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# **Bibliography**

## ECONOMIC AND AGRICULTURAL BOOKS

KACZAŁA M.: Systemowe ryzyko suszy rolniczej a ubezpieczenia. Zadania dla państwa (Systemic risk of agricultural drought vs. insurances. Tasks for the State) – Wyd. Uniwersytetu Ekonomicznego w Poznaniu (*Poznań University of Economics and Business Publishing House*), Poznań 2019, 241 pages.

The progressing climate changes cause extreme climatic events such as droughts. Since 2000, Poland has faced a severe agricultural drought seven times, which was also the case in other regions of Europe and other parts of the world. The visible effects of drought include reduced yields, decreased animal welfare and lower income of agricultural holdings. Studies on drought and drought risk management in agriculture have notably gained on significance. Three cognitive gaps were identified for this domain: theoretical (the concept of agricultural drought, elements determining its perception, acceptability and risk tolerance limits pertaining to control activities), methodological (acceptance and risk tolerance level), empirical (risk perception, concerns, acceptance, tolerance, control activities and insurances). The author of the monograph bridges the study gap in the area of agricultural drought risk management. The purpose of the paper at the theoretical and methodological level is: conceptualisation of agricultural drought; determination of factors affecting the perception of drought risk by the farmers; identification of linkages between risk perception, risk acceptance and tolerance levels and taking the adaptation actions; proposing the instruments for acceptance and tolerance level measurement. The purpose of the study at the empirical level is to measure risk perception and its determinants; identify the frequency of control activities; identify the concerns; assess the actions to date on the example of Poland; draw conclusions for the state policy in terms of management in agricultural drought conditions. In order to reach these purposes, the author carried out a survey in agricultural holdings of area above 1 ha in the Wielkopolskie, Kujawsko-Pomorskie and Lubuskie Voivodeships that are most frequently affected by drought. The subsequent chapters of the monograph present:

- a review of risk definitions, including agricultural drought risk, its properties, measurement method and coverage in Poland;
- a review of theories used in risk governance (RG) and the concept thereof, which integrates various theoretical aspects of risk and refers them, in a structured manner, to specific stages of action coordination at the macro level;

- determinants of drought risk in Poland with an indication of farmers as the main stakeholders of drought management system. This chapter is based on empirical studies on drought risk perception, concerns, acceptance and tolerance levels as well as the scope of necessary control activities;
- insurances as an instrument of drought risk control, including its importance among other available methods, structure, scope of implementation as well as assessment and proposals of potential modifications on the basis of the results obtained in empirical studies. (M.M.)

#### ŁUKIEWSKA K.: Metodologiczne aspekty pomiaru międzynarodowej konkurencyjności branży na przykładzie przemysłu spożywczego (Methodological aspects of international industry competitiveness measurement on the example of food industry) – Wyd. Uniwersytetu Warmińsko-Mazurskiego w Olsztynie (University of Warmia and Mazury in Olsztyn Publishing House), Olsztyn 2019, 287 pages.

The author of the presented monograph dealt with measurement and assessment of the international competitiveness of food industry. Based on the available body of literature and statistical data, she created an innovative model of international competitiveness of the industry. It is of universal nature and it has a broad scope of application. It can also serve as a competitiveness assessment tool for various industries, sectors and branches of the economy. The two first chapters of the publication are theoretical. The author presents the genesis of the concept of competitiveness, changes in the views of interpretation of this phenomenon, the essence and classification of the competitiveness concept, its various definitions, industrial aspects of competitiveness, factors affecting competitive capacity of an industry on international markets and specific nature of competitiveness in food industry. The third chapter, methodological one, presents the selected methods of dividing the competitiveness indicators, competitive capacity and position measures as well as author's measurement model for the international competitiveness of food industry ordered according to different criteria of competitiveness measure. The last three chapters present the analysis of empirical studies performed by the author on the basis of data for the EU countries collected in the years 2007-2015. The chapters contain the assessment of competitive capacity of food industry in separate countries and assessment of competitive position of the sector. The assessments were based on the typology and ranking of the EU countries by the assessed indicators. When performing a multi-dimensional analysis of indicators describing the competitive capacity and position, the author assessed competitiveness of food industry in the individual EU countries. She determined the interrelations between the capacity and position indicators and identified the causal links between these categories. Theoretical and empirical diagnosis of factors and measurements of food industry competitiveness is of important for operation of the agricultural business in the era of liberalisation and globalisation of agricultural markets and for the economic policy in the context of establishing new solutions for the EU competitiveness and entrepreneurship development policy. (M.M.)

