



AGRICULTURAL UNIVERSITY - PLOVDIV
4000 Plovdiv, Bulgaria 12, Mendelev Blvd.
tel. +359/32/654300 www.au-plovdiv.bg



Research and Innovation Profile

General information

Description

Title of the research entity/group

BIOECONOMY

Field of expertise

/in conjunction with Horizon 2020-Societal Challenge 2 (SC2): 'Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research and the Bioeconomy'/

Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy

- Sustainable agriculture and rural development;
- Natural resource economics;
- Innovation technologies for precision agriculture;
- Agricultural economics;
- Social capital;
- Logistics and management of material flows, information and human resources. Revers logistics and recycling;
- Agriculture's law and regulations;
- Marketing of agricultural products;
- GIS application for sustainable land use;
- Remote sensing and analyzes

Research products and services provided by the entity/group

Research results, technological solutions, advice and knowledge transfer to farmers, advisers, decision-makers, state control bodies, policy work-groups, etc. on:

- Reengineering of agricultural production systems towards sustainable bioeconomy;
- Investigation on the potential of artificial intelligence for sustainable agriculture and bioeconomy;
- Analyses of production and economic efficiency of innovation technologies in agriculture;
- Natural resources exploitation, conservation and regeneration;
- Modern concepts for marketing of agricultural products;
- Social capital – Bioeconomy – Agriculture – Rural communities;
- Logistics and management of material flows, information and human resources. Revers logistics and recycling;
- Development of new curricula for education in Bioeconomy.



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Participation in previous/ ongoing H2020 or other EU projects

Staccato "Sustaining Agricultural Change Through Ecological Engineering And Optimal Use Of Natural Resources"

National Scientific Program of Bulgarian Ministry Of Education And Science "**Healthy Foods For Strong Bio-Economy And Quality Of Life**", 2018-2022, /www.nnp-food.au-plovdiv.bg /

„Guarden“ Guardians Of Environment Framework: An Integrated Approach Of Strategies For Prevention Of Soil Pollution And Rehabilitation Of Harmed Territories, Financed By The South East Europe Transnational Cooperation Programme and the EU.

H2020-Ibasc2-Presidency-2017-785213 "Increasing The Security And Quality Of Food And Food Systems"

ProAkis "Agricultural Knowledge And Information Systems In Europe", 7-Th Framework Programme For Research, Technological Development & Demonstration. Grant Agreement № 311994.

Inemad (289712) – „Improved Nutrient And Energy Management Through Anaerobic Digestion“ European Commission Fp7 Specific Programme "Cooperation: Food, Agriculture & Biotechnology".

Claim „Supporting The Role Of The Common Agricultural Policy In Landscape Valorisation: Improving The Knowledge Base Of The Contribution Of Landscape Management To The Rural Economy“ FP7 grant Agreement № 222738.

„Provide“ Providing Smart Delivery Of Public Goods By Eu Agriculture And Forestry h2020-Isib-2014-2; Topic: Isib-01-2014, Grant Agreement № 633838.

Tempus Project № 159143-Hu-Jpcr, „Using Local Resources For Micro Regional Development – Sustainable Agribusiness And Tourism In The Southern Balkans“.

EU Project **Idari** (Qlrt-2001-02718), "Integrated Development Of Agricultural And Rural Institutions In CeeC", Consortium Leader The National University Of Ireland – Galway.

EU/FAO Project: **Ceesa** (Qlk5-1999-01611), "Sustainable Agriculture In Central And Eastern European Countries", Consortium Leader Humboldt University Of Berlin.

Number of researchers involved / incl. young researchers e.g. doctoral, post-doctoral, habilitated, etc./

1 Professor, 8 Assoc. Professors, 3 Assist. Professors and 1 PhD student



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Research infrastructure used

The AUP and its 185 ha experimental fields and animal farms; Agro ecological center; Centre for research, technology transfer and protection of intellectual property rights; Centre for biological testing of PPPs' efficacy (CBT); Centre of integrated management of plant diseases; Education and experimental winery; Demonstration center for e-commerce with agricultural and other products; Other national and international farms and companies.

Profile of the leading researchers in entity/group

Assoc. Prof. Dimo Atanasov, PhD., a lecturer in agricultural economics, precision farming, sustainable production systems, logistics, etc. Participating as a researcher and coordinator in 8 international research projects. His scientific interests are associated with agricultural economics and management, natural resource efficient exploitation, bio-economy, innovation technologies for precision farming, sustainable agriculture, bio-energy production, logistics, etc. He has published 3 books and 47 scientific papers.

