„Dunărea de Jos" University of Galați

Doctoral School of Fundamental Sciences and Engineering

DOCTORAL THESIS

ABSTRACT

RESEARCH ON THE IMPACT OF PAYMENT SCHEMES ON AGRICULTURAL PRODUCTION IN GALATI COUNTY

PhD Student,

Marius Daniel Nicula

Scientific coordinator,	**Prof. dr. eng. dr. ec. habil. Silvius STANCIU, „Dunărea de Jos" University of Galați**
Scientific references	**1. Prof. dr. eng. habil. Răzvan Ionuț TEODORESCU, University of Agronomic Sciences and Veterinary Medicine of Bucharest**
	2. Prof. univ. dr. ing. habil.Tiberiu IANCU, Banat University of Agricultural Sciences and Veterinary Medicine of Timisoara
	3. Prof. univ. dr. ing. Dumitru DRĂGOTOIU, University of Agronomic Sciences and Veterinary Medicine of Bucharest

Series I 9 Engineering and Management in Agriculture and Rural Development. No:10

GALAŢI

2021

The series of doctoral theses defended publicly in UDJG starting with October 1, 2013 are:

ENGINEERING SCIENCES

- Series I 1: Biotechnologies
- Series I 2: Computers and information technology
- Series I 3: Electrical engineering
- Series I 4: Industrial engineering
- Series I 5: Materials engineering
- Series I 6: Mechanical engineering
- Series I 7: Food Engineering
- Series I 8: Systems Engineering
- Series I 9: Engineering and management in agriculture and rural development

Domain ECONOMIC SCIENCES

- Series E 1: Economy
- Series E 2: Management

The field of HUMANITIES

- Series U 1: Philology - English
- Series U 2: Philology - Romanian
- Series U 3: History
- Series U 4: Philology - French

The field of MATHEMATICS AND NATURAL SCIENCES

- Series C: Chemistry

Foreword,

In the elaboration of the doctoral thesis I benefited from the competent guidance of Mr. Prof. univ. Dr. Eng. Dr. Ec. habil. Silvius STANCIU, as scientific director, to whom I would like to thank for the support offered and for the understanding shown during the doctoral internship and to express my full gratitude.

I would like to thank the university staff from the “Dunărea de Jos” University of Galați, for the help provided during these years of elaboration of the study: Mr. Rector, Prof. univ. dr. eng. Puiu Lucian Georgescu, Mr. IOSUD-UDJG Director, Prof. univ. dr. Cristian Victor Eugen RUSU, MCA, Mrs. Prof. Univ. Dr. Gabriela Elena BAHRIM, Dean of the Faculty of Food Science and Engineering, Mrs. Assoc. dr. Gina Necula, Dean of the Cross-Border Faculty.

I thank the teachers from the Department of Food Science, Food Engineering, Biotechnology and Aquaculture at the "Dunărea de Jos" University of Galați, Faculty of Food Science and Engineering, for their support during their doctoral studies. Special thanks to the guidance committee during my doctoral studies, which, through the support provided, helped me to complete the research within the thesis: Mrs. prof. Univ. Dr. Eng.ec. habil. Maria Magdalena Turek RAHOVEANU, Mr. prof. Univ. Dr. Eng. ec. habil. Adrian Gheorghe ZUGRAVU, Mr. Assoc. Prof. Dr. Eng. Cezar Ionuț BICHESCU, respectively Mr. Prof. Univ. Dr. habil. Florin Marian BUHOCIU, for the valuable recommendations made during the elaboration of the doctoral thesis.

I would like to thank my colleagues from local public institutions, who facilitated my access to the databases necessary for the elaboration of the doctoral thesis, especially the Agency for Payments and Intervention for Agriculture - Galati County Center, Galati County Agriculture Directorate, Territorial Branch of the Agency National Land Improvement and Galati County Directorate of Statistics.

Thank you Mrs. Alexandrina SAVA, administrator at the Individual Enterprise Sava Alexandrina, Mr. Ștefan OPREA, administrator at Compania Oprea S.R.L. and Mr. Dorin BURUIANĂ, administrator at Dorin S.R.L. for the help and understanding they showed during the research period related to the case studies, by providing the data necessary for the implementation and completion of the doctoral thesis.

Last but not least, I would like to thank especially the family and those who helped, encouraged and joined me in completing my doctoral thesis.

CONTENT

INTRODUCTION

The new agricultural policy aims to consolidate and improve agricultural holdings, ensure superior agri-food products in terms of quality, ensure stable and reasonable incomes for farmers, develop complementary activities to create jobs, protect the environment through friendly agricultural policies and improving living conditions for rural residents.

Starting from these desideratums, the present work has established as its objective, a detailed analysis of the agricultural production processes and of the relations between them and the financial support.

The study focused on the technical side of the farm management regarding the potential, ways and modalities of financing the vegetal and animal production, carried out in accordance with the legislation in force.

Traditionally, the agricultural sector is a very important branch for the national economy and for the evaluated region, this being highlighted in the share of the population living in rural areas and working in agriculture.

The Romanian rural economy is mainly based on agriculture, mainly due to tradition, natural potential (represented by favorable geographical conditions - relief, climate, soils, precipitation, etc.) and experienced staff, characteristics that make this sector an attractive and profitable field. . Both at national level and at the level of Galati county, agriculture has an important contribution in the Gross Domestic Product.

From this perspective, the topics addressed in the research are important and current, given the importance of the sector but also its fragility, taking into account the frequency of climate change (prolonged droughts, floods, landslides), imbalances in the structure of farms, decline national animal husbandry, migration of the population from rural areas, unstable prices for raw materials and finished products, deficient infrastructure, gaps between scientific research and professional training of farmers, etc.

The general objectives of the thesis are related to the analysis of agriculture in Galati County, in the general socio-economic context of rural areas, the performance of the local agri-food sector, environmental conditions, rural economy, human resource quality and local development. The doctoral thesis aims to identify and implement strategies to increase agriculture in Galati County based on the objectives of the draft reform of the Common Agricultural Policy for 2015-2020 and to facilitate farmers' access to the national subsidy system.

Stimulating competitiveness between farms, sustainability and the practice of an organic farming system guarantees the citizens of the European Union a healthy and quality diet.

The doctoral thesis established as an objective a detailed analysis of the agricultural production processes and the relations between them and the financial support of the agricultural sector in Romania. During the preparation and elaboration of the doctoral thesis, researches were carried out on the degree of development of agriculture and food industry, respectively the capacity to integrate agricultural production in Galati County. During the research he collaborated with the Galati County Directorate for Agriculture, the Agriculture Payments and Intervention Agency, the Galati County Payments and Intervention Agency - Galati County Center, the Galati County Office for Rural Investments, the Territorial Branch of the National Agency for Land Improvements and from Oprea SRL Company and Sava Alexandrina Individual Enterprise.

The research results can be used by farmers to improve and expand agricultural activity, as useful application information is presented, along with an extensive bibliographic documentation on agricultural policies in Romania and the European Union. The recommendations of the doctoral thesis can be taken into account by officials in the realization and implementation of the future agricultural policies of Romania.

From a structural point of view, the doctoral thesis begins with a word before, followed by an introduction, in which are briefly presented the objectives and the composition of the thesis, 6 chapters, conclusions, bibliography and annexes. For a good review of the paper, lists of abbreviations used, figures and tables were made, indicating the page where they can be found.
The documentary part of the paper, including the presentation of the working methodology are made over 40 pages, representing about 20% of the thesis. Chapter I. "Research on the financing mechanisms of agriculture in Romania and in the European Union" presents the instruments and mechanisms for financing agriculture through the Common Agricultural Policy.

The basic instruments of the Common Agricultural Policy are given by the Common Market Organization and the funds allocated for Rural Development. Financial support for agriculture and rural development for the Member States of the European Union is provided from the Community budget, to which each Member State comes with its own annual contribution, used to adjust agriculture to market requirements. The mechanisms for financing the EU agricultural budget 27, since 2007, consist of the European Agricultural Guarantee Fund (EAGF), which finances direct payments and the European Agricultural Fund for Rural Development (EAFRD), to finance rural development programs. . Support for agricultural markets and producers' incomes is achieved by granting direct payments to farmers and subsidies resulting from the requirements of the Common Market Organizations (application of intervention prices, collection of products from public funds to eliminate surplus from markets, quantitative restrictions on imports or exports).

An interesting conclusion of this chapter is that the system of direct payments has led to an increase in the sale prices of agricultural land, the value of land lease and ultimately led to a slowdown in the merger and restructuring process.

Chapter II. "Research method, research purpose and objectives", presents the research methods used in the paper. During the research process, the stages of collecting (through investigation, observation and experimental research) data processing and analysis were completed.

In the second part of the doctoral thesis were presented the results obtained and their interpretation following the studies performed and their own contributions.

Chapter III. "Characterization of the natural and organizational framework of Galati County" includes an analysis of the natural conditions of Galati County (relief, air temperature, atmospheric precipitation, hydrographic network and soils). The territory of Galați County ensures favorable and diversified conditions for the development of agricultural activity, but also the presence of negative phenomena (soil erosion, landslides, soils exposed to floods) and the appearance of poorly productive, sandy and salty soils.

In the administrative-territorial organization of the county, the network of localities plays an important role in the interactions in the regional space and in the territorial organization of the population.

The analysis of human resources in Galați County highlighted the fact that the population employed in agriculture holds a percentage of over 23.97%, in the industry sector, construction operates 28.99%, and in trade and services 47.05%.

Chapter IV. "Diagnostic study on the development of agriculture in Galati County in 2016-2020" includes a system of indicators on the role of agriculture in Galati County, land by categories of use and ownership, livestock, species, irrigation facilities, drainage and control soil erosion, arable crop structure, by crop groups and crops, average production per hectare and total production, destination of plant production, livestock, species and categories, average production per foraged animal and total production, destination of origin animal and feed base.

According to the analysis, high-performance agriculture can be practiced in Galati County. Favorable conditions offer farmers the opportunity to choose diversified crop structures, depending on market requirements for certain products at a given time. The hilly lands, dominant in the area, allow the mechanized performance of agricultural works by using high-performance equipment and

large capacities. Chapter V. "Financing agriculture in Galati County through the instruments and mechanisms of the Common Agricultural Policy".

Supporting agriculture from public funds (EU budget and national budget) at county level is part of the Common Agricultural Policy and is, at this stage, an essential aid for agricultural producers. The financing of agricultural holdings is made from own sources and from attracted sources that come from the state budget (subsidies), from non-reimbursable external financial assistance, external credit inflows, bank loans and other internal sources such as credit unions, loans, sales. with on-time delivery, certificates of deposit.

Chapter VI. „Research on the impact of payment schemes on agricultural production in Galati County. Case Study". presents the influence of the Common Agricultural Policy on the production structure, agricultural production and economic efficiency at the companies Oprea S.R.L, DORIN S.R.L. and at the Sava Alexandrina Individual Enterprise. In these societies it can be seen that achieving positive economic results in plant cultivation and animal husbandry is dependent on providing substantial support, both from the state and from European Union funds through the Common Agricultural Policies.

Chapter VII. "General conclusions. Original Contributions and Perspectives ”includes the main conclusions drawn from the research conducted and from the interpretations of the results and recommendations for future research directions related to the topic addressed. An important section of this chapter is the creation of a Practical Guide for accessing European funds by farmers in Galati County, which, through 15 points, focuses on recommendations for obtaining funding.

The bibliography contains 117 bibliographical references. The thesis contains 112 tables and 45 figures.

During the doctoral studies were published as main author or co-author a chapter in a volume made under the auspices of the Romanian Academy, 14 scientific articles in ISI listed journals / volumes of ISI Proceedings conferences (of which 4 as main author, 8 as co-author and 2 articles being indexed), and a number of 17 papers were presented at international scientific conferences, of which 5 as lead author and 12 as co-author.

1. RESEARCH ON AGRICULTURAL FINANCING MECHANISMS IN ROMANIA AND THE EUROPEAN UNION

1.1. Brief history of financing agriculture through the Common Agricultural Policy

Agriculture is the main sector responsible for food security of the population, is the strategic sector in all countries of the world, while having a special contribution to the general process of sustainable economic development and environmental protection, its contribution to accelerating the formation of competitive market and the structure of national economies. different from one country to another.

Both globally and in Romania, the demand for agricultural and agri-food products is constantly growing, being determined by the numerical increase of the population, the increase of the population income, the modification of the structure of consumption of agricultural and agri-food products, ensuring national reserves of agricultural and agri-food products. and so on

In Romania, agriculture has been and continues to be a sector of great importance, through the contribution it brings to the national economy, through the provision of food security, as well as through the provision of jobs for the rural population.

The implementation of the Common Agricultural Policy in Romania has led to a radical change in schemes to support agricultural production, national mechanisms, applied before accession, being replaced by those applied at Community level and achieved by linking agricultural production processes with national programs applied to financial support. national agricultural sector.

Romania must adapt to the European model of agriculture based on competitiveness, market orientation, environmental protection, integration of agriculture with the environment and forestry, etc.

Competitiveness in agriculture can be achieved by forming multi-activity, market-oriented agricultural holdings, by associating and cooperating with them, accessing non-reimbursable funds for making the necessary investments in farms or processing units, etc.

The agricultural sector is characterized by multifunctionality, a feature that contributes to ensuring the well-being by meeting the needs of present and future generations in terms of food, non-food or environmental services.

The European model of agriculture is based on a competitive, market-oriented sector, also fulfilling the functions of environmental protection, ensuring optimal living conditions for the rural population as well as the integration of agriculture with the environment.

The Common Agricultural Policy (CAP) is one of the most important development directions at European level, for which the institutional framework, a unitary financing and management system, strategies and rules establishing the production, processing and marketing of agri-food products in the European Union have been created. and involving increasing attention to rural development. The Common Agricultural Policy is a system of means and methods of operation through which the general objectives in the agricultural sector are met.

The challenge for agricultural policies is to improve the functioning of markets for exits, inputs and financial services, in order to overcome market problems.

In 1957, at the same time as the Treaty of Rome was signed, the European Economic Community (EEC) was established in six states: Belgium, France, Germany, Italy, Luxembourg and the Netherlands, which represents the moment of the establishment of the Common Agricultural Policy.

Legislation on agricultural policy can be found in Articles 38-46 of the Treaty of Rome (currently Articles 32-38, as amended by the Treaty of Amsterdam).

In 1958, when the common market was established by the Treaty of Rome, the agriculture of the founding Member States (Belgium, France, Germany, Italy, Luxembourg and the Netherlands)

was characterized by a strong involvement of the state. The main reason for the emergence of the Common Agricultural Policy is to eliminate state interventions that are not compatible with the common market and to include the free movement of agri-food goods and products. The year 2007, the date of Romania's accession to the European Union, marked a new era in the agricultural and rural development economy of our country. In this context, Romania had to quickly adapt its agricultural and rural development economy in order to be able to integrate into the internal market of the European Union and to fully adopt the CAP.

It was necessary for European states to relinquish their sovereignty privileges in the field of agriculture, in accordance with the principles of the CAP:

• obstacles to attempts to balance agricultural production and constant demand for food could lead to large price fluctuations within the Union, if there were no market regulation measures;

• without adequate border protection, changes in market prices would reduce common prices and thus lead to changes in production;

• the high number of disadvantaged regions, for which measures were needed to reduce structural deficiencies, both in order to maintain the level of production and to maintain the population;

• decisions on rural development are an important objective of the common European policy, as 50% of the population of the European Union lives in rural areas;

• European trade in agricultural products and the decision of exporting countries to ensure the placement of their products.

The CAP uses more than 50% of the common budget through the complex system of grants and other financial incentives. The agricultural sector is a traditional sector, which provides the indispensable food for human existence, with foundations in history, and symbols in the form of traditions, customs, legends, which are essential sources in shaping national identities.

The European payment system has seven components:

1) aid coupled to production;
2) a "basic payment";
3) a payment for the "ecological component" ("green" for public environmental goods);
4) additional aid for the first hectares of a holding through redistributive payment;
5) young farmers benefit from additional payment;
6) simplification of the system for small farmers;
7) providing additional income support in areas facing natural constraints.

By 2019, each Member State has provided for adjustable direct payment packages that can be transformed into minimum payments per hectare, consolidating the two pillars of the Common Agricultural Policy. Pillar I is fully funded by the "European Agricultural Guarantee Fund" (EAGF) and covers direct aid and market measures, and Pillar II is co-financed and provides payments for rural development. Member States have the possibility to transfer funds initially allocated to the two funds (from the first pillar to the second pillar, up to 15%, and from the second pillar to the first pillar, up to 25%).

The new Single Common Market Organization allocates a new "crisis reserve" to combat possible market disturbances, by providing integrated, more precise and area-focused treatment for rural development. A number of existing instruments under the second pillar of the CAP have been simplified to focus on support for competitiveness, innovation, knowledge-based agriculture, the setting up of young farmers, sustainable coordination of natural resources and balanced territorial development.

1.2. Tools and mechanisms for supporting, implementing and consolidating the Common Agricultural Policy in the European Union

The financing of agriculture and rural development of the Member States of the European Union is ensured:

- from the Community budget, to which each Member State contributes annually a percentage of GDP (non-reimbursable financing to support farmers' incomes);

- from the national budgets for adjusting agriculture to the exigencies of the market;
- from farmers' own sources;
- from loans, in addition to own sources.

In the case of implementation of rural development measures concerning investments, their financing has as a source, in addition to the Community budget, the national co - financing from the national budget of the Member States, as well as the participation with own funds of the project beneficiaries. The year 2015 can be defined as the reference year for the declared land area. Member States can expect a significant increase in the areas declared eligible and were entitled to limit the number of payment entitlements granted in 2015 to either a percentage of 135% or a percentage of 145% of the total area declared in 2009.

The provisions on cross-compliance involve farmers complying with:

- rules laid down by the Member States concerning agronomic and environmental conditions designed to limit soil erosion, maintain soil structure and soil organic matter levels and ensure a minimum level of maintenance;
- the European rules in force on public health, animal health, the environment and animal welfare.

