
STATE AND PROBLEMS IN THE MANAGEMENT AND DEVELOPMENT OF AGRICULTURE

Marina Nikolova¹

Marusya Linkova²

^{1,2} D. A. Tsenov Academy of Economics – Svishtov

E-mail: ¹m.nikolova@uni-svishtov.bg; ²m.linkova@uni-svishtov.bg

Abstract: The international scientific and practical conference on “State and Problems in the Management and Development of Agriculture” held in Svishtov on 4 October 2019 attracted a great number of Bulgarian and foreign scholars who work in the field of agriculture as well as representatives of the business in the agricultural sector. The scientific forum was attended by 83 representatives from nine countries and three continents; they presented 68 papers dealing with the organization and management of investments and innovations, entrepreneurial initiatives and diversification in the agricultural business, financial and accounting aspects, marketing, distribution and trade, information technologies, ecologization and sustainable development, legal and socio-cultural barriers of the general agricultural policy of the European Union. In the discussions during the scientific forum, we identified, analysed and assessed the current problems that accompany the development of agriculture and made specific proposals for their solutions on the basis of the expert capacity of the scientific community and the institutions that manage the agricultural sector in Bulgaria, as well as the needs of the agricultural business.

Key words: scientific forum, agriculture, agricultural policy, management, training.

This paper is **cited** as follows: Nikolova, M., Linkova, M. (2020) State and Problems in the Management and development of Agriculture. Economic Archive, (1), pp. 13-26.

URL: www2.uni-svishtov.bg/NSArhiv

JEL: A11, Q01, Q10, Q13, Q18.

* * *

1. The scientific forum – an opportunity for exchanging ideas, solutions and promoting scientific research

Organizing and holding scientific forums at the D. A. Tsenov Academy of Economics provides opportunities not only for discussing topical issues, exchanging ideas, finding the intersection between economic processes and information technologies, but also for strengthening the relationship between the economic theory and the business practice, for promoting the diversity of educational products offered by educational institutions (educational and qualification degrees, educational and scientific degrees, continuing, vocational and post-graduate trainings) and generating creative solutions.

The international scientific and practical conference on “State and Problems in the Management and Development of Agriculture” held in Svishtov on 4 October 2019 marks the 35th anniversary since the establishment of the Department of Agricultural Economics and is part of the scientific forums that mark the 83rd anniversary since the establishment of the D. A. Tsenov Academy of Economics – Svishtov.

The relevance of organizing and holding the scientific and practical conference can be viewed in several aspects.

First, despite the substantial financial resources allocated to the agricultural sector, the investment and innovations in the agricultural business are still significantly low. What is needed is fresh ideas and recommendations for a more rational organization and management of the investment and innovation process in the agricultural enterprises.

Second, the business practice requires new entrepreneurial initiatives for benefiting from the opportunities for diversification in/ and outside the agricultural business in Bulgaria and the scientific forum could facilitate the generation of a diversity of ideas.

Third, the higher production risk and the specific aspects of agriculture as an economic industry pose specific requirements to the financial and accounting relationships and the possibilities for social and insurance protection in the sector. The scientific forum could provoke creative solutions based on the expert capacity of the scientific community and the administrative institutions.

Fourth, the strategic guidelines for the development of the European Union and the Republic of Bulgaria as an equal member pose new challenges to the ecologization and the sustainable development of agriculture. The problems of the sustainable development of Bulgaria to a certain extent are the result of an insufficiently strong relationship between the economic theory and the business practice. The scientific forum provides opportunities for the

exchange of ideas, learning about the new trends and the normative regulation of the sustainable development.

Fifth, the dynamic environment shortens the distance between the contemporary trends in the marketing, the distribution of and trade with agricultural products and the information technologies in agriculture. The scientific forum enables finding the intersections in those processes.

Sixth, Bulgaria's membership in the EU opens new horizons for the study of the legal, historical and socio-cultural barriers in the achievement of the common agricultural and regional policies on a national and European level.

The main objective of the international scientific and practical conference is to identify, analyse and assess the current problems accompanying the development of agriculture and to formulate specific proposals for their solution on the basis of the expert capacity of the scientific community and the institutions that administrate agriculture in Bulgaria, the needs of the agricultural business and the creativity of the students and the PhD students.

