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ECONOMIC ANALYSIS OF THE TYPICAL RURAL AREAS IN BULGARIA

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Abstract

Rural areas are taking an important and significant share of the EU. Bulgaria is not an exception and it is important to periodically review and analyze Rural areas` progress on certain parameters, such as GDP per capita, foreign direct investments, tangible fixed assets acquisition costs, coefficient of economic activity, etc. The main goal of this article is to review the progress for a period of 5 years in the typically Rural areas in Bulgaria according to classification NUTS 3 and draw possible future goals for better regional and rural development. The research is based on the official national statistics in Bulgaria and Eurostat. After processing the data, main results are showing higher statistical values in some of the analysed parameters, like GDP and average output of non-financial enterprises. We can conclude that even these results are better in last few years, there is need of more stable tendency, so we can consider the typical rural areas as fast developing regions in Bulgaria.

Key words**:** *Rural areas, Bulgaria, GDP*

INTRODUCTION

Villages and rural areas fall into the agenda of various analyses, assessments and policies.
They present a research field for the study and analysis of new models of economic, civil and social behaviour, and as such, remain at the center of our attention, not only as a source of agricultural products and foodstuffs, but as an asset and social welfare, with their unquestionable values – natural environment and landscape, open spaces, unique way of life, material and spiritual culture, place for recreation, tourism and rest (Georgieva-Stankova et. al., 2018) [4].
The typology "urban-rural territories" is presented by Eurostat in the Guide to typologies of regions (Applying the Degree of Urbanisation, 2020) [1, 2].
The etymology of the term urbanization is very complex, there are different interpretations of a large number of authoritative scholars dealing with this matter.
Regional Science has an important role to play in providing decision makers with evidence-based research that meets the challenges of the post-urban world.(Westlund, H. and Borsekova, K., 2023)[11].
The word comes from the Latin urbs, hence the adjective “urban” in translation - urban or more urban.
In the 14th century the term “urbanity” enters in the literature as a concept, referring to the emergence and development of cities (Marinov, P., 2021) [6].
There are three types of approach to classify urban and areas rural NUTS 3 regions.
The first step is to identify the population in Rural areas: "Rural areas" are all areas outside urban clusters. "Urban clusters" are groups of contiguous grid cells of 1 km² with a density of at least 300 inhabitants per km² and a minimum population of 5,000.
In the second step, NUTS 3 regions are classified as follows, based on the proportion of their population in rural areas:
-"*Predominantly rural*" if the share of the population living in rural areas is higher than 50%
-"*Intermediate areas*" if the share of the population living in rural areas is between 20% and 50%
-"*Predominantly urban*" if the proportion of the population living in rural areas is less than 20.

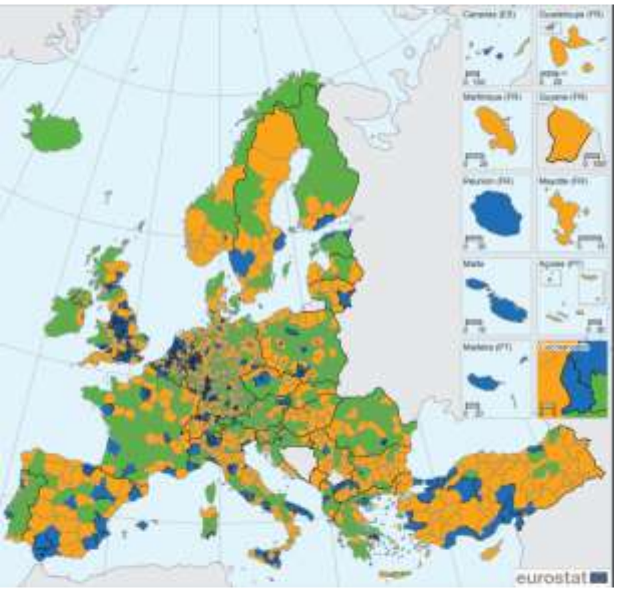
In a third step, the size of urban centers in the region is taken into account.

A predominantly rural region that contains an urban center of more than 200,000 inhabitants, constituting at least 25% of the region's population, becomes intermediate.

An intermediate region that contains an urban center of more than 500,000 inhabitants, constituting at least 25% of the regional population, becomes predominantly urban.