If the rules of cross compliance are not complied with by a farmer, the direct payments he can claim are partially reduced or even eliminated altogether. A budgetary discipline mechanism is in place to keep expenditure under the first pillar of the CAP below the annual budgetary ceilings set in the multiannual framework of the financial perspective. Direct payments to farmers in advance can be reduced in each year to feed the market's new "crisis reserve" to € 400 million.

The main instruments for supporting, implementing and consolidating the Common Agricultural Policy are:

1. Basic payment scheme / simplified area payment.

Member States distribute about 70% of their national envelope to direct payments in the context of the new basic payment scheme, after deducting the amounts allocated to young farmers or other payments for less-favored areas, small farmers, redistributive payments or "coupled" payments. Amounts corresponding to farmers receiving more than the regional or national average were adjusted proportionately, with Member States having the option to limit any "loss" of support to 30%.

2. Mechanisms for redistribution of basic payments

Member States shall be entitled to make a redistributive payment for the first hectares, for which they may allocate up to 30% of the national parcel, either for the first 30 hectares or up to the average area of agricultural holdings, if this is more than 30 hectares. hectares. Member States applying the redistributive payment may be exempted from the compulsory degressivity of basic payments from EUR 150,000 (minimum 5%).

3. Scheme for young farmers

To encourage generational change and the involvement of young people under the age of 40 in the year of application and who are first settling on a farm as head of a holding or who have already settled in one of the five years prior to the first submission of an application, the amount allocated is increased by 25% over the next five years after installation. This additional amount is financed by up to 2% of the national envelope and is binding on the Member States.

4. Greening (agricultural practices beneficial for climate and environment).

In addition to the basic payment and the single area payment, each holding receives an additional payment per hectare if it applies agricultural practices that are good for the climate and the environment. Member States are required to allocate 30% of their national financial envelope to this green payment included in crop diversification measures; the maintenance of existing permanent pastures or the creation of an area of ecological interest.

5. Coupled payments, in order to avoid the potential negative consequences of internal convergence for certain particularly sensitive sectors or regions. The option was limited to 8% of

the national financial envelope if the Member State already grants coupled aid or to 13% if its level is higher than 5%.

6. Payments for areas facing natural (disadvantaged) constraints.

Member States or their regions may grant an additional payment of up to 5% of the national financial envelope for territories classified as areas facing natural constraints.

7. Scheme for small farmers

The CAP allows Member States to allocate a simplified scheme to small farmers in the event of an annual payment of up to EUR 1250, regardless of the size of the holding. Farmers who fall under this scheme must comply with less stringent cross-compliance requirements and are exempted from all greening obligations. The total cost of the scheme for small farmers may not exceed 10% of the national financial envelope, unless a Member State chooses to grant small farmers the amounts they would have reimbursed if this scheme had not existed.

8. Compensatory measures for rural development

Rural development is the second pillar of the CAP (Pillar II), which aims to support rural areas to meet the many economic, social and environmental challenges. This policy complements the system of direct payments to farmers and measures to manage agricultural markets (Pillar I).

EU rural development policy is funded by the European Agricultural Fund for Rural Development (EAFRD).

These measures aim to encourage farmers to adopt agricultural practices that ensure the maintenance of the environmental value of rural areas, habitats specific to agricultural land for important wildlife, sustainable use of natural resources, preservation of traditional landscapes, the transition from conventional to specific agriculture. organic farming and the economic compensation of the losses recorded by farmers in carrying out agricultural activities related to the low production capacity of agricultural land.

The European Agricultural Fund for Rural Development finances the measures provided in the NRDP 2007–2013 for ongoing commitments (Measure 214 - Agri-environment payments), respectively in the NRDP 2014 - 2020 (Measure 10 - Agri-environment and climate; Measure 11 - Organic farming; Measure 13 - Payments for areas facing natural or other specific constraints; Measure 14 - Animal welfare).

9. Market measures and market interventions

Market measures are being introduced to stabilize agricultural markets and prevent the escalation of market crises, stimulate demand and help EU agricultural sectors to better adapt to market changes:

a. Public intervention

Market intervention measures are financed by the European Agricultural Guarantee Fund (EAGF). In a public intervention, the governments of the EU Member States or their agencies buy and store products, which will then be sold on the market. The purpose of this intervention is to avoid lowering prices to unviable levels.

Public intervention can currently be used in several sectors that are prone to price fluctuations. To combat instability, the EU has adopted a mechanism to reduce the impact of years of particularly low prices on farmers. The sectors that can benefit from public intervention are: wheat, durum wheat, barley, corn, rice, beef and veal, butter, skimmed milk powder.

b. Storage of products to the private sector

In times when market prices are too low, the European Union intervenes to protect private sector operators with financial support to cover the costs of storing their own products for a specified period. This temporarily reduces the impact of a short-term surplus supply. Currently, private sector companies can receive storage aid for the following products: white sugar, olive oil, beef, butter, cheese and skimmed milk powder, pork, mutton, goat meat and flax fiber.

c. Exceptional measures

Exceptional measures are used when a crisis or crisis threat occurs and a timely response is needed to prevent a sharp fall in prices and / or to mitigate its consequences.

They enable the European Commission to take proportionate action swiftly when it is found that:

• periods of severe market imbalances;
• loss of consumer confidence due to risks to public health, animals or plants;
• specific problems.

d. Sectoral aid schemes

Sectoral aid schemes aim to address specific issues in certain agricultural markets in the European Union. The schemes aim to improve the capacity of the agricultural sectors in the European Union to adapt to market conditions and increase their competitiveness and sustainability. The fruit and vegetable sector is mainly based on producer organizations. In other sectors, there may be specific crisis prevention and risk management measures. Currently, these schemes cover the fruit and vegetable, wine, olive oil, beekeeping and hops sectors.

e. Market monitoring

In order to ensure the proper functioning of agricultural markets and to monitor their development, the European Commission collects information from EU countries and stakeholders. This information, which complements EU market measures, aims to improve market transparency by being collected and made available through market observatories and the agricultural data portal.

Market measures and market interventions:

- Community aid for the supply of milk and other milk products to schools;
- financial support under the School Fruit Scheme;
- distribution of apples and adjacent measures;
- financial aid granted to reduce milk production;
- restructuring / reconversion of vineyards;
- ensuring the harvest of grapes for wine;
- aid for investment in the wine sector;
- financial support for producer groups in the fruit and vegetable sector;
- financial support to finance the operational programs of producer organizations in the fruit and vegetables sector;
- exceptional financial support to support the fruit and vegetable sector;
- Community and national financial support for the beekeeping sector.

In order to achieve the objectives of the Common Agricultural Policy defined in the Treaty of Rome and in the spirit of the principles set out in Stresa, a complex system of rules and mechanisms governing the production, trade and processing of agricultural products has been set up, grouped under common market organizations.

1.3. The evolution of the instruments and mechanisms for financing the Common Agricultural Policy in Romania, after the accession to the European Union

Since 2007, the financing instrument of the agricultural budget of the European Union is represented by the two funds constituted by the restructuring of the EAGGF and the unification of the structural funds for rural development, respectively the European Agricultural Guarantee Fund (EAGF) for financing market measures and the European Agricultural Fund. Rural Development (EAFRD), to finance rural development measures. The implementation of the Common Agricultural Policy in Romania (2007) determined a radical change in the mechanisms for supporting the agricultural market in our country.

The support measures financed by the European Agricultural Guarantee Fund - EAGF and the European Agricultural Fund for Rural Development - EAFRD are the following:

- Direct payments;
- Market measures;
- Measures financed by European funds for agriculture and rural development;
- Payments representing financial support from the national budget.

The direct payments were granted as a result of the CAP Common Agricultural Policy 2007-2014, according to the Government Emergency Ordinance no. 125 of December 2006, and was granted only to farmers registered in the Farmer's Register, in the form of a Single Area Payment. The European financial allocation and the degree of absorption of European funds managed by APIA for the period 2007-2014 are presented in Table 1.2.

Table1.2

European financial allocation and absorption of European funds

Source of funding	Financial allocation managed by APIA		
	Allocated ceiling 2007-2014 (billion Euros)	Payments made 2007-2015 (billion Euro)	% Absorption 2007-2015
FEGA	7.79	7.66	98.33 %
FEADR – inclusiv cofinanțarea din BN	3.16	3.04	96.14 %
TOTAL	**10.95**	**10.70**	**97.70 %**

Source: Author, data processing provided by the Agency for Payments and Intervention for Agriculture.

2015 was the first year of application of the provisions of the new Common Agricultural Policy for the financial year 2015-2020, based on a new set of regulations that must be observed by farmers in order to access direct payments.

Table 1.3.

FEADR allocated funds for the period 2015-2020

Measure	Programming period 2015 - 2020	FEADR (mil. euro)	NB (mil. euro)	Total (mil. euro)
8	Investments in the development of forested areas and in improving the viability of forests	105,70	18,82	124,51
10	Agri-environment and climate	909,96	160,78	1070,74
11	Organic farming	200,69	35,73	236,42
13	Payments for areas facing natural or other specific constraints	1.150,80	204,10	1.354,89
14	Animal welfare	437,01	79,52	516,53
15	Forestry services, climate services and forest conservation	100,00	17,80	117,80
TOTAL		**2.904,16**	**516,75**	**3.420,89**

Source: Author, data processing provided by the Agency for Payments and Intervention for Agriculture.

The allocation from the EAFRD and the co-financing from the National Budget for the period 2015-2020 amount to 3.42 billion Euros (table 1.3.) And were allocated through the National Rural Development Program.

The analysis of the amounts paid by the Payments and Intervention Agency for Agriculture in the period 2015–2020, for direct payments, on the vegetable and animal husbandry sector, are highlighted in tables 1.4. and 1.5.

Table 1.4.

Value of payments - vegetable sector, in the period 2015-2020

Year	Total payments (thousands euro)	Direct payments (thousands euro)	Transitional national aid (thousands euro)
2015	1.686.274,057	1.371.473,932	314.800,124
2016	1.265.298,578	966.572,967	298.725,611
2017	2.549.664,489	1.756.343,191	289.971,287

2018	2.614.218,730	1.816.434,930	236.756,850
2019	2.854.896,670	1.858.421,187	219.145,273
2020	2.987.343,231	1.961.323,967	187.914,873
(+/-) faţă de 2015 -%	**43,52**	**30,07**	**- 40,30**

Source: Author, data processing provided by the Agency for Payments and Intervention for Agriculture.

For the vegetable sector, the value of payments increased in total payments from 1,686,274,057 thousand euros in 2015 to 2,987,343,231 thousand euros in 2020, which represents an increase of 43.52% compared to 2015. Direct payments increased by to 1,371,473.932 thousand euros in 2015 to 1,961,323.967 thousand euros in 2020, which represents an increase of 30.07% compared to 2015.

A significant decrease is registered for the transitional national aids which decreased from 314,800.124 thousand euros in 2015 to 187,914,873 thousand euros in 2020, which represents a decrease of 40.30% compared to 2015.

Table 1.5.

Value of payments - livestock sector, in the period 2015-2020

Year	Total payments (thousands euro)	Direct payments (thousands euro)	Transitional national aid (thousands euro)
2015	287.316,214	100.912,654	183.574,239
2016	288.526,531	102.350,743	186.175,788
2017	289.728,754	113.397,256	176.331,497
2018	294.105,736	116.610,933	156.956,367
2019	345.545,600	131.109,367	147.945,356
2020	398.059,386	165.667,390	123.496,368
(+/-) faţă de 2015 -%	**27,82**	**39,08**	**-30,42**

Source: Author, data processing provided by the Agency for Payments and Intervention for Agriculture.

For the livestock sector, the value of payments increased in total payments from 287,316,214 thousand euros in 2015 to 398,059,386 thousand euros in 2020, which represents an increase of 2.36% compared to 2015. Direct payments increased by to 100,912,654 thousand euros in 2015 to 165,667,390 thousand euros in 2020, which represents an increase of 39.08%. There was a decrease in transitional national aid from 183,574.239 thousand euros in 2015 to 123,496.368 thousand euros in 2020, which is a decrease of 30.42% compared to 2015. For the financial year 2015 - 2020, Romania had allocated approximately 19.43 billion euros for both pillars, which means a substantial increase compared to the previous total allocation 2007-2013 which was 13.8 billion euros.

1.4. Criteria and mechanisms for allocating resources to finance the Common Agricultural Policy

The main instrument for financing measures under Pillar 1 of the Common Agricultural Policy is the European Agricultural Guarantee Fund, set up for the development of agriculture in its Member States, through shared management between the Union and the Member States, and shall finance the following expenditure:

- measures to regulate or support agricultural markets;
- direct payments to farmers in the context of the common agricultural policy;

- the Union's financial contribution to measures to inform and promote agricultural products on the Union's internal market and in third countries, undertaken by the Member States on the basis of programs selected by the European Commission;

- the Union's financial contribution to the program to encourage the consumption of fruit and vegetables in schools, measures on animal diseases and the loss of consumer confidence;

- the promotion of agricultural products, either directly by the Commission or through international organizations;

- measures taken in accordance with Community legislation to ensure the conservation, characterization, collection and utilization of genetic resources in agriculture;

- creation and maintenance of computerized accounting systems for agriculture;

- agricultural investigation systems, including on the structure of agricultural holdings.

The Paying and Intervention Agency for Agriculture (APIA) manages support schemes for farmers, financed by the EAGF - European Agricultural Guarantee Fund (direct payments, market measures), EAFRD - European Fund for Agriculture and Rural Development (through delegated measures from within PNDR 2015 - 2020) but also from the National Budget - BN (transitional national aids, state aids, de minimis aids).

Table 1.8.

FEGA allocation for direct payments managed by APIA, in the period 2015-2020

DESCRIPTION OF THE MEASURE	Deposit campaign - millions of euros					
	2015	2016	2017	2018	2019	2020
Funded direct payments FEGA	**1.508,63**	**1.680,36**	**1.745,51**	**1.840,22**	**1.896,30**	**1.945,42**
Funded direct payments	706,72	867,90	895,92	957,63	970,63	981,02
Redistributive payment	91,72	91,51	94,85	98,03	99,89	99,94
Payment for agricultural practices beneficial for climate and environment	507,19	510,85	525,37	541,17	559,27	593,19
Payment for young farmers	9,18	11,65	12,77	17,09	22,21	23,26
Coupled support scheme in the plant and livestock sector	193,82	198,45	218,60	226,30	244,30	248,01

Source: Author, processing according to data provided by the Agency for Payments and Intervention for Agriculture

The National Rural Development Program 2015-2020 allocated non-reimbursable amounts from the European Union and the Romanian Government for modernizing and increasing the viability of agricultural holdings by consolidating them, opening to the market and processing agricultural products, encouraging the rejuvenation of generations of farmers by supporting the installation of young people farmers, the development of basic rural infrastructure as a precondition for attracting investment in rural areas and creating new jobs and developing rural space.

Table 1.9

Scheme si măsuri gestionate de Agenția de Plăți si Intervenție pentru Agricultură, în perioada 2015-2019

DESCRIPTION OF THE MEASURE	Deposit campaign - millions of euros					
	2015	2016	2017	2018	2019	2020
Support measures financed by FEADR	**321,25**	**341,16**	**412,24**	**427,58**	**465,52**	**478,52**
Measure 10 - agri-environment and climate	23,48	42,79	82,88	118,07	135,78	145,16
Measure 11 - organic farming	9,13	18,06	28,92	42,83	56,94	73,11
Measure 214 - Agri-environment payments	65,12	52,15	37,15	-	-	-
Measure 13 - payments for disadvantaged areas	223,52	228,16	263,29	266,68	272,80	260,25

Source: Author, processing according to data provided by the Agency for Payments and Intervention for Agriculture

1.5. The current situation of financing agriculture in Romania through the Common Agricultural Policy

The accession to the European Union brought with it special financial opportunities for the agri-food sector in Romania.

Direct payments, allocated in order to stabilize farmers' incomes, and to finance projects through national rural development programs, are intended to increase the competitiveness and sustainability of agriculture.

The first pillar of the Common Agricultural Policy is to support the market and incomes, focusing on providing direct payments to farmers. Direct payments will achieve their goals if they are simplified and better targeted. Any change must ensure the protection and functioning of the internal market created by the Common Agricultural Policy over the years.

The second pillar includes measures for rural development and provides funding for on-farm investment programs, environmental programs or funding for the development and renewal of village infrastructure.

Table1.10.

Allocation of EAFRD payments through AFIR, in the period 2014-2020

No.	Measure	Total EU contribution planned for the period 2014-2020 (Euro)
1	M01 - Actions for knowledge transfer and information actions	0,00
2	M02 - Advisory services, farm management services and on-farm replacement services	0,00
3	M04 - Investments in physical assets	166.531.352,00
4	M06 - Development of farms and enterprises	73.747.750,00
5	M 07 - Basic services and village renewal in rural areas	150.250.000,00
6	M08 - Investments in the development of forested areas and in improving the viability of forests	909.574,00
7	M09 - Establishment of producer groups and organizations in agriculture and forestry	3.281.192,00
8	M10 - Agri-environment and climate	257.996.335,00
9	M 11 - Organic farming	7.428.836,00
10	M13 - Payments for areas facing natural or other specific constraints	0,00
11	M14 - Animal welfare	437.013.968,00
12	M15 - Forestry, climate and forest conservation services	0,00
13	M16 - Cooperation	0,00
14	M17 - Risk management	0,00
15	M19 - Support for local development LEADER (DLRC - Local development under the responsibility of the community)	0,00
16	M20 - Technical assistance for Member States	0,00
	Total	**1.097.159.007,00**

Source: Author, processing from the National Rural Development Program for the period 2014 – 2020

1.6. Present and perspectives of the Common Agricultural Policy

In relation to the new Multiannual Financial Framework (MFF) 2021-2027, the Common Agricultural Policy must address a number of challenges in terms of programming logic (eg application and protection mechanisms, budgetary allocation procedures, eligibility criteria), as well as in terms of the sustainability of expenditure and the total amount allocated.