Official guests of the proceedings were: His Excellency, Mr. Moyad Eldali, Ambassador Extraordinary Plenipotentiary of the Arab Republic of Egypt; prof. Mariyana Bozhinova, PhD, Vice-rector for academic affairs at the D. A. Tsenov Academy of Economics – Svishtov; prof. Serghei Ohrimenco, DSc of the Academy of Economic Studies of Moldova – Doctor Honoris Causa of the D. A. Tsenov Academy of Economics; prof. Antonina Ryahovskaya, DSc, Rector of the Institute of Economics and Anticrisis Management at the Financial University under the Government of the Russian Federation; Prof. Shaban Nidal, PhD, International Association ISLE Dijon France; representatives of the Ministry of Agriculture, Food and Forestry – Kalin Krastev, Pavlina Damyanova, Diana Atanasova; Aneliya Dimitrova – Mayor of the Municipality of Svishtov Ad Interim; Albena Simeonova, Chair of the Bulgarian Association “Organic Products”; Pepo Petrov, CEO of the Foundation of Environment and Agriculture; Krasimir Kirilov, Governor of the Dobrich Region and alumnus of the D. A. Tsenov Academy of Economics – majored in Agricultural Economics; Rosen Kotsev, Managing Director of Regional Office – Sofia Region; Gancho Lambev, honorary citizen of the town of Svishtov, chair of the “Izgrevev-93” cooperative and member of the Board of Directors of the Regional Union of Agricultural Cooperatives “Dunav-2000” Svishtov; Hristo Tsvetanov, CEO of Kemapul AD Svishtov; Mihail Bilev, PhD, Chair of the “Start-93” Cooperative in the village of Karamanovo; deans and heads of departments, lecturers, students and PhD students.

The conference proceedings comprised 68 papers from 9 countries and 3 continents, 61 by Bulgarian scholars, PhD students and students and 7 by scholars representing foreign universities from Russia, Moldova, Ukraine, Romania, Uzbekistan, etc. Depending on the thematic fields, the papers were presented in three sections. The papers presented by the participants in Section 1 caused lively discussions related to the organization and management of investment and innovations in the agricultural sector, the entrepreneurial initiatives and the opportunities for diversification in the agricultural business. The papers in Section 2 were related to problems of the financial and accounting aspects, the social and insurance protection, the marketing, distribution, trade and information technologies in the agricultural sector. The participants in Section 3 embraced as a leading topic of their papers, presentations and discussions the significant aspects of ecologization and sustainable development of agriculture in reporting the frameworks of the Common agricultural policy of the European Union.

In the closing session the participants shared their satisfaction from contributing to the international scientific and practical conference and emphasized that such scientific forums are useful and necessary for sharing visions about the opportunities for solving pertinent problems in the development of the economic processes and the business practice.

The results of the international scientific and practical conference on “State and Problems in the Management and Development of Agriculture” can be systematized in several directions.

1) *Results related to securing the educational process* – improving the educational process and product offered by the D. A. Tsenov Academy of Economics (educational portfolio) by including the shared scientific knowledge and the presented good practices in the content of the taught disciplines.

2) The scientific forum has established prerequisites for accelerating the scientific and research activity and attracting students and PhD students to this process, as well as expanding the contacts with researchers from other universities, specialists of the business practice and experts from national institutions.

3) A favourable environment has been formed which is expected to generate fresh ideas and opportunities for their further development in the form of strategies, policies, concepts, models, etc. in future scientific publications by lecturers, PhD students and students.

The major emphasis in the proceedings of the scientific forum was placed by prof. Antonina Ryahovskaya, DSc of the Moscow Financial University under the Government of the Russian Federation – Rector of the Institute of Economics and Anticrisis Management with a paper on “Russia’s Agriculture: Opportunities for Accelerated Development”; prof. Nidal

Shaban, PhD with a co-authored paper on “Agronomists job don't reduce natural resources to meet today's needs without compromising the needs of future generation”; prof. Andrey Zahariev, PhD and Ivaylo Marinov, PhD with a paper on “Bulgaria and Romania on their Way to Growth and Convergence – Comparative Analysis and Assessment”; assoc. prof. Minka Chojeva, PhD with a paper on “Level of Social Stability in Agriculture”: assoc. prof. Margarita Shopova, PhD with a paper on “Statistical Analysis of the Regional Differences of the Usable Arable Land”; assoc. prof. Marina Nikolova, PhD with a paper on “State of the Market of Arable Land in the Republic of Bulgaria” and assoc. prof. Marusya Linkova, PhD with a paper on “Institutional Imperatives and Fluctuations in the Agricultural Business”.

