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## **Bibliography**

## ECONOMIC AND AGRICULTURAL BOOKS

BADORA A., KUD K., CELIŃSKA M., DRĄŻEK O., KLIMKIEWICZ E., MAJEWSKA D., PASEK A., SNOPEK A.: Nowe style konsumpcji (New Styles of Consumption) – Wyd. Difin, Warsaw 2020, 143 pp.

Proper nutrition consists in fully covering the body's needs for all nutrients needed for psychophysical development and maintaining health. It can be carried out with a different range of food products. Today, new patterns of consumer behavior are popularized all over the world, which undergo the so-called homogenization process, which means aligning people's eating habits. This phenomenon results, among others, from unifying the offers of shopping centers, the impact of advertising and the media, the popularization of fast food restaurants, the so-called convenience food and detraditionalization, i.e., reducing the importance of traditional food patterns present in the culture of a given population. A team of experts from the Faculty of Agrobioengineering at the University of Life Sciences in Lublin attempted to present consumption models based on new generation diets and changes in the food pyramid. The authors of the monograph discussed the structure of consumption of plant products in the EU countries, taking into account health, as well as cultural and social factors that affect changes in consumption profiles and making purchasing decisions. They characterized selected diets (Mediterranean, vegetarian, vegan), their advantages and disadvantages, and their impact on health. They analyzed changes in the food pyramid of Poles and emphasized the influence of selected trace elements on the human body. They characterized selected dried fruits and nuts as well as their pro-health qualities. They discussed the issue of enriching food with chemical elements which are a source of nutrients. They emphasized the importance of the acid-base balance of beverages consumed by humans as regulators of the body's water balance. They also discussed selected aspects of consumer behavior on the food market related to the logistics and quality of food supplies as well as consumption styles based on new generation diets and changes in the food pyramid. (M.M.)

SIDORCZUK-PIERTASZKO E.: Wdrażanie koncepcji zielonej gospodarki w regionach Polski (Implementation of the Concept of Green Economy in the Regions of Poland) – Wyd. Uniwersytet w Białymstoku, Białystok 2020, 168 pp.

The countries of the European Union have actively participated in environmental protection and the promotion of the sustainable development strategy. Initiating actions to change the patterns of socio-economic development is reflected in the strategies adopted by the European Commission, e.g. EUROPE 2020. The transformation of social life, including the economy, includes mutually complementary and interpenetrating concepts of green economy, low-emission economy and resource efficient, circular economy, bioeconomy. More and more funds are being allocated to activities within these concepts; in the 2014--2020 perspective it was EUR 40 billion, which is twice as much as in the 2007-2013 perspective. The author of the presented monograph aims at investigating how issues related to the green economy are included in the development strategies of Polish voivodships and how the pro-ecological modernization of the economy is progressing in them. She formulated the following research hypothesis: in the individual regions of Poland, environmental protection and green economy issues are more and more often taken into consideration in voivodship development strategies and the level of greening the economy is higher, measured by selected indicators, including the proprietary synthetic indicator. The analysis of the transformation towards green economy was carried out for 2004-2016, and the research on the development strategy of voivodeships and regional operational programs for 2007--2013 and 2014-2020. In the first chapter of the monograph, the author reviews the concept of pro-ecological modernization of the economy and its reception in the development policy of Poland. Then, she analyzed the scope of taking into account the issues of environmental protection and green economy in strategic development documents at the level of directions of activities and monitoring indicators. She also analyzed expenditure on the implementation of pro-ecological and green economy projects under regional operational programs. In the last part of the publication, the author defined the actual progress of regions in greening economies on the basis of statistical data and detailed indicators, as well as the proprietary synthetic indicator – the Regional Green Economy Index. (M.M.)

ZIELIŃSKA-CHMIELEWSKA A.: Ocena efektywności ekonomicznej przedsiębiorstw mięsnych w Polsce (Assessment of the Economic Efficiency of Meat Enterprises in Poland) – Wyd. Uniwersytet Ekonomiczny w Poznaniu, Poznań 2020, 263 pp.

