

GAPS IN THE EDUCATION LEVEL BETWEEN RURAL AND URBAN AREAS IN THE EUROPEAN UNION

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Abstract

The paper aimed to analyze the education level in the EU rural areas and identified the gaps existing between different member states compare to the EU average according to ISCED 2011 classification mainly for the population aged 15-64 years. The Eurostat data were processed determining the differences in percentage points registered in the year 2021. The results showed that, in more than 50% EU member states, the share of the rural population is over the EU mean of 22.3%. With 44.9% and 44.7%, Slovakia and Romania could be considered rural countries. The demographic changes in the rural areas have had a deep influence on enrollment and future labor force reserve. The early school-leaving rate is the highest in the rural areas, while tertiary education has lower percentages, on the last position being situated Bulgaria and Romania (below 10%). The EU rural population aged 15-64 years has a higher share than the EU average of 25.5% for "Less primary, primary and lower secondary education (level 0-2)" in only 9 countries: Portugal, Spain, Italy, Greece, Malta, Bulgaria, Romania, Denmark and Hungary. Compared to the EU mean of 74.5% for "Upper secondary, post secondary non-tertiary education (level 3-8)", a lower level was registered in only in 9 countries: Hungary, Denmark, Romania, Bulgaria, Malta, Greece, Italy, Spain and Portugal. The EU average for "Upper secondary and post secondary non-tertiary education (level 3 and 4)" accounted for 53% and this rate was higher in only 7 states: Czechia, Slovakia, Poland, Croatia, Romania, Hungary and Germany. For "Tertiary education (levels 5-8)", the EU-27 average is 21.4% and a higher rate was found only in 14 countries: Ireland, Belgium Luxembourg, Slovenia, Sweden, Cyprus, France, Estonia, Lithuania, Malta, Spain, Netherlands, Finland, Austria. The large variation of education level in the rural areas from a country to another has a deep impact on economic and social development. For this reason, besides the EU strategy, each country has to adapt its policy and strategy to the local situation and needs. Education and work force crises in the rural areas should be solved by a better infrastructure, more and highly competent teaching staff, a modern endowment in rural schools and a competence oriented curricula, extend of IT skills and digitalization, creation of partnerships and networks, exchange of experience and good practices, educational platforms and internet connections to ensure the permanent interlinks in the community and in the territory, and a proper financing for the field of education from the budget and access of the EU financial support provided by CAP 2021-2027, European Regional development Fund (ERDF), European Social Fund (ESF), EaSIF- European and Social Innovation Fund, ERASMUS Programme and Horizon 2020.

Key words: education level, rural areas, discrepancies versus urban areas, European Union

INTRODUCTION

Education and training are part of life and enable the people to get knowledge and better understand what is happening around them, to develop thinking capacity, to stimulate

creativity, acquire skills and experience and increase job performance [9].

Well-educated people have a chance to a more stable life, to benefit of better opportunities in their career, to be independent and free ensuring their financial security, to be more

confident in attaining the goals of their lives [48].

Also, a higher level of education could bring nonmaterial benefits such as: health, social involvement and cultural participation, well-being and a high life quality and expectancy, higher chances of marriage etc. [24].

At the society level, the education and training enable the work force to increase productivity and assure economic growth and social development [8, 21].

Labor productivity depends not only the fixed capital performance and technologies applied but also on human capital, in terms of qualification and specialization [1]. A higher education and training level stimulates production, productivity and product quality in the non tradable sector [2, 28]. But, a higher productivity also favors a better wage in the labor market [4].

Education is an important factor contributing to the economic growth, to the increase of GDP, value added [23, 26, 32, 37].

[26] affirmed that education is key determinant of economic well-being and increases in human capital inherent in labour force.

GDP level is deeply conditioned on fixed capital, labor force, employment, professionalism and qualification of labor force [25, 29, 30, 31].

Employers are interested to used high qualified labor in all the sectors, including agriculture and rural services contributing to the sustainable development of the rural areas [3, 5, 6, 7, 36].

In the rural areas education and training has a lower level than in the urban areas, and the agriculture being the main activity run in the rural areas requires labor force of high qualification able to apply modern technologies and raise productivity, sustain rural development, and GDP created in this economic sector [33, 34, 35].

Education level is different from a country to another and for allowing comparisons, at the international level there were set up classification standards. ILOSTAT provides aggregate levels of education established by International Standard Classification of

Evaluation - ISCED, designed by United Nations Educational, Scientific and Cultural Organization- UNESCO [25].

The ISCED-2011 Classification applied since 2014 includes five aggregate educational levels as follows:

(a)*Less than basic education* consisting of NS- No schooling, and ECE- Early childhood education;

(b)*Basic education* comprising: (i) PE- Primary education; (ii) LSE- Lower secondary education;

(c)*Intermediate education* which regards: (i) USE- Upper secondary education; PSNTE- Post secondary non tertiary education;

(d)*Advanced education* or Tertiary education, including: (i) SCTE-Short-cycle tertiary education; (ii) BSc- Bachelor's or equivalent; (iii) MSc- Master's or equivalent level and (iv) PhD- Doctoral or equivalent level.