2. Fluctuations in the management and development of agriculture

The research of the theoretical and practical bases and the institutional imperatives of the relationship between the public authorities and the economic structures in the management and development of agriculture is of utmost importance. It is well-known that the different models of public influence cause both positive and negative effects on the economic processes. The problems related to the management and development of the economy in the conditions of institutional transformations are the subject of a lot of research in the specialized literature. They become particularly relevant after the 1980s when the countries of Central and South-east Europe embark on structural social, economic and institutional transformations. Despite the increased interest in the analysis and assessment of the interaction between the institutions and organizations from the agricultural business, *deeper scientific research related to the coordination between the subjects shall be carried out* (Nikolova, 4/2018) for the achievement of higher competitiveness of the agricultural business and orientation towards those agricultural sectors that generate higher value added.

Market transformations have a significant impact on the development of the economy and change the conditions for the functioning of both the institutions and the economic subjects. These transformations are based on the use of formal rules that facilitate the solution of the problems in the economy in the agricultural sector. After the 1990s the institutional framework of agriculture undergoes structural transformation. Research shall be carried out on the major actions that facilitate avoiding the negative fluctuations in the development of the agricultural business, the result of the structural transformation of the institutional framework of agriculture and the adjustment of the organizational structures to the dynamic changes of the market environment.

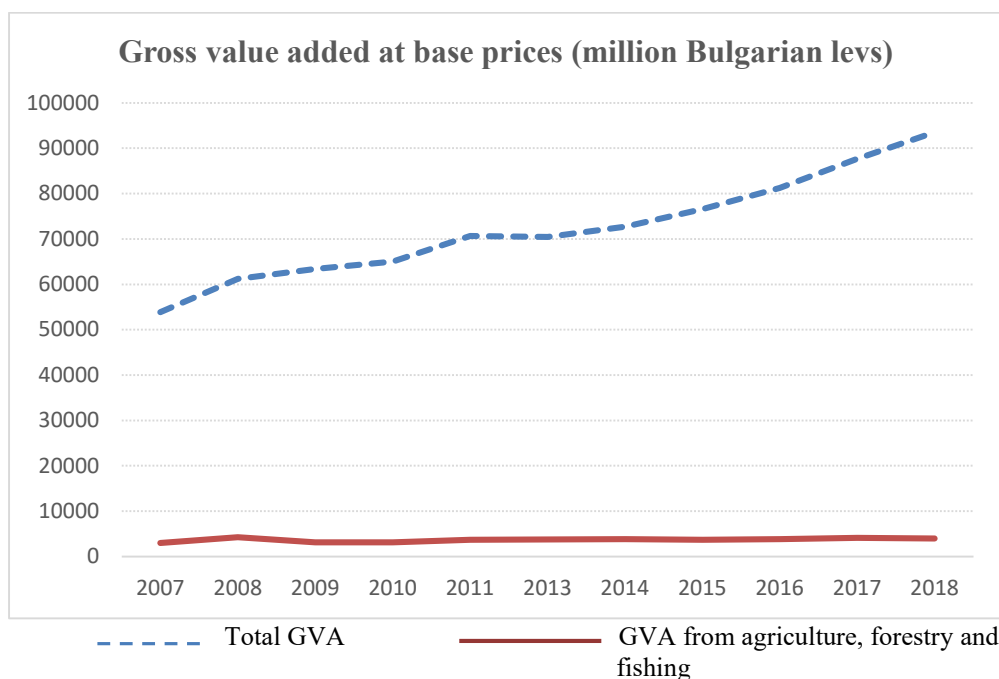
The models of management and development of agriculture in Bulgaria presented at the conference: (Linkova, 2019), (Nikolova, State of the Market of Arable Land in the Republic of Bulgaria, 2019), Russia (Ryahovskaya, 2019), Romania (Zahariev & Marinov, 2019) and Ukraine (Sharag, 2019) allow synthesizing **the general problems in the sector**. The existing formal rules for support and regulation of agriculture do not secure economic growth and improvement of the competitiveness of the industry. *The deviations of the aggregated public measures* for the support of agriculture *from* the set objectives and the adopted formal rules in each country can be systematized in several directions:

- the subsidies do not have a positive influence on the gross value added produced by agriculture;
- bipolar agriculture is formed as traditional industries either shrink or face being closed down;
- asymmetries appear in the export of agricultural products;
- the access to the market of small agricultural enterprises is limited while the social and economic differences in the regions deepen;
- the horizontal and vertical cooperation in the sector is insignificant;
- there is a lack of sustainable management of arable land – increased concentration of arable land in a small number of enterprises and at the same time fragmented ownership, low prices of the land and good management practices.