# **PIETRZAK M.: Fenomen spółdzielni rolników. Pomiędzy rynkiem, hierarchią I klanem (The phenomenon of farmers' cooperatives. Between the market, hierarchy and clan)** – Wyd. CeDeWu (*CeDeWu Publishing House*), Warsaw 2019, 392 pages.

The object of interest of the author of this monograph is farmers' cooperatives producing the means of agricultural production and involved in sales of agricultural products or agri-food processing. This publication does not focus on either agricultural production cooperatives or entities supporting agriculture in the area of finance (cooperative banks, mutual insurance associations). The author aimed at presenting the farmer cooperatives as an economic phenomenon, taking into account the existing economic approaches: neoclassical economics, new institutional economics, theory of systems and theory of organisation. The paper provides a conceptual review, while carefully selected foreign and domestic literature and profound own analyses enabled the author to conceptualise the cooperatives on a broader basis as hybrids accumulating the features of three coordinating mechanisms: market, bureaucracy and clan. The first part of the monograph presents the neoclassical approach. The author presents the early trends in economic analysis on cooperatives, the line of disputes, whether cooperative is an extension of operation of its members or an independent enterprise, as well as neoclassical model of cooperative (an exemplary cooperative supplying the members in fertilizers) and the impact of assumptions adopted for the cooperative's objectives on model solutions (in short and long time perspective). In the second part, a cooperative is presented from the perspective of new institutional economics. The author described the genesis and development of this theory and its key concepts, transactions, contracts and transaction costs. He described the cooperative as a hybrid coordination institution and substantiated its operation in context of unreliability of market contracting. According to the author, cooperative is a specific form of ownership. He emphasized the difficulties resulting from limited ownership rights, their sharing and separation. The third part of the monograph features the cooperative as a system. It presents the elements establishing the cooperative as well as factual and regulatory interrelations. The part describes a specific system of coordinated activities based on readiness to participate, concurrence and a common objective, followed by balance as a condition of continuity and development. (M.M.)

**WIELICZKO B.:** Dylematy tworzenia długookresowej polityki rolnej (Dilemmas of long-term agricultural policy-making) – IERIGŻ – PIB (*Institute of Agricultural and Food Economics – National Research Institute Publishing House*), Warsaw 2019, 193 pages. Studia i Monografie nr 173 (*Studies and Monographs* No. 173).

Due to an increasing number of challenges to be faced by agriculture, agricultural policy-making becomes even a more complicated and intricate task. In recent past, this policy focused on the issues of effectiveness and justice. At present, it must consider the environmental issues (supplying public goods, ensuring animal welfare) and increasing social expectations. The presented monograph, based on systematic review of global literature, presents the conceptual approach to the long-term agricultural policy-making.

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It aims at determining a method of identifying priorities in agricultural policy in a long time perspective and in the case of uncertainty as to future arrangements based on known trends and directions of changes in agriculture. The paper also specifies the actions to be implemented in the agricultural policy to make it effective and efficient in terms of shaping the agricultural sector in line with the expectations of the stakeholders taking into account the directions of socio-economic development by 2050. This publication is consistent with the so called anticipatory governance i.e. the decision-making method with the use of data and information enabling determination of future results of various activities and phenomena.

The research approach applied by the author represents, however, the complexity economics, since the performed analysis of long-term determinants of agricultural development demonstrates that both uncertainty and continuous evolution of the conditions for conducting an agricultural activity address the assumptions of this economic theory. In the first part of the monograph, the author presented her concept of determining long-term objectives of agricultural policy based on the backcasting approach. She presented the studies pertaining to the global development scenarios in 2050 perspective, which emphasize the need to re-model the agricultural policy in order to ensure food security with regard to climate change affecting the agricultural production. In the second part, the author presented various instruments which allow for achieving the established goals for agricultural development on the basis of literature review. (M.M.)

Prepared by M.M.