Tertiary education confers levels of higher complexity and specialization provided by academic institutions as well as by vocational and professional units.

(e)*A not stated level*, which is not classified [25].

The educational level of the population is influenced by a large range of factors among which the most important are: legal background, education system organization, education policy and strategy, economic factors (the budget allocation for the field of education, infrastructure in the education units, income level of the teaching staff etc), social factors (education and training level of teaching staff, possibilities to improve the competence and quality of the educational process, family climate and the parents' model of education, community climate regarding education etc), psychological factors (the power of models which deserve to be followed, self-awareness regarding the importance of educational level in life etc).

The large number of factors existing in various countries have determined differences from a state to another and also from a region to another and from rural communities to urban ones [45].

It is unanimously recognized that, in general, education in rural areas has a lower level than in the urban area. This is because of the gaps

in infrastructure, the existence of a fewer number of educational units and their endowment which is not updated like in the urban areas, the long distance to travel from home to school or a library, non sufficient teaching staff, the limited opportunities to get a higher educational level etc.

For this reason, young people move to the cities to find better chances to study especially in high schools and universities.

Sometimes, the access to education is restrained by the family possibilities to financially sustain the children' education. The lower income per household in the rural areas than in the urban zone is a restraining factor regarding the increase of education level [39, 45]. In the rural areas, work in the households, gardens, field and farms is of a high complexity and parents are accustomed to involve their children in various agricultural works which diminish the time allotted to studying and learning.

The number of pupils in the rural communities is smaller than in the urban localities and the relationship with the family is closer and stronger. Demographic changes in the rural area have a deep impact on the enrollment in various educational units and also on the future labor force of the local communities [38].

In this context, rural schools needs a specific educational strategy to overcome the difficulties they are facing and connect equally to the opportunities offered by urban localities.

The local authorities have to be much involved in helping rural schools to develop in the benefit of the community. The young generation has to be educated and trained to be able to get knowledge and skills so that its general educational background to be helpful for becoming the reserve of the work force in the local community, to be able to understand policies, procedures, rights and duties, legislation, local economy, to be conscious that education is a vital element and a tool to perform yourself and develop your career and standard of life and also to contribute to the economic development and prosperity of the local community.

However, the gap between the education level in the rural areas and in the urban ones continues and economic returns to education for rural areas continue to lag those for cities and towns and suburbs. More than this, the loss of potential work force in the rural areas due to the migration of the young generation to cities looking for a higher education level, better paid jobs and a higher income and living standard cannot be stopped and this depletes local resources because communities have invested in the future workers' education and are expecting to get a return on that investment. Therefore, outmigration could diminish school effects [22].

Therefore, education plays a critical role in the development of the rural communities and areas. That is way schools are facing new challenges at present [46, 47].

In this context, the purpose of the paper was to study the education level of the population in the EU according to ISCED 2011 classification for the population aged from 15 to 64 years in the year 2021. Starting from the EU-27 average, there were made comparisons establishing the countries whose performance is over and, respectively, below the EU mean. This is helpful to determine the gaps existing in education level in the rural areas compared to all the areas (cities, small towns and suburbs and rural areas) and to issue recommendations how these differences to be diminished.

MATERIALS AND METHODS

The paper was to set up based on the literature regarding the achievements and prospects in the field of education, emphasizing the ones related to rural areas.

The main indicator taken into consideration was the education level of the people aged 15-64 years, as these persons could be potentially employed and become work force.

The analysis was logically run by education level as established by ISCED 2011.

The statistical information were collected from Eurostat, and were classified according to the EU-27 average so that there were established groups of countries with an

education level over the EU mean and another group with a performance below this mean.

After presenting a short situation in 2015, the study pointed out the actual education level in the year 2021 expressed in percentage of the educated population in the total population of a country, taking into account all the areas (rural, towns and suburbs and cities) and separately only rural areas.

In this way, the comparison method was used to evaluate the differences in percentage points between rural areas and all the regions both for the countries whose education level is over the EU-27 average and the ones whose level of education is below this mean.

The results were tabled and interpreted, and finally the main conclusions were drawn and a few recommendations were issued for diminishing the gap regarding the education level in the rural areas and all the regions as a whole.

RESULTS AND DISCUSSIONS

Demographic trends in the EU-27, emphasizing in rural areas

In 2022, of its surface of over 4 million km², 44% of the total land expanse is considered rural territory. France has the largest surface, while Malta the smallest.