In the coming years, the Polish meat market will face significant changes related to a slow and gradual decline in the cost advantages of raw materials and finished meat preparations. Therefore, competitiveness will be determined by the increase in the efficiency of meat processing, and the basic element of the chain of entities operating on this market are meat plants. Thus, the competitiveness of the Polish meat industry in the long term will depend on the improvement of the financial, technical, organizational, and environmental effectiveness of the meat plants operating on the market. The author of the monograph examined the level of and changes in the economic efficiency of meat enterprises in Poland in 2010-2017. The basic research material was the source data from EMIS Intelligence / EMIS Professional databases, which were used to identify and determine changes in financial efficiency and technical efficiency for 695 meat enterprises.

The author also used the results of surveys conducted in 2017 in 100 Polish meat plants, and on that basis, she designated and defined changes in environmental and organizational effectiveness. In her work, she adopted four research hypotheses: financial efficiency is related to each type of research efficiency; reducing the production gap leads to an increase in technical efficiency; organizational efficiency positively depends on internal conditions and trade policy; environmental efficiency positively depends on external conditions and those shaped by the domestic environmental policy. In the course of the analyses, the author partially positively verified the first and second hypotheses, and completely confirmed the third and fourth. The results of the research provide decision-makers with information for the purposes of shaping the policy regarding the meat industry and enable formulating recommendations regarding the improvement of the economic efficiency of meat enterprises in Poland. (M.M.)

SMYCZEK S. (eds.): Zrównoważona konsumpcja w polskich gospodarstwach domowych – postawy, zachowania, determinant (Sustainable Consumption in Polish Households – Attitudes, Behavior, Determinants) – Wyd. Uniwersytet Ekonomiczny w Katowicach, Katowice 2020, 266 pp.

A team of scientists from the Department of Consumption Research in Katowice analyzed the issue of sustainable consumption in households, which is important in the modern economy and science. The study of the phenomenon covers four main areas: spatial, organizational, subjective, and objective. The presented analyses develop, generalize, and integrate the existing theories in the field of behavioral economics with sociological theories. The following chapters of the monograph discuss the following issues:

- the origin and development of the concept of sustainable economic development and the place of sustainable consumption in it;
- the essence, conditions and significance of convergence in the processes of balanced consumption in a spatial system, international comparison of consumption in EU countries, assessment of consumption sustainability taking into account selected aspects;
- analysis of sustainable consumption in macroeconomic terms;
- characteristics of the concept of sustainable production, its evolution, tools and methods of measurement;
- analysis of consumption sustainability and assessment of its rationality and consumer behavior in the area of food consumption;
- analysis of sustainable development in the context of digitization of public services and the formation of sustainable behavior of digital service consumers;
- impact of virtualization on the level of sustainable household consumption and market behavior;
- weak and strong sustainability and their consequences for consumption and consumer behavior;
- determinants shaping consumer attitudes and a model of attitudes towards the concept of sustainable consumption in households;
- causes and conditions of the gap between the attitudes and intentions, and the behaviors of consumers. (M.M.)

*Prepared by M.M.* 

## ECONOMIC AND AGRICULTURAL ARTICLES

BAKKER L., SOK J., van der WERF W., BIANCHI F. J. J. A.: Kicking the Habit: What Makes and Breaks Farmers' Intentions to Reduce Pesticide Use? – Ecological Economics 2021, Vol. 180, https://doi.org/10.1016/j.ecolecon.2020.106868.

Referring to the assumptions of the Reasoned Action Approach, the authors of the article presented the results of research on the socio-psychological constructs determining the intentions of Dutch farmers in the use of plant protection products. They analyzed the responses to an online survey conducted in 2019 among 681 respondents in the production of cereals, fruit, vegetables, and flowers to assess which constructs influenced the attitudes of respondents regarding the use of pesticides. The research shows that the intention to reduce the use of substances harmful to the environment was strongly determined by the actions and approaches of other farmers being the reference group for the respondents. The surveyed agricultural producers saw the limited possibilities and autonomy in terms of reducing the use of pesticides, while perceiving such activities as risky from the production point of view. Fears of pro-environmental farming practices partially reduced the ethical beliefs of agricultural producers related to ecology. Therefore, the results of the research indicate the need for disseminating among farmers both effective examples of reducing the consumption of plant protection products, as well as the need for intensifying mutual exchange of experiences and information on the use of alternative methods of pest control, such as appropriate selection of plant varieties, rotation, or the use of precision farming solutions. The conclusions from the research should be taken into account when shaping agricultural policy instruments concerning the transfer of knowledge and information in agriculture. (M.D.)