In 2018, the OECD produced a new typology complementing the previous typologies by introducing the concept of *functional urban areas* to better reflect the link between rural and urban areas (Féret, S. et. al., 2020) [3].

The image of the urban-rural regions in the EU is shown in Map.1.



Map 1. Urban-rural typology regions in EU in 2022
Source: Eurostat, 2023 [2].

The social and economic status of each region, its development programs, as well as national strategies and plans must be taken into account when planning the goals and objectives for sustainable development (Marinov P., 2020) [5].

It is important to define that all regions in Bulgaria according to NUTS 3 level are 28 and they are matching with the districts of the national regions division.

Map 2. Rural-urban territories, LAU 1, Bulgaria
Source: Spatial concept of Bulgaria(2013-2025) [10].

More than 80% of the territory of the country is rural and you can see the exact distribution to Figure 2 (NSRD, 2019) [7].

In this context, the purpose of the paper is to analyse the economic status of the typical rural areas in Bulgaria using specific indicators.

MATERIALS AND METHODS

The tasks for accomplishing the research goals include 1) selecting proper territory type – typical Rural areas in Bulgaria; 2) collect and classify the information based on the official National Statistical Institute; 3) analyzing and processing the information, followed by conclusions for the economic status of the rural areas.

The regional cut in the research methodology is based on the Gross Domestic Product per capita in Bulgaria. The area of research includes seven regions and they all are classified as same type.

In order to guarantee the proper information processing, following methods are used: analysis and synthesis; inductive, deductive and translational methods; grouping, systematization, classification; statistical methods for characterizing dynamic and variation statistical series; structural analysis; econometric methods; cluster analysis.

RESULTS AND DISCUSSIONS

The average Gross Domestic Product per capita (GDP) for all seven typical rural areas was just over 64% of the national average in 2015 and fell to over 63% in 2021, due to the

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fact that the GDP per capita in rural areas is growing more slowly than the national average.

The average GDP for rural areas reached BGN 12,449 in 2021. Of course, there are differences between the districts, which are not significant, but we can note that some of the rural districts have a higher growth rate than the average for the seven regions (61.1%) and the average for the country (62.4%). These are Kardjali (81.9%), Vidin (82.2%), Razgrad (67.1%). The lowest growth rate of GDP is in the regions of Smolyan (43.9%) and Sofia region (45.3%).

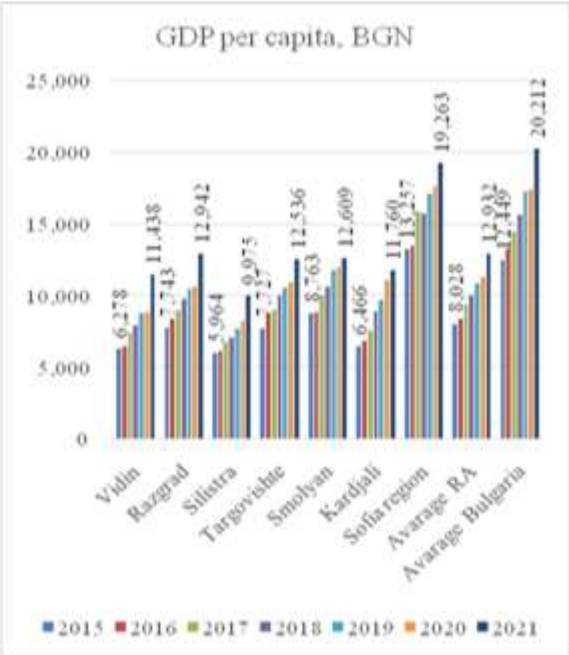

Fig. 1. Gross domestic product per capita, BGN
Source: NIS [8].

However, the growth of the cultivated goods per capita in the rural areas is the result not only of an increase in the production of goods, but also of the unfavourable trend of decreasing the number of the population, with the exception of the Kardjali region (Fig. 1).

The average Economic Activity Coefficient (EAC) for rural areas (2015-65.8%, 2021-67.8%) is lower than the average for the country as at the beginning of the observed period (2015-69.3%), and at the end of the period (2021-72.0%) (Fig. 2).

