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The 8th International Scientific Conference RURAL DEVELOPMENT 2017:

Bioeconomy Challenges

ABSTRACTS BOOK

23-24th November, **2017**

Aleksandras Stulginskis University Akademija, Kaunas district, Lithuania http://www.ruraldevelopment.lt

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Dear scientists and experts, rural development policy makers and colleagues

We are pleased to invite you to participate already in the 8th International Scientific Conference 'Rural Development 2017: Bioeconomy Challenges'. It already became as biannual tradition to meet colleagues all over the world here. In addition, we are pleased that this event became a common area for international scientific interdisciplinary discussion on rural development and innovations.

It is a pleasure for us to welcome you at Aleksandras Stulginskis University, which is developing due to the challenges of smart growth and bioeconomy. The University is becoming more and more advanced in science and more open to society for cooperation and sharing knowledge.

The Mission of University reveals our main aspiration: to develop and disseminate scientific knowledge and sincerely strive for save and healthy food and ful-fledged living environment for all citizens of Lithuania.

We are able do more "step by step" with global changes and innovations by sharing innovative ideas, experience and results of our researches.

The existing and rising challenges of bioeconomy will be discussed in different Conference sections:

- Biosystems Engineering and Environment Integrity;
- Agro-innovations and Food Technologies;
- Multifunctional Approach for Sustainable Use of Natural Bio-Resources;
- Social Innovations for Rural Development.

Together we can create synergy from broad participation from different sectors of the society, the scientists, practitioners, policy makers, private sector actors, NGOs, even young researchers and students. All the participants will be awarded the possibility to express their attitude towards the scientific issues related to rural development, especially in the focus of bioeconomy challenges.

Prof. dr. Antanas Maziliauskas Rector of Aleksandras Stulginskis University, Chairperson of Scientific Committee research by other authors that small companies had lower chance to be supported because of more difficult access to good advisory services and bank loans.

Keywords: investment support, food technologies, impact assessment

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Population Density in Rural Areas as a Driver of the Human Capital Development

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Abstract

Rural areas are typically characterised by uneven access to education and the resulting varying levels of pupils' educational attainment. The inefficiency of the education system may lead to a decreased level of human capital development in the society. It is therefore vital to identify the factors responsible for the inefficiency of the education system and take steps to mitigate their negative impact.

The aim of the present study is to determine the relationship between the population density in rural areas, the pupils' average level of examination performance and the educational value added.

The analyses were based on the exam results achieved by lower secondary school-leavers in 1,372 rural communes between 2012 and 2014. The original intention was to include all rural communes in the analysis. However, due to the incompleteness of the data concerning some of the communes, they were eventually excluded from the study. The final sample for analysis consisted of about 58% of all rural communes in Poland.

The communes were divided into classes, based on the criterion of population density. The objects under study were arranged in an ascending order according to the value of the population density variable, and then divided into

four classes (class A contained 25% of communes with the highest population density).

The classes thus defined were used as a qualitative predictor in the subsequently performed ANOVA test. As a next step, contrasts were determined by applying a simple contrast to the analysed classes of communes. The analyses revealed that the highest examination results were achieved in the communes with the highest population density, while the lowest examination results were found in the communes with the lowest population density. This dependence may be indicative of educational negligence at lower levels of education, in this particular case - at the stage of primary school.

The results of the analyses point to the need for expanding the network of nursery schools. To address the above problem, financial support should be provided from the state budget to social initiatives aimed at increasing the access to nursery schools, e.g. by creating an appropriate system of subsidies for nursery schools run by both local governments and private entities.

Keywords: ANOVA, educational effectiveness, human capital, rural areas, educational diversification

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Economic Rationale for Protected Geographical Identification Introduction for Latvian Canned Sprats

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Abstract

The article raises the question of economic rationale of including Latvian sprat to the protected geographical identification (GI) register of the European Commission. GIs aims to address the situation of asymmetric information on the market specifically a situation when high-quality foodstuffs customers' loyalty and trust can be jeopardized by presence of sub-optimal products. One