РЕЗЮМЕТА

на научните публикации и трудове
на доц. д-р Димо Атанасов Атанасов от катедра „Икономика“ при АУ-Пловдив, които не повтарят представените за придобиване на ОНС „доктор” и академичната длъжност „доцент”, покриващи националните минимални наукометрични изисквания за придобиване на академичната длъжност “професор”, в област на висше образование 3.0 Социални, стопански и правни науки, професионално направление 3.8 Икономика, научна специалност „Икономика и управление (селско стопанство)“, във връзка с конкурс, обявен в ДВ, бр. 21/ 21.07.2023 г.

I. Научни публикации, реферирани и индексирани в световноизвестни бази данни с научна информация:

I.1. Научни публикации, реферирани и индексирани в SCOPUS:

1. **Atanasov, D.,** B. Ivanova, R. Beluhova, M. Shishkova, K. Hristov, S. Sharipov, I. Khasanov 2023 **“Regional transformations in Bulgaria and challenges for sustainable development”**, *SCOPUS Joiurnal "IOP Conference Series: Eart and Environmental Science", ISSN 17551315, 17551307, SJR 0,202*

Structural changes in rural areas are a subject of widespread discussion. During the transition to a market economy, Bulgarian agriculture underwent serious reforms, and after the accession to the EU, the transformations of the sector became even more significant. Political changes and socio-economic processes had impact on the organisational structure, production results and market performance of agriculture. This also played an essential role for the development of rural areas. The main objective of the study was to perform analysis of structural changes in Bulgarian agriculture and their impact on the rural areas transformation, based on which to underline models and recommendations for sustainable development. The study showed that the changes in agriculture and rural areas, during the analysed period, were not efficient and in the right direction. The significans of the two sub-sectors – cereals and oilseeds continues to grow, while livestock, fruits and vegatables stay underdeveloped. The country exports large quantities of low-value-added products and raw materials, while at the same time imports high-value-added ones (meat, milk

products, fruits, vegatables, fish, etc.). The EU's Common Agricultural Policy did not contribute enough, as it was expected, to balanced and sustainable development of rural areas. In the following years, there will be more opportunities for modelling the CAP, according to regional and local specifics. A new conceptual framework needs to be adapted in Bulgaria to lay the foundations and infrastructure for more intelligent and sustainable development of all sectors and regions. The government should develop policies in conjunction with different stakeholders (business, citizens, active civil society organizations, NGO's, academic and research institutions).

2. Sadłowski, A., R. Beluhova-Uzunova, Rositsa, J. Popp, **D. Atanasov**, B. Ivanova, M. Shishkova, K. Hristov 2022 **"Direct Payments Distribution Between Farmers in Selected New EU Member States"** *SCOPUS Agris On-Line Papers in Economics & Informatics, 14(4).ISSN 18041930, Q2 SJR 0,27*

The study aims to identify the degree of direct payments concentration in selected Central and Eastern European Member States (compared to the entire EU) and outline perspectives and recommendations for the next programming period. The spatial scope of the study includes Poland, Czech Republic, Hungary and Bulgaria. The time scope covers the period 2009 – 2019. The survey indicates that the payments distribution in Bulgaria, Czech Republic, Hungary, and to a lesser extent in Poland, is highly unbalanced. The analysed countries used the redistribution instruments, optional for the Member States, which were introduced by the 2013 CAP reform, to a moderate extent, in order to ensure a more even funds distribution between the beneficiaries. It cannot be ruled out that instruments ensuring a more even funds distribution would be politically easier to introduce at the EU level than at the national level. Nevertheless, also in the next financial perspective, in line with the subsidiarity principle, this issue is left to the Member States.

Some of the outcoms of the study are:

1. Despite the opportunities provided by the CAP, after 2013, the unbalanced funds allocation under the First Pillar helped the further development of large holdings;
2. The CEE countries did not utilize the potential of available instruments to support small and medium-scale farmers;
3. The excessive concentration of agricultural production sistems causes strong pressure on natural resources.

4. The new CAP, 2023-2027, is orientated towards greening, digitisation and young farmers. There are no serious changes in the direct payments schemes, which could contribute to further polarization.
5. The convergence of support level between farmers and between Member States is lagging behind. Subsidiary principle and related to that Member States decisionmaking will determine the opportunities for more balanced and fairer financial support distribution.

