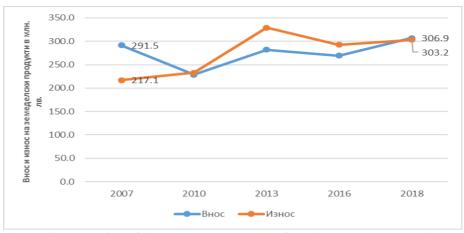


Figure 2. Dynamics of imports and exports of agricultural products in million BGN Source: FAO / FAOSTAT data <a href="www.fao.org">www.fao.org</a> for the period 2007 -2018.

The sustainable development of agriculture during the pre-accession vears is financed through state payments from the budget and the use of EU preaccession funds. Figure 3 shows the dynamics of financial assistance from the state to the sustainable development of agriculture in our country. In the preaccession period 2001-2007, the Bulgarian state provided financial support for the development of agriculture in the amount of BGN 202.29 million (in 2001), which increased and reached BGN 594.5 million in 2006. At the time of Bulgaria's accession to the EU, state support for the development of the agricultural sector began to decline sharply and reached its minimum of BGN 299.24 million in 2010. The downward trend in national support for the development of the sector is explained by the fact that that Bulgaria, as a full member of the EU, is starting to use as a matter of priority funds from the European Agricultural Fund for Rural Development (EAFRD) for the sustainable development of agriculture, as the national surcharges are gradually starting to decrease. In the period 2011-2015, state support increased sharply and reached its peak of BGN 1295.9 million in 2015. In this period, the accelerated absorption of financial assistance provided under the RDP 2007-2013 and the RDP 2014 began. -2020 as well as an increase in the national surcharges provided for the sector. As a result of the support provided through the financial mechanisms of the CAP and state co-payments over the last 10 years, there has been a sharp increase in production (2.3 times) and exports (1.4 times). This proves

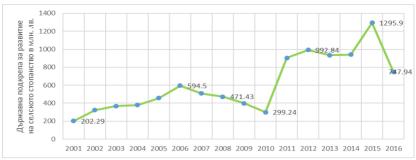


Figure 3. State support for agricultural development in million BGN Source: FAO / FAOSTAT data www.fao.org for the period 2001 -2016.

The financial support mechanisms for agriculture included in the CAP as well as those included in the state direct sectoral support have a multiplier effect and cause secondary effects in other (related) sectors (lending, tourism, agriculture, renewable energy sources, construction, education, etc.) . One of the important sectors for competitive development of agriculture is the credit sector. for sustainable implementation of projects management competitiveness of agricultural holdings requires co-financing entrepreneur (farm - private or public), which co-financing affects the demand for loans. The banking sector is a major provider of loans for agricultural development in the country. For the period 2000 - 2018, lending to the sector increased almost 20 times (see Fig. 4). The established increase in state support -6.4 times (compared to 2000) leads to this secondary effect in the credit sector. Loans granted to agriculture in 2000 amounted to BGN 106.3 million, and their amount increased dramatically and reached BGN 2,158.73 million in 2018.

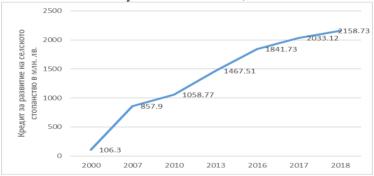


Figure 4. Loans granted in the agricultural sector (million BGN). Source: FAO / FAOSTAT datawww.fao.org for the period 2000 -2018.

Another important multiplier effect of CAP financial assistance on the sustainable development of the agricultural sector is the amount of foreign investment attracted. In the period 2000 - 2016 there are sharp fluctuations in foreign direct investment in the agricultural sector of Bulgaria. At the time of the country's accession to the EU, namely in 2008 there was an exceptional peak in attracted foreign investments, at this time they reached BGN 64.6 million (see Figure 5). An explanation in this can be found that our country as a new full

member of the EU is an interesting and attractive destination for investment. A year later, a drastic decline in attracted foreign direct investment began, reaching a minimum in 2010 - BGN 3.3 million. This is explained by the then created global economic situation, namely the onset of the financial crisis in 2007 in the United States, which later spread to the rest of the world. In the period 2010 - 2016 there is a stabilization and sluggish increase in foreign direct investment in the agricultural sector and in 2016 they reached levels of BGN 8.1 million (a level much lower than reported in 2000).