To understand the challenges, it is important to understand a number of criticisms or grievances about the evolution of the Common Agricultural Policy over the last decades. Firstly, there is a steady downward trend in the Common Agricultural Policy from one financial year to another. The allocations related to the two pillars have had a downward trend in recent years, and this trend will be recorded mainly in the future multiannual financial framework according to expert estimates.

The percentage decrease is high: from about 80% of the Community budget in the 1980s, to 43% in 2007, to 35% by the end of the current multiannual financial framework and further to only 27% as estimated to be the Common Agricultural until the end of the multiannual financial framework 2021 - 2027.

1.7. Partial conclusions

So far, the financial support of the agricultural sector has not been based on the real substantiation of the need for funds and has not always been achieved as a result of studies and analyzes of the realities in the field. Farmers' financing programs were not conditioned by certain performance indicators, which would highlight both the level of quantitative achievement of production and their influences in increasing the quality of production obtained.

Direct payments, allocated in order to stabilize farmers' incomes, and to finance projects through national rural development programs, are intended to increase the competitiveness and sustainability of agriculture.

The first pillar of the Common Agricultural Policy is to support the market and incomes, focusing on providing direct payments to farmers.

Direct payments will achieve their goals if they are simplified and better targeted.

The National Rural Development Program 2015-2020 allocated non-reimbursable amounts from the European Union and the Romanian Government for modernizing and increasing the viability of agricultural holdings by consolidating them, opening to the market and processing agricultural products, encouraging the rejuvenation of generations of farmers by supporting the installation of young people farmers, the development of basic rural infrastructure as a precondition for attracting investment in rural areas and creating new jobs and developing rural space

2. RESEARCH METHOD. PURPOSE AND OBJECTIVES OF THE RESEARCH

2.1. Research method

The research aimed at a series of objectives related to various exploratory studies, descriptive studies, as well as the identification of objectives regarding causal studies.

The identification of a topic that we want to research in its initial phase, is often found in an ambiguous or less precise wording, and then it will be clearly defined and then specify what needs to be done. researched. The identification of the research topic (through an exploratory research) includes its essential understanding, the magnitude of the problem to be studied as well as the identification of the objectives to be pursued. The importance of the research topic involves paying close attention to the negative effects of studies and the causes that generate them.

Research design requires the existence of a well-defined plan that specifies the essence of the study, as well as procedures that are required for the collection, processing and analysis of the necessary data. The research objectives, previously established, are the basis for choosing the research method, the sources for obtaining primary and secondary data, the sampling methodology and determining the sample size, the variables to be examined and their measurement, methods analysis, research costs and research period.

During the research process, the stages of collecting (through investigation, observation and experimental research) data processing and analysis were completed.

The survey is the most common method of obtaining primary data (verbal, written, numerical reports) obtained from organizations, individuals, legal entities through various methods. In order to carry out a descriptive or explanatory research, we need to question a sufficiently large sample of the studied population.

Observing actions, data and people involves collecting relevant information with great flexibility, sometimes being the most used method in conducting a study, with a different degree of complexity of information, a phenomenon that determines their inclusion in total and partial. The total observation (census and statistical reports) implies the recording according to certain unitary criteria of the data in accordance with the observation program from all the units of the studied community. Partial observations (surveys, statistical surveys, main part observation, statistical monograph), assume that the data are obtained only from a smaller sample of the units of the community, part representative or not in relation to the whole community.

According to the way the phenomenon is characterized, we can have static observations and dynamic observations. Static ones are used to collect data on the structure and volume of a static population at a given time. The study of a process that evolves in time, (with the establishment of the time at which the data are collected and the moments at which the recordings are made) is done through dynamic observations.

The method used most in collecting primary data (verbal, written reports, figures obtained for the first time) from organizations, legal entities, individuals is the survey and is based on a questionnaire conducted on a sample representative of the population studied.

The collection of causal information made in order to determine the relationship between cause and effect, by studying homogeneous groups, using differentiated questions and determining the reactions of those groups was done through experimental research.

Through observation, investigation and experimental research we obtain structurally both primary and secondary information, their collection being made quantitatively and as a result of some measurements (which are reported on a large scale) and qualitatively resulting from some assessments (based on questionnaires or interviews), in the case of socio-economic studies.

The data collected are thoroughly prepared (by checking the correctness of the answers, omissions of information, classification, interpretation and recording) and brought in a state that

allows correct answers to all problems resulting from the topic we proposed for research, following to be classified, ordered in relevant graphs, tables and figures.

Any research is completed following the processing of information obtained with a series of conclusions and recommendations resulting from a good understanding of data obtained from various subjects and their analysis by statistical and analytical methods depending on the objective to be achieved by the research and by a series of proposals that would have the effect of reducing or removing the negative effects found.

2.1.1. Methods for optimizing crop structure

Depending on the percentage occupied within the arable area, the crops and their structure represent basic elements of the field plant cultivation system at the level of the agricultural farm. The composition of the crop structure analyzes the demand and supply of agricultural products manifested at the market level, the level of land productivity, labor security, the economic efficiency of crops and plant requirements in relation to the precursors.

The establishment of the culture structure is achieved through the normative-constructive method, the planning method and the linear programming method.

The normative-constructive method is based on the elaboration of plant structure variants that suppose different combinations in quantitative and qualitative plan of the cultures that are on the given territory, in optimal conditions of growth and development, with the framing in the zonal structure and with the satisfaction of the needs. from the market. The establishment of each variant will take into account the existing resources in the agricultural exploitation, the way of optimizing the capitalization of resources by practicing different crops and the own consumption of the agricultural farm. The assessment of the viability of the various variants takes into account a system of indicators approximately identical in importance, and by the scoring method each indicator receives a number of points, depending on the value analyzed from an economic point of view. Depending on the total number of points, the hierarchy of variants is performed.

The planing method combines the elements of the normative-constructive method with the elements of linear programming following the surface that can be occupied with a certain culture, depending on the most limited resource and the most severe restriction. Priority is provided for the crop that uses the most scarce resource most efficiently and only later are other crops considered. When a resource has been depleted due to the practice of certain crops, it becomes a limiting factor for other crops in the productive circuit leading to their ranking based on other available resources.

The linear programming method determines the identification of the optimal solution from the numerous existing solutions. For this, a mathematical model is chosen that clearly shows the most significant restrictions on the objective function, the area available to the farmer, the crop rotation established by crop rotation, the time of return of a crop on the same land area, the use of resources and obtaining a higher production volume.

2.1.2. Methods for optimizing the size of agricultural holdings

The optimization of the size of agricultural holdings is achieved by classical methods, which take into account the nature of the theoretical model and modern methods, which use computerized methodological tools:

- The method of statistical grouping in which the observations recorded in the initial phase of statistical research are systematized by groups according to attributive characteristics, obtaining series of distribution (distribution) of frequencies by value ranges. For each group, the average values for a series of indicators of effective activities of the production units are calculated;
- The statistical-mathematical method uses statistical methods to determine the optimal size of agricultural farms through the concept of statistical correlation specific to the links between potential

indicators (factorial or independent variables) and indicators of results and economic efficiency (resultant or dependent variables) of a farm agricultural;
- The method of interdependent parallel series consists in appreciating the connection between two or more ordered features in the form of parallel strings. The application of the method presupposes the existence of databases containing information on a certain number of agricultural holdings, the area for each holding, the levels of result indicators and the efficiency that characterizes their activity;
- The monographic method is based on the research of the typical production units for the respective profile and area, with the best production results. The quality of this method is given by the concrete character of the production conditions to which the size of the exploitation is related and of its organizational subdivisions in which efficient results were obtained in the economic
- The analytical methods for determining the size of the agricultural holding quantify actions of various elements, factors and causes that justify the variation of the researched economic-financial phenomenon;
- Mathematical methods for optimizing the size of farms are the theoretical basis of econometrics (econometric modeling of agricultural production at the sector level leads to a system of very large equations) by which producers maximize profits and consumers, utility, in certain imposed conditions;
- Mathematical programming is used to determine the optimal dimensions of production units, while ensuring a total optimum of the farm. By using linear programming in establishing the size of the agricultural holding, the economic-mathematical model is elaborated, based on the existing resources in the unit and the achievable technical-economic parameters.

2.2. Purpose and objectives of the research

The main purpose of the research is to determine the influences that the Common Agricultural Policies through the allocated funding have on the development of agriculture and agricultural production (quantitative and qualitative) in Galati County.
In carrying out the research undertaken, we set ourselves several objectives:
- analysis on the financing of agriculture through various instruments and mechanisms under the CAP in the European Union and in Romania;
- the specifics of the agriculture of Galati county (natural conditions, administrative-territorial organization and human resources);
- identification of the place occupied by agriculture and presentation of the pedo-climatic conditions of Galati county;
- analysis and processing of production and economic-financial results of agriculture in Galati county in the period 2015-2020;
- identification of measures and instruments for financing agriculture in the field of vegetable, animal production and processing of agricultural production;
- elaboration of strategies for the development of agriculture of Galati county at the horizon of 2027 by applying the financing measures provided in PNDR 2020-2027;
- highlighting the diversification of financial support for agricultural production;
- determining the influence of the Common Agricultural Policy on agricultural production;
- assessing the effectiveness of financial assistance from the national budget and European funds.

3. CHARACTERIZATION OF THE NATURAL AND ORGANIZATIONAL FRAMEWORK OF GALATI COUNTY

3.1. The study of natural conditions

The surface of Galaţi County presents a weakly fragmented relief, formed by alluvial deposits, composed mainly of sands and clays. The climate is temperate-continental, being characterized by hot and dry summers and winters with frequent blizzards and negative temperatures. Atmospheric precipitation amounts to the lowest values in the country with an annual average of 426 mL. From the analysis of the pedoclimatic conditions it results that the agricultural surface of Galati county meets the best conditions for the cultivation of cereals for grains, vines and vegetables. The territory of the county, through its morphological features, ensures optimal conditions for agricultural activities.

The territorial surface of Galati County falls into the category of temperate-continental climate, with harsher accents, characterized by particularly hot and dry summers and winters marked by strong blizzards with low temperatures but also with warmer periods caused by hot air fronts and wetlands in the south and southwest that cause heating and melting of the snow cover. In the general climatic context, the Siret, Prut and Danube Meadows determine changes in the values and regime of the main meteorological elements, which lead to the installation of a specific meadow climate, wetter and cooler in summer and wetter and slightly cold in winter.

The oscillating thermal and hydric regimes, the different intensities of insolation and brightness as well as the relief forms and the set of ecological factors have direct implications in the way of land use.

It is estimated that the researched territory offers favorable and varied conditions for agricultural activity, there are also some negative processes and phenomena, such as soil erosion, landslides, saline and sandy soils (poorly productive) and soils subject to floods.

3.1.1 The main types of soil

On the territory of Galati county, the zonal soils predominate, belonging to the chernozemic types, next to which the erodisols, phaeoziomes, regosols, psamosols appear, and among the azonal ones are aluvisols and gleiosols.

The chernozems with the calcareous and cambic subtypes occupy 68% of the county's surface, have a rather high fertility, being favorable for cultivating plants and obtaining superior yields.

Erodisols occupy 5.7% of the surface, they are poorly productive soils generally occupied by pastures.

Phaeoziums are found in the northern part of the county, occupy 4.6% of the surface, are soils with less favorable qualities than chernozems and are suitable for the cultivation of orchards, vineyards and pastures.

Psamosols cover 1.3% of the county's surface, they are sandy soils found in the Tecuci Plain, with a low productivity that requires improvement measures.

Regosols cover 1.2% of the surface, are found on slopes, on lands subject to erosion and landslides, are poorly productive being occupied by pastures.

Aluvisols cover 16% of the surface and are found in the running water meadows in the county, being soils with good fertility, but which vary depending on the texture and groundwater level.

Gleiosols cover 3.1% of the surface and are found in areas with groundwater at a depth of 1.5-2 meters, with low fertility due to excess water.

3.2. Administrative-territorial organization

From an administrative point of view, Galati county consists of 184 localities, of which: 2 municipalities (Tecuci and Galati), 2 cities (Berești and Târgu Bujor), 61 communes grouped in 119 villages

From an administrative point of view, the network of localities has an important role in achieving the interactions in the regional space and represents the territorial organization of the population. The development of the locality network must solve the constant effects caused by economic and social changes, high population density, increasing demands for energy resources, transport as well as inefficient infrastructure and migration. The restructuring of the locality network follows primarily the development of functionally viable localities, by promoting polarization functions due to the fact that they have a high economic potential and a privileged position being located on major roads or in the immediate vicinity of cities.

The city of Galați has a share of almost 50% of the total county in terms of the number of inhabitants with a very high development potential in all areas, being also the county seat. The second city in terms of population, size and development is the city of Tecuci.

3.3. Human resources

The quality of work resulting from the activity carried out by the human resources occupied in the production processes in agriculture and in other branches is influenced by the level of professional training. It is necessary for the agricultural workforce to be involved in training, vocational training and information, consultancy and training of specific entities to train agricultural producers.

The evolution of the long-term work factor was analyzed from a qualitative, structural and quantitative point of view.

The evolution over time of the population size is influenced by birth rate and mortality (essential demographic processes) as well as by health status, average life expectancy, standard of living, structure and share of training expenditures (economic and social factors).

Structurally, the age pyramid of the population between 0-14 years, 15-59 years and 60 years is the basis of economic research that ultimately results in identifying the optimal structure of the population. An edifying image of labor as a factor of production results from the study of the available labor force as well as from the number of hours actually worked per week.

According to the labor legislation, the able-bodied persons have the age category between 15 and 65 years and have intellectual and physical capacity corresponding to the tasks incumbent on them in the activity carried out. Active persons carrying out economic activities of appropriate age in accordance with the legislation in force produce goods and services for the entire population.

People employed in various occupational activities, including pupils and students, constitute the active population and are influenced by mortality, population structure by age groups, sex and birth rate.

From an economic point of view, the inactive population is represented by the unemployed, domestic persons, pupils and students (except those who exercise an economic activity under an employment contract), pensioners, and persons in the care of the state or other persons (preschool children, the elderly, the disabled).

The branch structure of the population includes active persons who work on the basis of an employment contract in an economic unit, persons who work in their own unit (company, farm, agency, office, workshop, etc.) with one or more many employees, persons working in a family economic unit coordinated by a family member without remuneration in the form of salary, persons working as an owner of agricultural land in their own farm or other companies, established under Law 36/1991.

The active population in rural areas is also represented by employees but the vast majority of the population is made up of self-employed workers, forming the category of private farmers.

Table 3.7

The structure of the employed population by activity sectors in Galați County

No.	Specification (number of people - thousands of people)	Galati County					
		2015	2016	2017	2018	2019	2020
Total economy		***183,4***	***180,6***	***175,1***	***177***	***178,2***	***179,4***
1	***Agriculture sector***	***56,9***	***49,6***	***42,5***	***42,8***	***43,4***	***43***
	Agriculture, hunting, forestry, fishing and fish farming	56,9	49,6	42,5	42,8	43,4	43
2	***Industry and construction sector***	***49,1***	***50,6***	***51,2***	***51,8***	***50,9***	***52***
	Extractive industry	0,4	0,4	0,3	0,5	0,6	0,5
	Manufacturing industry	27,7	28,9	29,2	29,8	29,1	29,1
	Electricity, heat, gas, water and air conditioning	2	1,8	1,7	1,6	1,2	1,2
	Water distribution, sanitation, waste management, decontamination	3,2	3,3	3,3	3,3	3,7	3,7
	Construcții	15,8	16,2	16,7	16,6	16,3	17,5
3	***Trade and services sector***	***77,4***	***80,4***	***81.4***	***82,4***	***83,9***	***84,4***
	Trade	24,1	24,4	24,2	24,1	25	25,2
	Hotels and restaurants	3,6	3,8	4	4,4	4,6	4,7
	Transport, storage	8,4	8,6	9,5	9,3	9,3	9,3
	Information and communications	2,4	2,9	2,9	3	2,9	3,1
	Financial intermediation and insurance	1,5	1,5	1,5	1,4	1,4	1,4
	Real estate transactions	0,7	0,8	0,9	0,7	0,8	0,8
	Professional, scientific and technical activities	3,1	3	3	3,1	3,3	3,3
	Administrative and support service activities	6,6	7	7,6	8,1	7,5	7,6
	Public administration and defense	4,3	4,5	4,3	4,4	4,5	4,5
	Education	9,7	9,7	10,1	9,9	9,9	9,7
	Health and social work	8,1	8,5	8,2	8,5	9	9,5
	Entertainment, cultural and recreational activities	1,8	1,8	1,7	1,6	1,8	1,8
	Other service activities	3,1	3,9	3,5	3,9	3,9	3,5

Source: Author, own processing according to the data registered at the Galati County Directorate of Statistics

The structure of the active population by branches, determines the place of each in the whole economy in terms of the share of the active population, so in agriculture the employed population is a minority with a percentage of over 23.97% while in the industry, construction, is 28, 99 and trade and services is about 47.05% of the active population, at the end of 2020.

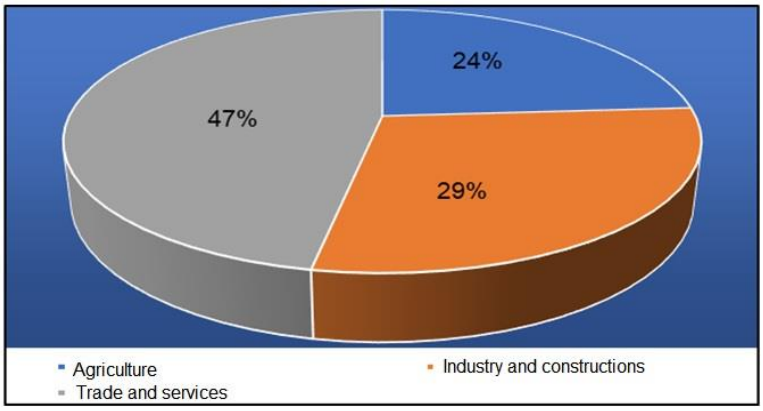

Figure 3.9. Structure of the employed population by sectors of activity, year 2020 (%)
Source: Author, own processing according to the data registered at the Galati County Directorate of Statistics

The population structure is constantly changing due to the natural mobility of the population through demographic events (births, deaths, marriages and divorces) as well as migration.