# ECONOMIC AND AGRICULTURAL ARTICLES

**BEDNARCZUK A., ŚLESZYŃSKI J.: Marnotrawstwo żywności w Polsce (Food wastage in Poland)** – Zeszyty Naukowe Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie. Problemy Rolnictwa Światowego (*Scientific Papers of the Warsaw University of Life Sciences, Issues of Global Agriculture*) 2019, Vol. 19, Issue 4, pp. 19-30.

Due to the depletion of natural resources and widespreading model of sustainable development, the issue of food wastage is becoming of crucial importance on a global scale. The authors of the article analysed the scale of this phenomenon in Poland, using international and domestic statistical data. Based on the FAO and EC materials, they defined terms such as "food loss", "food waste" and "wasted food" and, in addition, emphasized inconsistency of data and absence of commonly accepted methodology for collecting, processing and presenting information describing food wastage. They pointed out that the scale of this phenomenon in Poland is significant, since it amounts to 174.1 kg *per capita* in annual terms. It ranks our country on the fourth position among the studied EU countries and translates into food wastage accounting for approx. 9 million of tonnes of food per annum. The actions aiming at reduction of food wastage include activity of the Federation of Polish Food Banks and opening of the so called food sharing facilities. Legislative actions aiming at establishment of legal and economic regulations preventing food wastage are necessary. (M.M.)

BERKES J., WILDRAUT CH., MERGENTHALER M.: Chancen und Perspektiven für einen Dialog zwischen Landwirtschaft und Gesellschaft für mehr Akzeptanz und Wertschätzung – Einschätzungen von Branchenvertretern aus NRW (Chances and prospects of dialogue betweeen agriculture and society in terms of broader acceptance and respect – assessment of representatives from the sector in North Rhine-Westphalia) – Berichte über Landwirtschaft 2020, Band 98, Ausgabe 1.

The authors of the article attempted to assess the possibility of a constructive dialogue between business entities of agricultural and food sectors and the society, being represented in this case by food consumers. In recent years, despite numerous informational, educational and advertising campaigns, the discrepancies in perception of agriculture and food industry have deepened, while the image of agricultural sector in the society has deteriorated. The authors performed their studies in the form of a survey with representatives of individual industries of agricultural sector in Germany. The results demonstrated that direct meetings of the consumers and industrial representatives have significant improvement capacity, since they build mutual trust and reliability. A transparent dialogue plays a crucial role in this respect, however, it requires more commitment on the part of the agri-food sector. (P.S.)

CHATZIMICHAEL K., CHRISTPPOULOS D., STEFANOU S., TZOUVELE-KAS V.: Irrigation practices, water effectiveness and productivity measurement – European Review of Agricultural Economics 2020, Vol. 48, No. 2, pp. 467-498, doi:10.1093/erae/jbz012.

According to the estimates, agriculture, as an economic sector, consumes more than 70% of fresh water resources. With regard to increasing global demand for food, the need for improving effectiveness of water use has been brought up more and more often. Thus, in the economic research, this resource has recently been treated as a specific production factor, while researchers and practitioners focus on the methods to use water in a more efficient and effective way. The article presents a theoretical model aiming at measurement of irrigation effectiveness. It also analyses the impact of innovation on productivity growth in agricultural holdings based on smooth transition from conventional (drip irrigation) to state-of-the-art irrigation techniques (greenhouse suspended sprinkler systems). The authors developed an econometric model based on a two-stage estimation procedure, covering the processes of technological alignments in the sector and decomposition of total factor productivity (TFP). The data used in the model were taken from surveys performed in 56 small horticultural holdings with greenhouse production located in Crete. The results of the analyses proved that a technological change consisting in the introduction of new irrigation methods depended on individual features of farmers (human capital level) and specification of their holdings. The new methods of water use have vastly contributed to TFP increase (productivity rate increase by 7.54%). In addition, greater benefits from adaptation of innovative technological solutions were observed among the farmers working in relatively tougher climate and soil conditions. (M.D.)

**DOSTATNY D.F., CIĘPKAA., PODYMA W., BABALSKI M.: Obecne użytkowanie dawnych gatunków pszenic (Current use of ancient wheats)**–Zeszyty Naukowe Szkoły Głównej Gospodarstwa Wiejskiego w Warszawie. Problemy Rolnictwa Światowego (*Scientific Papers of the Warsaw University of Life Sciences, Issues of Global Agriculture*), 2019, Vol. 19, Issue 4, pp. 31-46.