BERTONI D., CAVICCHIOLI, D., LATRUFFE L.: Impact of Business Transfer on Economic Performance: the Case of Italian Family Farms – International Journal of Entrepreneurship and Small Business 2021, Vol. 10, doi: 10.1504/IJESB.2021.10040377.

Succession is an issue that is rarely discussed in relation to the agricultural sector, despite the fact that family farms dominate world agriculture. The authors of the article studied transfers of family farms and estimated the impact of the processes on the achieved economic results. The source of information was panel data from farms

continuously in the field of observation of the Italian FADN from 2008-2014. They considered succession of a farm as a transfer of agricultural productive assets by an older family member to a younger person (intergenerational succession). In their analyses, they considered the impact of farm transfer on the values of a number of economic variables, including production volume and intensity, value added and income per unit area, labor and capital. Two methodological approaches were used to capture the impact of transfers on the economic situation of farms. The first consisted in the application of the t test for the equality of the mean of the considered indices. The second method of estimating the impact of succession concerned the use of the propensity score matching (PSM) method. The research revealed that the succession increased the capital value of the researched farms. As a result, the economic results of the analyzed entities after their transfer, i.e., costs, added value and income per unit of capital, deteriorated. The authors of the article point to the need for improving the instruments for supporting investments carried out by persons starting farms, especially young farmers. (M.D.)

GAWROŃSKI D.: Ograniczenie skutków suszy w uprawach poprzez stosowanie kwasów humusowych i biohumusu (Reduction of the Effects of Drought on Crops by Using Humic Acids and Biohumus) – Zagadnienia Doradztwa Rolniczego 2021, No. 2, pp. 48-59.

Progressing climate changes cause, among others, the phenomenon of drought, which has occurred in Poland as many as 18 times in the past 30 years as shown by statistical data. Water deficit in the most important phases of plant growth is responsible for lower and poorer quality crops of field and horticultural crops. It is highly probable that the phenomenon of drought will progress year by year, and therefore one should find ways to protect crops against water shortage and drought. The author of the article drew attention to the use of innovative biotechnological products containing humic acids, natural biohumus and clay minerals. He provided their definition based on the Fertilizers and Fertilization Act, as well as the scientific and industrial definitions, and described their impact on soil and plants. The use of humic acids, biohumus, and clay minerals in plant production increases the content of humus in the soil, which allows to increase the sorption and water capacity of agricultural land. It is estimated that increasing the level of humus in the soil by 1% makes it possible to store twice as much water. It is one of the most effective ways to sustainably increase the water holding capacity of soil. The proper application of fertilizers containing humic acids, natural biohumus, and clay minerals can effectively reduce losses related to water shortages and positively affect the biological, physical, and chemical properties of soil. (M.M.)

de GORTER H., DRABIK D., JUST D. R., REYNOLDS CH., SETHI G.: Analyzing the Economics of Food Loss and Waste Reductions in a Food Supply Chain – Food Policy 2021, Vol. 98, https://doi.org/10.1016/j.foodpol.2020.101953.

