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Post-COVID Recovery of Family Businesses in V4 Contries

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New Challenges in Agricultural Development

ABSTRACTS OF PRESENTATIONS

Ing. Veronika Svatošová, Ph.D.
Mendel University in Brno
Introduction of the results of V4 project: Post-COVID Recovery of Family Businesses in V4 countries

This project investigates the effects of the Covid-19 crisis on small family farms in the Central European countries- the Czech Republic, Slovakia, Poland, and Hungary. We focus on small family businesses from the perspective of multifunctional agriculture, as this perspective includes also non-productive activities of farms that have been largely affected by Covid-19. We build our investigation on an exploratory qualitative research design based on 86 semi-structured in-depth interviews with owners or responsible managers of small family farms from all mentioned countries and explored the effects of the Covid-19 crisis on different areas of their business such as from the perspective of human resources, supplier-customer relations, production, distribution channels or strategies, price of inputs and outputs and business models. In a nutshell, our findings indicate that small family farms in Central Europe have been resilient in the face of the Covid-19 pandemic. Several negative impacts are identified, such as a decrease in sales due to the closure of accommodation and restaurant services, delays in the supply of inputs, and minor problems with the availability of workers, however, they are perceived to be moderate. The results show that Covid-19 pandemic created not only difficult challenges but also opportunities for small firms in agricultural sector.

Idoc. Ing. Daniela Hupková, PhD., Ing. Bianka Körmendiová
Slovak University of Agriculture in Nitra
Vertical Linkages in Agri-Food Supply Chains – the Role of Producers

Agricultural producers are entities that largely decide on the structure of the agri-food supply chain. Currently, the European Union is striving to shorten supply chains in agriculture, as short supply chains are ecologically, economically and socially more sustainable. The main objective of the paper is to examine the role of primary producers in the agri-food supply chains. The basic technique applied for data collection was questionnaire survey, which we carried out on family farms in Slovakia. Obtained data were statistically examined applying the statistical analysis using the Chi-square test. Based on the estimations we could conclude that the choice of the main distribution

channel depends on the size of the given company and also on the main type of production. Businesses with fewer than 10 employees prefer direct distribution channels that allow them to sell their products to final consumers. The identification of factors affecting the choice of the main distribution channel as well as a detailed analysis of the nature of dependence make it possible to formulate recommendations on what steps to take in order to increase the number of agricultural enterprises selling through short supply chains.

Apolka Ujj PhD
Hungarian University of Agriculture and Life Science
Promotion of multifunctional agriculture through education

Multifunctional agriculture is the sustainable way to integrate the interrelated objectives of farmers and society in three functions: production; protection, enhancement of the countryside, and provision of environmental services valued by the public; contribution to reinforcing the economic and social cohesion between groups and regions. The background of why and how multifunctional agriculture has gained an increasingly important role in higher education and vocational education for farmers will be explained during the presentation. It will also be discussed what kind of demands are expressed by farmers, what trainings and initiatives strengthen the environmental awareness and social role of farming. The speaker pays special attention to social farming, as it is considered a fundamental practice that affects not only agricultural activity but other key sectors such as health care, social services, environment, and employment, to promote sustainable and inclusive growth in rural and often marginalised areas.

dr inż. Jacek Puchała
University of Agriculture in Krakow
Factors affecting the adaptation processes of food economy chain entities, to the opportunities and threats resulting from the Covid crisis

The aim of the research was to systematize the strengths and weaknesses of the organization that affect the adaptation of the company to operate in the conditions of the pandemic crisis. 25 in-depth telephone interviews were conducted among conventional and organic farms. The research was carried out in March and April 2022. SWOT/TOWS, cause-and-effect, and tabular-descriptive analyses were carried out, thanks to which a vicious circle of problems was noticed. The problem tree method was used, thanks to which you can quickly identify the key problem. This problem generates the most adverse consequences. Such a cause-and-effect analysis leads to the identification of goals, the implementation of which will contribute to effective crisis management. By choosing the goal leading to the solution of the largest possible number of unfavourable consequences, the effectiveness of management can be brought closer to the proportions known from the Pareto law. Focusing on solving the key problem, in turn, requires identifying the causes that co-create this key problem. Bridging the gap between the desired (target) and actual (problem) state, requires the active implementation of management functions by entrepreneurs and the appropriate food policy.

dr Małgorzata Pink
University of Agriculture in Krakow
Good Agricultural Practices Certification Schemes in chosen EU countries

In line with the assumptions of the Green Deal, the European Commission has set a target of 50% reduction in the use of chemical pesticides by 2030 and 25% organic farming of EU farmland. Implementing these assumptions requires institutional support and the provision of a certain framework for agricultural producers. One way to do this is through certification schemes and good agricultural practices in non-organic agriculture. In this article we classify and identify certification schemes that support the implementation of the Farm to Fork Green Deal strategy. Their number varies around 170 in the EU alone. Particularly important in the context of the EU strategy of limitation of the pesticides, seem to be certification schemes for good practices, which in some countries have become part of the strategic plans COP 2023-2027 at national level. The purpose of this article is a comparative analysis of the "Integrowana Produkcja", "Sistema di Qualità Nazionale di Produzione Integrata per le Produzioni Agricole" and "Haute Valeur Environnementale" schemes in the context of the implementation of EU strategic goals, the level of dissemination and perception of these schemes and consumer recognition. The study was based on a review of data reported by entities responsible for the above-mentioned certification schemes, a review of literature and preliminary own research on the perception of certification among a selected group of farmers applying the principles of "Integrated Production". The study was conducted on a representative sample, based on an interview questionnaire, using the Likert scale.