A growing interest of farmers and consumers in agricultural products cultivated in the low-input organic farming system and current trends related to healthy nutrition cause interest in old species and cultivars of cultivated plants, including cereals. The reason behind the development of this trend is also the attempts of scientists to prevent genetic erosion of cultivated plants i.e. loss of the gene pool. The ancient cultivars of hulled wheat, such as einkorn and emmer, can be cultivated on poor soils, are resistant to biotic and abiotic stress, while their hulled grains are better protected against pests during storage and they have excellent nutritional and taste values. In the years 2016-2018, the Plant Breeding and Acclimatization Institute (IHAR) – National Research Institute carried out research on agricultural technique of organic farming of ancient wheat species. The authors of the article discussed the results of this research and formulated the conclusions. They emphasized that due to health and taste values, hulled wheats have become a subject of more and more comprehensive research and their global market continues to expand rapidly. (M.M.)

**GORYŃSKA-GOLDMAN E.: Ewolucja rozwoju żywności lokalnej w kontekście zrównoważonej konsumpcji (Evolution of local food development in the context of sustainable consumption)** – Turystyka i Rozwój Regionalny (*Tourism and Regional Development*) 2019, No. 12, pp. 43-57.

Aware consumers modify their consumption habits and reach for local food more and more often, since such food is fresh, low-processed, has a short and simple list of ingredients, and is natural and tasty. Local food market is developing gradually and provides an alternative to production and consumption in order to balance it. Based on literature studies, analysis of statistical data and domestic and international information from the entities operating on the local food market, the author of the article presented the concept and genesis of local food and demonstrated its importance in sustainable consumption development. She provided data demonstrating that the local food market continues to develop and is becoming popular as well as presented the examples of domestic and foreign initiatives supporting promotion of consumption of such food, i.e. Slow Food, locavore, Try Fine Food, Our Culinary Heritage, wiemcojem.pl, smakujlokanie.pl. The author emphasized that from the producer's point of view, production of local food due to the benefits achieved in the environmental and socio-economic terms became one of the essential elements of sustainable rural development. From the consumer's perspective, due to the taste, utility and health of local food, such production system forms a sound basis for development of the sustainable consumption model. (M.M.)

HAILU G.: Economic thoughts on COVID-19 for Canadian food processors – Canadian Journal of Agricultural Economics 2020, Special Issue, doi.org/10.1111/ cjag.12241.

The global coronavirus pandemic triggered an unprecedented health and economic crisis. The author of the article discusses the potential effects of the COVID-19 pandemic for Canadian food processors. This issue is of key importance, since the agri-food industry is essential to the Canadian economy due to employment level and generated income. According to the analyses, the existing pandemic affects the financial condi-

tion of the industry due to demand shocks. Food demand has been primarily affected by restrictions in the socio-economic life imposed by the authorities (e.g. social distancing, isolation, prohibition of providing various services), level of consumer trust to market institutions, government and private entities, as well as freezing of international trading. The latter is of particular importance, since Canada exports food to 180 countries and the value of food industry products marketed abroad in 2019 exceeded 37.5 billion of dollars. According to the author, the outbreak of the COVID-19 pandemic will limit the operation of all food industry sectors in a short time period. In the long term, regardless of introduced administrative restrictions, the pandemic will cause an increase in demand for processed food in retail trade, but also contribute to lower demand for gastronomic services. Facing a drop in demand from restaurants and hotels, followed by export restrictions, the food companies will switch to marketing of their products to domestic retailers. According to the author, supply shocks for food processors related to the coronavirus are determined by a limited inflow of production resources from abroad. At the same time, the Canadian food industry faces a challenge of ensuring sufficient workforce in transport, logistics, production and distribution of food. Another severe effect of the pandemic is associated with the structure of processing industry. In Canada, it is based on micro and small enterprises, whose low liquidity and capital make them vulnerable to crises. (M.D.)

HARDENBERG L., SCHAPER CH., HEISE H.: Die Bereitschaft deutscher Fleischer und Direktvermarkter zur Umsetzung alternativer Vertriebs- und Marktstrategien in der Vermarktung von Tierwohlfleisch (Readiness of German butchers and agricultural holdings involved in direct sales to implement alternative marketing strategies in distribution of meat products) – Berichte über Landwirtschaft 2020, Band 98, Ausgabe 1.