The EU-27 is highly economic developed area, contributing by 16% to the world Gross Domestic Product, expressed in Purchasing Power Standard. The EU-27 economy is in a permanent competition with ones of USA and China, being the three leaders in the global economy.

In 2021, the EU-27 mean of GDP per capita accounted for Euro 27,810 [11].

In 2022, EU-27 population accounts for 446.9 million inhabitants. The country with the highest population is Germany with over 83.2 million inhabitants (18.6%), and the country with the smallest population is Malta having 520 thousands inhabitants (0.1%) [13].

In 2022, in the EU-27, about 100 million people live in the rural areas, representing 22.3%. It worth to note that in 2015, the rural population accounted for 28% in the total number of the EU-28 inhabitants. In 2018, 29.1% people lived in the rural areas, while 39.3% in the cities and 31.6% lived in towns and suburbs [20].

In 2020, a number of 15 countries have a share of over 30% rural population in their total population (Fig. 1). Looking at the figures we may consider that three countries are rural: Lithuania, Romania and Slovakia [38, 44, 45].

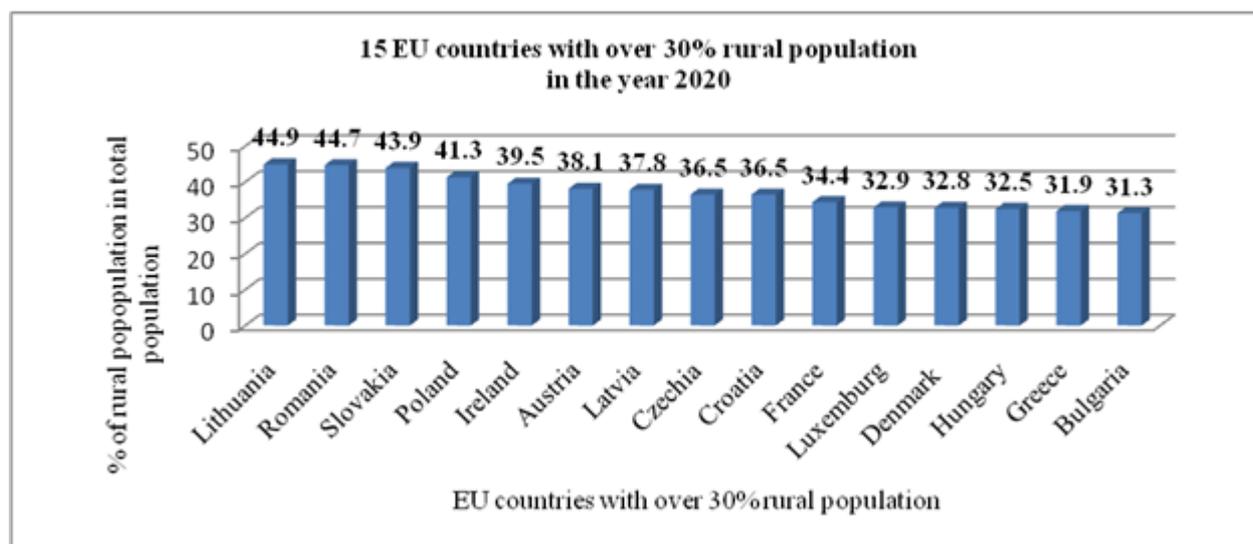


Fig. 1. A number of 15 EU countries have over 30% rural population in the year 2020
 Source: Own design based on Eurostat Data, 2022 [14].

In the year 2015, Slovakia was on the top position with 56.2%, but in 2020, the share of the rural population declined to 43.9%.

Also, in 2015, in Denmark, Croatia, Latvia, Luxemburg and Hungary, the rural population had a share ranging between 45% and 49%.

In 2020, the EU countries with the smallest share of the rural population in their total population were: Italy 18.3%, Belgium 15.3%, Netherlands 10.7% and Malta 0.2%. In 2015, their shares were a little higher: Italy 18.9%, Belgium 18%, Netherlands 14.7% and Malta 0.3%.

Therefore, in the period 2015-2020, in the EU-27 it is an ascending trend of the population in the rural areas and also in towns and suburbs, while in the cities, the population is declining.

Compared to 2019, in 2050, the overall population of the EU-27 is projected to increase only in four member states: Ireland (+24.5%), Sweden (+10.9%), Denmark (+1.2%) and Belgium (+1%).

In 20 EU states it is projected to decrease.

Regarding the rural population, it is expected a decline in Lithuania (-43.5%) and Austria (-0.6%), and also in Latvia (-37.6%), Bulgaria (-26.8%), Romania (-25%) and Croatia (-23.3%).

Also, compared to 2019, it is projected that till 2050, urban population to increase in only 15 EU member states, ranging between +35.4% in Malta to +2.3% in Croatia.