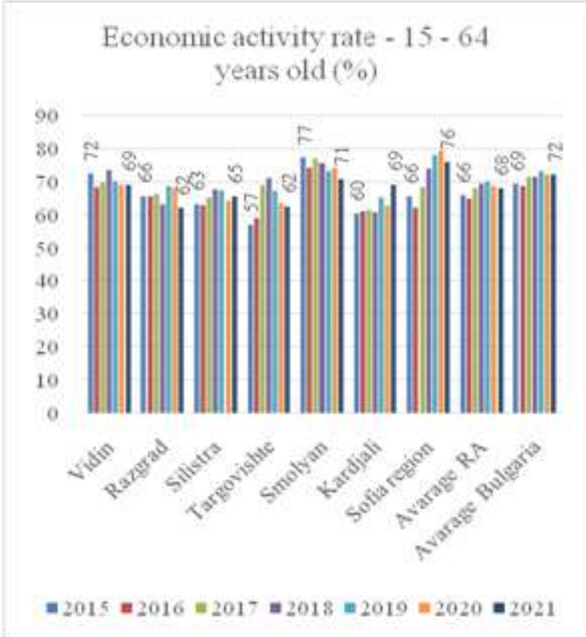

Fig. 2. Economic activity rate - 15 - 64 years old (%)
Source: NIS [8].

There is a decrease in the difference, albeit very poorly-in 2015 the EAC index in the rural areas compared to the national average is 94.9%, and in 2021 it is 94.2% i.e. the economic activity coefficient increases faster in rural Areas than average in the country. However, this is also related to the higher rate of population reduction in these regions. An exception is the Kardjali district, where the population is increasing. The most unfavourable are the trends in the districts of Vidin and Smolyan, where we monitor a decrease in economic activity.

Undoubtedly, the adverse demographic indicators of Vidin region are caused and directly related to the increased net outgoing migration, which affects the reduction of the EAC of the area for the observed period. An increase in EAC was observed in Sofia-region (15.7%), with this temp ahead of the country average rate (3.9%), Targovishte (10%) and Kardjali (14.4%). From the other hand there is decrease to the EAC for districts: Vidin, Razgrad and Smolyan. It is important to point out that only in these areas (without Silistra) we have a net incoming migration, leading by Kardjali region (2016 to 2021), Targovishte (net incoming in 2021), Sofia region (net incoming in 2015) (Fig. 2).

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The average Foreign direct investments (FDI) for rural areas

FDI value is almost three times lower than the average for one area in the country throughout the observed period- 2015- 2.97 times, and 2021- 2.72 times.

FDI in rural areas has increased by 2018, and in 2019 they decreasedcomparedto 2018, but still we have higher than all previous years and to the end of the period in 2021. All seven rural areas are one quarter of the districts in the country (28), and they make up only approx. 10% of all FDIs in 2021 in the country. In each individual rural region, an increase in the FDI is reported, with the exception of the districts of Razgrad and Vidin.

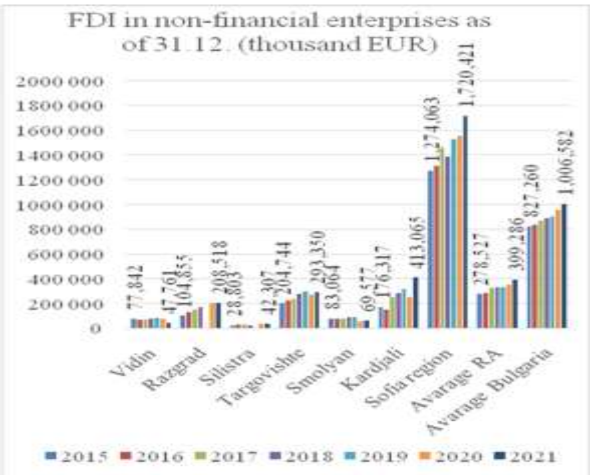

Fig. 3. FDI in non-financial enterprises as of 31.12. (thousand EUR)
Source: NIS [8].

It is a fact that the growth of FDI in rural areas (43.4%) is higher than the increase for the country (total and average per district) (21.7%).The largest is the rate of increase of FDIs in the district of Kardjali (by 134 %) and the Razgrad region (100%), and this rate is ahead of the rural average for the growth rate of the FDI for the five years, which is related to the net incoming migration and the investments coming mainly from Turkey. The other areas in which FDI increases are Sofia region and Targovishte. They also have a higher growth rate than the national average, but still as a level of FDI there are lagging there behind the leaders mentioned before. We have to also declare two regions with negative result for the period and these are: Vidin and Smolyan, with results respectively (-62% and -20%). There is decreasing trend monitored for Vidin district as the FDI are still lower than the average for the country. (Regional profiles, 2021) [9] (Fig. 3).

