January 27, 2023

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Summary of the dissertation entitled:

**Assessment of spatial differentiation of the implementation of the Agri-environmental Program in Poland in 2008-2014**

**Keywords:** agri-environmental programme, packages, sustainable agriculture, organic farming, soil and water conservation, spatial distribution, Common Agricultural Policy.

Over the last 70 years, there has been an increase in agricultural production intensity and specialisation, which has led to water eutrophication, soil erosion, loss of soil organic matter, decrease in biodiversity and greenhouse gas emissions. The main task of the Agri-Environmental Measure (AEM), which is funded within the Common Agricultural Policy (CAP), is to reduce the negative impact of agriculture on the environment and maximise its positive impact on natural resources, climate or biodiversity. An important issue that should be evaluated is the impact of AEM on the transformation of the organisational structure and intensity of farms. It is also no less important to assess whether, under Polish conditions, AEM was linked to natural-structural factors and other instruments of the CAP. Knowledge in this area enables agricultural policy interventions to be optimally adapted to local conditions.

The paper presents the results of the research of farms implementing AEM commitments between 2008 and 2014, of which there were 130.6. A number of methods were used for this purpose. Descriptive measures including: measures of location (*arithmetic mean*), measures of variability (*standard deviation, coefficient of variation, minimum and maximum value*), measures of concentration (*Lorenz curve and concentration coefficient*) were used to describe the structures and empirical distributions of the analysed data. In addition, cluster analysis using the k-means method, correlation analysis and the successive quotient method were performed. The crop redistribution index, the soil vegetation cover index, the intensity of the organisation of agricultural production, and the Shannon-Wiener diversity index as well as the Pielou equality index were also calculated.

The utilised agricultural areas (UUA) on which the requirements of Package 1 Sustainable Agriculture were implemented were mainly found in voivodeships with a high agricultural culture. The largest area of agricultural land covered by Package 2 occurred in Zachodniopomorskie and Warmińsko-Mazurskie Voivodeships. Package 8 Soil and Water Protection, meanwhile, was implemented over the largest area in the Wielkopolskie, Lubelskie, Pomorskie and Kujawsko-Pomorskie Voivodeships.

Implementation of the AEM allowed the application of appropriate packages in areas where there were natural-structural risks related to fertilisation intensity, the quality of the agricultural production areas, soil erosion, soil humus content or the presence of forms of nature conservation. A correlation was shown to exist between the share of UUA covered by the AEM in the district and natural, productive-organisational and economic indicators.