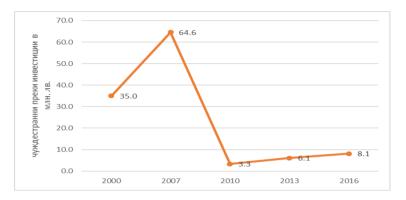


Figure 5. Foreign direct investment in the agricultural sector. Source: FAO / FAOSTAT datawww.fao.org for the period 2000 -2016.

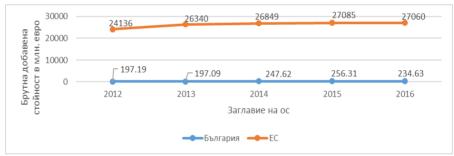


Figure 6. Gross value added generated by the agricultural sector (EUR million). Source: EUROSTAT, 2012-2016

The increase in state support as well as lending in the agricultural sector leads to an increase in gross value added (GVA). In 2012, the gross value added in the sector amounted to EUR 197.19 million. (see Fig. 6). In the following years, GVA increased and reached its peak in 2015 - 256.31 million euros, which is almost 1.3 times compared to the levels reported in 2012.

The increase in GVA in both production and exports proves that the CAP has a positive effect on the competitiveness of the sector. The growth rate of GVA in Bulgarian agriculture follows the positive growth rate of GVA at EU level (28).

At the time of Bulgaria's accession to the EU, the state of agriculture is low-productivity and low-competitive. The production process in the farm is

realized under extremely unfavorable conditions - low productivity of the applied production technologies (they are obsolete and resource-intensive), outdated equipment, low level of education and qualification of the employed workers, underdeveloped road and communal infrastructure. In this business environment, Bulgaria's agriculture is facing new challenges in the pan-European market. Bulgarian agricultural farms face the high competitiveness of Western European agricultural farms, which have innovative technologies, high-performance machinery and equipment, as well as highly skilled workers who work with them.

The entry of our country into the EU customs union requires the restructuring of exports of products produced by the sector. The change of the current traditional for our country foreign trade partners begins, due to the imposition of customs duties and other customs restrictions. The process of export restructuring is taking place at a time when the global economy is in a whirlwind of financial crisis. All this requires the state to take action to strategize its support to promote the competitiveness of the agricultural sector. In the following years, a process of preparation and implementation of a specific strategic program with the participation of stakeholders was launched, which would create opportunities for improving the general economic situation and the competitiveness of agriculture. The increase in agricultural production,

Achieving an innovative and competitive agricultural sector requires research and development (R&D) expenditures as well as promoting technology transfer from research and education organizations to agricultural holdings. The main source of R&D funding is the state budget, 98% of R&D in the sector is done annually by the state (according to data from the National Statistical Institute). There is still a lack of private enterprises to carry out R&D in the sector. At present, the contribution of science to the development of the agricultural sector is insufficient due to the low costs of research and development (R&D), innovation and development with practical effect. The link between science and agribusiness, innovation and technology transfer in the sector is underdeveloped.

# Chapter III. Identification of the needs of the Ministry of Foreign Affairs for development of their competitiveness in the conditions of the CAP

Empirical research has shown that small farms are highly dependent on the level of subsidies received. This determines the central role of the CAP and its intervention instruments in maintaining and developing the competitiveness of small farms. For more than 10 years, these production structures have been developing under the conditions of the CAP and, in general, their profitability and viability have increased dramatically, given the overall state of the agricultural sector. However, in the context of the new CAP, which will be implemented after 2021, the competitive development of small farms needs to determine their needs, taking into account the specific features of their management. The identification of the needs of the Ministry of Foreign Affairs under the new CAP starts as a process,

#### **SWOT** of the Ministry of Foreign Affairs

SWOT analysis is used to identify strengths and weaknesses, as well as opportunities and threats to the development of small farms. Through the

application of the in-depth interview method and through open and open discussions (in two focus groups), the strengths / weaknesses as well as the opportunities / threats of the Ministry of Foreign Affairs are identified.

Based on expert assessments, matrices of interaction between the 4 factors have been compiled. A point system assesses whether strengths help to seize an opportunity and whether they help prevent a specific threat. In addition, it was assessed whether the weaknesses do not create difficulties in seizing opportunities and preventing threats.

Table 2 lists the identified strengths and weaknesses as well as the opportunities and threats to developing the competitiveness of small farms under the CAP.