The structural changes in agriculture result in a progressing intensification of production aiming at improved specialisations, economies of scales and cost reduction. These trends in animal production may negatively affect the welfare of farmed animals, which is becoming more and more important for many consumers. Hence, consumers highly value the possibility of purchasing meat products directly in small processing plants and agricultural holdings. However, such distributors must compete with large plants and retail networks. The authors of the article assessed the readiness of small processing plants and agricultural holdings to implement the new forms of marketing strategies in order to strengthen their market position. The key issues of concern include higher costs of business activity resulting from maintenance of animal welfare and small economies of scale.

# LEE J.Y., QIAN Y., GUSTAVSEN G.W., NAYGA JR. R.N., RICKERTSEN K.: Effects of consumers' cohorts and age on meat expenditures in the United States – Agricultural Economics 2020, Vol. 52, doi.org/10.1111/agec.12568.

The issue of age and generation of consumers is rarely considered when analysing the factors shaping food demand, despite the fact that the consumption habits and styles as well as behaviours of individual demographic groups usually change over the years. The authors of the article attempted to analyse the impact of these determinants on meat consumption in the USA. They focused on adverse effect of excessive meat consumption on population health (contribution to obesity, neoplastic and cardiovacular diseases) and the vital importance of this industry to the US economy. In their research, they analysed fluctuations of demand for beef, pork, poultry and other meats taking into account the impact of demographic cohorts, consumers' age and situation on agricultural markets in the years 1984-2012. They revealed that including the demographic effects into calculations results in better identification of changes in meat demand comparing to omission of these effects. The authors believed that agri-food market analysts should consider demographic and cultural determinants in their projections of demand and volume of sales. The research results confirmed that the persons born in the earlier generations have bought much less meat comparing to their peers from the later generations. The authors revealed also that tendency to purchase poultry increases with age, while the opposite tendency is observed for red meat. In the case of certain generations of the Americans, beef and pork have been treated as substitutes. In addition, the research documented that, from all analysed types of meats, the highest price flexibility was recorded for beef. Having considered the demographic cohort effect resulted in the increased intrinsic absolute values for beef, pork and poultry and decrease of these values for the other types of meats. According to the projections of the authors, aggregate demand for poultry meat in the USA will continue to grow at least by 2022. (M.D.)

## **LÖTJÖNEN S., TEMMES E., OLLIKAINEN M.: Dairy farm management when nutrient runoff and climate emissions count** – American Journal of Agricultural Economics 2020, Vol. 102, No. 3, pp. 960-981, doi:10.1002/ajae.12003.

Due to the climate policy, a great deal of attention has been given to dairy farms. Emissions of methan, carbon dioxide and nitrogen suboxide related to animal production contribute to global warming to a large extent. The development of the effective climate policy mechanisms requires, however, a deeper understanding of specific nature of agricultural sector of animal breeding, including dairy cattle. The article presents a theoretical model and empirical simulations pertaining to optimal private and social methods of dairy farm management in the case of nitrate runoff and greenhouse gas emission. According to the authors, dairy farm management requires making many critical decisions on, e.g. herd size, animal nutrition, type of fertilizers or cultivated crops. Manure storage and application methods as well as milking frequency are also important. The article describes optimal instruments of climate and water policy addressed to dairy farms. It was proved that implementation of climate instruments alone contributes positively to water purity. In addition, positive climate impact can be achieved by implementation of mechanism focused on the protection of water resources. Detailed model of bio-economic simulation applied in the study proves that management decisions made by milk producers affect both climate and water quality. In the opinion of the authors, dairy farms have a greater room for manoeuvre in adaptation of water policy instruments than climate policy instruments due to their potential to reduce the amount of fertilizers in the soil. (M.D.)

### PETERSEN L., THIMERMANN I., BREUSTDET G.: Einstieg in den Ökolandbau – Ergebnisse einer Regionalanalyse (Implementation of organic farming – results of regional analysis) – Berichte über Landwirtschaft 2020, Band 98, Ausgabe 1.