Food losses and wastage are a global problem, span the entire agri-food chain and have negative environmental, economic, and social consequences. The article presents an economic model of food waste for consumers, intermediaries, and farmers. Due to the phenomenon of food waste at every stage of the supply chain, the entities included in it must obtain higher selling prices to compensate for the losses. The theoretical economic model developed for the research is able to accurately predict how interventions (public policies or private initiatives) aimed at reducing food losses affect the market. Thanks to the model, it is also possible to determine the size of indirect effects of taking specific actions at all stages of the food supply chain. The authors of the study present the interactions occurring in the food supply chain using a formal model and carry out a series of simulations based on data from the British market, in particular the poultry and fruit market. Estimates show that the economic effects of reducing losses vary with the commodity, the levels of elasticity of demand and supply, the degree of market openness to international trade, and the initial loss rates at each stage of the value chain. The authors observed the undulations of cascading effects up and down the supply chain, meaning that in some cases interventions to reduce food loss were amplified and in other cases weakened. (M.D.)

JĘDRZEJCZAK I.: Ekspozycja na ryzyko sytuacji pandemicznej COVID-19 i wrażliwość społeczno-ekonomiczna obszarów wiejskich i agrobiznesu (Risk Exposure to the COVID-19 Pandemic Situation and the Socio-Economic Sensitivity of Rural Areas and Agribusiness) – Ubezpieczenia w Rolnictwie. Materiały i Studia 2020, Vol. 73, No. 1, pp. 7-39.

Based on international and national research on the impact of a pandemic on the general economic situation and everyday life of societies, the author of the article analyzed the issue of spatial differentiation of the risk exposure to COVID-19 and social sensitivity to the effects of the pandemic, taking into account the specificity of rural areas and the agribusiness sector. As research tools, she used the risk exposure index and the socio-economic sensitivity index to a pandemic situation. She modified both indicators to identify differences between urban and rural areas. Among the most important factors increasing socio-economic sensitivity, she mentioned public feeling and the financial condition of households, which deteriorated due to high prices in shops, reduced expenses due to the loss or reduction of earnings, and the costs of treatment after infection with SARS-CoV-2. Using research by scientists from Germany and Switzerland and the analysis of two banks operating in Poland, she created an example of the sensitivity of a Polish farm as a case study. The author concluded that rural areas are less exposed to the risk of pandemic effects due to a lower population density than highly urbanized areas. On the other hand, the socio-economic sensitivity of rural areas and agribusiness is much greater than that in the city due to a lower level of wealth, worse infrastructure, and poorer access to health services. (M.M.)

KNAPP L., WUEPPER D., FINGER R: Preferences, Personality, Aspirations, and Farmer Behavior – Agri-Cultural Economics 2021, https://doi.org/10.1111/agec.12669.

In economics, there is a growing number of studies which, in addition to the individual's preferences and attitudes towards risk, also include personality characteristics and aspirations into decision-making models. The function of such models is to explain as many events as possible on the basis of the smallest possible set of parameters. The article analyzes selected features of farmers, relations between them, and the usefulness of the characteristics in explaining decisions in terms of farm management. In particular, the authors examined the role of attitudes towards risk, the importance of the personality type (especially in the dimension of self-efficacy and the sense of locus of control) and the significance of individual aspirations in making a number of economic decisions by agricultural producers. The decisions concerned practices, such as: preventing the spread of pests, using crop insurance against damage caused by hail, and initiating entrepreneurial activity by starting own processing and direct sale of agricultural products. To analyze the impact of the traits and attitudes of agricultural producers on managing farms, they used data collected in 2018 from 568 Swiss fruit growers growing sour cherries, plums, and grapes. The authors used two different methodological approaches. The first of them was based on stepwise regression with deliberate selection of variables. The second concerned the estimation of the parameters of the linear model of the extended Least Absolute Shrinkage and Selection Operator (LASSO) method and the selection of explanatory variables using the Akaike information criterion. The results indicated that the internal locus of control and the high production aspirations of the surveyed growers were relatively the best predictors of pest control practices. In turn, the use of plant crop insurance was influenced by all the considered personality variables (i.e., relatively lower self-efficacy, internal locus of control, and higher production aspirations), and especially a high level of risk aversion. The relatively higher propensity for risk, combined with the internal locus of control, translated into the entrepreneurship of the respondents. (M.D.)

**KOBYLIŃSKA M.: Regionalne zróżnicowanie pszczelarstwa w Polsce (Regional Variation of Beekeeping in Poland)** – Wiadomości Statystyczne 2021, Vol. 66, No. 2, pp. 25-38, DOI:10.5604/01.3001.0014.7388.