3. **Atanasov, D.**, G. Dobrevska, M. Dallev 2020 **"Economic assessment of an optimised model of apple rootstock production"** *SCOPUS Bulgarian Journal of Agricultural Science, 26(6), 1166-1170. ISSN 13100351 Q3 SJR 0,25*

A three-year study was conducted on the development of apple clonal rootstocks with somatic organogenesis origin in a stoolbed and different moisture-absorbing polymer quantity in the covering soil layer. An economic assessment of the production process was made based on the specific effects of the moisture-absorbing polymer on the quality of the resulting product. The results from the study show that the M9 rootstock demonstrates an improved rooting with a higher number of roots shoots, as well as, increased revenue when applying the moisture-absorbing polymer in a doze of 3.5 kg/da. The economic benefit from applying the same doze of moisture-absorbing polymer in the case of the MM106 rootstock failed to meet our expectations. The doze of 3.5 kg/da proved to be economically ineffective. The results from the economic analysis demonstrated that the application of such a doze from the moisture-absorbing polymer was not economically feasable in comparison to findings from the alternative doze of 1.5 kg/da.

The current study analysed the technical and economic efficiency of the apple rootstock production process by taking into consideration the final quantitative and qualitative values and by accounting for the influence of the added moisture-absorbing polymer to the covering soil layer.

The 3-year study has methodological and practical relevance. A methodology has been created, based on which the technical and economic efficiency of different technologies for growing apple rootstocks can be analyzed, and the positive influence of a moisture-absorbing polymer in the surrounding soil layer on the final results has been isolated. An innovative technological model that could be adapted for different cultures, in different conditions is also presented.

4. Behluli, A., F. Qerimi, P. Borisov, **D. Atanasov**, T. Radev 2019 **"Identification of the Human Resource Management Model in Kosovo Agrobusiness"** *SCOPUS 19th International Multidisciplinary Scientific GeoConference SGEM 2019 (pp. 375-382) ISSN 13142704 SJR 0,23*

This paper is based on a large-scale survey, conducted in agricultural enterprises in the Republic of Kosovo. The main objective of the study was to identify and analize the existing management models in the agricultural organizations, and the role of innovative approaches for the creation and development of a harmonious working environment and high staff motivation. The reasons for the low motivation of workers in a large part of agribusiness organizations have been established. Good examples from practice were synthesized in a conceptual management approach based on organizational innovation, improvement of working conditions, flexibility of work shifts and fair remuneration. Modern approaches for human resource management were introduced as reccomendations to companies, mainly based on the continuous training of the personnel to work with new technologies, machines and equipment, as well as sustaining safe and healthy working conditions and good social environment.

5. Qerimi, F., A. Behluli, P. Borisov, **D. Atanasov**, T. Radev 2019 **"Management Effectivity of Forests Resources in Heating, Environmental Protection and Social Awareness for Forests in Kosovo"** *SCOPUS 19th International Multidisciplinary Scientific GeoConference SGEM 2019 (pp. 745-752) ISSN 13142704 SJR 0,23*

This paper is based on a study, establishing the relationship and interaction between agriculture and forestry in the Republic of Kosovo. It analyses the ecological and socio-economic importance of forests on the quality of life and sustainable development of societies, not only in this country but worldwide. The negative effects of deforestation and air pollution from wood burning have been also in the focus of the study. A comparison was made between models of heating, based on different energy resources. Their effectiveness from the user's point of view and from the society's point of view was evaluated. This could be used in the future development of innovative heating systems, with less resource consumption and a lower carbon footprint, in accordance with major green policies and strategies.

I.2. Научни публикации, реферирани и индексирани в Web of Science:

6. **Atanasov, D.** 2023 **"Socio-economic Development of Agriculture Based on Technological Change"** *Web of Science – CABI Agricultural Sciences, Vol.15, Issue 37, ISSN 1313-6577 (print), ISSN 2367-5772 (online), DOI suffix:10.22620*

Societies worldwide have faced different economic, environmental and social challenges in recent decades, including increasing population and consumption, shortages of natural resources, pollution and climate change. Agriculture is one of the most affected sectors. Considering its vital role as a provider of life-sustaining products and services, as well as business opportunities and employment for millions of people, we are responsible for finding solutions for its long-term development. For thousands of years, agriculture has grown in line with human civilization's growth. During its evolution, though, many negative externalities have become evident. Some resources disappeared; others were severely damaged or exhausted, threatening the food security of many countries or the whole world. The signals nature has sent us for years have become more and more serious. It is about time to change our philosophy of life and our social and economic models. It is time to focus on knowledge, science and innovations, good practices and experience, and new technologies.