Table2. SWOT matrix of small farms. Source: Result of focus groups in which 78 owners of the Ministry of Foreign Affairs took part.

#### Strengths

- 1. Flexibility in business management
- 2. High degree of control over the activity
- 3. High motivation for farm development
- 4. They use mainly manual labor, which allows for better performance of labor operations (harvesting, weeding, pruning, spraying, etc.)
- 5. The backbone of the rural economy
- 6. Variety in manufactured products
- 7. Own funds for financing the activity
- 8. They perform social functions
- 9. Clearly expressed individualism in entrepreneurial activity
- 10. Apply production practices aimed at obtaining high quality products
- 11. Production of quality products from the point of view of the end user12. Protect natural resources

#### Weaknesses

- 1. Weak influence on the purchase price
- 2. High production costs
- Production of heterogeneous in type and quality products, in small volumes
- 4. They have no desire to cooperate
- There is a lack of experience in applying for structural funds and inability to work with administrative documents
- 6. Low degree of mechanization of production
- 7. Insufficient provision of skilled labor
- 8. Low creditworthiness
- 9. Insufficient working capital
- 10. Insufficient risk management skills
- 11. Poor awareness of market trends
- 12. Weak investment activity

#### **Opportunities**

- 1. Trend of rising food prices
- 2. Financial support from the state
- 3. Promotion of local food brands
- 4. Trend of increasing demand for organic products on the market
- Encouraging innovation and technology transfer by increasing the capacity of NAAS
- Direct sales
- Support for cooperation of agricultural producers
- 8. Search for quality agricultural products
- Creating local markets through the active participation of LAGs and municipalities

#### Threats

- 1. Unstable market prices
- 2. Competition from large farms in the country and the EU
- 3. Rising resource prices
- 4. Regulatory restrictions and unstable regulations
- Loss of specialized labor due to migration and emigration processes, as well as as a consequence of the demographic collapse
- Global climate change, the country falling into a drought zone and risks related to natural disasters
- 7. Strong market power of supermarkets and distributors
- 8. Insufficiently developed elements of the system for trade in agricultural goods (no futures contracts, auctions, etc.)
- 9. Underdeveloped credit market for the needs of agriculture
- 10. Delay in government payments Increase in administrative costs
- 11. Limited access to market information

# Potential for development of the competitiveness of the Ministry of Foreign Affairs

In the context of the competitiveness of small farms, five strengths and five weaknesses have been identified on the basis of focus groups with farmers. Strengths include:

- adaptability to market changes;
- high motivation;
- better performance of operations;
- own funding and

production of quality products.

#### Weaknesses include:

- high production costs;
- low degree of production standardization;
- low degree of mechanization;
- low creditworthiness and
- low awareness.

Based on assessments of the interaction between the strengths of small farms and the opportunities and threats to their development, it was found that in order of importance they are ranked as follows:

- 1. high motivation;
- 2. adaptability to market changes;
- 3. production of quality products;
- 4. own financing;
- 5. better performance of operations.

The first-placed strength "high motivation" can be defined as a major factor in competitiveness, as its assessment exceeds twice the assessment of the second-placed strength. The high motivation for development of the economy is related to the utilization of 7 of the 9 opportunities for development, and in terms of threats it helps to overcome 7 of them in 11 identified. It should also be noted that the links between motivation and opportunities and threats are defined by farmers in almost all cases as significant or of high importance (score 2 and score 3). Obviously, the motivation of farmers is the main tool that gives them the strength to compete in the market of agricultural products, as well as to continue their activities in the future.

Adaptability to market changes is another important strength of small farms, which helps to exploit six of the opportunities. This strength has a contribution in terms of opportunities close to that of the previous strength, but in terms of threats, a link is established with only one of them (volatile market prices). Obviously, faster decision-making and easier restructuring of production under the influence of market signals can have an impact only when opportunities are exploited. This defines the potential of this strength as limited in terms of the results of its manifestation.

A third important strength (the production of quality products) is assessed in an identical way to the previous one, with differences only in terms of its significance for specific opportunities. Here, too, there is this feature that the strength helps in practice only to seize opportunities.

The strength of "own funding" is assessed with a significantly lower degree of importance, but its contribution is almost entirely in terms of addressing threats. However, it should be borne in mind that for only two of the threats its relationship was assessed with high significance, which again shows limited application potential.