prof. Ing. Libor Grega
Mendel University in Brno
How Has COVID-19 Affected the Wine Industry in the Czech Republic? The Case of micro-region Modré Hory

This paper addresses the impacts of the COVID-19 pandemic on winemakers organized in the wine micro-region Modré Hory in the year 2020. The Modré Hory is wine micro-region with unique terroir and wines from this area can be certified as wines with appellation. Currently there are 19 wine farms producing wine under appellation scheme (130 ha). Discourses from 13 interviews with winemakers from Modré Hory are subjected to content analysis, considering impact perception and crisis management. Through an exploratory approach, the effect of the COVID-19's impacts on vineyards management, wine production, sales and distribution and rural tourism were interrogated. The research suggests that perceived impacts of COVID-19 relate to business profiles and to the stage of the crisis and specific strategies and measures adopted on the national level. Following the results, theoretical and practical implications are suggested to mitigate impacts of such a crisis.

Ing. Pavel Kotyza, Ph.D.
Czech University of Life Sciences Prague
Equality among by young farmers – the case of the Czech Republic?

The paper focuses on small and young farmers in the Czech Republic due to lack of studies dealing with this topic. The aim of this paper is to characterize young farmer sample in the Czech Republic and to identify whether there exists equality among farmers from the perspective of land and finance distribution among the young farmer sample. The partial aim is to conduct a questionnaire survey among young farmers in the Czech Republic and to identify their nonagricultural activities and future plans. Paper analyses data about beneficiaries of subsidies from Czech Paying Agency in 2020. In 2020 the share of young farmers on total supported application was more than 14 %. According to subsidy analysis, young farmers are interested in environmental measures and most of them are in areas with natural constraints, these are involved in livestock production. There are also interested in investment subsidies or start-ups. With respect to new CAP, it is necessary to maintain their farming. By using GINI coefficient inequality among farmers was confirmed.

dr Michał Niewiadomski
University of Agriculture in Krakow
State of perception and knowledge of bioeconomy in selected European universities

Sustainable Bioeconomy" is one of the aspects enabling the European Green Deal achievement. A similar Bioeconomy term understanding makes possibility to take proportional actions aimed at fulfilling the Sustainable Development Goals in EU countries simultaneously. A parallel Bioeconomy term perception is crucial for reaching a common consensus on actions aimed at introducing optimal plans for the green technologies development. Therefore, the purpose of the article is to develop a tool - a special research questionnaire, the use of which will enable research hypothesis verification claiming that the state of perception and knowledge of bioeconomy among students differs depending on the studied country.

Ing. Petra Palátová, Ph.D.
Czech University of Life Sciences Prague
Current state of bioeconomy in the Czech Republic

Sustainability, circularity, and the bioeconomy are ways to resist the current socio-economic threats and therefore belong to the topics of great interest of researchers and managers in recent years. Specific activities are part of strategies in various areas (e.g., economy, agriculture, forestry, regional development), but the Czech national strategy for the area of bioeconomy does not yet exist. The aim of the contribution is to present the current state and activities devoted to the bioeconomy in the Czech Republic. Part of the contribution is focused on the international project CEE2ACT, of which the Faculty of Forestry and Wood Sciences, CZU Prague, is a project partner. CEE2ACT is a Horizon Europe project coordinated by the Hungarian company Geonardo Environmental

Technologies. This CSA event aims to transfer knowledge from selected European countries to target countries, including the Czech Republic, with the aim of assisting in the creation of circular bioeconomy strategies and action plans. The project was launched in 2022 and will last 36 months with the involvement of 17 partners from all over Europe.

Ing. Radka Redlichová, Ph.D.
Mendel university in Brno
Czech Farms´ Economic Situation: Does the Size and Location Matter?

Agricultural is the inevitable of the traditional countryside, involving its form, social structure and economic situation. The profitability and viability have a crucial impact on the countryside landscape and inhabitants´ wellbeing. The farms ability to adapt to the variability of surrounding economic, politic, environmental and social situation is to the great extend dependent on its economic results. In this paper we therefore analyse the size and structure of revenues and the factors affecting the variability if farms. We also pay attention to the relation of productivity and profitability. Last, but not least we focused on the level of agricultural subsidies as a share of agricultural production, what enable us to characterize the up-to-date subsidy system. In our findings we use the data from FADN CZ database for the period 2015 - 2020. Methodological approach is based on the comparison of farms of different size and location applying the conventional (not organic) farming system. The results show there are no substantial differences among the farms located in areas with and without natural constraints. However, there are evident differences among the companies of different sizes. The crucial reason lies in the productivity. The larger the farm the higher the productivity is. This issue has and impact to the situation of the countryside region as well. The current system of agricultural subsidy policy involves the revenues and profit of agricultural companies in a significant way. The highest ratio of subsidies compared to the agricultural production is reached by the farms located in mountain areas with natural constraints. Their ratio is 1.5 higher in than in the case of farms located in the areas more convenient to the agriculture. Simultaneously it is 2.3 times higher in small farms than in the very large ones. The main issue causing the worse financial situation of small farms is their lower productivity. Low level of economic productivity calls for the change in the market strategy of small farms. In this respect the results support the positive evaluation of the size structure development of Czech farms after 1990.