3.4. Partial conclusions

The territorial surface of Galati County falls into the category of temperate-continental climate, with harsher accents, characterized by particularly hot and dry summers and winters marked by strong blizzards with low temperatures but also with warmer periods caused by hot air fronts and wetlands in the south and southwest that cause heating and melting of the snow cover. In the general climatic context, the Siret, Prut and Danube Meadows determine changes in the values and regime of the main meteorological elements, which lead to the installation of a specific meadow climate, wetter and cooler in summer and wetter and slightly cold in winter.

Oscillating thermal and hydric regimes, different intensities of insolation and brightness, landforms and all ecological factors have direct implications for land use.

On the territory of Galati county, the zonal soils predominate, belonging to the chernozemic types, next to which the erodisols, phaeoziomes, regosols, psamosols appear, and among the azonal ones are aluvisols and gleiosols.

From the analysis of labor resources in the agricultural area of Galati County, the conclusions that emerge are the following:

- there are sufficient resources to cover the need for work in agriculture;
- the active population from the localities located in the rural environment, employed in agriculture is influenced by its stability and by the degree of their economic-social development;
- over half of the population employed in agriculture belongs to the age group between 55-59 years;
- the share of the population employed in agriculture is represented by over 90% of self-employed workers from individual agricultural holdings, to which are added the workers specialized in agriculture, engineers and technicians from commercial agricultural farms;
- the labor force in agriculture of Galati county is lower (23.97%) compared to the labor force in the trade and services sector (47.05%), industry and constructions (28.99%).

4. DIAGNOSTIC STUDY REGARDING THE AGRICULTURAL DEVELOPMENT OF GALATI COUNTY IN THE PERIOD 2015-2020

4.1. Study on the place of agriculture in Galati county

4.1.1 Land fund by categories of use and property

The study of the categories of land use in the period 2015-2020 led to the conclusion that the arable area decreased in the research years, except for 2020, when there was a slight increase, while vineyards and vineyards registered a decrease of surface and orchards and nurseries have grown. The majority private sector holds 99.64% of the agricultural area, while the majority state sector still holds only 0.36%.

Table 4.2.

The structure of the agricultural land in Galati county, by categories of use in 2020

Category of use	Total county (Ha)	% of agricultural	Private sector (ha)	% of the total county	Majority state sector (ha)	% of total County
Arable	289581	82.32	287992	81.86	1589	0.45
Pastures and hayfields	40914	11.64	35513	10.09	5401	1.53
vineyards	19521	5.54	19062	5.41	459	0.13
orchards	1763	0.50	1761	0.50	2	0.0005
Total agricultural	351779		344328		7451	

Source: Author, own processing according to the data registered at the Galati County Directorate for Agriculture

The structure of agricultural land by categories of use consists of 82.32% arable land, 11.64% natural pastures and hayfields, 5.54% vineyards and vineyards and 0.50% orchards and fruit nurseries.

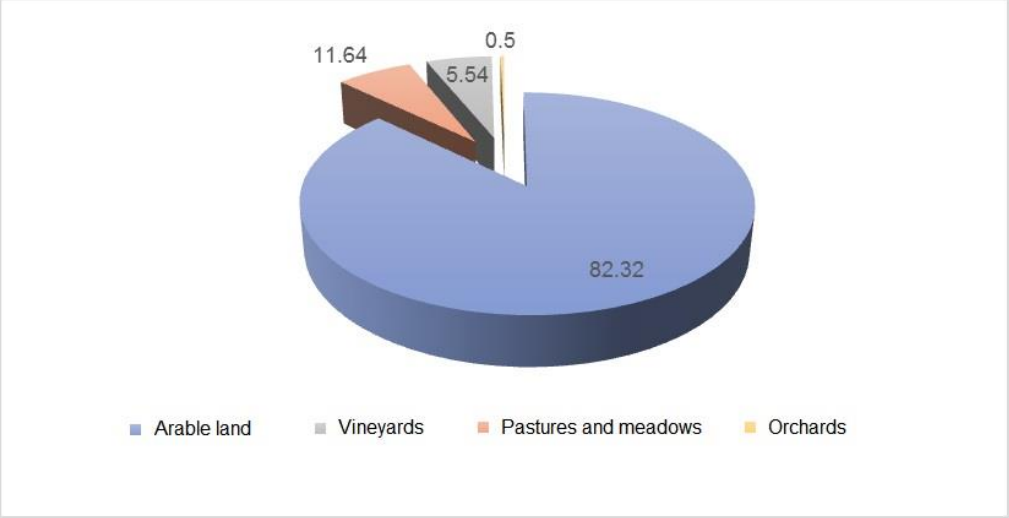

FIG. 4.1 - Land fund by categories of use in Galati county in 2020
Source: Author, own processing according to the data registered at the Galati County Directorate for Agriculture

4.1.2. Arrangements for irrigation, drainage and combating soil erosion

The phenomena of excessive drought, landslides and the degree of soil erosion (factors that strongly influence the obtained productions) are met regularly and affect considerable areas of agricultural land. From the period studied, the driest years in Galati County were 2015 and 2020 when compensations were approved for agricultural producers according to Emergency Ordinance no. 45/2015 (for crops established in the spring of 2015) and Order 97/63/2020 (for crops established in the fall of 2019).

Table 4.7

Evolution of irrigation facilities and areas actually irrigated in Galati County 2015-2020 (thousand ha)

Land improvements	Land use	2015	2016	2017	2018	2019	2020	(+/-) faţă de 2015 (%)
Irrigation arrangements	Total landscaped area	137,43	137,43	137,43	137,43	142,94	146,09	+ 6,3%
	Landscaped agricultural area	136,99	136,99	136,99	136,99	142,41	145.65	+ 6,3%
	Arable land	130,32	130,32	130,32	130,32	133,54	136,79	+ 5%
Effectively irrigated surface with at least one watering	Landscaped agricultural area	136,99	136,99	136,99	136,99	142,41	145,65	+ 6,3%
	Arable land	15,45	9,97	11,29	26,63	32,98	62,23	+ 402 %

Source: Author, own processing according to the data registered at the Territorial Branch of Land Improvements Galați

The total area arranged for irrigation in Galati County increased by 6.3% in 2020 compared to 2015. Regarding the area actually irrigated with at least one watering, it increased in 2020 (year characterized by excessive drought) by 402% compared to 2015. This situation shows that farmers are interested in irrigating cultivated land (an important link in the production process) only in the years when obtaining the expected yields are threatened by lack of rainfall.

Anti-erosion plantations lead to better fixation of land affected by surface erosion by limiting fertile soil losses (in case of high intensity rains) and by reducing surface runoff. Of the surface arranged with works to combat erosion and improve the land in Galați County, 95.75% belongs to the arable land.

Table 4.8

Erosion control and land improvement works in Galati county 2020

Land improvements	Land use	ha
Erosion control works and land improvement *	Total landscaped area	161.220
	Arranged arable area	154.378

** - after 1990 no CES works were performed*

Source: Author, own processing according to the data registered at the Territorial Branch of Land Improvements

Anti-erosion plantations have the following beneficial effects on agriculture:

- surface water is protected by reducing evaporation;
- the agricultural crops in the vicinity of the curtains show a better development;
- water infiltrations are reduced.

Due to the excessive development of vegetation (failure to mow the wind) and non-compliance with current maintenance times, the canals have reduced their transport capacity, the evacuation of water from the area being difficult which requires specific works on canals and pumping stations - drying for restoration of transport capacity.

Table 4.9

*Drainage works, by categories of land use, in Galati county in YEAR 2020**

Land use	Galati County
	ha
Total landscaped area	59218
Landscaped agricultural area	49055

*Source: Source: Author, own processing according to the data registered at the Territorial Branch of Land Improvements Galați; * after 1990 no new drainage works were carried out*

4.2. Research on the development of agriculture in Galati county

4.2.1. The structure of crops in arable land

In Galați County, on average, the crops sown annually with the highest share of arable land are grain cereals and oil plants, followed by other crops, which have lower shares.

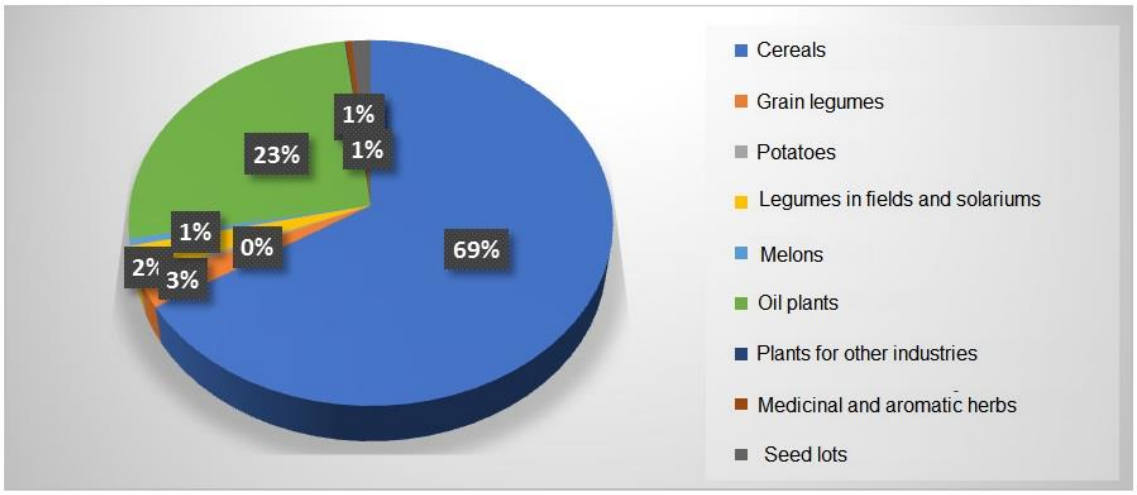

FIG. 4.8. Area, by categories of use, in Galati county in 2020

Source: Author, own processing according to the data registered at the Directorate for County Agriculture Galați

The largest share of grain cereals is justified by the fact that Galati County is in an area favorable to their cultivation.

4.2.2 Average production per hectare and total production for main crops

Ensuring the increase of productions to the main crops can be done by increasing the cultivated areas in the case of the extensive system or by increasing the productions per unit area in the intensive system. The way to increase production per unit area, by using the intensive system, is based on the use of high-performance varieties and hybrids, the use of modern production technologies, the use of scientific research results and the use of innovations in the process of obtaining agricultural production.

Production technologies are based on the use of state-of-the-art tractors, machines, machinery and agricultural equipment, the use of chemical fertilizers, disease and pest control substances (herbicides, fungicides, bactericidal insecticides, acaricides, nematocides) and growth regulators. and so on Large production per unit area is the most important means of increasing agricultural production, in accordance with the requirements of crop plants and avoiding the problems of soil pollution, water with pesticides, nitrates, etc.

The harvest obtained is significantly influenced by the variety or hybrid used, by the genetic structure they have and by the interaction with other factors of production.

4.2.3 The destination of vegetable production

The vegetal production obtained after cultivating the lands from Galati county is used for own consumption, sales to processors, direct sales or to intermediaries, sales to warehouses or for export.

4.3. Analysis of animal production in Galati county

4.3.1. Livestock, by species and categories

Animal husbandry is an important segment in the economic and social field, with a specific share in the agriculture sector of Galati County. In the last 30 years, the decapitalization of agricultural holdings has led to a very large decrease in livestock numbers as well as the yields obtained from their growth and exploitation. During the research period, in Galati county, the number of cattle decreased by 17%, the number of pigs decreased by 45%, the number of sheep decreased by 15% and the number of birds decreased by 8%.

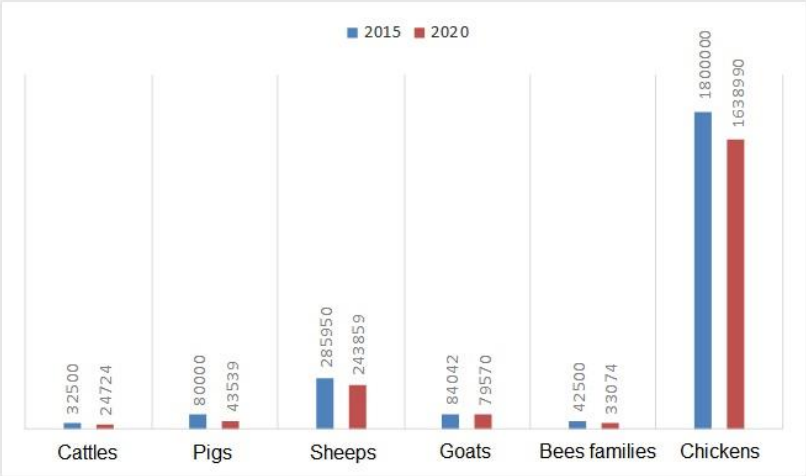

FIG. 4.9 - Dynamics of livestock in 2020 compared to 2015

Source: Author, own processing according to the data registered at the Galati County Directorate for Agriculture

4.3.2. Average feed production and total production

The average production per feed animal depends on the actual production capacity of the animal, the amount of food distributed and the conditions of care. At a high production per animal, the farm is profitable with a low production cost and characterized by the volume of investments, depreciation made, feed cost, applied technology, employee wages and the productive capacity of the animals. The analysis of the average production per animal identified an ascending evolution, with differences in different species. It is noted that in 2020, compared to 2015, there were increases of 10% for cow's milk and 20% for sheep's milk. Production decreases of 8.6% were recorded for table eggs and 20% for honey.

4.3.3. Destination of production of animal origin

The beef production produced in the period 2015-2020 was intended mainly for family consumption as well as free market sales. A small percentage of this amount was earmarked for

processing units. Pork production was mostly intended for family consumption, followed by processing units and in smaller quantities by the free market. In terms of sheepmeat and goatmeat production, the main destination was family consumption, followed by free market sales. For poultry production, the main destination was the free market and family consumption.

Cow's milk production was destined for market sales, followed by family consumption and processing units.

4.3.4. Feed base

Efficient feeding of animals influences their biological potential to achieve optimal production in terms of quantity and quality, especially in winter when animals can not graze. Of the categories of fodder used in animal feed, the vegetable ones, are of special importance from a biological and economic point of view.

Farmers who also deal with animal husbandry must correctly choose the plants they grow, which are adapted to local soil and climate conditions, are optimal for animal feed and can be grown in a well-defined crop.

During the researched period, the surface of the fodder base used in the feeding of livestock in Galați County registered a general decreasing trend.

4.4. Partial conclusions

From the analysis of the pedoclimatic conditions it results that Galati county meets optimal conditions for the cultivation of grain cereals, vines and vegetables.

The analysis of the crop structure in the period 2015-2020, shows us the fact that in Galati county a high-performance agriculture can be practiced with a variety of crops.

The hilly terrain allows the total mechanization of agricultural works with high-performance equipment.

In the livestock sector, cattle are the species with the greatest impact on the food balance of the population. The prospects for improving cattle are imposed by the situation of milk and meat consumption and the demand-supply ratio for these products.

The general characteristic in the case of animal breeding is the fact that the herds have decreased a lot.

Regarding the evolution of the forage base, it is found that the area cultivated with fodder plants registered a decrease of 9%, due to the decrease of the area cultivated with annual plants (-64%), even if the perennial plants registered an increase of 7%.

Total green mass production in 2020 compared to 2015 decreased by 68%

5. FINANCING OF AGRICULTURE IN GALATI COUNTY IN THE PERIOD 2015-2020

The financial support of agricultural holdings aims at forming the "commercial sector", with viable European farms and an adequate system of financing production and investments.

The financing of agricultural holdings is made from own sources having as components the net profit, the depreciation fund of farms or legal entities, the gross margin of family farms that produce for the market and from attracted sources that come from the state budget (subsidies), from non-reimbursable external financial assistance, external credit inflows, bank loans and other internal sources such as credit unions, loans, sales on time delivery, certificates of deposit.

5.1 Direct payment schemes to support agricultural producers

In the period 2015-2020, from the European Agricultural Guarantee Fund (EAGF), from the European Fund for Agriculture and Rural Development (EAFRD) and from the national budget, payments are granted to farmers under the following direct payment schemes, transitional national aid and compensatory measures for rural development.

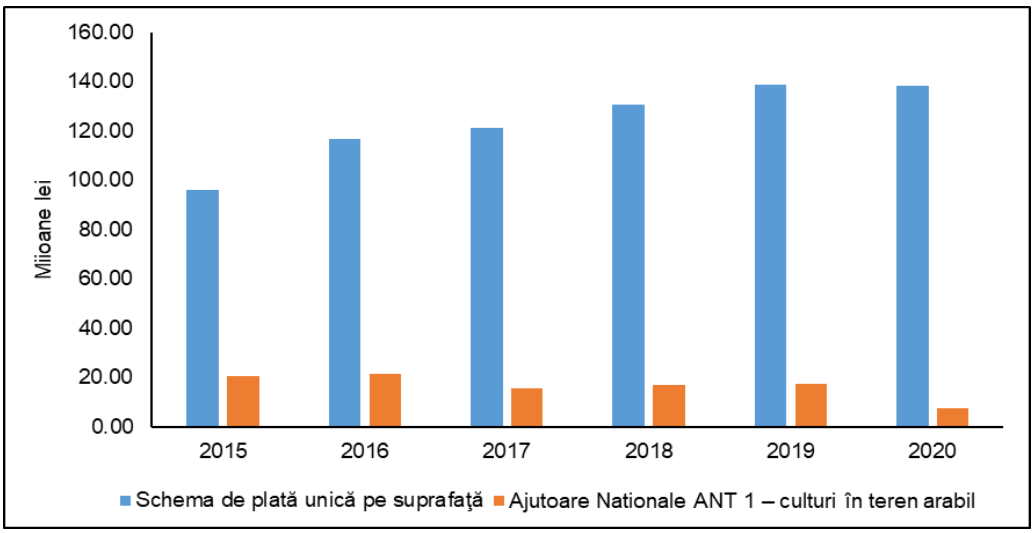

Figure 5.1 Single area payments and transitional national aid 2015-2020 (million lei)
Source: Author, own processing according to the data registered at the Agency for Payments and Intervention for Agriculture, Galati County Center

During the research period, there can be a steady increase from 2015 to 2020 of single area payments (from the European Union) and a decrease in the value of transitional national aid (from the national budget). Within a reasonable timeframe, single area payments will continue to increase until they reach the level of those in the European Union, while transitional national aid will tend to zero.