The last strength to be assessed is "better performance of operations", which has to do only with opportunities. It manifests itself significantly in only two of them. Again, the threats cannot be overcome through this strength, which defines it with limited potential. However, it should be borne in mind that the production of better quality products from small farms is the main means by which to meet the growing demand for quality (natural) agricultural products, as

well as to stimulate direct sales. In general, this strength is rated with the lowest degree of significance compared to the others, but its impact on competitiveness is direct, as it displaces competition outside the realm of prices.

All the above gives reason to conclude that small farms have the potential to take advantage of the opportunities arising from their specific features to put the amount of income in the first place among their goals, taking into account family ties and traditions and personal qualities of the farmer. Exploiting and developing this potential can lead to an improvement in the status of farmers and their families, which can also be reflected in an increase in living standards in rural areas. To this positive finding must be added the conclusion that the threats faced by small farms cannot be overcome through the strengths available. The strong-threat relationship manifests itself singly, most often of low significance,

Based on assessments of the interaction between the weaknesses of small farms and the opportunities and threats to their competitive development, it was found that in order of importance they are ranked as follows:

- 1. low awareness;
- 2. high production costs;
- 3. low creditworthiness;
- 4. weak standardization of production;
- 5. low degree of mechanization.

The most critical weakness in terms of the competitiveness of small farms is identified as "poor market awareness". Farmers say they have difficulty obtaining up-to-date and timely information, which puts them in a bad competitive position vis-à-vis large farms. Poor awareness is related to all identified opportunities without "creating local markets, through LAGs and municipalities", and in all cases it is significant or highly significant (score 2 and score 3). In general, this weakness creates problems mainly in exploiting opportunities and to a much lesser extent in threats. This suggests that overcoming this weakness is a key prerequisite for exploiting the opportunities of small farms.

High production costs also have a high degree of significance for the competitiveness of small farms. They have the exact opposite effect. It is related to 6 of the 11 threats, while in terms of opportunities it manifests itself in only two of them. Clearly, high costs are a major problem that prevents small farms from overcoming threats.

The low creditworthiness of small farms is the third most important weakness, characterized by a steady impact in terms of opportunities and threats. It manifests itself in 5 of the possibilities, but for only three it has a significant impact, and in terms of threats it manifests itself in 4 of them and again only for three it has a significant impact. In general, low creditworthiness has a limited impact on opportunities and threats. As a result, the competitiveness of small farms is threatened by the fact that it has a strong influence on: the absorption of funds to finance projects, the establishment of local food brands, investment in new production, balancing cash flows during the business year.

The low degree of standardization of production also has a negative impact on the competitiveness of small farms. This weakness is particularly strong in competition with large producers, as well as in the conclusion of contracts for the purchase of products from large processors or traders. The low degree of standardization of production creates problems mainly in the utilization of opportunities, and in terms of threats its impact is limited.

"The low degree of mechanization "is the last weak point in terms of importance. It is linked only to threats, and its manifestation is critical to the loss of specialized labor in the sector. This weak point calls into question the development of small farms in the near future if the necessary steps are not taken to overcome it.

All that has been said so far leads to the conclusion that small farms have weaknesses that prevent them from seizing opportunities, while also having to do with threats. Overcoming these weaknesses is a prerequisite for increasing the competitiveness of small farms. Without the provision of policy measures and support in this regard, small farms would not be able to maintain a competitive position in the market on their own. This finding is also supported by the fact that the weak-threat link is very common compared to the strong-threat link.

As a summary of the competitiveness of small farms, it can be determined that their competitive positions are highly endangered and difficult to compete through strengths, which requires very active work to overcome weaknesses.

For the sustainable development of the competitiveness of small farms, it is necessary to support their efforts in the management of innovation, risk and marketing in carrying out their activities. By supporting these business activities, small farms can overcome their weaknesses and attack opportunities through their strengths.

# Basic needs of the Ministry of Foreign Affairs for development of their competitiveness

In the current conditions of the CAP, small agricultural holdings in our country identify the following obstacles to increase competitiveness - organic access to certain production resources and high production costs; insufficient working capital; low mechanization of production; limited market access; competitive imports of agricultural products, as well as frequently changing regulations; the lack of sufficient experience in the management of the projects financed under the individual measures.