The German agricultural policy assumes that in the future the organic farms will gain on importance thanks to the appropriate support programmes. Precise development of such programmes requires identification of factors determining the decisions made by farmers in terms of implementing organic production methods and obtaining relevant certifications. The authors of the article assessed the economic, personal and regional factors affecting farmers' decisions. They performed their research using the regression analysis and the empirical material covered the business years: 2005/06-2007/08 and 2012/13-2014/15. The research results demonstrated that the decisions on transformation were made primarily by farmers holding permanent grasslands. Young age and high education level of farm managers also played a vital role. In regional perspective, a large share of organic farms was observed in the southern (mountainous) regions of Germany and one could even speak of the so called Bavarian effect. (P.S.)

### SCHULZE SCHWERING D., HUCHTEMANN J-P.: Einflussfaktoren auf die Attraktivität einer Tätigkeit im Vertrieb bei Studierenden der Agrarwissenschafte (Factors influencing the attractiveness of employment in distribution and trade sectors for students of agricultural sciences) – Berichte über Landwirtschaft 2020, Band 98, Ausgabe 1.

The German agribusiness lacks well-educated employees, and in particular employees willing to hold the management positions. This problem is faced primarily by the enterprises in the distribution and trade sectors. In general opinion, the image of working in trade and marketing is poor. The authors of the article assessed the attitude of students of economic and agricultural faculties to work in such positions. The research was performed on a group of 299 students with the use of the regression analysis. The research results demonstrated that the key determinant continues to be career development opportunities and related student expectations. (P.S.) WIELEWSKA J.: Determinanty rozwoju ekoinnowacji w przedsiębiorstwach agrobiznesu (Determinants of eco-innovation development in agribusiness enterprises) – Turystyka i Rozwój Regionalny (*Tourism and Regional Development*) 2019, No. 12, pp. 103-113.

Innovative solutions in modern enterprises must be implemented in line with environmental protection principles and sustainable development concept. Thus, innovative activities should be of ecological nature and consider maintenance of economic, social and environmental balance. The body of literature has recently identified the concept of eco-innovation among the other innovative activities. The author of this article presented numerous existing definitions of this concept and emphasized their common element: no harm to the environment. She listed the types of eco-innovation (product, process, organisational), environmental impact assessment methods (direct and indirect) and scope of analysis (ecological, social and economic). Then, she presented the results and conclusions from the studies conducted in 2019 using a diagnostic survey method among the agribusiness enterprises in the Pomorskie Voivodeship. The analysis of survevs obtained from owners, managers or persons in charge of environmental protection in the company identified the determinants for development of eco-innovations implemented in agribusiness and reasons for reluctance to invest in ecological solutions. She revealed that the companies implementing eco-innovations are driven by environmental, economic and social benefits, while the key obstacles for such activities include obsolete infrastructure, financial limitations, high economic costs and market instability. (M.M.)

ŽIVOJINOVIĆA I., WEISS G., WILDING M., WONG J.L.G., LUDVIG A.: Experiencing forest products – an innovation trend by rural entrepreneurs – Land Use Policy 2020, Vol. 94, doi.org/10.1016/j.landusepol.2020.104506.

There is increasing talk of innovations in the context of improving prosperity of rural inhabitants. New rural products and services are vital in terms of challenges faced by these areas, such as globalisation, technological progress, strong competition on agricultural markets, population ageing or expansion of cities. The perception of rural areas has changed in recent years. At present, they are perceived as a consumption area rather than as a location of production activity. At the same time, demand of urban inhabitants for products and services closely related to natural environment continues to grow. Thus, there are numerous innovative offers in rural areas using forest products and services - NWFP (non-wood forest products) (such as consumption of mushrooms, berries, herbs, hunting combined with hiking, education and adventures). The authors of the article conducted research on whether and in what manner the growing demand for NWFP created the new markets in rural areas. They analysed data obtained with the use of a structured survey method from the managers of four innovative micro-enterprises from Austria and the Great Britain. The operations of the NWFP sector were described in terms of application of both economy of experience (referring to cognitive, aesthetic, escapist and entertaining experiences) and innovative system concept. They stated that all four undertakings referred, on one hand, to conventional and local skills as well as cultural values, and on the other hand directly responded to the needs of the new-type consumers. The success of the analysed companies and innovative business models consisted in creating the new social values based on traditional products. The authors believe that the research results point out at lack of institutional support for development of innovative companies operating in conventional sectors, such as forestry. Better tailoring of innovative policy and establishment of dedicated support systems would be vital for inclusion of such entities to the main economic stream. (M.D.)

Prepared by the Team

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