The main objective of this paper is to summarize and present some of the most influential concepts of economic growth, analyze its dependence on innovations, and present the potential of new technologies to contribute to the social and economic development of agriculture. Some of the analysis is focused on the theory of economic growth and the ways it can provide sustainable development. The factors influencing the continuing economic growth of agriculture are evaluated, and a methodology for assessing technological efficiency is also presented.

7. Ivanov, R., **D. Atanasov** 2023 **"Risk Management in Agriculture"** *Web of Science – CABI Agricultural Sciences, Vol.15, Issue 37, ISSN 1313-6577 (print), ISSN 2367-5772 (online), DOI suffix:10.22620*

This paper is a result of the theoretical and methodological part of a PhD research on risk management in agriculture, done at the department of economics, Agricultural University – Plovdiv. All businesses are exposed to risk. Uncertainty and volatility are growing in the changing world. Usually the risk is associated with the probability of

different negative influences on the business process, which can reduce or destroy expected outcomes. Risks cannot be fully avoided in any business, especially in agriculture, but they can be managed in order to minimize their impact. Agricultural producers tend to be exposed to more risks with greater magnitudes compared to other economic sectors, and still the availability of specialized risk management tools is lagging (EC, 2017). The aim of this research is to explore the possible risks in agriculture and the related theoretical concepts for their assessment, as well as to outline some of the most advanced management methods and instruments applied in practice for prevention and control.

Research findings demonstrated the complexity of the risk management process and its increasing relevance given the uncertain environment. Organisations in the agricultural sector face a widening range of potential risks. Respectively, the risk management process is of increasing relevance and impact on performance. The review of the theoretical concepts in this article demonstrates the need for a pro-active and effective management of potential and actual risks. This process may be considerably fostered by applying proven theoretical models in the field. The combined use of and accumulated experience in performing in the macro, meso and micro environment should be seen as key pillars of the risk management process. Therefore, research findings can be applied as part of a methodology when assessing risks and risk management practices in the field of agriculture. Nevertheless, it is important to note that future empirical research is necessary in order to analyse the actual applicability and value of the theoretical concepts in different types of agricultural organisations and contexts.

8. **Atanasov, D**., G. Dobrevska, M. Dallev 2022 **“Economic Aspects of Sustainable Production of Apple Rootstocks, According to Bioeconomy's Circuler Use of Organic Matter”** *Web of Science Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development Vol. 22, Issue 2, 2022 PRINT ISSN 2284-7995, E-ISSN 2285-3952*

The quality of rootstocks is very important for the long term production results of apple trees. It depends on many factors, such as good air and water regime of the soil, good supply of nutrients etc. Different methods of enriching the soil are practiced in order to produce high quality planting material. Bearing in mind the concepts of sustainable agriculture and bioeconomy’s principles of production, the authors of this

paper, also scientists at the Agricultural University – Plovdiv, Bulgaria undertook a 3 year experimental project aiming to discover efficient ways for improving quantity and quality of apple rootstocks per unit area, while using cheap soil additives or even organic wastes in an environmentally friendly manner. To what extent the use of natural humates and pyrolysis residue from biogas production can change soil conditions and improve quality of apple rootstocks; have positive environmental impact; reduce production cost and guarantee higher economic results was the unifying idea of the project. This article's main objective is to evaluate the impact of the use of natural humates and pyrolysis residue on apple rootstock's production efficiency from technical and economic perspectives. Natural humates contain a certain amount of moisture-absorbing crystals and pressed organic substances, the use of which drastically reduces the use of water and fertilizers in the production system. These have positive economic as well as environmental impact. Pyrolysis residues are obtained as a result of using biogenic fuels for heating greenhouses. They are waste, but can be used as a valuable resource for soil improvement.