The main limiting factor in increasing the size of the farm is the available agricultural land. Farmers point out that the prices of agricultural land have increased significantly and even with the help of individual measures that support them, they cannot afford to buy one. The leasing of agricultural land is also difficult due to the long terms of leases, which are required to receive financial assistance under the individual measures. According to farmers, the procedure for renting municipal land is cumbersome. Large grain producers compete with the Ministry of Foreign Affairs for the management of land resources in the sector. Due to the poor condition of irrigation systems in the industry, access to water resources needed for agricultural production is limited. High irrigation fees (from BGN 20 to BGN 50) / dca) increase production costs and reduce the competitiveness of small farms. One of the options is the use of drilling and gravity irrigation to ensure production. This alternative requires additional investment costs (for drilling) as well as knowledge of the regulations

governing this type of activity. On the other hand, gravity irrigation leads to higher weeding and increased costs for RZ referrals. Small farms do not have the opportunity to invest in the creation of drip irrigation or the purchase of irrigation equipment due to lack of sufficient funds. This alternative requires additional investment costs (for drilling) as well as knowledge of the regulations governing this type of activity. On the other hand, gravity irrigation leads to higher weeding and increased costs for RZ referrals. Small farms do not have the opportunity to invest in the creation of drip irrigation or the purchase of irrigation equipment due to lack of sufficient funds. This alternative requires additional investment costs (for drilling) as well as knowledge of the regulations governing this type of activity. On the other hand, gravity irrigation leads to higher weeding and increased costs for RZ referrals. Small farms do not have the opportunity to invest in the creation of drip irrigation or the purchase of irrigation equipment due to lack of sufficient funds.

There are also restrictions on access to quality RH, fertilizers and fertilizers. Most farmers do not trust the quality of the referrals and fertilizers offered by traders. The low efficiency of these preparations leads to their more frequent use, and this reflects on the production costs. Traders often cheat and refuse to issue invoices to farmers, who are then unable to declare these costs. Low levels of income, as well as achieving financial stability with exclusively own funds objectively limit the available finances of small farms, necessary for investment and structural development. The banking sector has high requirements for the provision of agricultural loans and thus limit farmers' access to credit. This is the main reason why small farms do not invest in the purchase of specialized equipment and attachments. Another critical factor for the successful development of small farms is access to the market of agricultural products. Farmers say that this market is extremely dominated by resellers, who set low levels of purchase prices in order to make a higher profit from the business. Another factor that determines lower purchase prices is competitive imports of agricultural products, which set low levels of purchase prices in order to be able to derive higher profits from the activity. Another factor that determines lower purchase prices is competitive imports of agricultural products. which set low levels of purchase prices in order to be able to derive higher profits from the activity. Another factor that determines lower purchase prices is competitive imports of agricultural products.

The needs of small farms identified above require the following important decisions to be taken:

- effective state control over the activity of suppliers of resources and traders of agricultural products;
- working state guarantees for granting credit for the needs of small agricultural holdings, as well as the creation of conditions for the establishment of mutual credit, guarantee and insurance funds;
- a special measure for small farms for the purchase of agricultural machinery and attachments:
- to have more advance payments under the individual measures and to increase the amount of these payments;
- under a facilitated regime for small agricultural holdings wishing to lease municipal land;

- clearer presentation of the application rules for the individual measures, the necessary documents and requirements to be specified in advance;
- state support for hiring additional labor on farms;
- to remove the age limit of 60, which is required if the person wants to apply for financial assistance under the individual measures;
- more flexible regulations. In the case of beekeeping, the obligatory requirement for the agricultural producer to cultivate at least 10 decares of land should be abolished. To give the right only to livestock farms to delineate the pastures in one land. Do not require a document of ownership of the agricultural building on livestock farms, because this limits access to financial support and increases administrative costs;
- up-to-date and clearer orthophoto maps. This update will make it easier to delineate small farms, as well as minimize errors and subsequent sanctions;
- encouraging the construction of local agricultural markets, where only registered agricultural producers have the right to sell agricultural products;
- encouraging local processing companies to work with local raw materials;
- increase the capacity of the NAAS in order to meet the expectations of small farms to provide more advisory assistance.