The urban population is expected to decline in Latvia (-17.7%), Greece (-16.7%), Poland (-10.3%), Romania (-8.6%), Italy (-3.1%), Lithuania (-2.7%), Hungary (-1.7%), Portugal (-1.6%) and Bulgaria (-1.4%).

The reasons are the high living costs in the urban zone and the new orientation of the people during the COVID-19 pandemic to less crowded places.

It worth to mention that in the rural and remote areas, the population being below 50 years old has the lowest shares [17].

Labor force in the rural areas

The EU-27 is facing a decline in work force in the rural areas, especially in agriculture, first of all due to the modernization of fixed capital and more productive technologies, but also

due to the population aging, outmigration of the young people, the lower qualification level of the ones involves in farming and other sectors compared to the urban areas [27, 45].

The development of agriculture is highly conditioned by labor force. The number of people working in agriculture, their training level, practical and managerial skills are the key factors which could contribute to agriculture development in the future. The existing gap between the availability of jobs and the supply of graduates is an important barrier which could affect agricultural labor force in the coming years [27, 36, 40, 44].

There are differences among the EU countries regarding the number of employed people in agriculture, its training level, the efficiency of the labor force in terms of productivity, product quality, gross value added, agricultural production value [40, 41, 42, 44]. Also, regarding GDP created in agriculture like in Romania and Bulgaria [29, 35, 43].

Schools in rural areas

Compared to cities and towns where population is more numerous, the number of schools is higher and of a large range of educational profile and the number of pupils who could be enrolled is also high, in the rural areas there is a few number of schools, located in general in the larger communities (communes and villages), which means that there are many small localities where schools are missing. More than this, the number of pupils who could attend education is smaller as well as the number of teachers.

This is a real challenge for rural schools which are many times dependent on the community conditions.

More than this, rural schools have a lower endowment and infrastructure due to the lower funding, teachers have limited opportunities for professional development, book shops and libraries are missing in many cases and schools are situated far away from cultural centers.

The schooling is limited to the curricula, without other alternatives of educational activities dedicated to pupils, teachers and parents.

Since 2018, in the EU it was launched eTwinning experience to sustain rural education by helping the teachers to explore new topics as: " multi-level classes, involvement of the parents, media literacy, universal design for learning, social-emotional learning and well-being of the pupils and teachers" [10].

Digitalisation in the rural areas

Digital skills have become very important for the population living in the rural area in order to ensure the contact and the best access to information and communication needed to develop and perform better in schools and local communities, to be more competitive economically. socially, environmentally by increasing the education and training level of the local population.

In 2019, in the rural areas of the EU, the share of the adult population having digital skills was 48% for basic and above basic skills compared to 62% in cities and 55% in towns and suburbs.

However, in the period 2015-2019, the overall level of digital skills in the EU increased in the rural areas from 46% to 48%, but the shares varies from a country to another.

A similar increasing trend it was recorded in the urban areas from 60% in 2015 to 62% in 2019 [12, 16, 20].

Education and skills

In 2021, in the EU-27, the percentage of the total early leavers from education and training for the age 18-24 years accounted for 9.7%, compared to 9.9% in the year 2020 and 10.2% in 2019 when United Kingdom was included. By degree of urbanization, the situation is the following one:

- rural areas, registered 10% in the year 2021 compared to 10.7% in 2020;
- cities recorded 8.7% in 2021 compared to 8.6% in 2020;
- towns and suburbs registered 10.7% in 2021 compared to 11.1% in 2020 [15].

In the rural areas, the tertiary education has a lower share than in the urban areas.

However, in the interval 2012-2019, the share of the population aged 25-64 years in the rural areas increased from 18% to 22%, which is a positive aspect.

But, the gap between cities and villages has become larger as in the cities the share increased from 17% to 19% in the same period [12].

In 2015, the early-leaving rate of the educated and trained people between 18 and 24 years old in the EU accounted for 12.2% in the rural areas compared to 9.8% in cities and 11.5% in towns and suburbs. But, among the EU member states there are substantial differences.

The highest early-leavers' rate in the rural areas was recorded in Slovakia, Spain, Greece, Hungary, Estonia, Romania and Bulgaria, while in France, Germany, Belgium and Austria belong to the city residents.

The EU rural population aged 30-34 years having a tertiary level of educational attainment had a share of only 27.9% in 2015, compared to 33.4% in towns and suburbs and 48% in cities.

And this gap between rural and urban level of tertiary education continues to grow. Therefore, the tertiary level of educational attainment is deeply lower in the rural localities of the EU countries.

Also, in 2015, the rate of people aged 30-34 years having a tertiary education level ranged between 44.9% in rural Luxemburg compared to 77.7% in cities.

At the opposite pole, there were Bulgaria and Romania, where the rate was only 10% in the rural areas compared to 46.6% in the cities of Bulgaria and 44.4% in the cities of Romania.