2.1. The subsidies do not have a positive impact on the GVA¹

According to Eurostat data, Bulgaria is one of the countries in which the subsidies (up to this moment) do not have a positive impact on the gross value added (GVA), produced by the industry. The dynamics of the GVA of agriculture is presented in figure 1. For a period of eleven years, the GVA from agriculture has increased from BGN 2,949 million to only BGN 3,937 million, regardless of the substantial subsidizing and the enlargement of agricultural enterprises in Bulgaria.

¹ Gross value added



Source: https://infostat.nsi.bg/infostat/pages/reports/result.jsf?x_2=135

Figure 1. Dynamics of the GVA for the period 2007 – 2018

2.2. Bipolar agriculture and closed down sectors

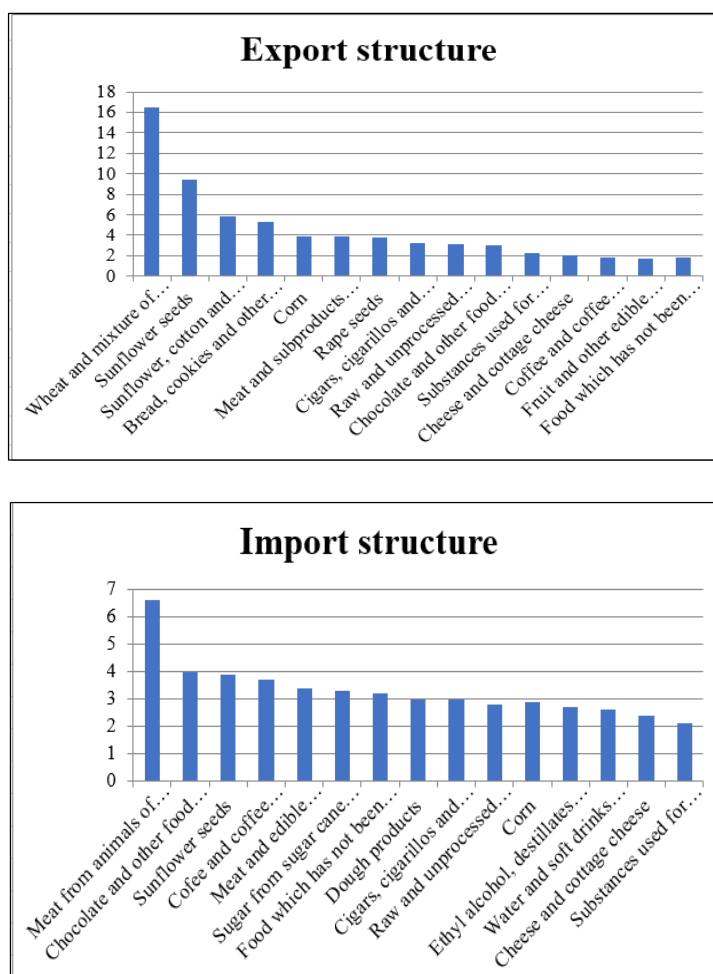
Bipolar agriculture is formed (large and very small agricultural enterprises), where 1.5 % of them cultivate 82 % of the arable land for growing five cereal crops and oilseed crops (wheat, barley, corn, sunflower and rape).

Traditional subsectors shrink or face being closed down. Among them are: vegetable production (from BGN 853.5 million in 2007 to 344.1 million in 2017), the production of potatoes has decreased fivefold, fruit-growing (decreased production of: pears from BGN 21.8 to 2.2 million; apples – from BGN 44.1 to 22.2 million; grapes – from BGN 241.9 to 148.3 million), horse breeding (decreased by 90 %), sheep breeding (nearly 40 % decrease) etc., as respectively, the production from animal breeding has decreased nearly fivefold respectively. For the period 2007 – 2017, the processing of agricultural products has decreased nearly twice from BGN 443.3 to 228.7 million.