9. **Atanasov, D.,** P. Zorovski, R. Beluhova-Uzunova 2020 **"Technical and Economic Efficiency of Ancient Wheat Species, Grown Under Different Technologies of Organic Fertilization"** *Web of Science Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development Vol. 20, Issue 3, 2020 pp. 109-118, PRINT ISSN 2284-7995, E-ISSN 2285-3952*

The consumer awareness and interest in food quality is growing which leads to greater demand for organic products. Organic farming is helping to maintain biodiversity in the agro-ecosystems, as well as to preserve traditional species and varieties of crops and rare breeds of animals in certain regions or countries. The main objective of the paper is to observe the technical and economic efficiency of the three species of ancient wheat, grown under different technologies of organic fertilization and sowing rates. The study is conducted at the experimental centre for organic production at the Agricultural University – Plovdiv during the period 2014 – 2017. The analysis of results showed different levels of technical efficiency of the three wheat species, grown under different technologies of bio fertilizer treatment. On the other hand, the high prices of the approved fertilizers for organic production do not guarantee the economic efficiency of their application. In fact better economic

results were observed without use of fertilizers. It was also concluded that higher sowing rates of the wheat species impacts positively on yields.

10. Beluhova-Uzunova, R. , **D. Atanasov**, M. Shishkova 2020 **"Distribution of Direct Payments in Bulgaria – Policy Lessons and Prospects Beyond 2020"** *Web of Science Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development Vol. 20, Issue 2, 2020, pp. 53-60, PRINT ISSN 2284-7995, E-ISSN 2285-3952*

Direct payments are an essential element of the Common Agricultural Policy Budget. Pillar I plays an important role for Bulgarian farmers` income stabilization and support. The aim of the study is to analyse the direct payments distribution in Bulgaria and on this base to formulate recommendation regarding future policy development. In the paper Lorenz curve is applied as widely used measure of inequality. The results indicate significant disparities among farmers and uneven distribution of the financial support. The allocation of aid under Pillar I leads to serious imbalances in Bulgarian agriculture. There is a substantial transformation in production and trade patterns. The new architecture of direct payments and the greater flexibility of the instrument post 2020 can address some of the existing challenges.

Based on the analysis some conclusions and recommendation can be drawn: - The new CAP 2021-2027 proposals are oriented to improve targeting on several directions – greening and young farmers. On the other hand, the convergence among farmers' income support and the external converges among Member-states is lagging behind. In this regard, more ambitious capping and higher reduction payments are recommended. Redistributive payments also need to be more efficient and better targeted. The eco-schemes have been introduced as a new intervention, but their content, requirements and impact are still unclear to some stakeholders. - The flexibility and subsidiarity proposed by the new CAP, as well as the short terms for developing strategic documents could have a negative impact on Bulgaria. - The lack of serious change in the basic payments and other elements of Pillar I is a prerequisite for unequal distribution and further polarization of Bulgarian farm structure. - The capabilities, priorities and ambitions of Bulgarian agricultural policy will determine the efficiency of the CAP implementation. - The new model and

responsibilities of the Member-States, could help Bulgarian agriculture to overcome major issues related to the direct payments and farm income distribution.

11. **Atanasov, D.,** G. Lubeniqi 2019 **"Subsidies in agriculture and their influence on sustainability. Theory and methodology"** 2019 *Web of Science – CABI Agricultural Sciences, Vol. 11, Issue 26, pp.29-35. ISSN 1313-6577 (print), ISSN 2367-5772 (online), DOI suffix:10.22620*

Governmental intervention in agriculture and its impact on production quantity and quality; soil, water and energy exploitation; employment; investments; social services and overall sustainability of agriculture, rural regions and the economy has been objecting of discussions and analyses for decades. Instruments for institutional support defer among countries and the analyses of their efficiency are complicated due to serious differences in business environment, natural resource base, technological level, social conditions, living standards etc. Differences are even deeper when comparing developed with developing countries or in the case of European Union old member states and new member states. The main objective of this research is to analyze the positive and negative impact governmental support, especially direct payments have on the sustainable development of agriculture and rural regions.

12. Beluhova-Uzunova, R., **D. Atanasov** 2019 **"Biodynamic Agriculture – Old Traditions and Modern Practices"** *Web of Science Trakia Journal of Sciences, 17(1), 530-536. ISSN 1313-7069 (print), ISSN 1313-3551 (online)*

The concerns regarding food security and safety, environmental challenges and resource scarcity remodel the prospects of agriculture. Therefore biodynamic farming as an alternative method for sustainable production becomes an object of growing scientific interest in the past 20 years. Biodynamic farming is one of the oldest organic systems and its roots could be found in the beginning of 20th century. Although the skepticism, biodynamic agriculture evolved over the years and nowadays is considered as an opportunity to address various environmental, social and economic issues. The aim of the paper is to introduce the concept and features of biodynamic agriculture and observe different case studies and surveys on the effect of this farming system upon yields, profitability and sustainability. The analysis is based on different research methods. The paper applies monographic, historical

and comparative methods. The results indicate that biodynamic farms have higher soil quality, lower crop yields, and equal or greater net returns than conventional agricultural holdings. The long-term effect of biodynamic farming on the economic performance, however, needs further research and investigation. The studies prove that biodynamic agriculture is important alternative farming system that could provide answers to number of alarming questions associated with viability and sustainable development.