The level of this rate much higher in the cities than in the rural communities is explained by the fact that the institutions providing tertiary education programmes are located in the cities, where labour market is deeply specialized, there is a large scale of jobs and the graduates are more attracted by better paid jobs and the city living standard [3].

Analysis of education level of the population aged 15-64 years according to ISCED 2011 in the year 2021

Less primary, primary and lower secondary education (level 0-2)

In the EU-27, in 2021, the average rate of less primary, primary and lower secondary

education (level 0-2) for the population aged 15 to 64 years was 24.9%.

For the whole population (rural and urban), the highest rate was achieved, in the decreasing order, in: Portugal, Italy, Spain, Malta, Luxemburg, Netherlands, Greece, France, Romania and Germany.

In the rural areas, the average EU-27 rate for this level of education was 25.5%.

The EU countries with a higher rate than the EU average in the rural areas were, in the descending order: Portugal, Spain, Italy, Greece, Malta, Bulgaria, Romania, Denmark and Hungary (Table 1 and Figure 2).

Table 1. The rate of education level - less than primary, primary and lower secondary (level 0-2) for the EU-27 people aged 15-64 years in 2021

EU-27 Average 24.% - Urban and rural areas			EU-27 Average 25.5% - Rural areas		
The highest rate			The highest rate		
Country	Rate %	Difference from the EU average pps	Country	Rate %	Difference from the EU average Pps
1.Portugal	40.3	+23.4	1.Portugal	50.8	+25.3
2.Italy	39.2	+14.3	2.Spain	47.1	+21.6
3.Spain	37.9	+13.0	3.Italy	42.6	+17.1
4.Malta	36.1	+11.2	4.Greece	38.5	+13.0
5.Luxemburg	25.1	+0.1	5.Malta	36.9	+11.4
6.Netherlands	23.6	-1.3	6. Bulgaria	35.0	+9.5
7.Greece	23.5	-1.4	7.Romania	33.8	+8.3
8.France	22.1	-2.8	8.Denmark	30.4	+4.9
9.Romania	21.6	-3.3	9.Hungary	27.9	+2.4
10.Germany	21.0	-3.9			

Source; Own calculation based on Eurostat, 2022 [18, 19].

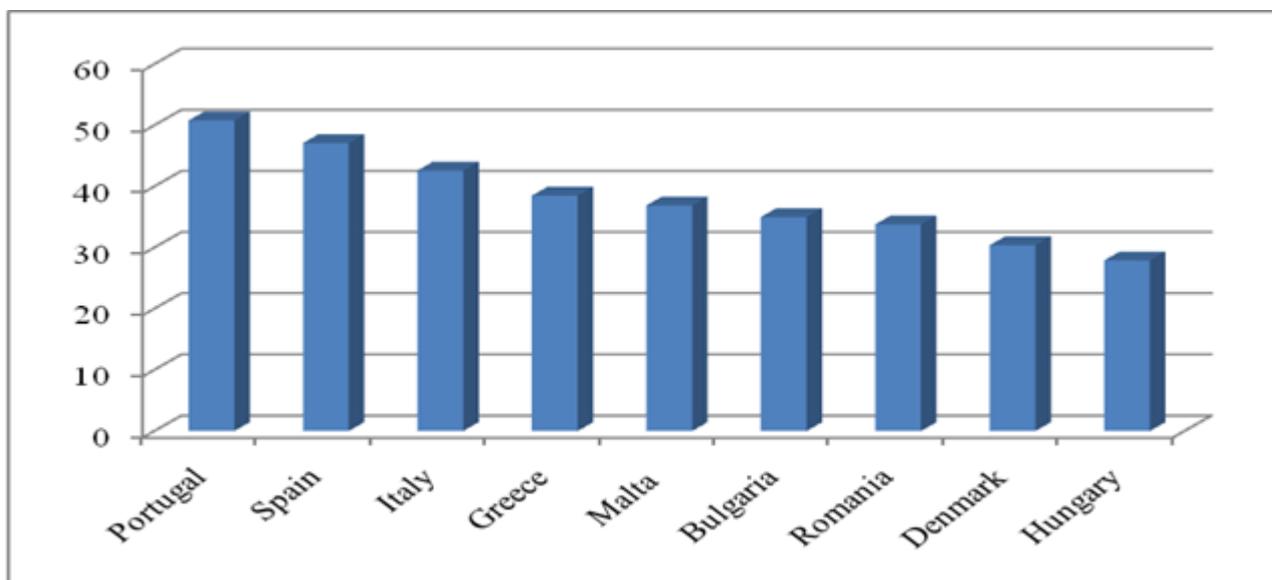


Fig. 2. The EU countries where the average rate for the education level (0-2) in the rural areas is higher than the EU average

Source: Own design based on Eurostat data, 2022 [18, 19].