5.2 Measures from PNDR 2015-2020 financed from FEADR

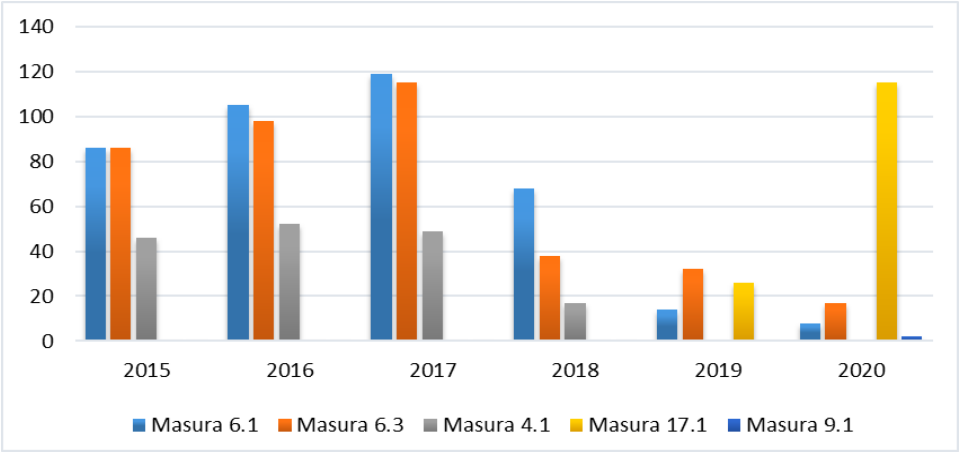

Figure 5.7 Projects contracted in the period 2015-2020
Source: Author, own processing according to the data registered at the County Office for Financing Rural Investments Galati

The analysis of figure 5.7 shows that the largest number of projects in the research period were submitted in 2017, compared to 2020 when the fewest were submitted.

5.3 Payments made during 2015-2020 from the National Budget

De minimis aid for the application of the tomato product support program in protected areas

• De minimis aid for the implementation of the garlic support program
• De minimis aid to compensate for the effects of unfavorable hydrometeorological phenomena manifested in the beekeeping sector
• De minimis aid for sheep farmers who sell wool
• Program to stimulate the employment of young people in the sectors of agriculture, aquaculture and food industry

5.4. Partial conclusions

Financial support for agriculture has been influenced by the implementation of different agricultural policies, in line with successive government programs. The numerous changes in the land reform have led to excessive subdivision of land owned by right holders, with long-term negative consequences on agricultural performance and have facilitated the waste of financial resources to maintain a subsistence agriculture.

During the research period, there can be a steady increase from 2015 to 2020 of single area payments (from the European Union) and a decrease in the value of transitional national aid (from the national budget). Within a reasonable timeframe, single area payments will continue to increase until they reach those in the European Union, while transitional national aid will tend to zero.

6. RESEARCH ON THE IMPACT OF PAYMENT SCHEMES ON AGRICULTURAL PRODUCTION IN GALATI COUNTY. CASE STUDY

6.1 Study on the influence of the CAP on the production structure and agricultural production

The strategic development of vegetable production has as final result the obtaining of high and high quality productions both to ensure the necessary consumption on the domestic market and for export. Measures to finance agricultural activities ensure the production of fresh fruits and vegetables for consumption and industrialization, strengthening the forms of association of agricultural producers, progressively reducing the differences in performance between farmers in Romania and others in EU Member States, obtaining production diversified, qualitatively superior raw materials for industrialization and increasing the number of new jobs in rural areas. The central element of the agricultural structures is the production structure taken together with all the elements that converge towards obtaining products, with all the component links, with the producing industry and with the commercialization of the finished products. The effects that all this has on the quantitative and qualitative value of agricultural production accentuate the functional interdependence of agricultural farms on these types of structures and determine the developments regarding the agri-food chain.

6.1.1. Case study at COMPANIA OPREA SRL

The research of the influence of the Common Agricultural Policy on the production structure and of the agricultural production was carried out at COMPANIA OPREA SRL with the following results:

Year 2017:

- **in the version without subsidy,** the farm registers a loss of 555.17 thousand lei, at a value of expenses of 1505.87 lei per 1,000 lei income per total holding. Regarding the situation on crops, most register losses;
- **in the subsidized version,** the farm registers a profit of 141.59 thousand lei (equivalent to 31.79 thousand euros), with a gross margin of 439.06 thousand lei (equivalent to 98.58 thousand euros), which allows the classification farm in the seventh grade of economic dimension.

Year 2018:

- **in the version without subsidy,** the farm registers a profit of 131.40 thousand lei, at a value of expenses of 874.39 lei per 1,000 lei income per total holding. The farm achieves a gross margin of 277.75 thousand lei (equivalent to 60.39 thousand euros), which allows the farm to be classified in the seventh class of economic dimension;
- **in the subsidized version,** the farm registers a profit of 978.62 thousand lei (equivalent to 212.78 thousand euros), with a gross margin of 1124.97 thousand lei (equivalent to 244.60 thousand euros), which allows the classification farm in the eighth grade of economic dimension.

Year 2019:

- **in the version without subsidy,** the farm registers a profit of 360.09 thousand lei, at a value of expenses of 655.76 lei per 1,000 lei revenues per total holding, with a gross margin of 469.84 thousand lei (equivalent to 100, 81 thousand euros), which allows the farm to be classified in the 8th class of economic dimension;
- **in the subsidized version,** the farm registers a profit of 1205.76 thousand lei (equivalent to 258.72 thousand euros), and a gross margin, per total holding, of 629.55 thousand lei (equivalent of 135.08 thousand euros), which allows the farm to be included in the 8th grade of economic dimension, with the possibility of developing and securing funds for the resumption of the production process.

Year 2020:

- **in the version without subsidy,** the farm registers a loss of 888.13 thousand lei, at a value of expenses of 1930.73 lei per 1,000 lei incomes per total exploitation, in the conditions in which on crops, profit is registered for most crops;
- **in the subsidized version,** the farm registers a loss of 427.05 thousand lei (equivalent to 89.88 thousand euro) due to the high expenses made with the lease maturity, with a gross margin of 99.21 thousand lei (equivalent to 20.88 thousand euro), which allows the farm to be classified in the fifth class of economic dimension.

From the analysis of the presented data, it is found that the activity of COMPANIA OPREA SRL was profitable in most crops, except for 2017 and 2020. The losses recorded in 2017 were caused by the climatic conditions of that year, and the losses in 2020 were due large expenses made with the lease due. It is clear that the need to subsidize crops in order to obtain the necessary income to continue production processes and make investments. Of particular importance is the choice of an optimal crop structure, depending on the natural conditions and resources of the farm.

6.1.2. Case study DORIN SRL

Year 2017:

- **in the version without subsidy,** the farm registers a loss of 1802.53 thousand lei, at a value of expenses of 1205.89 lei per 1,000 lei income per total holding. Regarding the situation on crops, most register losses;
- **in the subsidized version,** the farm registers a profit of 1107.47 thousand lei (equivalent to 248.66 thousand euros), with a gross margin of 2480.47 thousand lei (equivalent to 556.95 thousand euros), which allows the classification farm in the tenth class of economic dimension.

Year 2018:

- **in the version without subsidy,** the farm registers a loss of 3909.47 thousand lei, at a value of expenses of 1676.73 lei per 1,000 lei income per total holding;
- **in the subsidized version,** the farm registers a loss of 1927.47 thousand lei (equivalent to 419.08 thousand euros), at a value of expenses of 1676.73 lei to 1,000 lei revenues per total holding.

Year 2019:

- **in the version without subsidy,** the farm registers a loss of 1308.14 thousand lei, at a value of expenses of 1390.02 lei per 1,000 lei revenues per total holding;
- **in the subsidized version,** the farm registers a profit of 695.86 thousand lei (equivalent to 149.31 thousand euros), and a gross margin, per total holding, of 1441.80 thousand lei (equivalent of 309.37 thousand euros) , which allows the farm to be classified in the 10th class of economic dimension, with possibilities for development and provision of funds for the resumption of the production process.

Anul 2020:

- **in the version without subsidy,** the farm registers a loss of 2245.62 thousand lei, at a value of expenses of 1799.72 lei per 1,000 lei income per total holding.
- **in the subsidized version,** the farm registers a profit of 549.20 thousand lei (equivalent to 115.59 thousand euros), with a gross margin of 1458.85 thousand lei (equivalent to 307.06 thousand euros), which allows the classification farm in the ninth grade of economic dimension.

From the analysis of the presented data, at DORIN SRL it is found that in the version without subsidy in the four years studied, the company registers losses. In the subsidized version, the company registers a profit except for 2018. It is clear that the need to subsidize crops in order to obtain income necessary to continue production processes and make investments. Of particular importance is the choice of an optimal crop structure, depending on the natural conditions and resources of the farm.

6.2. Study on the influence of the CAP on the economic efficiency of agricultural holdings

The transition to a market economy imposed the research of the economic efficiency of the production and the specialization of the agricultural farms by modifying the production process, of the necessary human resources with the realization of consistent investments. The choice of crops is made according to profitability. A quality management in agriculture can be achieved by perfect knowledge of the evolution of different economic and financial processes during a year of activity,

their evolution compared to those expected and in dynamics, by correctly diagnosing the established period. After obtaining these data, we can establish the necessary measures to correct the negative elements found and the widespread use of positive elements, with direct effect in increasing the profitability and economic and financial competitiveness of agricultural farms imposed by market economy standards and requirements.

The profitability of an agricultural farm is determined by analyzing the gross product (calculated between production volume and selling price), expenses incurred (total, variable and fixed), gross profit, net profit and taxable profit, rate of return on profit, standard gross margin and break even.

In order to ensure the continuity of the activity, the objectives of the agricultural farm must achieve two major desideratum:

- the capacity of the agricultural holding to obtain a monetary surplus (profitability) to meet the commitments assumed and to allow its development;

- the characteristic of agricultural holdings to harmonize the use of resources (financial balance) so as to allow it to permanently ensure solvency.

Profitability is manifested in different aspects but correlated with each other by ensuring an optimal remuneration of production factors and invested capital, by managing in conditions of efficiency and effectiveness of resources without neglecting the risks that may occur in the production process.

The effects of the risk being contradictory, we have the problem of limiting a certain level of risk in order to obtain productions at the proposed profitability. Risk can also be understood as a variable of profit compared to the average profitability of the last year, as an impossibility of agricultural holdings to adapt to changes over time and with low costs to changes in environmental conditions. The profitability of agricultural holdings depends very much on the general state of risk in which they operate.

The determination of the exploitation risk is made with the help of the exploitation profitability threshold, which is also known as critical point or equilibrium point. The profitability threshold establishes the link between the variation of the result obtained after the exploitation and the variation of the volume of activity consumed by the agricultural exploitation (exceeding the profitability threshold ensures, in fact, the profitability of the activity in the agricultural exploitations).

The break-even point provides us with data on the volume of activity that involves making a profit, the time required to cover expenses and the degree of utilization of production capacity.

Case study SAVA ALEXANDRINA INTREPRINDERE INDIVIDUALA GALATI

The research of the influence of the CAP on the economic efficiency of agricultural holdings was carried out at SAVA ALEXANDRINA INTREPRINDERE INDIVIDUALA GALATI with the following results:

Year 2017:

- **in the version without subsidy,** the farm registers a net profit of 149685.33 lei, at a value of 801.07 lei of the expenses per 1,000 lei incomes, on total exploitation, in the conditions in which by categories profit is registered only for the category of cows milk (376,650.82 lei). The rate of net profitability per farm is 20.86%. The break-even point (the volume of revenues that ensure the coverage of expenses, without obtaining a profit), in the amount of 93461.30 lei, has been reached;

- **in the version with subsidy**, the farm registers a net profit of 460674.00 lei, at a value of 801.07 lei of the expenses per 1,000 lei incomes, on total exploitation, in the conditions in which by categories profit is registered for the categories of dairy cows , youth 0-6 months, calves 6-12 months and youth over 12 months. The break-even point (the volume of income that ensures the coverage of expenses, without obtaining profit) is in the amount of 93461.48. In the subsidized version, the farm has development possibilities and provides funds for the resumption of the production process.

Year 2018:

- **in the version without subsidy,** the farm registers a net profit of 65716.05 lei, at a value of 1076.83 lei of the expenses per 1,000 lei incomes, on total exploitation, in the conditions in which profit is registered only for the category of dairy cows . The break-even point (the volume of revenues that ensure the coverage of expenses, without obtaining profit), in the amount of 126277.05 lei, was reached, taking into account the total revenues in the amount of 1,018,260 lei. It turns out that in 2018, in the conditions of not granting a subsidy, the farm makes a profit;
- **in the subsidized version,** the farm registers a net profit of 208762.301 lei, at a value of 1076.83 lei of expenses per 1,000 lei income, per total farm, given that profit is registered for all categories of animals, more little to heifers where losses are recorded. The break-even point (the volume of income that ensures the coverage of expenses, without obtaining profit) is 12627.25. It is exceeded, considering the total revenues in the amount of 1,018,260 lei.

Year 2019:

- **in the version without subsidy,** the farm registers a net profit of 2099.84 lei, at a value of 997.76 lei of the expenses per 1,000 lei income, on total exploitation, in the conditions in which profit is registered only for dairy cows. of profitability, in the amount of 139475.61 lei was reached, taking into account the total revenues in the amount of 1,116,174 lei. It results that in 2019, in the conditions of not granting a subsidy, the farm makes a profit;
- **in the subsidized version,** the farm registers a net profit of 302661.02 lei, at a value of 997.76 lei of expenses per 1,000 lei income, per total holding, given that profit is registered for all categories of animals, more little to heifers where losses are recorded.

Year 2020:

- **in the version without subsidy,** the farm registers a net profit of 93938.06 lei, at a value of 906.25 lei of the expenses per 1,000 lei incomes, on total exploitation, in the conditions in which profit is registered only for dairy cows and calves of 6-12 months. The break-even point, in the amount of 150,920.22 lei, was reached, taking into account the total revenues in the amount of 1,192,906 lei. It turns out that in 2020, in the conditions of not granting a subsidy, the farm makes a profit;
- **in the subsidized version,** the farm registers a net profit of 294,723.02 lei, at a value of 906.25 lei of expenses per 1,000 lei income, on total holding, in the conditions in which profit is registered for dairy cows and calves of 0-6 months, in the other categories there are losses.

7. GENERAL CONCLUSIONS, ORIGINAL CONTRIBUTIONS AND PERSPECTIVES

In the last chapter were presented the general conclusions, original contributions, recommendations and perspectives.

7.1.General conclusions

- The agricultural sector in Romania has a high potential for creating new jobs, potential for increasing the profitability of labor, capital and can cause a reduction in the price of major foods. In order to achieve this goal, the agricultural policies promoted and supported by the governments of our country, must be directed and supported by the allocation of financial support to the commercial farms that produce both for the domestic market and for export. It is necessary that the procedures for submission and implementation of small and medium-sized projects within the EAFRD program be simplified, to be easily accessible and with minimal costs for small farmers.
- The structure and size of agricultural farms in Romania are not compatible with those of other European Union countries, which requires urgent structural adjustment measures aimed at financial investments to stimulate the association of small agricultural producers in order to mechanized agricultural works, to modernize livestock , storage and marketing of products, stimulating the establishment of viable farms, of European type, by supporting semi-subsistence households, developing the land market, mortgage, leasing land, increasing the number of commercial agricultural farms to positively influence the increase of economic efficiency of activities agricultural. Financial investments are needed to stimulate the phenomenon of selling or renting land to young people who want to work in agriculture and the retirement of the elderly, encouraging and developing agricultural farms that produce organically and establishing diversified agricultural structures in rural areas, in in order to obtain alternative incomes.

- From the analysis of the presented data, it is found that the activity of SC COMPANIA OPREA SRL was profitable in most crops, except for 2017 and 2020. The losses recorded in 2017 were caused by climatic conditions of that year, and the losses in 2020 were result due to high expenses made with the maturity of the leases. It is clear that the need to subsidize crops in order to obtain the necessary income to continue production processes and make investments. Of particular importance is the choice of an optimal crop structure, depending on the natural conditions and resources of the farm.

- From the analysis of the presented data, at SC DORIN SRL it is found that in the version without subsidy in the four years studied, the company registers losses. In the subsidized version, the company registers a profit except for 2018. It is clear that the need to subsidize crops in order to obtain income necessary to continue production processes and make investments. Of particular importance is the choice of an optimal crop structure, depending on the natural conditions and resources of the farm.
- From the analysis of the economic results, of the expenses made and of the incomes realized at SAVA ALEXANDRINA ÎNTREPRINDERE INDIVIDUALĂ, it is found that the

agricultural exploitation registers profit in all the years studied, both in the version with subsidy and in the version without subsidy.

7.2. Original contributions and recommendations

In order to develop and consolidate the existing agricultural holdings, following the research, a Guide of measures in 15 points is recommended, proposed for increasing the efficiency of accessing European funds by the companies from Galati County. The recommendations can be extended to other agricultural holdings in Romania.

Expansion of family farms with commercial character, to represent the dominant form in the structure of organization of agricultural production, stimulation of forms of association in agricultural production, stimulation of the process of increasing the size of agricultural holdings financial and fiscal) the elaboration and approval of laws that stimulate the development of agricultural holdings and discourage the fragmentation of property to a certain extent, the establishment and efficiency of rural agricultural markets and the provision of the necessary infrastructure for the functioning of these markets.