13. Dunchev, D., **D. Atanasov** 2019 **"Impact of Innovations on Technical Efficiency of Soft Fruit Production"** *Web of Science – CABI Agricultural sciences, Vol. 11, Issue 26, pp. 41-47. ISSN 1313-6577 (print), ISSN 2367-5772 (online), DOI suffix:10.22620*

This research is focusing on the efficient use of different technological innovations in greenhouse production of soft fruits in the United Kingdom. Variety of sensors measuring the temperature of water and air, controllers of microclimate, irrigation and fertigation technologies etc. is described and analyzed. Results show that innovations could improve the efficiency of water and nutrients use, contribute to higher yields and lower negative impact on the environment, influence positively on the humane health.

The agricultural sector faces many challenges, including increasing population and consumption, shortages of resources, climate change, etc. It is necessary to implement new technologies to increase the productivity and efficiency of agricultural production and reduce negative effects on the environment. Innovative technologies are at the heart of sustainable development of agriculture and other sectors of the economy. The objective of the study is to present the latest technologies for soft fruits growing and to analyze their potential for increasing productive efficiency. Environmental benefits are also assessed.

14. Beluhova-Uzunova, R., **D. Atanasov**, M. Shishkova 2019 **"Direct Payments in Bulgaria – Trends and Perspectives"** *Web of Science Bulgarian Journal of Agricultural Economics and Management, Volume 64 № 3/2019, pp. 42-50. ISSN 2534-9872 (Online)*

Direct payments are key component of the Common Agricultural Policy (CAP) in Bulgaria. During 2007– 2013 they led to serious changes in specialization and

concentration in Bulgarian agriculture. In the period 2014–2020, around € 7.4 billion is expected to be invested in farming sector and rural areas through the CAP, of which direct payments are € 5.1 billion. The main purpose of the study is to analysise the trends in direct payments allocation and to outline the opportunities and perspectives for Bulgarian agriculture. Methodological approach includes analysis, synthesis, deduction and induction. Applied are comparative, monographic, logical, tabular and graphical method and statistical methods of analysis. In order to research the disparities in paper is used Gini coefficient as a widely applied measure of inequality. The results show that First Pillar benefits mainly larger-scale farms causing disbalances in Bulgarian agricultural sector. Small and medium sized farms receive negligible share of the financial support. The implementation of new opportunities presented by direct payments could help to decrease sectorial and structural imbalances in agriculture and to decrease the polarization of Bulgarian farms.

15. Beluhova-Uzunova, R., A. Roycheva, **D. Atanasov** 2018 **"Farm competitiveness determinants and drivers"** *Web of Science – CABI Agricultural Sciences, Vol. 10, Issue 24, pp.41-47. ISSN 1313-6577 (print), ISSN 2367-5772 (online), DOI suffix:10.22620*

The aim of the current paper is to present an overview of the literature on farm competitiveness and to present several definitions of this concept. Furthermore, we discuss a body of recent surveys on productivity and efficiency and outline key determinants of competitiveness with a view to identifying important drivers for growth. On the basis of previous results from the "Innovative Models for the Increase of Farm Competitiveness in Bulgaria – AGROIN" project we conclude that the key determinants of farm competitiveness referred to above are the quality and quantity of the production capacities, the national agricultural policies, and the innovations and investments in infrastructure.

The processes of globalization and integration in world economics make the concept of competitiveness relevant and provoke a debate over key factors influencing this category. The dynamic changes generate discussion of how to allocate resources and ensure the food security and social welfare. The determinants, contributing to the competitiveness and productivity growth, are subject of interest worldwide. The aim of the study is to highlight the main factors and determinants of farm competitiveness

and based on the overview of the literature to outline the main drivers for competitiveness growth.