2.3. Unfavourable structure of Bulgaria's export

A large part of the agricultural produce which has been produced in Bulgaria (65% of the total production) has been intended for export, but the export structure is dominated by the unprocessed products and raw materials

which in the last years occupy nearly 60% of the export of agricultural products. At the same time, the import of agricultural products with long-standing traditions and favourable conditions for production in the country has increased. The import of vital products such as fruit, vegetables and meat has reached up to 70-80%, although Bulgaria has an enormous capacity and long-standing traditions in the production of agricultural produce and relatively good availability of arable land. (See fig. 2)



Source: Agricultural report, 2018, pp. 95-96. (https://www.mzh.government.bg/media/filer_public/2019/05/22/agraren_doklad_2019_bg.pdf, 2019)

Figure 2. Structure of the export and import of some major agricultural products

2.4. Limited access to the market by small agricultural enterprises

The access to the market of most small agricultural enterprises is limited, but they are the ones that provide the diversity of agricultural products of good quality and at affordable prices. This adds up to the worsened structural and territorial asymmetries in the development of Bulgaria's agriculture. For the ten-year period, from a leader in the production of agricultural produce, especially vegetable and fruit growing and vine growing, the South-central region significantly lags behind with a decrease of over BGN 0.5 billion. (<https://infostat.nsi.bg/infostat/pages/reports/result.jsf>, 2019)

2.5. *Low level of horizontal and vertical integration*

The level of horizontal and vertical cooperation in the agricultural sector is low as at the same time the number of cooperatives decreases – from 372 to 258 and the cooperative organizational form has shrunk threefold from nearly 2,000 in 2003 to 767 in 2016. As of this moment in Bulgaria 15 organizations of producers of agricultural products and 39 groups of producers with 333 members have been certified; however, they are too far from benefiting from the opportunities for *strengthening* the market positions of the member agricultural enterprises and *forming* partnerships.

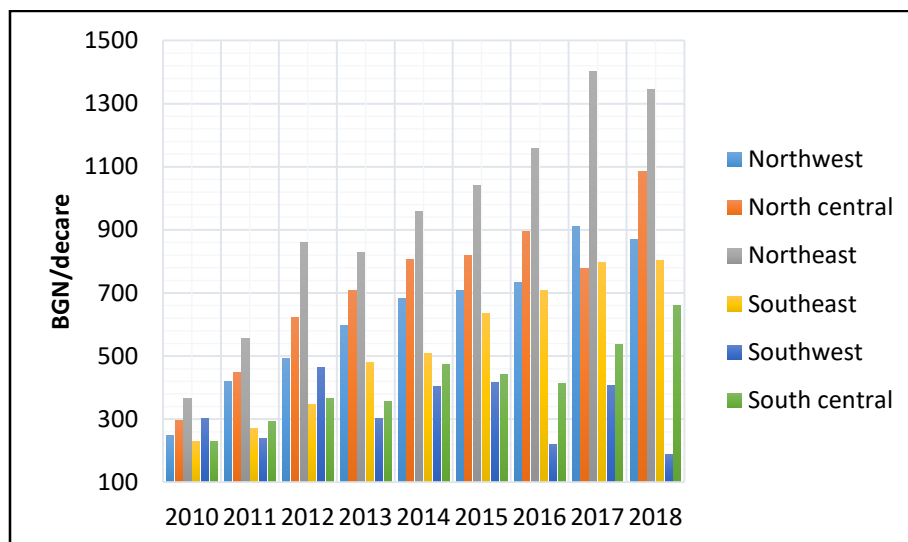
2.6. *Necessity of efficient and sustainable management of the land resource*

The efficient management of the land resource is an important prerequisite for the economic prosperity of every business unit related to the ownership of agricultural assets. At this stage, Bulgaria is the country with the largest concentration of arable land to a small number of enterprises; at the same time, it is the country with the most fragmented ownership of land compared to the rest of the European Union member states.

The market of arable land in Bulgaria is relatively stable. There is increased demand and limited supply. There is a lack of interest of foreign investment and clarity regarding the maximum amount of Euro subsidies during the new program period. There are still restrictions regarding the discussions on the draft law on arable lands. These circumstances determine the fewer concluded deals with arable land, as well as the investment interest by large farmers, cooperatives and investors. The main buyers (local farmers) avoid making long-term decisions when no clear conditions have been set, as for instance, the amount of subsidies for the following reference period.

The lack of investor interest by foreign investors is related to the fragmented ownership of land, the frequent changes in the relevant legislation, as well as the lack of long-term strategy and vision of the development of the sector. This explains the low prices of arable land in Bulgaria, which are among the lowest compared to the rest of the EU member states.