Creating cooperatives through association and cooperation in agriculture, a process that would solve many problems of farmers by obtaining large and balanced productions, creating opportunities to capitalize on the market of products in advantageous conditions, reducing production costs, increasing profits and finally decrease in consumer sales prices. The measures that stimulate the expansion of the zootechnical sector in each locality are important, by raising animals in a well organized and integrated system, in the form of agricultural cooperatives or agricultural associations that allow the organization and collective obtaining of production according to the characteristics of each village, raising pigs and birds.

Increasing the share of commercial farms in the operation and ownership of domestic agricultural producers. Small farms face problems with insufficient equipment, consisting largely of tractors and agricultural equipment with a high degree of physical and moral wear and tear. In order to practice a structurally efficient agriculture, it is necessary to increase the share of commercial farms in the exploitation and ownership of local agricultural producers, which represents the future of Romanian agriculture and to which it is necessary to channel the attention of Romanian decision-makers to avoid export of subsidies received by Romania from the agricultural funds of the European Union.

Accumulated subsidies and bonuses to small landowners who sell their land. At present, the payment system is identical for both a farmer with 1 ha and one with 3,000 ha. Each farmer submits an annual application that is verified, approved and paid on the basis of land ownership or lease, which acts as an inhibitor to the sale of fragmented land and hinders the merger process. A farmer who owns 1 ha of land in the property pays annually to the Romanian state a land tax of about 50 euros / year and receives a subsidy of about 200 euros, with a future tendency to increase this subsidy, knowing that it will equalize the average subsidies from the European Union. In this situation, the rational choice of the landowner is not to sell this land and to continue to benefit from subsidies. The recommended option would allow smallholders to register for the subsidy only once, after which they could sell the land and continue to receive the subsidy for ten years, a phenomenon that would eliminate the tendency to keep the land in ownership only to receive the grant through annual applications. This can have a major effect on the property structure of Galati County, where agriculture is fragmented. This recommendation would determine those with small

areas to sell, still benefiting from the subsidy for 10 years, and for farms defined as medium for Romanian standards with areas larger than 20 hectares would create possibilities for expansion by purchasing areas small in the immediate vicinity of existing farms. The effects could be the same as for the "life annuity" program, but much more extensive, allowing medium-sized farms to consolidate.

Adjusting the level of direct payments at national level to those at European level. In order to provide funding for direct payments and market measures (Pillar I payments) it is necessary to adjust direct payments to those at European level and to abandon the historical reference on the basis of which the current level of direct payments has been established, maintaining the Single Payment Scheme. on the Area which should also be a recognition for the complex services that farmers provide for society in rural areas, on biodiversity preservation, conservation of rural landscapes, animal welfare, establishment of a simplified payment system per hectare for small farms up to 5 ha, maintaining and allocating new market intervention instruments to act as a safety net in the event of a crisis and to enable the consolidation of EU agriculture at a high level from a competitive point of view in relation to third countries and in fluctuating conditions. prices, the introduction of Community financial mechanisms for management to be useful in times of deep crisis and flexible to have rapid effects, to simplify the conditions for compliance with cross-compliance, to introduce new financial support measures to help reconcile land, to stimulate the development of non-agricultural economic activities in the environment. and reduce the effects of climate change.

Increasing the value of financial support for agriculture from the European Agricultural Guarantee Fund and the European Fund for Agriculture and Rural Development in the configuration of the 2 complementary pillars that must determine the capitalization of potential in rural areas, as well as achieving convergence objectives, by supporting active farmers will reduce disparities between regions through a correct allocation of financial resources. Allocating a reasonable budget ensures a decent standard of living for farmers, avoids the phenomenon of abandonment of rural areas, agricultural activity, conservation and maintenance of rural features, practicing European agriculture and preserving local traditions. It is also necessary to maintain and increase funding from the Community and national budgets, financing major projects mainly from the Community budget, maintaining the current structure of the Common Agricultural Policy, with the two pillars, and the possibility that agri-environment payments, payments for disadvantaged areas, from the National Rural Development Program to be introduced in Pillar I.

The active involvement of the County Agricultural Directorate is very important in the context of the development of small farms, given that a large part of farmers do not have specialized studies and do not have information on the legislation in the field, which is constantly changing. The specialists from the County Agricultural Directorate elaborate projects for accessing European funds, carry out continuous professional training courses for farmers based on the results obtained in agricultural scientific research and recommend solutions on optimal technologies for cultivating different plants, choosing varieties and hybrids. the pedoclimatic conditions of the area, the phytosanitary products approved for the treatment of diseases and pests in agricultural crops, but also in the field of animal husbandry and marketing of obtained products.

Public interventions in agricultural markets predictable and with direct effect in increasing investor confidence in agriculture. The investments made from the European Union funds for agriculture determine the reduction of unemployment by creating new jobs as well as an increase of the taxes that farmers pay to the state budget. Indirectly, both farmers who supply raw materials

and materials, as well as processors or traders, register significant increases in turnover, and in turn will pay higher taxes to the state budget.

Improving the direct marketing systems of agri-food products on the domestic market and for export. Through direct sales networks, farmers receive a higher percentage of sales prices, which determines their motivation to offer the market superior products in terms of quantity and quality.

Rural development networks supported and further developed, because they play an essential role in building and strengthening the capacity of rural communities, leading to improved communication and well-being within them. Farmers have the possibility of much easier access to changes in legislation, information and news on the market, can interact with partners and collaborators to develop and consolidate their business.

State-guaranteed insurance for cultivated land and animal shelters. The risks that can be manifested in plant production and animal production can be reduced by developing an optimal insurance system for cultivated land and animal shelters by encouraging farmers to use it by explaining the major benefits they have and by significantly reducing the gaps. between the agricultural years in terms of liquidity as well as for establishing medium and long term strategies for the development and consolidation of farms.

Adapted marketing strategies farmers should be encouraged to take market demand into account when establishing the crop plan and to streamline their marketing strategy for a higher capitalization of the products obtained.

Integrated production systems between the vegetable, livestock and processing sectors. Achieving high efficiency can be achieved through the integration of the plant, livestock and processing, in which production costs are reduced.

Establishment of agricultural farms with multi-activity. A high competitiveness in agriculture can be obtained by setting up multi-activity agricultural farms, with a massive market orientation, by associating them in order to access non-reimbursable funds to finance the necessary investments in farms, processing units and streamlining the process of capitalization. production.

Development of storage facilities through access to European funds. Achieving high average productions, obtaining superior quality products, building and expanding storage spaces, investments in agriculture and animal husbandry by accessing European non-reimbursable funds and bank loans determine the increase of economic efficiency in the plant and animal husbandry sector.

Development of alternative sources of green energy. It is recommended that vegetable and livestock farms to use energy from renewable sources such as wind or solar to reduce electricity costs and protect the environment, increase the supply of traditional products, high quality and obtained in ecological system, (there is a large increase in demand for these products), bringing livestock farms to European standards, improving forage procedures on farms and adopting advanced breeding techniques. In the vegetable sector it is recommended to use varieties and hybrids adapted to extreme climatic conditions and high productivity per hectare, to associate agricultural producers in producer groups for an efficient capitalization of production and to achieve production capitalization chains from producer, processor to consumer finally, establishing the link between producers and processors, by concluding firm and long-term contracts.

7.3. Prospects for further research

The structure and dimensions of agricultural holdings in Galati County are not yet compatible with those of other European Union member states. For this reason, urgent structural adjustment measures are needed, which aim at associating small agricultural producers to carry out mechanized agricultural work, crop rotation, modernization of the livestock sector, storage and marketing of products, formation of family farms, by financing semi-subsistence households for to evolve towards European type farms by developing the land market, mortgage credit and encouraging land lease, increasing the number of commercial agricultural holdings to ensure the economic efficiency of agricultural farms. It is necessary to stimulate the lease of land to young farmers and the retirement of the elderly.

A restructuring of production in agricultural societies, encouraging and stimulating farms to produce in an ecological system, the formation of diversified and efficient agricultural structures in rural areas, for obtaining alternative incomes, merging agricultural lands, etc. Small farms face a modest endowment, consisting mainly of tractors, combines, machines and obsolete agricultural equipment, with a high degree of wear. An efficient agriculture, from a structural point of view, requires increasing the share of commercial farms owned by local agricultural producers, they represent the future of Romanian agriculture and all the attention of the Romanian decision-making bodies must be directed towards them.

Regarding direct payments and market measures, the measures supported by Romania (beneficial for domestic agriculture), regarding the balancing of direct payments at European level and the abandonment of the historical reference based on which the current level of direct payments was established, maintaining the Payment Scheme Single on the Area to represent a recognition and remuneration for the complex services provided by farmers to society in rural areas by preserving biodiversity, conserving rural landscapes, animal welfare, re-evaluating the role of small and medium farms and identifying a simplified system of payment per hectare for farms smaller than 5 ha, identification of new intervention tools in crisis situations, to maintain European Union agriculture at a competitive level in terms of price volatility, identification of new measures to stimulate land consolidation, encourage active development rural non-agricultural economic activities and to counter climate change.

As part of good practices for accessing European funds, farmers are recommended to integrate, process and market production due to the fact that they receive additional points, compared to those that require non-reimbursable European funds only for the production or recovery part.

Through projects financed with European non-reimbursable funds, the labor market in the region can diversify, ensuring the premises for increasing the standard of living in the area. On the other hand, projects financed with European non-reimbursable funds for agriculture also take into account sustainable development, by creating a unit with a minimum impact on the environment and by transporting products over a short distance (up to 100 km), thus a horizontal theme of the rural development program.

REFERENCES

1. Chiran A., Vasilescu N., Vinţu V., Gîndu Elena, *The policy of rural development în România*, Revista Cercetări agronomice în Moldova, 1998, vol. 3-4, Iaşi.

2. Nicula, M., Stanciu, S., 2019, Government Support Measures for Romanian Farmers, (OP 3.2.12), 7th Edition of SCDS-UDJG, Perspectives and challenges în doctoral research, (Galați, România, June 13-14, 2019), http://www.cssd-udjg.ugal.ro/index.php/abstracts-2019

3. Avarvarei I., Macovei Gh., *Agricultură şi economia de piaţă în contextul integrării europene*, Lucrări ştiinţifice, U.A.M.V. Iaşi, 1997, vol. 40, seria Agronomie.

4. Fruja I., Csösz I., Creţ N., – *Integrarea agriculturii – prezent şi viitor.* Lucrări ştiinţifice, U..A.M.V. Iaşi, vol. 38, 1994, seria Agronomie.

5. Chiran A., Gîndu E., Ciobotaru E., A., *Consideraţii teoretice privind strategia distribuţiei produselor zootehnice în perioada de tranziţie la economia de piaţă*, Lucr. şt. USAMV Iaşi, 2001, vol. 44, seria Zootehnie.

6. Bârsan M., *Integrare economică europeană*, 2000, vol. ÎI. Editura Fundaţiei CDIMM Maramureş.

7.https://www.digi24.ro/stiri/economie/finante-economie/cu-cat-a-scazut-produsul-intern-brut-in-primele-9-luni-ale-anului-domeniul-care-a-avut-o-crestere-de-peste-10-in-2020-1414356

8. http://finantare-rurala.ro/despre/ce-este-fega.html

9. Davidovici I., Gavrilescu D., Cionga C., *Politici de susţinere a creşterii agricole în România: evoluţii, retrospective şi posibile opţiuni*, Oeconomica, 2002, anul XI

10. Mireşan M., Cândea D., *Dezvoltarea durabilă din perspectiva sistemelor de producţie. Din volumul: Manual de inginerie economică*, Editura Doria, 2002, Cluj-Napoca.

11. Zahiu L. şi colab., *Economia şi organizarea creşterii ovinelor*, Editura Ceres, 1988, Bucureşti.

12. Nicula, M., Băcanu (Șerban), C., Stoica (Dincă), C., Ion (Dumitriu), I.M, Stanciu, S., 2018, Aspecte privind impactul schemelor de plată asupra producției agricole naționale, Sesiunea Științifică Internațională Cercetări de Economie Agrară și Dezvoltare Rurală: „Piețele agricole și spațiul rural în contextul modernizării și simplificării politicii agricole comune", Organizatori Academia Română, Institutul Național de Cercetări Economice „Costin C. Kirițescu", Institutul de Economie Agrară (București, România, Decembrie 11, 2018), Secțiunea 1, Exploatația agricolă și managementul resurselor, http://eadr.ro/fişiere/sesiune2018ro.pdf

13. Zahiu L., *Politici şi pieţe agricole - reformă şi integrare europeană*, Editura Ceres, 2005, Bucureşti.

14. Zahiu L., Toncea V., Lăpuşan A., Toderoiu F., Dumitru M., *Structurile agrare şi viitorul politicilor agricole*, Editura Economică, 2003, Bucureşti.

15. Costantini F. ed colab., *Management ed aspetti zooeconomici dell'allevamento, del broiler în rapporto all'habitat ed al coşti energetici.* Riv. l'Informatori Agrario, nr. 41, 1983, Verona, Italia.

15. Zahiu Letiţia, 2006 - Agricultura Uniunii Europene sub impactul Politicii Agricole Comune. Editura Ceres, Bucureşti.

16. Dumitrescu E., Niculescu E., *Mutaţii în structura pieţei bunurilor de consum în România*. RevistaComerţul modern, 1991, nr. 3 - 4.

17. Marinescu Gh.,– *Tipologia exploataţiilor agricole.* RevistaRomână de Statistică, 1996, nr. 12.

18. *Dezvoltarea rurală în România*. Carta verde, Ministerul Agriculturii şi Alimentaţiei, 1998, Bucureşti.

19. *Recensământul general agricol, 2010,* INS, 2011, Bucureşti.

20. Nicula, M., Stoica (Dinca), C., Băcanu (Şerban) M. C., Ion (Dumitriu) I.M., Stanciu, S., 2019, Research Concerning Agricultural Subsidies for Romanian Farmers between 1990-2007, Proceedings of the 33rd Internaţional Business Information Management Association Conference: Education Excellence and Innovation Management through Vision 2020 (Granada, Spain, April 10-11, 2019), Vol. I-X, pp. 4772-4779, Ed. Soliman, K.S., ISBN: 978-0-9998551-2-6,

21. Nicula, M., Stanciu, S., 2019, Analysis of the Agricultural Sectorin the South-East Region of România, (OP 3.2.13), 7th Edition of SCDS-UDJG, Perspectives and challenges în doctoral research, (Galați, România, June 13-14, 2019), http://www.cssd-udjg.ugal.ro/index.php/abstracts-2019

22. Hera C., *Agricultura României în contextul integrării în Uniunea Europeană,* 2004.

23. Otiman P. I., *Sustainable Development Strategy of Agriculture and Rural Areas în România on Medium and Long Term - Rural România XXI*, Rev. Agricultural Economics and Rural Development, 2008, Year V, no.1-2. Bucureşti.

24. Petrache I. A., *Agricultura României şi integrarea în U.E.*, Rev. Tribuna Economică, 2004, nr. 33, Bucureşti.

25. Toma E., Dachin A., Alexandri C., *Agricultura României în procesul de integrare europeană*, 2009, Ed. ARS Academică, Bucureşti.

26. Nicula, M., Stanciu, S., 2018, The Common Agricultural Policy în the Perspective of 2020, 32 IBIMA Conference: Vision 2020: Sustainable Economic Development and Application of Innovation Management from Regional expansion to Global Growth, (Seville, Spain, Nov. 15-16, 2018), https://ibima.org/accepted-paper/the-common-agricultural-policy-in-the-perspective-of-2020

27. Malassis L., Ghersi G., *Initialization a l'economie agro-alimentaire*, 1992, Hatier-Aupelf;

28. Buciuman E., *Economia rurală*, Editura Pro Transilvania, 1999, Alba Iulia;

29. Nicula, M.D., Stoica, C.D., Dumitriu Ion, M.I., Florea, A.M., Munteanu Pila, M., Bratoveanu, D.B., Stanciu, S., 2020, Research regarding land evolution and agricultural area of Galați County, Scientific Papers-Series A-Agronomy, 63(2), pp. 178-183, ISSN: 2285-5785, WOS:000596730700028, https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000596730700028

30. Gîndu E., Dima F.M., Chiran A., Drobotă B., *Revitalization Measures of Vegetal Agricultural Production în Galați Agro-economical Area by Attracting European Funds*, Buletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca – Horticulture, 2009, volume 66 (2), pag.194-201.

31. Brezuleanu S., *Management agricol – teorie şi practică*, 2004, Ed. Performantica, Iaşi.

32. Oancea M., *Managementul modern în unităţile agricole*, 2003, Ed. CERES, Bucureşti.

33. Zezza A., *The Changing Public Role în Services to Agriculture:The Case of Information*, Xth EAAE Congress 'Exploring Diversity în the European Agri -Food System', 2002, Zaragoza, 28-31 August, Spain.

34. Brezuleanu S., Iaţco C., *Methods of improving risck management în the field of fiscal administration*, Universitatea de Ştiinţe Agricole şi Medicină Veterinară, Facultatea de Zootehnie, Lucrări Ştiinţifice 2007, Suport CD, ISSN 1454-7368, Iaşi.

35. Wilson N, Anton J., *Combining risk assessment and economics în managing a sanitary-phytosanitary risk*, American Journal of Agricultural economics, 2006, No. 88(1).

36. Ungureanu G., Brezuleanu S., Brezuleanu C., O., Chiran A., Gîndu E., *Study of risks strategy în agricultural companies (Case study at S.C. KOSAROM S.A., Paşcani). Management of technological changes,* Proceedings of the 7/th Internaţional Conference on Management of Technological Changes. Book 2, septembrie 1-3, 2011, Alexandropoulis, Greece.

37. Van Dongen H., *Financial Animal Disease Control în the Netherlands*, Presentation at the Conference on Risk Management, 2008, Berlin.

38. Antón J., Kimura S., *Risk Management în Agriculture in Spain*, OECD Food, Agriculture and Fisheries Working Papers, No. 43. 2011, Paris.

39. Tangermann S., *Risk Management în Agriculture and the Future of the EU's Common Agricultural Policy,* ICTSD Programme on Agricultural Trade and Sustainable Development. Issue Paper No. 34. 2011, Geneva, Switzerland.