16. Beluhova-Uzunova, R., **D. Atanasov**, K. Hristov 2017 **"Analisys of Direct Payments Distribution in Bulgarian Agriculture"** *Web of Science Trakia Journal of Sciences, Vol. 15, Suppl. 1, pp 282-287, ISSN 1313-3551 (online) doi:10.15547/tjs.2017.s.01.051*

Direct payments are the main component of the Common Agricultural Policy (CAP). They form approximately 76% of CAP budget in the programming period 2014-2020. The main purpose of the study is to outline the opportunities and challenges for Bulgarian agriculture, based on the analysis of direct payments distribution. The Lorenz curve, as the most widely used measure of inequality, is applied in the paper to surveying the disparities in the direct payments distribution. The results of the analysis show highly uneven distribution of the direct support across Bulgarian farms. The Lorenz curve indicates that payments are accumulated mainly in the larger-scale farms, thereby generating problems for small holdings and structural imbalances. The allocation of EU funds has impacted on the level of investments, productivity and economic efficiency of Bulgarian agriculture.

17. Beluhova-Uzunova, **D. Atanasov** 2017 **"Biodynamic Farming – Method for Sustainable Production of Quality Food"** *Web of Science Bulgarian Journal of Agricultural Economics and Management Volume 62, No 3, 2017 ISSN 0205-3845 (Print); ISSN 2534-9872 (Online)*

Biodynamic agriculture is an organic farming method that could provide ecological, economical and physical sustainability. Biodynamic agriculture was a subject of research during the past decades although part of the scientific community looks at the method with skepticism. In the past 30 years there have been published results of experiments as well as case studies that show the effects of biodynamic preparations on yield, soil quality and biodiversity. The case studies presented a positive environmental impact in terms of energy use and efficiency. The concept of biodynamic agriculture is gaining popularity because of the rising challenges coming from climate change, resource scarcity and population growth. Such alternative practices are viable methods that could make farming systems more diverse and sustainable. The aim of the paper is to underline the basic definitions and history of biodynamic farming, describe the main features of this method and to present

different studies and case trails compering biodynamic, organic and conventional agriculture. An overview of different long term trails on biodynamic farming is done. The results show that these systems generally have better soil and product quality and equal or greater net returns per hectare than conventional farms.

18. **Atanasov, D**., P. Borisov, K. Mihov, K. Kostadinov, S. Filipov 2016 **"Comparative economic evaluation from fertilization of greenhouse tomatoes in conversion to organic farming"** *Web of Science Bulgarian Journal of Agricultural Economics and Management 61, 2-4/2016, ISSN 0205-3845*

В статията се оповестяват резултатите от проведен тригодишен опит на територията на Аграрен университет – Пловдив, целящ да установи влиянието на биоторовете върху продуктивността на оранжерийни домати сорт Fado F1 .Чрез сравнителен икономически анализ се определя оптималният вариант на торене, като се използват стандартни показатели. Оптималният вариант на торене и неговият икономически ефект са оценени при строго контролирани фактори, при които протича експериментът. Така получените резултати от извършената икономическа оценка важат само за условията, при които е извършен опитът. Чрез статистическа обработка на получените данни се определя, че комбинацията на биоторове – Агробиосол + Лумбрикомпост + ХРБ + Софтгард, гарантира постигането на най-висок общ добив. При този вариант на торене се постига и най-висок икономически ефект от използваната система от торове, изразен чрез показателите брутен марж, брутна печалба и рентабилност на разходите. Биоторенето оказва положително въздействие върху продуктивността на оранжерийни домати сорт Fado F1 . Продуктивността на този тип торене на отстъпва на постигнатата чрез използването на конвенционални минерални торове. Използването на биоторове в производството гарантира получаването на по-висок икономически ефект

19. Varadinov, M., C. Dias, N. Almeida, **D. Atanasov** 2016 **"Management of reverse logistics activities in wine and olive oil production"** *Web of Science – CABI Agricultural Sciences Volume 8, Issue 20, pp.177-186 ISSN 1313-6577 (print), ISSN 2367-5772 DOI: 10.22620/agrisci.2016.20.025*

The wine industries have specificities at strategic and operational level, as they depend on the quantity of grapes in each campaign. The weather conditions affect

the availability and quality of production of the raw material (grapes). In turn, these factors affect the quantity and quality as well as the price of wine on the market. The return of the bottled wine, having reached the expiration date or change of quality, which influences the quality perceived by retail customers, especially the HORECA channel distribution (consisting of hotels, restaurants and cafes), requires adoption of a reverse logistics system. It is intended to analyze the logistics activities of companies that implement or not a system of reverse logistics and know the factors that significantly determine that adoption. The study is conducted through an online survey of companies with production facilities for wine and olive oil in the Alentejo region. As a result, it is expected to verify the impact of firm size, geographical areas of dispersion, the existence of information systems, technological investment, environmental awareness, the economic value of remanufacturing and legislation, on the adoption of a reverse logistics