Figure 3 presents the dynamics in the prices of arable land for a nine-year period (2010-2018) in the different regions in Bulgaria using data from the National Statistical Institute by regions of planning (NUTS-2).



(own figure by data from the National Statistical Institute)

Figure 3. Average prices of arable land by regions of planning and by years, BGN/decare.

In the field of sustainable management of lands (SML), an important role is played by the managerial experience of the farmer, as well as his/her knowledge and competences about the essence of the degradation processes occurring to the soil resources. The contemporary manager in the agricultural sector shall not only be familiar with them, but he/she shall also be familiar with the measures for their minimization, and in a number of cases with preventing them from occurring. Special attention shall be paid to those degradation processes which cause great damage and threaten the land by desertification: soil erosion, soil acidification, soil compaction and densification, soil moisture (Nikolova & Sirashki, Agricultural ecology, 2010).

The main objective of the sustainable development of lands is the preservation of the *productive, physiological, cultural and ecological functions* of the land and the land resources for the future and well-being of mankind. We can add to the sustainable management of land – economic applicability, social acceptance, decrease of the degree of production risk, preservation of natural resources, etc.

3. Approaches for solving the identified problems

3.1. Purposeful policy for facilitating the development of small and medium-sized agricultural enterprises in traditional for our country agricultural sectors on a national and regional level

The *debate* that has been held on the role of the government in the realization of a national agricultural policy and the efficiency of the tools for influencing agriculture *leads* to the conclusion that a purposeful and consistent governmental policy secures a favourable external environment for the development of agriculture, but an analysis of the negative aspects is necessary so that the tools for public influence can be optimized. On the basis of a comparative analysis between the macroeconomic and financial indicators of each country, we can draw the conclusion that the major factors concerning Romania's more advanced development compared to Bulgaria's, for instance, are the higher annual average rate of economic growth and the attracted foreign investment. (Zahariev & Marinov, 2019). The discussion has led to the conclusion that Bulgaria's economy also forms strong internal factors of growth which, combined with a higher degree of openness, can lead to a higher convergence speed against the average rate for EU28.

3.2. High education institutions – mediators in the process of coordination between the business, the public institutions and the local authorities and communities

In unison with the main strategic objective of the National strategy for the development of scientific research in the Republic of Bulgaria – Bulgaria's academia shall become a factor in the development of an economy based on knowledge and innovation activities, and the economic theory and business practice necessitate new approaches for determining and directing financial flows to the enterprises in the agricultural business. The coordination of scientific research between the individual research units, the public institutions in the agricultural industry and the enterprises in the agricultural business is a priority of the National strategy for sustainable development of agriculture in Bulgaria.

3.3. Joint projects for regional development

The successful development of Bulgaria's agriculture is dependent on approaches and models for building multifunctional agriculture by stimulating the large and successful farmers so that they can: apply less intensive and laborious productions (vegetable growing, sheep breeding, etc.) or establish new types of cooperatives with smaller agricultural enterprises – a special type of clusters following the example of Denmark and France. (Nikolova & et al, Possibilities and models for the functioning of regional farmer markets, 2018, p. 161)

The opportunities for multiplied benefits (strengthening the market positions, building partnerships, horizontal and vertical cooperation) in every region shall be realized through finding specific forms of cooperation between the agricultural enterprises, local authorities and cooperatives. The initiative shall be carried out “from inside to outside”, i.e., business enterprises shall direct their attention to the users, the market demand and the diversification of the markets of manufactured products. The fact that the number of enterprises in Bulgaria has increased fivefold from 1,518 to 6,322 can be accepted as an alternative preferred by the business for multiplying the capital to the forming of cooperatives and associations.

3.4. Participation of the agricultural business in the preparation and employment of agricultural economists

The participation of the agricultural business in the preparation and employment of competent specialists in the administration and management of agriculture can be carried out through: offering grants to outstanding students, carrying out study and specialization trainings in real environment, funding internship programs.

Conclusion

Marking the 35th anniversary of the Department of Agricultural Economics and the major of the same name at the D. A. Tsenov Academy of Economics in Svishtov has confirmed the significance and necessity of further development of the scientific and research capacity in an economic field which is a priority for our country, Europe and the world.