**Needs for innovation.** The main needs of small farms in the field of innovation are: the need for up-to-date market information; providing more access to new technologies and knowledge. Farmers are showing a keen interest in organic production. The transition from conventional to organic production by small farms is limited by the high cost of certification, the high prices of RH preparations and fertilizers that are allowed to be used in this type of production, and the low awareness of market trends. Another limiting factor is the lack of experience and knowledge in the construction of organic production. Another need of small farms is to innovate in the protection of the farm during the season. Overcoming these obstacles requires the following steps:

- subsidizing the costs of certification of organic production in small farms;
- building a system for up-to-date market information. In practice, there is such a system and it is SAPI, but it does not really work and is not popular among farmers as an information source;
- promoting the technological transfer from scientific organizations to small agricultural holdings, through the structures of NAAS, which can be the link between science and industry;
- encouraging the creation of local structures between universities and agricultural holdings for the creation and testing of new products and technologies;
- Promotion of organic production as a successful form of agricultural business;

Risk management needs. The main sources of risk for small farms are natural disasters, volatile market prices, financial risk and theft of agricultural products. In general, farmers do not give priority to risk management in the management of the overall activity of the farm, but take into account its importance. The use of insurance organizations in sharing these risks from agricultural activity is not a popular measure. The reasons for this are: the low trust of farmers in the activities of these organizations, the high insurance costs and the low interest of insurance organizations to impose their insurance

products in the agricultural sector. In risk management, the following support actions need to be taken:

- higher levels of insurance premium subsidies;
- higher activity on the part of insurance organizations in sharing the risk in agricultural activity;
- to create mutual guarantee and insurance funds with the active participation of the state:
- promoting cooperation among farmers in the marketing of products;
- creation of joint structures among the local population for protection of the farms:
- a clear calendar deadline for the payment of subsidies by the state (by the end of March). In this way the farmer will better plan his financial needs during the year;

Marketing application needs. Small farms practically do not perform marketing functions. This function is reduced to searching for effective ways to market the product in the shortest possible time. The reason for this is the ignorance of the marketing approach as an effective approach to farm management, as well as the inability to make marketing expenses. The main obstacles in performing the marketing functions are: the complexity of the management of the farm; the small volume of production, which does not presuppose marketing functions, but more commercial skills in the placement of production; the lack of actually functioning agricultural markets nearby; the presence of a gray sector; impossibility to standardize the produced production.

The main measures that need to be taken to promote the marketing of small farms are:

- encouraging the establishment of marketing cooperatives;
- the creation of local agricultural markets;
- creation of standard contracts for sale of agricultural products with mandatory elements such as delivery times, production quantities and purchase prices;
- introduction of quality standards for agricultural products;
- introduction of short food chains and vertical integration with processors.

#### Conclusion

During the programming period 2007-2013. as well as during the second programming period 2014-2020, there is a constantly growing interest on the part of small farms in the measures in the RDP (pillar II) and the schemes included in Pillar I of the CAP. The majority of survey farms (nearly 2/3) have made their investments through some of the measures included in the RDP. Almost all (95%) holdings received financial support from the schemes under Pillar I of the CAP. This determines the leading role of the CAP in shaping the profitability and competitiveness of small farms in the future. The large-scale information and consulting activity carried out by the NAAS has a significant contribution in this respect.In practice, almost all (nearly 99%) of the total number of submitted applications for individual measures for the entire survey period (2007-2019) were prepared by the NAAS. This certainly plays a decisive role and has a positive impact on the activity of small farms in the application of the CAP in the sector.

The needs of small farms for advisory services for their transformation into competitive units are a priority in the large-scale and diverse consulting

activities of NAAS experts. It is necessary to expand the capacity of NAAS with appropriate additional staff, etc. type of potential, especially in those District Agricultural Advisory Services that serve rural areas in mountainous, semi-mountainous and border areas.

It is necessary to increase the consulting services in the field of insurance activity of small agricultural holdings and in the field of specific preventive actions related to natural risk management. Special emphasis is needed on the support of the Ministry of Foreign Affairs from the mountainous areas in order to increase their competitiveness and improve the demographic situation in these areas. It is advisable to join the group of the Ministry of Foreign Affairs before special assistance for tobacco-producing farms.