The average cost of acquiring tangible fixed assets (CTFA) for rural regions is two to three times lower than the average for one region in the country during the entire observed period - 2015 - 2.06 times, 2016 - 2.91 times, 2019 - 2.4 times and in 2021 the difference is 2.89.

CTFA in rural areas decreases until 2016, and then an increase is reported, but not in all areas the levels from 2015 are reached.

In four of the rural areas (Razgrad, Kardjali, Smolyan and Sofia region) an increase in CTFAwas reported for the observed period (2015-2021), and the increase in Kardjali region is remarkable – more than 3 times and reaching 78.8% compared to the average level in the country for 2019 (the value of Kardjali - 615,854 thousands, BGN., Bulgaria - 781,203 thousands, BGN), which is the main result of Turkish investment in 2019. In the remaining three regions (Vidin, Silistra and Targovishte) a decrease in this indicator is observed.

The very high result for the region of Targovishte in 2015 is related to the construction of the capacity of the factory "Trakia glass Bulgaria" part of the Turkish company "Shishedjam" near the regional center.

CTFA in the Vidin region are mainly in the agricultural sector. Average for the seven rural regions also has a decrease (with 29%). Seven rural areas contribute with 8.6% to the CTFA in the country in 2021.

However, this does not have a negative impact to digitalisation and for example the internet access in rural areas is increasing to 34% above the national average (27%) and above the EU average (11%) Fig. 4).

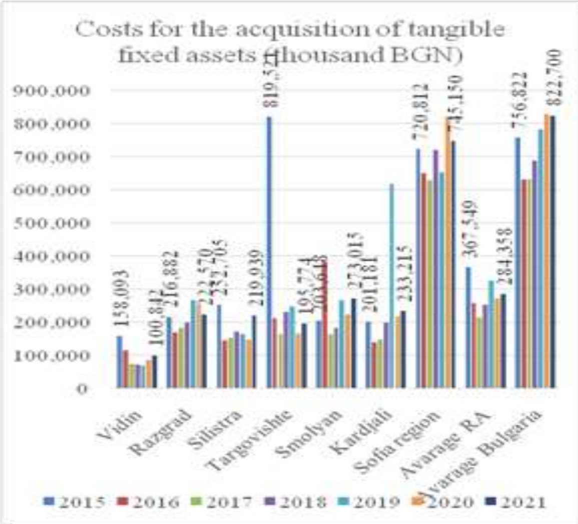

Fig. 4. Costs for the acquisition of tangible fixed assets (thousand BGN)
Source: NIS [8].

The average output of non-financial enterprises (ONFE) for rural areas is 2.5 times lower than the average for a region in the country both at the beginning of the observed period (2015) and at the end of the period (2021).

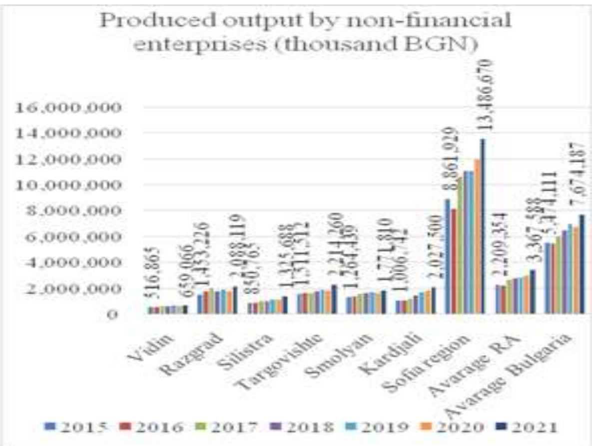

Fig. 5. Produced output by non-financial enterprises
Source: NIS [8].

The value of the produced products in rural areas reached in 2021 – 3,367,588 thousand BGN. Regarding the dynamics, it is clear that the rural areas show a growth in ONFE (with 52%), which also corresponds to the average rates for a region in Bulgaria, it is even higher than the average for the country value (40%).

The differences between the typical rural regions are not significant, with the exception of the Kardjali region, where the ONFE has doubled its value compared to the start of the monitored period.

The lowest growth rate of ONFE is in the Vidin (27%) and Targovishte region (46%), which, however, does not differ significantly from the rest of the rural regions and from the average for a region in the country (Fig. 5).