The author of the article discussed the importance of beekeeping for the development of agriculture in terms of obtaining bee products and the role of bees in the natural environment, i.e., their contribution to the production of higher and better crops. Then, using the data from the National Support Center for Agriculture (KOWR), the Regional Development Agency (ARR), IW, and the Apiculture Division of the Research Institute of Horticulture in Puławy for 2012, 2016, and 2019, she characterized beekeeping in Poland in terms of regions (voivodeships) and determined changes in the beekeeping sector. She analyzed the data on the number of bee colonies in absolute numbers and per 1 km² (number of bee colonies), the number of beekeepers, the average size of apiaries, total honey production, and honey production per colony. For the variables: number of bee colonies per 1 km², average size of the apiary, honey production per colony,

the mean value, minimum, maximum, standard deviation, coefficient of variation, and asymmetry coefficient were calculated. She stated that in the analyzed years the number of bee colonies and beekeepers was growing. The largest number of bee colonies was observed in the following voivodeships: Lubelskie, Małopolskie, Podkarpackie, and Warmińsko-Mazurskie, while the largest production of honey was in the Lubelskie voivodeship. (M.M.)

MEISTER M., BISSINGER K., TEUBER R: Faire Lebensmittelpreise. Analyse des Verständnisses von Akteuren entlang der Wertschöpfungskette (Fair Food Prices: Analysing the Understanding of Actors Along the Value Chain) – Berichte über Landwirtschaft 2021, Vol. 99, nr 2, DOI: https://doi.org/10.12767/buel.v99i2.345.

In the agri-food sector, but also in the media, there is a debate about fair food prices in the marketing chain. It is often argued that farmers are the weakest link in the supply chain and that the economic surplus is taken over by traders. A common argument in the discussion is the low prices of food and the lack of proper care for it, which result in large losses in retail trade and households. The authors of the article conducted appropriate qualitative research. The results showed that fair prices are characterized by the fact that it covers at least the production costs. If the price is fair for all participants, then it is based on a partnership between the producer and the retailer which excludes unfair commercial practices. (P.S.)

NACHTMAN G.: Rolnictwo ekologiczne w Polsce wobec działań na rzecz jego rozwoju (Organic Farming in Poland and Activities Undertaken for its Development) – Wiadomości Statystyczne 2021, Vol. 66, No. 7, pp. 24-43, DOI: 10.5604/01.3001.0015.0352.

The Common Agricultural Policy of the European Union offers a number of financial instruments supporting the development of organic farming, because this production system has a beneficial effect on the natural environment. It contributes to the improvement of soil and water quality, reduces the emission of greenhouse gases and chemical compounds polluting the air, and consequently reduces unfavorable climate changes. The European Green Deal adopted by the European Commission in the "From Farm to Fork" Strategy provides for organic production on 25% of the EU agricultural land by 2030. Meanwhile, in Poland, after a ten-year period of dynamic development of organic farming, i.e. since 2014, the trend has been slowing down and the number of organic farms is decreasing. Based on the Agricultural and Food Quality Inspection (IJHARS) and the FADN data from 2005, 2013, and 2018, the author of the article assessed the production and economic situation of organic farms, taking into account the importance of CAP mechanisms. The analysis was carried out in a dynamic approach, taking into account the distribution of the number of farms and UAA in voivodships, changes in the structure of crops and livestock, and the production volume of the most important plant and animal products at the national level. She stated that the main reasons for abandoning the ecological system are economic factors, such as: dispersion of production, too small areas of farms, administrative burdens, insufficient support for

organic livestock production, low profitability of production and farms. The reversal of the observed trend may be influenced by appropriate financial support and a rational agricultural policy offering aid and enforcing the implementation of environmental recommendations. (M.M.)

SABILLÒN B.H., GESTER-BENTAYA M., KNIERIM A.: Measuring Farmers' Well-Being: Influence of Farm-Level Factors on Satisfaction with Work and Quality of Life – Journal of Agricultural Economics 2021, https://doi.org/10.1111/1477-9552.12457.

