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## Natural climatic conditions as a determinant of productivity and economic efficiency of agricultural entities

P. Adamišín, R. Kotulič, I. Kravčáková Vozárová, R. Vavrek

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The scientific contribution builds on the previous scientific studies analysing the determinants of productivity and economic efficiency of the agricultural entities and extends the knowledge of the spatial econometrics area at the NUTS IV level (at the district level) for the reporting period. The paper aimed to assess the development of productivity and economic efficiency of the agricultural entities in the reporting period based on the synthetic evaluation of the selected economic indicators by the methods of cluster analysis, and so to create a spatial map according to the regional differentiation at the NUTS IV level. On the basis of the completed analysis, we can conclude that the natural and climatic conditions have a dominant influence on the achievable productivity and economic efficiency of the agricultural entities in ensuring the sustainability of the economic performance of agriculture in different regions of Slovakia. On the basis of conducting the analysis, there were clearly defined two relatively coherent areas in Slovakia (at the district level), which are characterized by differences in the achieved production indicators and allow the regional differentiation of Slovakia into districts with more and less prosperous agricultural enterprises.

### Keywords:

economic performance, agrarian businesses, spatial econometrics, cluster analysis

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