Upper secondary, post secondary non-tertiary education (level 3-8)

In the EU-27, in 2021, the average rate of upper secondary, post secondary non-tertiary education (level 3-8) for the population aged 15 to 64 years was 75.1%, taking into account both rural and urban areas.

A higher rate than the EU-27 mean was carried out by the following countries, in the descending order: Lithuania, Czechia, Poland, Slovenia, Slovakia, Latvia, Estonia, Croatia, Ireland, Finland, Austria, Hungary, Cyprus, Sweden, Germany, Romania, Netherlands and Greece (Table 2).

A rate below the EU average was registered by: Denmark (74.5%), Malta (63.9%), Spain (62.1%), Italy (60.8%) and Portugal (59.7%). In 2021, in the EU rural areas, the population aged from 15 to 64 years recorded an average

rate for this level of education of 74.5%. Below this EU average rate, there were situated the following countries: Hungary, Denmark, Romania, Bulgaria, Malta, Greece, Italy, Spain and Portugal (Table 2 and Fig. 3).

Table 2. The rate of education level - upper secondary, post-secondary non-tertiary (level 3-8) for the EU-27 people aged 15-64 years in 2021

EU-27 Average 75.1 % - Urban and rural areas			EU-27 Average 74.5% - Rural areas		
The highest rate			A lower rate than the EU average		
Country	Rate %	Difference from the EU average pps	Country	Rate %	Difference from the EU average Pps
1.Lithuania	89.1	+14.0	1.Hungary	72.1	-2.4
2.Czechia	88.0	+12.9	2.Denmark	69.6	-4.9
3.Poland	87.0	+11.9	3.Romania	66.2	-8.3
4.Slovakia	86.8	+11.7	4.Bulgaria	65.0	-9.5
5.Slovenia	86.7	+11.6	5.Malta	63.1	-11.4
6.Latvia	85.8	+10.7	6. Greece	61.5	-13.0
7.Estonia	83.3	+8.2	7.Italy	57.4	-17.1
8.Croatia	83.0	+7.9	8.Spain	52.9	-21.6
9.Ireland	82.3	+7.2	9.Portugal	49.2	-25.3
10.Finland	81.8	+6.7			
11.Austria	81.5	+6.4			
12.Hungary	80.8	+5.7			
13.Cyprus	80.3	+5.2			
14.Sweden	79.9	+4.8			
15.Germany	79.0	+3.9			
16.Romania	78.4	+3.3			
17.Greece	76.5	+1.4			
18.Netherlands	76.4	+1.3			

Source: Own calculation based on Eurostat, 2022 [18, 19].

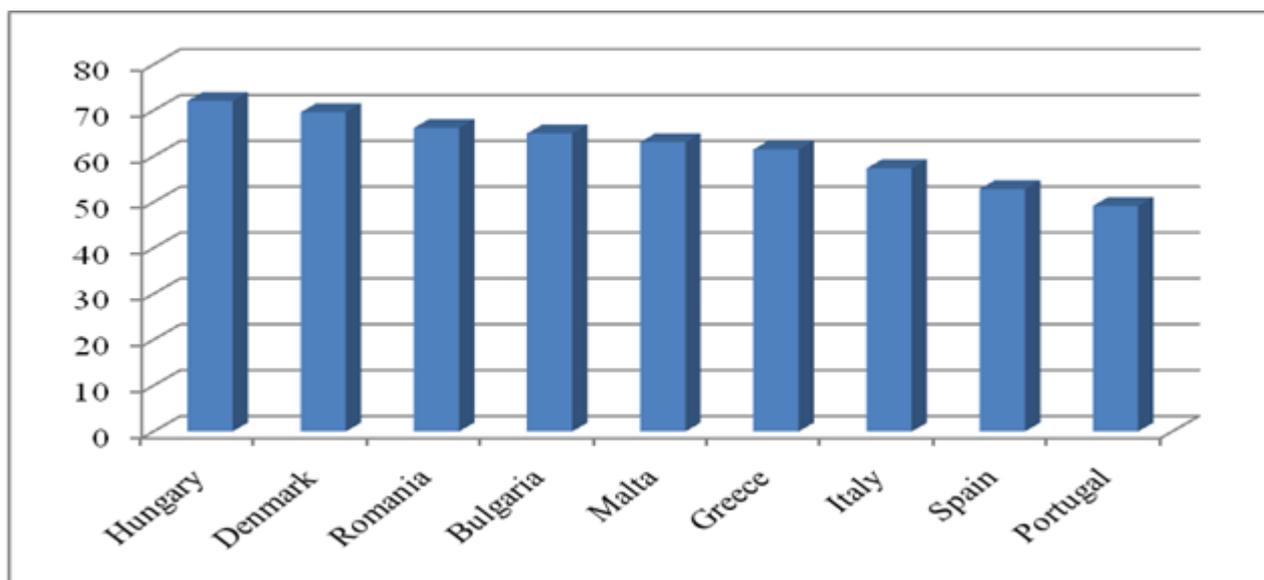


Fig. 3. The EU countries where the average rate for the education level (3-8) in the rural areas is smaller than the EU average

Source: Own design based on Eurostat data, 2022 [18, 19].