CONCLUSIONS

All indicators reviewed above are giving a global picture of the typical rural areas in Bulgaria. The analysis and evaluation of the obtained economic results allowed the opportunity to outline several general conclusions and recommendations, as follows:

- We can conclude that although the GDP is increasing, it is still lower than the average for the country and it is not enough one or more rural regions to be above the average values and this cannot lead to a tendency of increasing quality of live and better services in these areas.
- It is a good sign that we do have similar result for the economic activity rate in the rural areas compared to the country levels. Form the other hand the investments and the cost of acquiring tangible fixed assets is not very high and this is giving us a feedback that there are not enough investments in the local economy.
- After the pandemic situation related to COVID-19 lockdowns and multiple measures taken by the governments, there is a clear indication that the Foreign direct investments are with lower temp than the average for Bulgaria and also one of the lowest on European union level.
- Location is the main factor regarding the produced output by non-financial enterprises. It is visible from the analysis that Sofia region is with higher results than all other rural areas. So as closer as you are to a big city, more production could be generated and released to the markets.

Despite the mostly negative results for the main economic indicators, we have to also mention that there is positive influence from the most recent changes and more local companies updated their internal labor regulation that are allowing them to pass through the crisis periods. Many of them allowed remote working positions (where it is possible to be applied), others became more flexible from location point of view and these changes led to positive changes in their end production achievements. Lastly, we cannot deny that in 2021 for most of the indicators, we do have inspiring results and that will lead to even better progress in next years.

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REFERENCES

[1]European Commission, 2020, Applying the Degree of Urbanisation, A methodological manual to define cities, towns and rural areas for international comparisons, https://ec.europa.eu/eurostat/documents/10186/11395216/DEGURBA-manual.pdf/3a6bab6a-3fb1-4261-ad5b-e604cb67dc0d, Accessed on 10 February 2023.

[2]Eurostat, Statistics Explained, Territorial typologies mannual- urban-rural typology, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Territorial_typologies_manual_-_urban-rural_typology, Accessed on 10 February 2023.

[3]Féret, S., Berchoux, T., Requier-Desjardins, M., Abdelhakim, T., Slätmo, E., Chartier, O., Nieto, E., Millar, D., 2020, Framework providing definitions, operational typology and review of EU strategies for rural areas. D3.2, CIHEAMIAMM. 2020, pp.73. ffhal-03046064f, https://hal.science/hal-03046064/document, Accessed on 10 February 2023.

[4]Georgieva-Stankova, N., Yarkova, Y., Mutafov, E., 2018, Can depopulated villages benefit from the social and economic incorporation of ethnic and immigrant communities? A survey for Bulgaria, Trakia Journal of Sciences, No 2, pp. 140, 2018, https://www.researchgate.net/publication/326943481_Can_depopulated_villages_benefit_from_the_social_and_economic_incorporation_of_ethnic_and_immigrant_communities_A_survey_for_Bulgaria, Accessed on 10 February 2023.

[5]Marinov, P., 2020, Formation and implementation of sustainable development in Green infrastructure of urbanized Urban spaces, Jubilee International Science conference Economic science, Education and Real Economy: Development and Interactions in the digital age., Varna, Volume II, “UPH-Varna”, 739-747.

[6]Marinov, P., 2021, Urbanization - formation, factors and stages of the continent Europe, 6. İKSAD International Congress on Social Sciences, Széchenyi István University, Hungary, 511-517.

[7]National Strategy for Regional Development, 2019, https://www.eufunds.bg/sites/default/files/uploads/oprd/docs/2020-05/0_ANKPR_CORRECTED_30.04.2020%20final.pdf 131, Accessed on 10 February 2023.

[8]National Institute of Statistics, Bulgaria, https://www.nsi.bg/en, Accessed on 10 February 2023.

[9]Regional profiles, Statistics for Bulgarian regions, https://www.regionalprofiles.bg/bg/regions/vidin/, Accessed on 10 February 2023.

[10] Spatial concept of Development in Bulgaria 2013-2025, https://www.eufunds.bg/en/node/4554, Accessed on 10 February 2023

[11]Westlund, H., Borsekova, K., 2023, Rural problems, policies and possibilities in a post-urban world, Regional Science Policy and Practice, https://doi.org/10.1111/rsp3.12664