István Bazsik
Hungarian University of Agriculture and Life Sciences
Recent situation and challenges in the Hungarian agriculture

Hungarian Central Statistical Office published the new agricensus data in 2022. The survey resulted in some surprising facts. Since 2010 there has been a new methodology to measure the number of farmers, in this way more than hundred thousand farmers were excluded from the survey, having less than a one-hectare field. These farmers mainly work

as self-sustaining farmers, without high monetary possibilities of budget or great investment potential. Besides this farmer group, there is another part of farmers who are potentially lagging for a lack of digital competencies. A significant part of farmers do not have enough knowledge and educational attainment to catch up to agriculture 3.0 even less to 4.0. They cannot use precision agrotechnology and often do not even feel the need for it. These two groups are the majority of farmers; however, they present a negligible minority in production. The classical intensive crop production and livestock cannot be profitable for small farmers due to their farm size which also excludes investment in modern high-tech machines. However, multifunctional agriculture with higher added value production provides an alternative way for them. Within that approach, short supply chain and social farm activities may present a breakout opportunity.

dr Łukasz Satoła
University of Agriculture in Krakow
Impact of the Covid-19 pandemic on the functioning of local government units in Poland

The Covid-19 pandemic was an unprecedented event in recent world history. Limitations and changes in the functioning of many areas of the economy also concerned the operation of local government. The necessary adjustments in the organization of the work of the self-government resulted in incurring adequate costs. The costs of providing many public services increased as a result of rising costs related to epidemic procedures and rising prices of many products. In the later period, it was necessary to make larger budget expenditures caused by the rising prices of performing tasks as a result of inflationary processes. At the same time, the finances of local government units were under pressure already before the pandemic. In Poland, there were increasing tendencies to limit decentralization and autonomy of local governments. The lockdowns introduced during the pandemic resulted in a reduction in tax revenues of some municipalities. The pandemic had the greatest impact on the development of own income potential. The rapidly growing costs of performing public tasks will have a greater impact on the functioning of local government units in the future than the pandemic.

Kinga Nagyné Dr. Pércsi PhD
Hungarian University of Agriculture and Life Sciences
Effects of food crisis and prospectives in the Hungarian food/agricultural sector

We are seeing market anomalies that we did not see before (COVID-19 pandemic, Russian – Ukrainian war, drought, dumping of Ukrainian grain) so we could not even prepare a scenario for them. They hit us in an extremely short time, and with extraordinary force. However, the 80 percent co-financing provided by the Hungarian government to the sector is unique in Europe and provides a special opportunity for the Hungarian agricultural sector. The aim of the presentation is to provide an insight into the Hungarian agricultural and food market situation, gathering the factors that are of decisive importance in the shaping of market processes, and the reactions that can be effective based on the literature.

dr hab. Eng. Agnieszka Klimek-Kopyra
University of Agriculture in Krakow
Economic analysis of biofilm use in sustainable soybean cultivation

Soybean is one of the most perspective commodity crops grown in Europe. The yield strongly depends on the weed management, which requires an integrated approach for pesticide consumption. Increasing fungicide cost becoming a threat to farmers income and hazard to environment. In the light of new EU strategy dedicated to 'chemical pesticide-free agriculture', the new approach for weed management is solid. The biofilm has been proposed as an alternative approach to aid sustainable soybean protection against weeds infestation. The aim of the study was to evaluate the agronomic efficiency of biofilm relative to control and herbicide crop protection treatments, and analyse economic benefits from yield increases versus the cost of biofilm. We have proved that the use of biofilm generates similar cost for the farmer, but benefits of using biofilm for environment seems to be priceless.

Ing. Alice Čížková
Mendel University in Brno
Vliv přírodních krycích materiálů na snížení vodní eroze ve vinicích (in Czech language): The effect of natural covering materials on the reduction of water erosion in vineyards

During the monitored years 2018-2020, the influence of natural covering materials on the reduction of water erosion was evaluated at the experimental vineyard of Velké Bílovice. As part of the experiments, the effects of different natural cover materials (crushed grain straw, wood chips, compost) were verified, which were applied to the soil surface in the vineyard's interrows. The evaluated parameters of this experiment were soil moisture and the volume of soil runoff during rainfall. The results indicate a positive effect of the used covering materials on soil moisture, but above all on the volume of soil particle wash-off during erosion processes, when there is a significant reduction in the wash-off of soil particles. Based on these results, the use of natural covering materials can be identified as an important agrotechnical measure for viticultural practice.