Upper secondary and post secondary non-tertiary education (level 3 and 4)

In 2021, for this level of education, the EU-27 average rate accounted for 45.6% for all the areas: rural, cities and towns and suburbs.

The EU member states with a higher rate than the EU mean were: Czechia, Slovakia, Romania, Croatia, Bulgaria and Germany.

The countries recording the lowest level for this rate were: Denmark, Netherlands, Cyprus,

Belgium, Ireland, Malta, Portugal, Luxemburg and Spain (Table 3).

In the rural areas, the EU-27 average rate for this education level was 53%.

But there were countries which recorded a higher rate than the EU average like: Czechia, Slovakia, Poland, Croatia, Romania, Hungary and Germany (Table 3 and Fig. 4).

A lower rate than the EU mean in the rural areas was achieved by Luxemburg, Malta, Portugal and Spain (Table 3).

Table 3. The rate of education level - upper secondary and post-secondary non-tertiary (level 3 and 4) for the EU-27 people aged 15-64 years in 2021

EU-27 Average 45.6 % - Urban and rural areas			EU-27 Average 53% - Rural areas		
The highest rate			A higher rate than the EU average		
Country	Rate %	Difference from the EU average pps	Country	Rate %	Difference from the EU average Pps
1.Czechia	64.5	+18.9	1.Czechia	71.5	+18.5
2.Slovakia	62.1	+16.5	2.Slovakia	68.3	+15.3
3.Romania	62.1	+16.5	3.Poland	65.2	+12.2
4.Croatia	61.3	+15.7	4.Croatia	64.2	+11.2
5.Bulgaria	53.3	+7.7	5.Romania	61.1	+8.1
6.Germany	52.0	+6.4	6. Hungary	59.8	+6.8
			7.Germany	59.2	+6.2
The highest rate			The highest rate		
1.Denmark	39.7	-5.9	1.Luxemburg	37.3	-16.7
2.Netherlands	38.9	-6.7	2.Malta	35.1	-17.9
3.Cyprus	38.4	-7.2	3.Portugal	31.0	-22.0
4.Belgium	37.6	-8.0	4.Spain	24.8	-28.2
5.Ireland	37.1	-8.5			
6.Malta	34.5	-11.1			
7.Portugal	31.4	-14.2			
8.Spain	25.6	-20.0			

Source; Own calculation based on Eurostat, 2022 [18, 19].

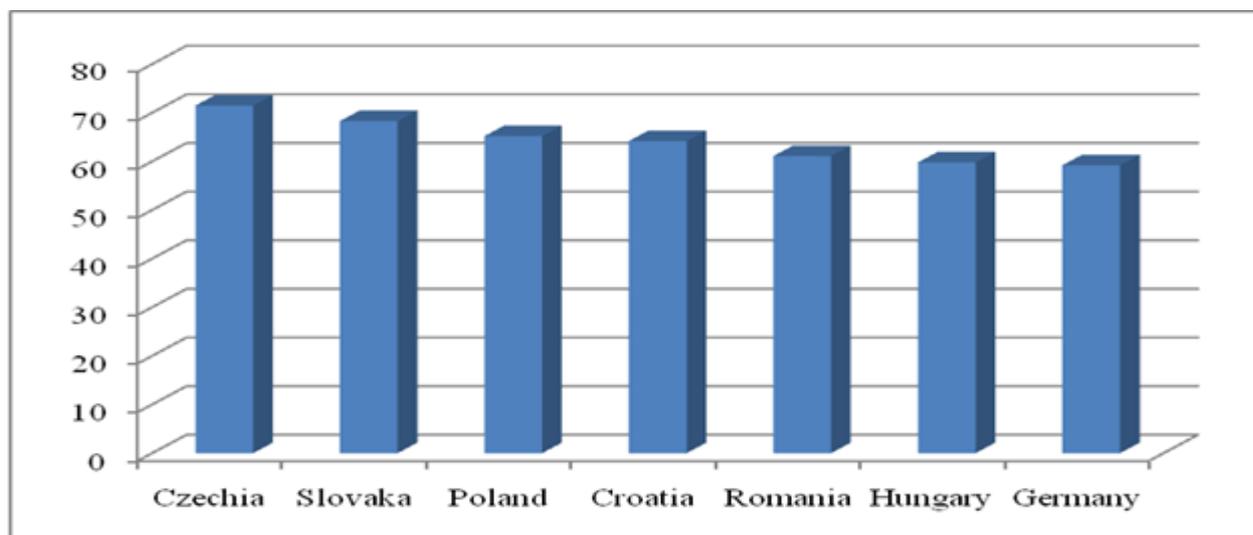


Fig. 4. The EU countries where the average rate for the education level (3-4) in the rural areas is higher than the EU average

Source: Own design based on Eurostat data, 2022 [18, 19].