In conclusion, it can be summarized that it is necessary to continue the Thematic sub-program for the development of small farms within the RDP for the program after 2020 or another intervention instrument supporting the Ministry of Foreign Affairs. In this regard, the levels of support for the transformation of some of the small farms into market-oriented and competitive farms should be increased, as well as the diversification of the economic activity in these farms. In the next programming period it is necessary to promote the opportunities of NAAS to provide advisory and consulting services, incl. development of business plans for small farms. Next, the scope of access to information needs to be improved, advisory and consultancy services in hard-toreach rural areas by strengthening the capacity of the NAAS and its connection with the institutes of the Agricultural Academy and universities. Another element of support could be to encourage investment in organizing and developing short market access chains. In connection with the improvement of the access to the markets, support is also needed for the adaptation of the farms to the changes in the food system, related to the dominance of the big trade chains and the need for the development of the local markets. Last but not least, it should be noted that the Ministry of Foreign Affairs has improved access to finance by supporting the functioning of the following rural financial institutions: credit agricultural cooperatives, mutual guarantee and insurance funds,

# III. Information about the contributing moments in the dissertation

The following contribution moments of scientific and applied nature can be distinguished in the dissertation:

- The nature of small farms in the context of the Common Agricultural Policy (CAP) has been clarified;
- The essence of the competitiveness of small agricultural holdings is clarified;
- The influence of the CAP on the profitability and competitiveness of small agricultural enterprises has been established;
- The needs of small agricultural holdings in the conditions of the CAP have been identified;

#### VI. Publications

- **1. Стефанов, Н.**. (2020). THE IMPACT OF THE CAP ON THE SUSTAINABILITY OF FORESTRY SECTOR IN BULGARIA. Journal of Bio-Based Marketing, vol.2, 2020, 29-41
- 2. CTeфahob, H.(2020). CONTRIBUTION OF INDIVIDUAL FINANCIAL INSTRUMENTS FOR BIODIVERSITY PROTECTION, IMPROVEMENT OF ECOSYSTEM SERVICES AND PROTECTION OF HABITATS AND LANDSCAPE IN THE BULGARIAN AGRICULTURAL SECTOR. Journal of Bio-Based Marketing, vol. 2/2020, 52-59
- 3. Стефанов, H.(2020). CONTRIBUTION OF SUBSIDIES TO THE LEVEL OF INCOME OF SMALL FARMS IN BULGARIA. Journal of Bio-Based Marketing, vol. 3.1 / 2020, 35-42

# **Summary**

## 1. Relevance and motives for choosing the topic

A characteristic feature of the structure of agricultural holdings in Bulgaria is its dual nature. This essence is expressed in the presence of a large number of small farms cultivating a small part of the utilized agricultural area (UAA) and a small number of large farms cultivating a significant part of the UAA. Small farms are important in terms of employment in rural areas and they play the role of social buffer in the context of the economic crisis. In these farms a significant part of the production is used for own consumption, which limits the income from agricultural activity and the opportunities for investment and development. Following the completion of the CAP phase 2007-2013, an assessment of the impact of the CAP on the development of the agricultural sector was carried out. The results of the ex-post evaluation of the CAP show that more than 2/3 of the financial aid set aside to support agricultural holdings has been used by the large structures in the sector. This raised the question of how to balance the structure of the agricultural sector through the implementation of the CAP phase 2014-2020. Many researchers on the problem of the deepening dualistic structure of agriculture have proposed that the new CAP make it possible to increase the share of small farms with access to financial assistance and to ensure an increase in the number of medium-sized farms. The idea is, through the implementation of the CAP, to achieve wider access for small farms to financial and other assistance to ensure their competitive development. This raised the question of how to balance the structure of the agricultural sector through the implementation of the CAP phase 2014-2020. Many researchers on the problem of the deepening dualistic structure of agriculture have proposed that the new CAP make it possible to increase the share of small farms with access to financial assistance and to ensure an increase in the number of medium-sized farms. The idea is, through the implementation of the CAP, to achieve wider access for small farms to financial and other assistance to ensure their competitive development. This raised the question of how to balance the structure of the agricultural sector through the implementation of the CAP phase 2014-2020. Many researchers on the problem of the deepening dualistic structure of agriculture have proposed that the new CAP make it possible to increase the share of small farms with access to financial assistance and to ensure an increase in the number of medium-sized farms. The idea is, through the implementation of the CAP, to achieve wider access for small farms to financial and other assistance to ensure their competitive development. Many researchers on the problem of the deepening dualistic structure of agriculture have proposed that the new CAP make it possible to increase the share of small farms with access to financial assistance and to ensure an increase in the number of medium-sized farms. The idea is, through the implementation of the CAP, to achieve wider access for small farms to financial and other assistance to ensure their competitive development. Many researchers on the problem of the deepening dualistic structure of agriculture have proposed that the new CAP make it possible to increase the share of small farms with access to financial assistance and to ensure an increase in the number of medium-sized farms. The idea is, through the implementation of the CAP, to achieve wider access for small farms to financial and other assistance to ensure their competitive development.