The results of the scientific forum show that the approaches for limiting the identified problems in Bulgaria’s agriculture are directed mainly to a purposeful policy of facilitating the development of small and medium agricultural enterprises on a national and regional level, turning the institutions of higher education into mediators in the process of coordination between the business, the public institutions, the local authorities and communities, the initiation and realization of joint projects for regional development, participation in the agricultural business and preparation and employment of agricultural economists.

Holding scientific forums is an opportunity for the popularization and dissemination of knowledge and science in a specific economic field. The scientific research in the field of contemporary agriculture is useful and necessary for sharing ideas about the possibilities for solving relevant problems in agriculture.

References

- (n.d.). Retrieved from <http://www.nsi.bg/bg/content/92/basic-page/>.
<http://evropeiskipravenpregled.eu/>. (2017, 03 18). Retrieved from [www/](http://www.nsi.bg)
www.nsi.bg.
- <http://www.nsi.bg/>. (2017, 03 18). Retrieved from https://infostat.nsi.bg/infostat/pages/module.jsf?x_2=12&lang=bg.
- <http://www.nsi.bg/bg/content/92/basic-page/>. (n.d.).
- <https://infostat.nsi.bg/infostat/pages/reports/result.jsf>. (2019, 09 04). Retrieved from www.nsi.bg.
- https://www.mzh.government.bg/media/filer_public/2019/05/22/agraren_doklad_2019_bg.pdf. (2019).
- Linkova, M. (2019). Institutional Imperatives and Fluctuations in the Development of the Agricultural Business. *State and Problems in the Management and Development of Agriculture* (стр. 478-486). Svishtov: Tsenov Publishing. Originally written in Bulgarian.
- Nikolova, M. (2019). State of the Market of Arable Land in the Republic of Bulgaria. *State and Problems in the Management and Development of Agriculture* (стр. 261-272). Svishtov: Tsenov Publishing. Originally written in Bulgarian.
- Nikolova, M., & et al. (2018). Possibilities and models for the functioning of regional farmer markets. *Almanac of Scientific Research - D. A. Tsenov Academy of Economics - Svishtov, 25 (I)*. Originally written in Bulgarian.
- Nikolova, M., & Sirashki, G. (2010). *Agricultural ecology*. Svishtov: Tsenov Publishing. Originally written in Bulgarian.
- Nikolova, M. M. (4/2018). Coordinating participant relations in the organization and functioning of regional farmer's markets in Bulgaria. *Paradigms of knowledge, Praha*.
- Ryahovskaya, A. (2019). Russia's Agriculture: Opportunities for Accelerated Development. *State and Problems in the Management and Development of Agriculture* (стр. 25-40). Svishtov: Tsenov Publishing. Originally written in Russian.
- Sharag, E. (2019). The Impact of Globalization on the Development of the Agricultural Sector in Ukraine. *State and Problems in the Management and Development of Agriculture* (стр. 472-478). Svishtov: Tsenov Publishing. Originally written in Ukrainian.
- Zahariev, A., & Marinov, I. (2019). Bulgaria and Romania on their Way to Growth and Convergence - Comparative Analysis and Assessment. *State and Problems in the Management and Development of*

Agriculture (стр. 191-199). Svishtov: Tsenov Publishing. Originally written in Bulgarian.

Yancheva, S. (2017, 03 14). Will farmers remain on the market after the changes in the Common agricultural policy? (N. Bocheva, Interviewer)

* * *

Marina Nikolova is an Associate Professor, PhD (Agric.), Head of the Department of Agricultural Economics at D. A. Tsenov Academy of Economics - Svishtov, Bulgaria. Research interests: agricultural business, sustainable environmental development, agricultural entrepreneurship.

ORCID ID: 0000-0002-1930-9775

Marusya Linkova is an Associate Professor, PhD (Econ.), at the Department of Agricultural Economics of D. A. Tsenov Academy of Economics - Svishtov, Bulgaria. Research interests: investments, agricultural entrepreneurship, agricultural business financing.