II.3. Научни публикации, реферирани и индексирани в други бази данни:

20. **Atanasov, D.**, R. Beluhova-Uzunova, K. Hristov 2021 **"Socio-Economic Dimensions Of Regional Differences In Bulgaria"** *AGRIBUSINESS AND RURAL AREAS – ECONOMY, INNOVATION AND GROWTH, CONFERENCE PROCEEDINGS, 2021, issue 1, pp.213-220, EconPapers DOI: 10.36997/ARA2021.213*

Регионалните диспропорции са тема на редица дискусии в рамките на страните-членки на ЕС. Целта на настоящето изследване е на базата на анализ на ключови социалноикономически индикатори, да се изведат основните тенденции в регионалното развитие на България и да се формулират изводи и препоръки по посока преодоляване на предизвикателствата, свързани с регионалните дисбаланси. Проучването констатира сериозни междурегионални диспропорции, които влияят върху качеството на живот и влизат в противоречие с възприетият на европейско ниво стремеж към сближаване и постигане на балансиран и устойчив икономически растеж. С цел преодоляване на тези предизвикателства е необходимо оптимизиране на инструментите на кохезионната и регионална политика в България. В тази посока е важна по-добрата координация между секторните политики и по-добро взаимодействие и интеграция между държавните и местните органи на управление.

21. **Atanasov, D.,** A. Aladjadjiyan, D. Penkov 2017 **"Economic Efficiency Comparison of Different Installations for Bio-energy and Compost Production"** *BIOACENT, BAOJ Nutrition journal, ISSN: Bioaccent online publishing Volume 3, Issue 3, 045*

Agriculture despite its multifunctionality and importance to society is one of the sectors that have serious negative impact on the environment. Agriculture is a main contributor to soil degradation in Bulgaria and therefore re-cultivation of land is a very important task. The possibilities for using composted either municipal waste or residues from biogas production for soil re-cultivation, suggested by the development of INEMAD project, should be assessed and popularized. The advantages and disadvantages should be analyzed and discussed. This research is based on the results from two previously published papers by AU-Plovdiv authors within the framework of INEMAD, as well as new information. The possibilities for production and marketing of bioenergy and digestat from municipal waste or from anaerobic digestion of animal manure are discussed. The processing of municipal waste for producing compost of organic origin that can be used for soil re-cultivation (to recover nutrients and improve structure) reduces the dunghill areas as well as the Greenhouse Gas emissions.

22. Georgiev, M., C. Yancheva, D. Grekov, **D. Atanasov**, M. Todorov, D. Grozdanova H.Gerbaulet 2017 **"Agri-land Management in Bulgaria – Current Legal State of Play Regarding Tenure"** *CEDR Journal of Rural Law CEDR Journal de Droit Rural, Volume 3, pp. 26-32, ISSN 2414-3456*

This paper is a brief chronological overview on the development of key leagal aspects of agriland tenure in Bulgaria, after the change of political system in 1989. The accession of Bulgaria to the European Union played and still plays an important role in the process.

EU's agricultural policy is focusing on sustainability of farming and rural areas, by supporting economic, social and environmental development. Also young enterpreneurs, small farms are additionaly supported. Land management and access to arable land is a corner stone for achieving europena starategies and policies in each member state.

This investigation is aiming of discovering and analyzing these trenda and processes in Bulgaria.

23. Beluhova-Uzunova, R., **D. Atanasov** 2017 **„Economic Implications of Structural Changes in Bulgarian Agriculture”** *Сборник от конференция „Роля на фамилния бизнес за устойчивото развитие на селските райони“, ISBN 978-619-90128-10-9, Издателство УЧИ, с.25-31;*

Agriculture is a strategic and multifunctional sector of Bulgarian economy. Traditionally farming provides fresh food and raw materials to the consumers and the processing industry. Its development is directly or indirectly connected with other economic sectors, with the natural resources and the environment, with society and the overall rural sustainability. Structural changes are an important reason and consequence of agricultural development in today's global economy, characterized with strong competition, high quality standards and environmental concerns. The study covers the period 1990 – 2014. The main objective of this research is to explore structural changes in Bulgarian agriculture, to analyze the factors influencing them and on these bases to outline solutions for stable and balanced future development of its sectors.