40. *Politica Agricolă Comună după 2013, posibilă configurţşie din perspectiva României*, Ministrul Agriculturii şi Dezvoltării Rurale, 2010, Bucureşti.

41. Chiran A. şi colab.,– *Avenir de l'agriculture de Roumanie dans la perspective de l'integration dans l'Union Européenne et role de l'informatique pour la gestion des exploitations agricoles et du territoire.* Lucrări ştiinţifice, U.A.M.V. Iaşi, vol. 40, 1997, seria Agronomie.

42. Chiran A., Dima Fl.-M., Gîndu E., Murariu C., Ralea V., *Strategia implemnentării politicilor de piaţă în domeniul vitivinicol şi dezvoltarea viticulturii județului Galați în perioada 2006-2014.* Lucrări ştiinţifice, USAMV Iaşi, vol. 50-nr.3, 2007, seria Agronomie.

43. Chiş Margareta, Merce Elena, *Agricultura spre economia de piaţă : concepte, cerinţe, strategii.* Editura Aletheia, 1999, Bistriţa.

44. Dinu I., *Tendinţe şi perspective în zootehnia mondială*. Editura Ceres,1989, Bucureşti.

45. Ionescu A., Săhleanu V., Bândariu C., *Protecţia mediului înconjurător şi educaţia ecologică*, Editura Ceres, 1989, Bucureşti.

46. Toderoiu F., *Agriculture, resources and efficiency,* Expert Publishing House, 2002, Bucharest.

47 *Dezvoltarea rurală în România*. Carta verde, Ministerul Agriculturii şi Alimentaţiei, 1998, Bucureşti.

48. Hazell P., Poulton C., Wiggins S., Dorward A., *The Future of Small Farms for Poverty Reduction and Growth*, Internaţional Food Policy Research Institute, 2007, Washington, UŞA.

49. Miller M., Wallace, J., *Rural Development Networks – A Mapping Exercise*, Carnegie UK Trust, 2012, Dunfermline, UK.

50. Rebollo J., *Relaţional marketing. Basic concepts and practical examples*, Spanish Journal of Rural Development, Vol. III (Special 1) , 2012, p. 103-110, Santiago de Compostela, Spain.

51. Ştefănescu S.L., Paranici S., Dumitrascu M., *Training Centers Network for Agricultural Advice în România,* Romanian Agricultural Research, nr. 28, 2011, Fundulea.

52. https://www.europarl.europa.eu/factsheets/ro/sheet/103/politica-agricola-comuna-pac-si-tratatul

53. *Politica Agricolă Comună -consecinţe asupra României*, Studiu nr.2, Proiect PHARE RO 9907-02-01, Institutul European din România, 2002 Bucureşti.

54. Fruja I., Csösz I., Creţ N., – *Integrarea agriculturii – prezent şi viitor.* Lucrări ştiinţifice, U..A.M.V. Iaşi, vol. 38, 1994, seria Agronomie.

55.Memorandumul Guvernului României privind aplicarea SAPS (mai 2005);

56.Tratatul de aderarea României la Uniunea Europeană;

57. Pelkmans J., *Integrarea europeană. Metode şi Analiză Economică.* Ediţia a doua. Institutul European din România, 2003, Bucureşti.

58. https://www.europarl.europa.eu/factsheets/ro/sheet/103/politica-agricola-comuna-pac-si-tratatul

59. Zahiu L., Manole V., Rotaru V., *Management-Marketing agroalimentar*, A.S.E., 1998, Bucureşti

60.https://www.europarl.europa.eu/factsheets/ro/sheet/107/instrumentele-pac-si-reformele-acestora

61.https://www.europarl.europa.eu/factsheets/ro/sheet/109/primul-pilon-al-politicii-agricole-comune-pac-ii-platile-directe-catre-fermieri

62. Regulamentul (UE) nr.1307/2013 al Parlamentului European şi al Consiliului de stabilire a unor norme privind plăţile directe acordate fermierilor prin scheme de sprijin în cadrul politicii agricole comune şi de abrogare a Regulamentului (CE) nr. 637/2008 al Consiliului şi a Regulamentului (CE) nr. 73/2009 al Consiliului;

63. Regulamentul delegat (UE) nr. 639/2014 al Comisiei de completare a Regulamentului (UE) nr. 1307/2013 al Parlamentului European şi al Consiliului de stabilire a unor norme privind plăţile directe acordate fermierilor prin scheme de sprijin în cadrul politicii agricole comune şi de modificare a anexei X la regulamentul menţionat;

64. Regulamentul delegat (UE) nr. 807/2014 al Comisiei de completare a Regulamentului (UE) nr. 1305/2013 al Parlamentului European şi al Consiliului privind sprijinul pentru dezvoltare rurală acordat din Fondul european agricol pentru dezvoltare rurală (FEADR) şi de introducere a unor dispoziţii tranzitorii;

65. Regulamentul CE nr. 1974/2006 de stabilire a normelor de aplicare a Regulamentului(CE) nr. 1698/2005 al Consiliului privind sprijinul pentru dezvoltarea rurală acordat din Fondul European Agricol pentru Dezvoltare Rurală (FEADR), cu modificările şi completările ulterioare;

66. Regulamentul de punere în aplicare (UE) nr. 641/2014 al Comisiei de stabilire a normelor de punere în aplicare a Regulamentului (UE) nr. 1307/2013 al Parlamentului European şi al Consiliului de stabilire a unor norme privind plăţile directe acordate fermierilor prin scheme de sprijin în cadrul politicii agricole comun.

67. https://www.europarl.europa.eu/ftu/pdf/ro/FTU_3.2.5.pdf

68.https://www.europarl.europa.eu/factsheets/ro/sheet/109/primul-pilon-al-politicii-agricole-comune-pac -ii-platile-directe-catre-fermieri

69. https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/market-measures/market-measures-explained_ro

70. http://finantare-rurala.ro/despre/ce-este-fega.html

71. https://agrointel.ro/wp-content/uploads/2017/02/Ghidul_Solicitantului_sM6.5.pdf

72. Ordonanţa de Urgenţă nr. 3/2015 pentru aprobarea schemelor de plăţi directe care se aplică în agricultură în perioada 2015-2020 şi pentru modificarea art.2 din Legea nr. 36/1991 privind societăţile agricole şi alte forme de asociere în agricultură, cu modificările şi completările ulterioare;

73. LEGEA NR 36/1991

74. Ordinul M.A.D.R. nr. 619/2015 pentru stabilirea criteriilor de eligibilitate, condiţiilor specifice şi a modului de implementare a schemelor de plăţi prevăzute la art. 1, alin. (2) şi (3) din Ordonanţa de urgenţă nr.3/2015 pentru aprobarea schemelor de plăţi care se aplică în agricultură în perioada 2015-2020 şi pentru modificarea art. 2 din Legea nr. 36/1991 privind societăţile agricole şi alte forme de asociere în agricultură,cu modificările şi completările ulterioare;

75. Programul Naţional de Dezvoltare Rurală (P.N.D.R.) 2014 – 2020;

76. http://finantare-rurala.ro/despre/ce-este-fega.html

77. https://www.europarl.europa.eu/factsheets/ro/sheet/108/primul-pilon-al-pac-i-organizarea-comuna-a-pietelor-ocp-pentru-produsele-agricol

78. https://www.europarl.europa.eu/factsheets/ro/sheet/106/finantarea-politicii-agricole-comune

79. https://www.gazetadambovitei.ro/actual/maine-seminar-de-informare-pentru-oportunitatile-de-finantare-europeana/

80. https://portal.afir.info/informaţii_generale_pndr_pndr_2014_2020

81. https://publications.europa.eu/en/publication-detail/-/publication/541f0184-759e-11e7-b2f2-01aa75ed71a1/language-en/format-PDF/source-40843483

82. https://eur-lex.europa.eu/legal-content/ro/TXT/?uri=CELEX:52017DC0713

83. http://www.asas.ro/wcmqs/PNS%202020/PAC%20Post%202020/Concept-Note_Reforma-Politicii-Agricole-Comune.pdf

84. https://agrointel.ro/98428/ultima-ora-s-a-anuntat-plafonarea-subventiilor-platile-nu-vor-mai-depasi-100-000-de-euro-ferma

85. https://www.caleaeuropeana.ro/comisia-europeana-reforma-politicii-agricole-comune-va-duce-la-mai-multa-flexibilitate-si-la-o-distribuire-mai-echitabila-a-platilor-directe-intre-statele-membre/

85.https://www.stiriagricole.ro/ghid-de-bune-practici-pentru-accesarea-fondurilor-europene-nerambursabile-pentru-agricultura-cum-arata-un-proiect-care-integreaza-productia-procesarea-si-comercializarea-20751.html

86.http://www.cnp.ro/inovatie/docs/principalele-livrabile/09_Rezumat%20studiu%20-%20Consolidarea%20exploatatiilor%20agricole.pdf

87. http://www.asas.ro/wcmqs/PNS%202020/PAC%20Post%202020/Concept-Note_Reforma-Politicii-Agricole-Comune.pdf

88. Regulamentul (UE) nr. 1305/2013 anexa I și Regulamentul (UE) nr.1307/2013 anexa III, cu modificările și completările ulterioare

89. Lefter C.,*Cercetarea de Marketing. Teorie şi practică*, Editura Lux Libris, 1998

90. Ghiţă S., *Statistică*, Editura Meteor Press, 2006, Bucureşti.

91. Cătoiu I., Balaure V., *Cerinţe ale elaborării ştiinţifice şi utilizării eficiente a studiilor de piaţă*, Revista Comerţul modern, nr. 6, 1998.

92. http://www.cjGalați.ro/images/stories/formulare/identificare-relatii-teritoriale.pdf

93. http://opengis.unibuc.ro

94. https://www.ghidulprimariilor.ro

95. https://www.wikiwand.com/ro/Listă de comune din județul Galați

96. Otiman I.-P., *Agricultura României la cumpăna dintre mileniul II şi III.* Editura Elicon, 1994, Timişoara.

97. Chiran A. şi colab., *Avenir de l'agriculture de Roumanie dans la perspective de l'integration dans l'Union Européenne et role de l'informatique pour la gestion des exploitations agricoles et du territoire*, Lucrări ştiinţifice, U.A.M.V. Iaşi, 1997, vol. 40, seria Agronomie.

98. Muntean L.S., Borcean I., Roman Ghe., Axinte M., *Fitotehnie*, Ed. Ion Ionescu de la Brad, 2003, Iaşi.

99. Alecu I.N., Merce E., Pană D., Sâmbotin L., Ciurea I.,V., Bold I., Dobrescu N., - *Managementul exploataţiilor agricole,* Editura Ceres, 2001, Bucureşti.

100. Bărbulescu, G., *Merceologie Agroalimentară.* Ed. Didactică şi Pedagogică R. A., 2003, Bucureşti.

101. Manole, V., Stoian M., Ion R.A., *Agromarketing*, Editura Academia de Studii Economice, 2003, Bucureşti.

102. Pop I., *Constrângeri şi beneficii ale integrării agriculturii româneşti în UE*, Adevărul economic, nr. 4, p. 13, 2004, Bucureşti.

103. Ştef, L., *Cereale în alimentaţia păsărilor şi porcilor.* Rev. Fermă, 2005, Nr. 5, Bucureşti.

104. Mogârzan A., Rizea A., Haraga M., Berea N., *Conservarea şi păstrarea produselor agricole vegetale.* Ed. Ion Ionescu de la Brad, 2003, Iaşi.

105. *Sân Gh**. şi colab**.,* *Managementul tehnologic al plantelor de câmp*, Editura Ceres, *2005,* Bucureşti,

106. H.G.nr. 226/2015 privind stabilirea cadrului general de implementare a măsurilor programului naţional de dezvoltare rurală cofinanţate din Fondul European Agricol pentru Dezvoltare Rurală şi de la bugetul de stat;

107. Ordinul M.A.D.R. nr. 531/2015 privind aprobarea condiţiilor de depunere a cererilor de finanţare pe măsurile 4-Sub-măsura 4.1."Investiţii în exploataţii agricole", 6-Sub-măsura 6.1."Sprijin pentru instalarea tinerilor fermieri", 19-Sub-măsura 19.1 -Sprijin pregătitor pentru elaborarea Strategiilor de Dezvoltare Locală (SDL) şi respectiv a cererilor de ajutor pe măsurile 10-Agromediu şi climă, 11-Agricultura ecologică şi 13 - Plăţi pentru zonele care se confruntă cu constrângeri naturale sau cu alte constrângeri specifice, din cadrul Programului Naţional de Dezvoltare Rurală 2014-2020, anterior aprobării acestuia de către Comisia Europeană;

108. Regulamentul(UE) nr.1305/2013 al Parlamentului European şi al Consiliului privind sprijinul pentru dezvoltare rurală acordat din Fondul european agricol pentru dezvoltare rurală (FEADR) şi de abrogare a Regulamentului (CE) nr. 1698/2005 al Consiliului;

109. Regulamentul(UE) nr.1310/2013 al Parlamentului European şi al Consiliului de stabilire a anumitor dispoziţii tranzitorii privind sprijinul pentru dezvoltare rurală acordat din Fondul european agricol pentru dezvoltare rurală (FEADR), de modificare a Regulamentului (UE) nr. 1305/2013 al Parlamentului European şi al Consiliului în ceea ce priveşte resursele şi repartizarea acestora pentru anul 2014 şi de modificare a Regulamentului (CE) nr. 73/2009 al Consiliului şi a Regulamentelor (UE) nr. 1307/2013, (UE) nr. 1306/2013 şi (UE) nr. 1308/2013 ale Parlamentului European şi ale Consiliului în ceea ce priveşte aplicarea acestora în anul 2014;

110. Regulamentul de punere în aplicare (UE) nr. 808/2014 al Comisiei de stabilire a normelor de aplicare a Regulamentului (UE) nr. 1305/2013 al Parlamentului European şi al Consiliului privind sprijinul pentru dezvoltare rurală acordat din Fondul european agricol pentru dezvoltare rurală (FEADR);

111. Ordinul M.A.P.D.R. nr. 243/2006 privind stabilirea măsurilor finanţate din Fondul European Agricol pentru Dezvoltare Rurală (FEADR), care vor fi implementate de către Agenţia de Plăţi pentru Dezvoltare Rurală şi Pescuit, respectiv Agenţia de Plăţi şi Intervenţie pentru Agricultură;

112. ORDONANŢĂ DE URGENŢĂ Nr. 45/2015 privind instituirea unei scheme de ajutor de stat pentru compensarea pagubelor cauzate de fenomenul meteorologic de secetă severă în perioada aprilie - septembrie 2015

113. Ordinul MADR nr.97/63/2020

114. Hera C., *Agricultura României în contextul integrării în Uniunea Europeană,* Agricultura României, 2004, v. 15, nr. 3, p. 1-3, Bucureşti.

115. Marian M., Merce E., Merce E., *Introducere în managementul exploataţiilor agricole*, Ed. Intel Credo, 1994, Deva.

116. http://statistici.insse.ro/ipc/?page=ipca1&lang=ro

117. Alecu I., Drăghici M., Oancea M., Zahiu L., Scrieriu F., *Manual de management al fermei*, Editura Atlas Press SRL, 2004.

ANNEXES

1. ANNEX 1. LIST OF PUBLISHED/ IN PRESS/PRESENTED PAPERS

Books / Book Chapters as an author / co-author

Băcanu (Șerban), C., Stoica (Dincă), C., Ion (Dumitriu), M.C., **Nicula, M**., Stanciu, S., 2019, Influența factorilor de cultură agricolă asupra productivității unor soiuri de grâu semincer în județul Brăila, în Volumul „Piețele agricole și spațiul rural în contextul modernizării și simplificării Politicii Agricole Comune", Editura Academiei Române, ISBN 978-973-27-3127-7, Ref. șt. Otiman, P.I,. Coord. Alexandri, C., Alboiu, C., Kruzsliscika, M., Rusali, M., Tudor, M, pp. 143-152 (9 pag/647 pag).

Scientific articles

Articles published in ISI journals / volumes of ISI (Web of Science / Clarivate Analytics Core Collection) indexed conferences

1. **Nicula, M.D.,** Bratoveanu, D.B., Liptac A.P., Stanciu, S., 2021, Aspects Regarding the Evolution of Human Resources in Galati County, in the Period 2015-2020, Proceedings of the 37th IBIMA International Conference: Innovation Management and Sustainable Economic Competitive Advantage: From Regional Development to Global Growth (Cordoba, Spain, May 30-31, 2021), https://ibima.org/conference/37th-ibima-conference/#ffs-tabbed-15, in press.

2. **Nicula, M.D**., Stoica, C.D., Dumitriu Ion, M.I., Florea, A.M., Munteanu Pila, M., Bratoveanu, D.B., Stanciu, S., 2020, Research regarding land evolution and agricultural area of Galați County, Scientific Papers-Series A-Agronomy, 63(2), pp. 178-183, ISSN: 2285-5785, WOS:000596730700028, https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000596730700028.

3. Bratoveanu, B.D., **Nicula, M.**, Sârbu, R., Stanciu, S., 2020, The Beer Market în România. Situation and Outlook, Proceedings of 2020 BASIQ Internaţional Conference: New Trends în Sustainable Business and Consumption (Messina, Italy, Jun 04-06, 2020), Ed. Dinu, V., ISSN: 2457-483X, pp. 532-539, WOS:000630165800115, https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000630165800115.

4. Dumitriu (Ion) I.M., Stoica (Dinca), C., Băcanu (Şerban) M. C., **Nicula, M.**, Stanciu, S., 2019, Research on Optimizing the Quality of the Lots of Grain Cereals Seeds for Sowing, Proceedings of the 33rd Internaţional Business Information Management Association Conference: Education Excellence and Innovation Management through Vision 2020 (Granada, Spain, April 10-11, 2019),Vol. I-X, pp. 3732-3739, Ed. Soliman, K.S., ISBN: 978-0-9998551-2-6, WOS:000503988805072, https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000503988805072.