By increasing the competitiveness of small farms, employment can be increased and many secondary effects can be achieved in the rural areas of the country, such as the development of related industries, increasing incomes, reducing the risk of agricultural activity, increasing the skills of the workforce. experience and knowledge, implementation of innovations in production, etc.

#### 2. Conceptual thesis of the dissertation

In the present dissertation research the thesis is defended that the Common Agricultural Policy (CAP) creates conditions for increasing the competitiveness of small agricultural holdings. Leading sub-theses in the research are:

- The CAP sets a framework that defines the competitiveness potential of small farms;
- The CAP affects the competitiveness of small farms and their adaptability to market requirements.

#### 3. Purpose and tasks of research

The goal of the present dissertation is to establish the impact of the CAP on the level of competitiveness of small farms.

In order to achieve the set goal, the following tasks are solved:

- The nature of small farms and their competitiveness are clarified;
- The nature of the CAP and its role in achieving and increasing the competitiveness of small farms is clarified;
- A conceptual framework for assessing the impact of the CAP on the competitiveness of small farms is being developed;
- The impact of the CAP on the competitiveness of small farms is analyzed and assessed:
- The needs that small farms experience on the way to their competitive development in the conditions of the new CAP are analyzed.

#### 4. Subject and object of the dissertation research

**Object**of the research are the small agricultural farms operating on the territory of Bulgaria. Subject of the research is the impact of the CAP on the level of competitiveness of small farms.

#### 5. Conclusion

During the programming period 2007-2013, as well as during the second programming period 2014-2020, there is a constantly growing interest on the part of small farms in the measures in the RDP (pillar II) and the schemes included in Pillar I of the CAP. The majority of survey farms (nearly 2/3) have made their investments through some of the measures included in the RDP. Almost all (95%) farms received financial support from the schemes under Pillar I of the CAP. This determines the leading role of the CAP in shaping the profitability and competitiveness of small farms in the future. The large-scale information and consulting activity carried out by the NAAS has a significant contribution in this respect. The assistance received free of charge from the NAAS in preparing the business plans in connection with the application for the individual measures of the RDP proves to be particularly useful. In practice, almost all (nearly 99%) of the total number of applications submitted for individual measures for the entire survey period (2007-2019) were prepared by the NAAS. This certainly plays a crucial role and has a positive impact on the activity of small farms in the application of the CAP in the sector.

The needs of small farms for advisory services for their transformation into competitive units are a priority in the large-scale and diverse consulting activities of NAAS experts. It is necessary to expand the capacity of NAAS with appropriate additional staff, etc. type of potential, especially in those District Agricultural Advisory Services that serve rural areas in mountainous, semi-mountainous and border areas.

They need to increase consulting services in the field of insurance activity of small agricultural holdings and in the field of specific preventive actions related to natural risk management. Special emphasis is needed on the support of the Ministry of Foreign Affairs from the mountainous areas in order to increase their competitiveness and improve the demographic situation in these areas. It is advisable to join the group of the Ministry of Foreign Affairs before special assistance for tobacco-producing farms.

In conclusion, it can be summarized that it is necessary to continue the Thematic sub-program for the development of small farms within the RDP for the program after 2020 or other intervention instrument supporting the Ministry of Foreign Affairs. In this regard, the levels of support for the transformation of some small farms into market-oriented and competitive farms should be increased, as well as the diversification of economic activity in these farms. In the next programming period it is necessary to promote the opportunities of NAAS to provide advisory and consulting services, incl. development of business plans for small farms. Next, the scope of access to information needs to be improved, advisory and consultancy services in hard-to-reach rural areas by strengthening the capacity of the NAAS and its connection with the institutes of the Agricultural Academy and universities. Another element of support could be to encourage investment in organizing and developing short market access chains. In connection with the improvement of access to the markets, support is also needed for the adaptation of the farms to the changes in the food system, connected with the dominance of the big trade chains and the need for the development of the local markets. Last but not least, it should be noted that the Ministry of Foreign Affairs has improved access to finance by supporting the

functioning of the following rural financial institutions: credit agricultural cooperatives, mutual guarantee and insurance funds.