Assoc. Prof. Boryana Ivanova, PhD., a lecturer at the Department of Economics, Vice Rector of AU-Plovdiv. Expert in cooperatives, producers groups and social capital; agrarian institutions and property rights; natural resource management and sustainable rural development. Component-coordinator of the National Science Program of the MES "Healthy Foods for Strong Bioeconomy and Quality of Life" 2018-2022, Component 4 "Bioeconomy, food systems and integrated regional development". Member of H2020 Programme Committee: Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy. Evaluator of investment projects to the Local Action Group Breznik-Tran.

Prof. Ivan Penov, PhD., a Head of the Department of Economics, AU-Plovdiv. PhD from the University of Missouri, USA. He is manager of the Foundation "Land – Source of Income", which supports many social projects for sustainable development of small farms and disadvantaged families. Teaches Production economics, Agricultural policy, Macro-economics, Investment projects in agriculture, etc. Scientific interests are connected to: production and institutional factor for sustainable development, social networks, economic analyses of agriculture and rural development.

Assoc. Prof. Teodor Radev, PhD., a lecturer on agricultural marketing at the AUP and Director of Distant learning center. Scientific interests in (organic) marketing. A co-author of the books: "Sustainability of agriculture"; "Farm management /handbook for successful agro-business/"; "Sustainability of vine-wine sector in Bulgaria", "Investment norms in vine growing"



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Profile of the leading researchers in entity/group

Assoc. Prof. Peter Borisov, PhD., a lecturer on agricultural management at the AUP. Experienced in FP7 programs, participated as an expert in the project “EU Balkan vegetables”. Worked in the operative program “Competitiveness” in Bulgaria as a Head manager of the project “Establishment of transfer technology centre - Maritza” in Plovdiv. Scientific interests in agricultural management. He is a co-author of the books: “Sustainability of agriculture”; “Sustainability of vine-wine sector in Bulgaria”; “Investment norms in vine growing”.

Assoc. Prof. Velika Kuneva, PhD., specialized in mathematical modelling and application of mathematics in agronomy. A coordinator of the Erasmus+ at the Faculty of Economics. Scientific interests in the areas of algebra structures, knowledge in improving usability of mathematical modelling, application of mathematical methods in agronomic research. She is author and co-author of more than 40 scientific publications and articles.

Assoc. Prof. Violeta Dirimanova, PhD., a lecturer on agricultural organization and management. PhD from Humboldt University.

Assoc. Prof. Zhulieta Arnaudova, PhD., a lecturer and researcher on Melioration technologies, GIS, SENTINEL

Assoc. Prof. Minko Georgiev, PhD., a lecturer and researcher on Agricultural law, Land market, Property rights, etc.

In which calls of Horizon 2020-SC2 or Horizon Europe the entity/group is ready to participate and how

Call - Rural Renaissance

H2020-RUR-2018-2020-continued

Organising sustainable food and non-food value chains under changing conditions

- RUR-05-2020 - Connecting consumers and producers in innovative supply chains
- RUR-06-2020 - Innovative agri-food chains
- RUR-07-2020 - Reducing food losses along the value chain

Boosting innovation and enhancing the human and social capital in rural areas

- RUR-15-2018-2019-2020-continued - Thematic networks compiling knowledge ready for practice



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In which calls of Horizon 2020-SC2 or Horizon Europe the entity/group is ready to participate and how

- RUR-17-2020 - Networking European farms to boost the mutual knowledge exchanges and close the innovation gap
- RUR-09-2018: Realising the potential of regional and local bio-based economies
- CE-RUR-10-2019: Circular bio-based business models for rural communities

Research on and assessment of:

- Exploration of disbalances in the food supply chain and possibilities for improving farmers' position in the value chain.
- Analysing the different actors' potential for cooperation and adoption of innovative integrated approaches in food production and distribution.
- Exploration of the structure and behavioural incentives of the agri-food value chains and assessment of their impact on sustainability and innovation in practice.
- Assessment of the potential of rural regions to develop a circular bio-based economy using their own resources, the readiness for cooperation and networking and knowledge exchange.
- Identifying business models for replication in a variety of locations and contexts, with relatively low levels of investment, risk and technical sophistication and assessment of their sustainability.
- Development and application of strategies for capturing and spreading knowledge.
- Applying the multi-actor approach to favour longer-term and wider use of knowledge with a view to enable updating, consolidating and connecting to regional and national AKISs.
- Effective transfer of knowledge to farming, research and policy sectors and to society

Research entity/group contact person /name, postal address, e-mail, phone number/

Assoc. Prof. Dimo Atanasov, PhD.
Dean of the Faculty of Economics
Agricultural University-Plovdiv
12 "Mendeleev" Blvd.
4000 Plovdiv
e-mail: d.atanasov@au-plovdiv.bg
telephone: +359885843553