5. Băcanu (Şerban) C., Stoica (Dinca), C., Ion (Dumitriu) I.M., **Nicula, M.**, Stanciu, S., 2019, Aspects Regarding the Areas and Conditions for Wheat Seed Multiplication în România and In Brăila County, Proceedings of the 33rd Internaţional Business Information Management Association Conference: Education Excellence and Innovation Management through Vision 2020 (Granada, Spain, April 10-11, 2019), Vol. I-X, pp. 3740-3746, Ed. Soliman, K.S., ISBN: 978-0-9998551-2-6, WOS:000503988805073,https://apps.webofknowledge.com/full_record.do? product=WOS&search_mode=GeneralSearch&qid=1&SID=D21dCqHJoLxxKQHbxKr&page=1&doc=14.

6. Băcanu (Şerban) C., Stoica (Dinca), C., Ion (Dumitriu) I.M., **Nicula, M**., Stanciu, S., 2019, The Influence of Temperature, Precipitation, Irrigation and Varieties on Seed Production în România, Brăila County, Proceedings of the 33rd Internaţional Business Information Management Association Conference: Education Excellence and Innovation Management through Vision 2020

(Granada, Spain, April 10-11, 2019), Vol. I-X, pp. 2285-2293, Ed. Soliman, K.S., ISBN:978-0-9998551-2-6, WOS:000503988803075,https://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=D21dCqHJoLxxKQHbxKr&page=1&doc=11.

7. **Nicula, M.**, Stoica (Dinca), C., Băcanu (Şerban) M. C., Ion (Dumitriu) I.M., Stanciu, S., 2019, Research Concerning Agricultural Subsidies for Romanian Farmers between 1990-2007, Proceedings of the 33rd Internaţional Business Information Management Association Conference: Education Excellence and Innovation Management through Vision 2020 (Granada, Spain, April 10-11, 2019), Vol. I-X, pp. 4772-4779, Ed. Soliman, K.S., ISBN: 978-0-9998551-2-6, WOS:000503988807006, https://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=D21dCqHJoLxxKQHbxKr&page=1&doc=17.

8. Stoica (Dinca), C., Băcanu (Şerban) M. C., Ion (Dumitriu) I.M., **Nicula, M.**, Stanciu, S., 2019, Aspects Regarding the Selection of Maize Hybrids on Agricultural Farms în North Bărăgan Plain, România, Proceedings of the 33rd Internaţional Business Information Management Association Conference: Education Excellence and Innovation Management through Vision 2020 (Granada, Spain, April 10-11, 2019), Vol. I-X, pp. 2341-2348, Ed. Soliman, K.S., ISBN: 978-0-9998551-2-6, WOS:000503988803081,https://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=D21dCqHJoLxxKQHbxKr&page=1&doc=12.

9. Stoica (Dinca), C., Băcanu (Şerban) M. C., Ion (Dumitriu) I.M., **Nicula, M.**, Stanciu, S., 2019, Researches Concerning the Influence of Soluble Salts Concentrations în the Soils of the Northern Bărăgan Plain în România on the Germination of Corn Hybrid Seeds, Proceedings of the 33rd Internaţional Business Information Management Association Conference: Education Excellence and Innovation Management through Vision 2020 (Granada, Spain, April 10-11, 2019), Ed. Soliman, K.S., ISBN: 978-0-9998551-2-6, Vol. I-X, pp. 1468-1476, WOS: 000503988802093, https://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=D21dCqHJoLxxKQHbxKr&page=1&doc=10.

10. Stoica (Dincă), C., Dumitriu, I.M., **Nicula, M**., Florea, A.M., Dinca, A.D., Stanciu, S., 2019, Production of Hybrid Maize Seeds în Brăila County: Characteristics and Evolution 2007-2018, Proceedings of 34th International-Business-Information-Management-Association (IBIMA) Conference VISION 2025: Education Excellence and Management Of Innovations Through Sustainable Economic Competitive Advantage (Madrid, Spain, Nov 13-14, 2019), Ed. Soliman, K.S., ISBN: 978-0-9998551-3-3, pp. 3579-3587, WOS: 000556337405016, https://www-webofscience-com.am.e-nformation.ro/ wos/woscc/full-record/WOS:000556337405016

11. Bratoveanu, B.D., Bichescu, C.I., Zungun, D., **Nicula, M.D**., Stanciu, S., 2019, Spirits Market în România: Trends, Analysis and Statistics, Proceedings of 34th International-Business-Information-Management-Association (IBIMA) Conference VISION 2025: Education Excellence and Management Of Innovations Through Sustainable Economic Competitive Advantage (Madrid, Spain, Nov. 13-14, 2019), Ed. Soliman, K.S., ISBN: 978-0-9998551-3-3, pp. 8402-8411, WOS: 000561117201067, https://www-webofscience-com.am.e-nformation.ro/wos/woscc/full-record/WOS:000561117201067.

12. **Nicula, M**., Stanciu, S., 2018, The Common Agricultural Policy în the Perspective of 2020, Proceedings of The 32 IBIMA Conference: Vision 2020: Sustainable Economic Development and Application of Innovation Management from Regional expansion to Global Growth, (Seville, Spain, Nov. 15-16, 2018), Ed. Soliman, K.S., ISBN: 978-0-9998551-1-9, Vol. XI, pp. 7260-7270, WOS:000508553208023,https://apps.webofknowledge.com/full_record.do?product=WOS&search_mode=GeneralSearch&qid=1&SID=E2UXWnELhrh9PUAUwIc&page=1&doc=50.

Papers presented at international / national conferences with international scientific committees

1. **Nicula, M.D.,** Bratoveanu, D.B., Liptac A.P., Stanciu, S., 2021, Aspects Regarding the Evolution of Human Resources in Galati County, in the Period 2015-2020, Proceedings of the 37th IBIMA International Conference: Innovation Management and Sustainable Economic Competitive Advantage: From Regional Development to Global Growth (Cordoba, Spain, May 30-31, 2021), https://ibima.org/conference/37th-ibima-conference/#ffs-tabbed-15.

2. **Nicula, M.D.,** Stanciu, S., 2021, An Assessment of the Labor Force in Agriculture of Galati County, The 9th edition of the Scientific Conference of Doctoral Schools SCDS-UDJG 2021, Section 4. Advances in Engineering and Management in Agriculture and Rural Development, http://www.cssd-udjg.ugal.ro/index.php/abstracts-2022.

3. **Nicula, M.D.,** Stanciu, S., 2021, Research on the Evolution of Agricultural Holdings in Romania, The 9th edition of the Scientific Conference of Doctoral Schools SCDS-UDJG 2021, Section 4. Advances in Engineering and Management in Agriculture and Rural Development, http://www.cssd-udjg.ugal.ro/index.php/abstracts-2022.

4. Ferțu, C., **Nicula, M.D.,** 2021, Smart Agriculture: Could It Be the Future of Agriculture in Romania? "Dunărea de Jos" University of Galați, Romania, Risk in Contemporary Economy XXII-th Edition RCE 2021, http://www.rce.feaa.ugal.ro/index.php/rce-2021/conference-program-rce-2021.

5. **Nicula, M.D.,** Ferțu, C., 2021, Impact of Payment Schemes on the Agriculture of Galati County, "Dunărea de Jos" University of Galați, Romania, Risk in Contemporary Economy XXII-th Edition RCE 2021, Romania, http://www.rce.feaa.ugal.ro/index.php/rce-2021/conference-program-rce-2021.

6. **Nicula, M.,** Stanciu, S., 2020, Financing Agriculture through CAP. Pat, present, perspectives, The 8th edition of the Scientific Conference of Doctoral Schools SCDS-UDJG 2021, Section 4. Advances in Engineering and Management in Agriculture and Rural Development, http://www.cssd-udjg.ugal.ro/index.php/2020/programme-2020

7. **Nicula, M.**, Stanciu, S., 2020, The Impact of CAP in Agriculture of Galati County, The 8th edition of the Scientific Conference of Doctoral Schools SCDS-UDJG 2021, Section 4. Advances in Engineering and Management in Agriculture and Rural Development, http://www.cssd-udjg.ugal.ro/index.php/2020/programme-2020

8. **Nicula, M.,** Stanciu, S., 2019, Government Support Measures for Romanian Farmers, (OP 3.2.12), 7th Edition of SCDS-UDJG, Perspectives and challenges în doctoral research, (Galați, România, June 13-14, 2019), http://www.cssd-udjg.ugal.ro/index.php/abstracts-2019.

9. **Nicula, M.**, Stanciu, S., 2019, Analysis of the Agricultural Sectorin the South-East Region of România, (OP 3.2.13), 7th Edition of SCDS-UDJG, Perspectives and challenges în doctoral research, (Galați, România, June 13-14, 2019), http://www.cssd-udjg.ugal.ro/index.php/abstracts-2019.

10. Băcanu (Șerban), C., Stoica (Dincă), C., Dumitriu (Ion), **Nicula, M.**, Stanciu, S., 2019, Conditions for Seed Production. Certified Agricultural Areas for Wheat Seed Production în Brăila County, (OP 3.2.21), 7th Edition of SCDS-UDJG, Perspectives and challenges în doctoral research, (Galați, România, June 13-14, 2019), http://www.cssd-udjg.ugal.ro/index.php/abstracts-2019.

11. Băcanu (Șerban), C., Stoica (Dincă), C., Dumitriu (Ion), **Nicula, M**., Stanciu, S., 2019, Aspects Regarding the Influence of Environmental Factors on Cereal Production în România, Brăila County, (PP 3.2.5), 7th Edition of SCDS-UDJG, Perspectives and challenges în doctoral research, (Galați, România, June 13-14, 2019), http://www.cssd-udjg.ugal.ro/index.php/abstracts-2019.

12. Stoica (Dincă), C., Dumitriu (Ion), I.M., **Nicula, M**., Florea, A.M., Dincă, A.D., Stanciu, S., 2019, Production of Hybrid Maize Seeds în Brăila County: Characteristics and Evolution în The Period 2007-2018, Proceedings of the 34th Internaţional Business Information Management Association Conference: Vision 2025: Education Excellence and Management of Innovations through Sustainable Economic Competitive Advantage (Madrid, Spain, November 13-14, 2019), Vol. I, pp. 3579-3587, Ed. Soliman, K.S., ISBN: 978-0-9998551-3-3, https://ibima.org/conference/34th-ibima-conference/#ffs-tabbed-15.

13. Dumitriu (Ion), I.M., Stoica (Dincă), C., **Nicula, M**., Dincă(Ursan), M.D., Stanciu, S., 2019, Research on the Optimization of the Storage Conditions for Seed Grains, Proceedings of the 34th Internaţional Business Information Management Association Conference: Vision 2025: Education Excellence and Management of Innovations through Sustainable Economic Competitive Advantage (Madrid, Spain, November 13-14, 2019), Vol. I, pp. 7057-7063, Ed. Soliman, K.S., ISBN: 978-0-9998551-3-3, https://ibima.org/conference/34th-ibima-conference/#ffs-tabbed-15.

14. Ion (Dumitriu) I.M., Stoica (Dinca), C., Băcanu (Şerban) M. C., **Nicula, M**., Stanciu, S., 2019, Research on Optimizing the Quality of the Lots of Grain Cereals Seeds for Sowing, Proceedings of the 33rd Internaţional Business Information Management Association Conference: Education Excellence and Innovation Management through Vision 2020 (Granada, Spain, April 10-11, 2019),Vol. I-X, pp. 3732-3739, Ed. Soliman, K.S., ISBN: 978-0-9998551-2-6, https://ibima.org/conference/33rd-ibima-conference/#ffs-tabbed-112.

15.Băcanu (Şerban) C., Stoica (Dinca), C., Ion (Dumitriu) I.M., **Nicula, M**., Stanciu, S., 2019, Aspects Regarding the Areas and Conditions for Wheat Seed Multiplication în România and In Brăila County, Proceedings of the 33rd Internaţional Business Information Management Association Conference: Education Excellence and Innovation Management through Vision 2020 (Granada, Spain, April 10-11, 2019), Vol. I-X, pp. 3740-3746, Ed. Soliman, K.S., ISBN: 978-0-9998551-2-6, https://ibima.org/conference/33rd-ibima-conference/#ffs-tabbed-112.

16. Băcanu (Şerban) C., Stoica (Dinca), C., Ion (Dumitriu) I.M., **Nicula, M**., Stanciu, S., 2019, The Influence of Temperature, Precipitation, Irrigation and Varieties on Seed Production în România, Brăila County, Proceedings of the 33rd Internaţional Business Information Management Association Conference: Education Excellence and Innovation Management through Vision 2020 (Granada, Spain, April 10-11, 2019), Vol. I-X, pp. 2285-2293, Ed. Soliman, K.S., ISBN: 978-0-9998551-2-6, https://ibima.org/conference/33rd-ibima-conference/#ffs-tabbed-112.

17. **Nicula, M**., Stoica (Dinca), C., Băcanu (Şerban) M. C., Ion (Dumitriu) I.M., Stanciu, S., 2019, Research Concerning Agricultural Subsidies for Romanian Farmers between 1990-2007, Proceedings of the 33rd Internaţional Business Information Management Association Conference: Education Excellence and Innovation Management through Vision 2020 (Granada, Spain, April 10-11, 2019), Vol. I-X, pp. 4772-4779, Ed. Soliman, K.S., ISBN: 978-0-9998551-2-6, https://ibima.org/conference/33rd-ibima-conference/#ffs-tabbed-112.

18. Stoica (Dinca), C., Băcanu (Şerban) M. C., Ion (Dumitriu) I.M., **Nicula, M**., Stanciu, S., 2019, Aspects Regarding the Selection of Maize Hybrids on Agricultural Farms în North Bărăgan Plain, România , Proceedings of the 33rd Internaţional Business Information Management Association Conference: Education Excellence and Innovation Management through Vision 2020 (Granada, Spain, April 10-11, 2019), Vol. I-X, pp. 2341-2348, Ed. Soliman, K.S., ISBN: 978-0-9998551-2-6, https://ibima.org/conference/33rd-ibima-conference/#ffs-tabbed-112.

19. Stoica (Dinca), C., Băcanu (Şerban) M. C., Ion (Dumitriu) I.M., **Nicula, M**., Stanciu, S., 2019, Researches Concerning the Influence of Soluble Salts Concentrations în the Soils of the Northern Bărăgan Plain în România on the Germination of Corn Hybrid Seeds, Proceedings of the 33rd Internaţional Business Information Management Association Conference: Education Excellence and Innovation Management through Vision 2020 (Granada, Spain, April 10-11, 2019), Vol. I-X, pp.

1468-1476, Ed. Soliman, K.S., ISBN: 978-0-9998551-2-6, https://ibima.org/conference/33rd-ibima-conference/#ffs-tabbed-112

20. Ion (Dumitriu), I.M, Băcanu (Șerban), C., Stoica (Dincă), C., **Nicula, M**., Stanciu, S., 2018, Influența cercetării privind optimizarea condițiilor de depozitare a semințelor certificate de cereale păioase, Sesiunea Științifică Internațională Cercetări de Economie Agrară și Dezvoltare Rurală: „Piețele agricole și spațiul rural în contextul modernizării și simplificării politicii agricole comune", Organizatori Academia Română, Institutul Național de Cercetări Economice „Costin C. Kirițescu", Institutul de Economie Agrară (București, România, Decembrie 11, 2018), Secțiunea 1, Exploatația agricolă și managementul resurselor, http://eadr.ro/fişiere/sesiune2018ro.pdf.

21. Băcanu (Șerban), C., Stoica (Dincă), C., Ion (Dumitriu), I.M, **Nicula, M**., Stanciu, S., 2018, Influența factorilor de cultură agricolă asupra productivității unor soiuri de grâu semincer în Județul Brăila, Sesiunea Științifică Internațională Cercetări de Economie Agrară și Dezvoltare Rurală: „Piețele agricole și spațiul rural în contextul modernizării și simplificării politicii agricole comune", Organizatori Academia Română, Institutul Național de Cercetări Economice „Costin C. Kirițescu", Institutul de Economie Agrară (București, România, Decembrie 11, 2018), Secțiunea 1, Exploatația agricolă și managementul resurselor, http://eadr.ro/fişiere/sesiune2018ro.pdf.

22. Stoica (Dincă), C., Băcanu (Șerban), C., Ion (Dumitriu), I.M, **Nicula, M**., Stanciu, S., 2018, Producția semințelor de porumb hibrid în Județul Brăila. Cracteristici și evoluție în perioada 2007-2017, Sesiunea Științifică Internațională Cercetări de Economie Agrară și Dezvoltare Rurală: „Piețele agricole și spațiul rural în contextul modernizării și simplificării politicii agricole comune", Organizatori Academia Română, Institutul Național de Cercetări Economice „Costin C. Kirițescu", Institutul de Economie Agrară (București, România, Decembrie 11, 2018), Secțiunea 1, Exploatația agricolă și managementul resurselor, http://eadr.ro/fişiere/sesiune2018ro.pdf.

23. **Nicula, M.,** Băcanu (Șerban), C., Stoica (Dincă), C., Ion (Dumitriu), I.M, Stanciu, S., 2018, Aspecte privind impactul schemelor de plată asupra producției agricole naționale, Sesiunea Științifică Internațională Cercetări de Economie Agrară și Dezvoltare Rurală: „Piețele agricole și spațiul rural în contextul modernizării și simplificării politicii agricole comune", Organizatori Academia Română, Institutul Național de Cercetări Economice „Costin C. Kirițescu", Institutul de Economie Agrară (București, România, Decembrie 11, 2018), Secțiunea 1, Exploatația agricolă și managementul resurselor, http://eadr.ro/fişiere/sesiune2018ro.pdf.

24. **Nicula, M.**, Stanciu, S., 2018, The Common Agricultural Policy în the Perspective of 2020, 32 IBIMA Conference: Vision 2020: Sustainable Economic Development and Application of Innovation Management from Regional expansion to Global Growth, (Seville, Spain, Nov. 15-16, 2018), https://ibima.org/accepted-paper/the-common-agricultural-policy-in-the-perspective-of-2020.