The possibility of balancing development in the social dimension is related to the recognition of complex determinants of the quality of farmers' lives. Contemporary phenomena in the agricultural sector and in rural areas, such as land abandonment, depopulation of peripheral areas, or abandonment of agriculture, require an in-depth analysis of the location of agricultural producers. This may be possible due to the inclusion of farmers' life quality indicators in agricultural information systems. The aim of the study presented in the article was an attempt to operationalize the measurement of farmers' well-being by determining how the conditions and factors influencing the farm level affect their satisfaction with work and life. For the purposes of the study, data from 1099 farms under the FADN observation system from nine EU countries: Spain, Hungary, Poland, the Netherlands, Finland, Ireland, Greece, France, and Germany was used. The empirical material was collected for the implementation of the FLINT project – Farm Level Indicators for New Topics in Policy Evaluation. The authors of the article verified a set of hypotheses concerning the level of job satisfaction and the perception of the quality of life based on the partial least squares method in the structural equation model (PLS SEM). The research shows that satisfaction with farm work had a statistically significant and important influence on the satisfaction with life. Factors such as working time, consumption of agricultural productive assets, financial situation or social commitment significantly influenced farmers' satisfaction with their profession, but their combined effect explained less than 1/5 of the level of life satisfaction. The authors argue that agricultural information systems designed to monitor and compare progress with respect to sustainable development of farms in environmental and economic terms should be supplemented with a social dimension reflecting the quality of life of farmers and their families. (M.D.)

SADŁOWSKI A., WRZASZCZ W., SMĘDZIK-AMBROŻY K., MATRAS-BO-LIBOK A., BUDZYŃSKA A., ANGOWSKI M., MANN S.: Direct Payments and Sustainable Agricultural Development — The Example of Poland — Sustainability 2021, 13(23), https://doi.org/10.3390/su132313090.

The article presents the results of research on the significance of the direct payments system as a tool for supporting the sustainable development of agriculture in Poland. At the same time, the effects of the 2015 reform of the Common Agricultural Policy were assessed in this context. The impact of various allocation criteria on the regional

distribution of direct payments was investigated using a simulation method in the form of variant analysis ("what if" model). For the purposes of one of the variants, a multicriteria synthetic indicator was constructed, including stimulants and destimulants of the level of environmental sustainability of agricultural plant production. The analysis was carried out at the voivodship level. The timeframe of the study covered the 2010-2019 period. The analysis showed that the reform of the Common Agricultural Policy of 2015 moved the distribution of funds under the direct support system away from that which would support the sustainable development of agriculture. Applying certain basic sustainability criteria to internalize environmental externalities would lead to a radical redistribution of support under pillar I of the Common Agricultural Policy. The paper concludes that a real greening of the European Union's agricultural policy is a task still to be accomplished. (A.S.)

WURM L.: Obstbau unter sich ändernden Rahmenbedingungen (Fruit Production under Changing Conditions) – Berichte über Landwirtschaft 2021, Vol. 99, No. 2, DOI: https://doi.org/10.12767/buel.v99i2.366.

Integrated, sustainable, and market-oriented fruit growing in Austria and neighboring countries is characterized by a high technical level of production, but often by difficult distribution conditions. The share of organic fruit production in Austria has risen to more than 30%. In recent years, the occurrence of diseases and pests, as well as damage caused by weather (e.g. slight frosts, droughts) has increased. Consumers expect healthy food, i.e., fruit with minimal residues of chemical plant protection products. The COVID-19 pandemic may result in an increase in the importance of the supply of domestic fruit. Investments in protection against weather conditions and pests in fruit growing help to reduce supply fluctuations, but result in high costs and carbon footprint. Therefore, farms implement risk management instruments, modern plant protection products, and ecological technologies. An important instrument is to extend the existing direct marketing not only to rare fruit species, but also to projects of a regional nature. In cooperation with retailers, they can provide an opportunity for local fruit production. (P.S.)

Prepared by the Team

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