24. Атанасов, Д. Р. Попова, Е. Вълчева, Г. Добревска, М. Даллев 2016 **„Влияние на Влагоабсорбиращ Полимер (TERAWET) Върху Някои Почвени Показатели в Маточно Насаждение при Ябълкови Подложки“** *Сборник доклади от 4-та национална конференция с международно участие „Хумусните вещества и ролята им за смекчаване на климатичните промени“ на Българското дружество по хумусни вещества, София 8-10 септември, 2016 г. ISBN 978-619-90189-2-7*

The content and ratio of nutrients in the soil are directly related to fertility and plant nutrition. The utilization of these elements is possible if the moisture in the soil is correct. This study presents soil indicators, when TERAWET is used in the rootstock area. The experiment was carried out in the Agricultural University – Plovdiv durin 2014 – 2015. Analyses of pH, organic matter, potassium and moisture were done. Positive influence of TERAWET polimer application in the soil was concluded.

TERAWET е калие полиакрилатен съполимер, който има способността да абсорбира голямо количество вода от валежите или при напояване и да я отдава плавно на кореновата система а растенията, при дефицит на влага. По този начин осигурява по-добър растеж и добиви, както и по-ефективно изплзване на поливната вода.

II. Монография:

24. **Атанасов, Д**. 2023 **„Роля на Иновациите за Икономическото Развитие на Селското стопанство“** *Академично издателство на Аграрен Университет – Пловдив ISBN 978-654-517-321-9*

Тема на изследването, което обобщава голяма част от научните резултати на доц. д-р Д. Атанасов, в периода между 2016 г. и 2023 г. е: „Ролята на иновациите за икономическото развитие на селското стопанство“. То разглежда тенденциите в икономическите, екологичните и социалните процеси в обществото и в селското стопанство, както и предизвикателствата за устойчивото им развитие, въз основа на които се предлагат иновативни производствени, технологични, управленски и институционални решения. Увеличаващото се население в глобален план води до ръст в потреблението на храни, енергия, природни ресурси, замърсяване на околната среда, изменение на климата и др. Селското стопанство е отрасълът, които произвежда храната и голяма част от другите жизненоважни ресурси за хората. То обаче има ограничения, които лимитират развитието му в синхрон с нарастващото население. Част от тези ограничения са свързани с природните ресурси (земя, вода, енергия, биологично разнообразие), а други със замърсяването, което причинява на екосистемите. Основното предизвикателство и за отрасъла и за обществото е как да организират и осъществяват производството на все-повече и повече храни и суровини, в условията на ограничени природни ресурси и нарастващи екологични и социални рискове. В бъдеще, постигането на устойчивост в развитието на селското стопанство и на другите отрасли, както и на цялото общество, ще зависи от намирането на решения за икономически растеж, базиран по-малко на конвенционални производствени модели и изчерпаеми природни ресурси и все повече на интелигентни и иновативни концепции, основани на науката, натрупания опит, добрите практики, образованието, новите технологии. Необходими ще са иновативни и холистични институционални подходи, които да създават необходимата среда за изграждането и адаптирането на аграрните системи към устойчиви модели за развитие, гарантиращи достатъчно производство, опазващи и подобряващи базата от природен и социален капитал.

Целта на проведеното изследване бе да се представят основните концепции за икономически растеж на селското стопанство; да се анализират европейските и националните ангажименти за постигане на устойчиво развитие; да се оцени ролята на иновациите и технологичните промени за социалната и икономическата еволюция на аграрния отрасъл; да се предложат решения и модели за растеж, в синхрон със съвременните „зелени“ политики.

В преследване на общата цел, изследването преминава през няколко етапа:

1. Дефиниране на икономическия растеж, проучване и представяне на факторната му обусловеност;
2. Разясняване ролята на иновациите за икономическия растеж;
3. Представяне на концепцията за устойчиво развитие и специфичното й проявление в селското стопанство;
4. Анализ на съвременните политики и стратегии за устойчиво развитие;
5. Представяне на аграрната производствена система и нейните особености;
6. Иновации и прецизни технологии в селското стопанство;
7. Съвременни инструменти за оценка ефективността на иновациите в селското стопанство