ORCID ID: 0000-0001-7704-8916

ISSN 0323-9004

Economic Archive

Svishtov, Year LXXIII, Issue 1 - 2020

**On a Revitalized, Vibrant, and Prospective
Phenomenon**

**State and Problems in the Management
and Development of Agriculture**

**Invention and Patent Activity in Bulgaria
in the Period 2012–2017**

**Debt Sustainability of EU Member States:
a Cluster Analysis**

**European Chemical Industry – Current State
and Challenges**

D. A. TSENOV ACADEMY OF ECONOMICS
SVISHTOV



EDITORIAL BOARD:

Prof. Andrey Zahariev, PhD – Editor-in-Chief
Prof. Georgi Ivanov, PhD – Deputy Editor
Prof. Yordan Vasilev, PhD
Assoc. Prof. Iskra Panteleeva, PhD
Assoc. Prof. Stoyan Prodanov, PhD
Assoc. Prof. Plamen Yordanov, PhD
Assoc. Prof. Rumen Lazarov, PhD
Assoc. Prof. Ventsislav Vassilev, PhD
Assoc. Prof. Anatoliy Asenov, PhD
Assoc. Prof. Presiana Nenkova, PhD

INTERNATIONAL BOARD:

Prof. Mihail A. Eskindarov, DSc (Econ) – Rector of Financial University under the Government of the Russian Federation – Federal State Educational Institution for Vocational Education, Doctor Honoris Causa of D. A. Tsenov Academy of Economics – Svishtov
Prof. Ken O'Neil, PhD – Professor Emeritus of Entrepreneurship and Small Business Development at the University of Ulster and chairman of the Board of Directors of the School of Social Enterprises in Ireland (SSEI)
Prof. Richard Thorpe, PhD – Professor of Management Development of Business School at Leeds University, Great Britain
Prof. Grigore Belostechnik, DSc (Econ) – Rector of Moldovan Academy of Economic Studies, Doctor Honoris Causa of D. A. Tsenov Academy of Economics – Svishtov
Prof. Mihail Zveryakov, DSc (Econ) – Rector of Odessa State Economic University, Doctor Honoris Causa of D. A. Tsenov Academy of Economics – Svishtov
Prof. Olena Nepochatenko, DSc (Econ) – Rector of Uman National University of Horticulture (Ukraine)
Prof. Dmytro Lukianenko, DSc (Econ) – Rector of Kyiv National Economic University named after Vadym Hetman (Ukraine)
Prof. Andrey Krisovatiy, DSc (Econ) – Rector of Ternopil National Economic University, Doctor Honoris Causa of D. A. Tsenov Academy of Economics – Svishtov
Prof. Yon Kukuy, DSc (Econ) – Supervisor of Finance and Accounting PhD programs, Valahia University, Targovishte, Romania, Doctor Honoris Causa of D. A. Tsenov Academy of Economics – Svishtov
Assoc. Prof. Maria Cristina Stefan, PhD – Director Management-Marketing Department, Valahia University of Targoviste, Romania
Assoc. Prof. Anisoara Duica, PhD – Management Department, Valahia University of Targoviste, Romania

Support Team

Anka Taneva – Bulgarian Copy Editor
Ventsislav Dikov – Senior Lecturer in English – Coordinator of the translation team, copy editing and translation
Petar Todorov, PhD – Senior Lecturer in English – translation and copy editing
Rumyana Deneva – Senior Lecturer in English – translation and copy editing
Margarita Mihaylova, PhD – Senior Lecturer in English – translation and copy editing
Ivanka Borisova – Senior Lecturer in English – translation and copy editing
Deyana Veselinova – Technical Secretary
Blagovesta Borisova – Computer graphic design

Editorial address:

2, Emanuil Chakarov street, Svishtov 5250
Prof. Andrey Zahariev, PhD – Editor-in-Chief
☎ (+359) 889 882 298
Deyana Vesselinova – technical secretary
☎ (+359) 631 66 309, e-mail: nsarhiv@uni-svishtov.bg
Blagovesta Borisova – computer graphic design
☎ (+359) 882 552 516, e-mail: b.borisova@uni-svishtov.bg
© Academic Publishing House “Tsenov” – Svishtov
© D. A. Tsenov Academy of Economics – Svishtov

ECONOMIC ARCHIVE

YEAR LXXIII, BOOK 1 – 2020

CONTENTS

Atanas Damyanov

On a Revitalized, Vibrant, and Prospective Phenomenon /3

Marina Nikolova, Marusya Linkova

State and Problems in the Management and Development of Agriculture /13

Plamen M. Pavlov

Invention and Patent Activity in Bulgaria in the Period 2012–2017 /27

Velichka N. Nikolova

Debt Sustainability of EU Member States: a Cluster Analysis /44

Borislav E. Boyanov

European Chemical Industry – Current State and Challenges /57