Tertiary education (levels 5-8)

Tertiary education was attained by a smaller number of people and for this reason this indicator of education level has a smaller rate than the rates analyzed so far.

In 2021, for this level of education, the EU-27 average rate accounted for 29.5% for all the areas (rural and urban).

Table 4. The rate of tertiary education level (level 5-8) for the EU-27 people aged 15-64 years in 2021

EU-27 Average 29.5 % - Urban and rural areas			EU-27 Average 21.4% - Rural areas		
The highest rate			A higher rate than the EU average		
Country	Rate %	Difference from the EU average pps	Country	Rate %	Difference from the EU average Pps
1.Ireland	45.2	+15.7	1.Ireland	39.2	+17.8
2.Luxemburg	44.5	+15.0	2.Belgium	38.7	+17.3
3.Cyprus	41.9	+12.4	3.Luxemburg	37.9	+16.5
4.Lithuania	39.8	+10.3	4.Slovenia	30.3	+8.9
5.Belgium	39.7	+10.2	5.Sweden	29.9	+8.5
6.Netherlands	37.5	+8.0	6. Cyprus	29.9	+8.5
7.Spain	36.5	+7.0	7.Estonia	28.7	+7.3
8.France	36.3	+6.8	8.France	28.4	+7.0
9.Estonia	36.0	+6.5	9.Lithuania	28.3	+6.9
10.Denmark	34.8	+5.3	10.Malta	28.0	+6.6
			11.Spain	28.0	+6.6
			12.Netherlands	27.6	+6.2
			13.Finland	26.8	+5.4
			14.Austria	25.8	+4.4
The lowest rate			The lowest rate		
1.Italy	17.8	-11.7	1.Croatia	12.8	-8.6
2.Romania	16.4	-13.1	2.Italy	12.7	-8.7
			3.Hungary	12.3	-9.1
			4.Bulgaria	8.9	-12.5
			5.Romania	5.1	-16.3

Source; Own calculation based on Eurostat, 2022 [18, 19].

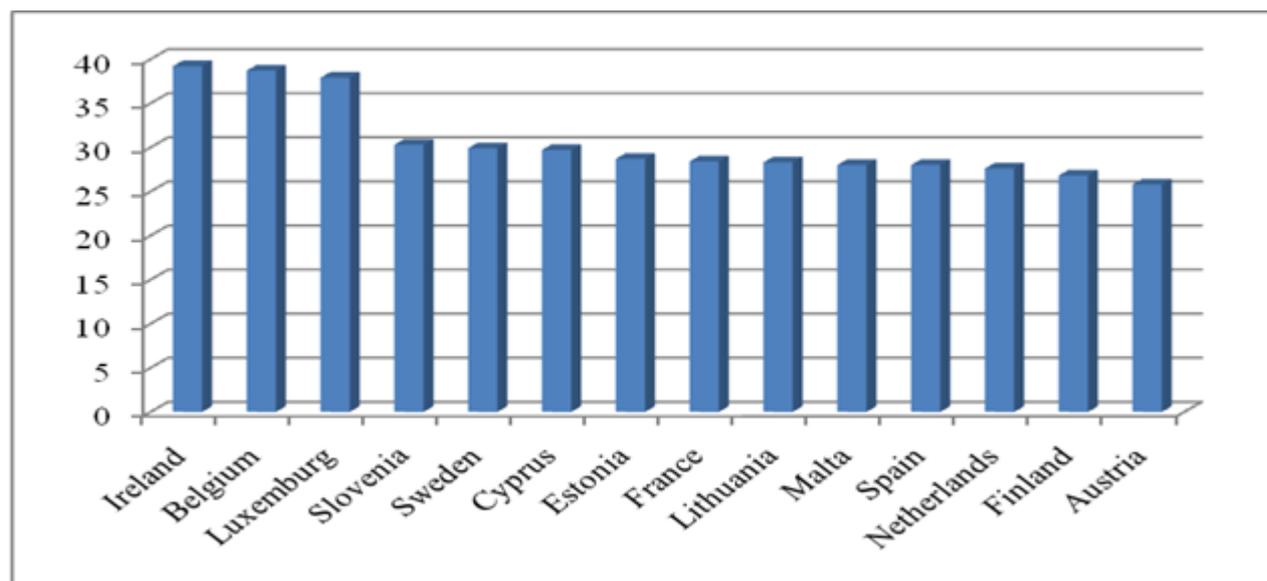


Fig. 5. The EU countries where the average rate for the education level (5-8) in the rural areas is higher than the EU average

Source: Own design based on Eurostat data, 2022 [18, 19].

The EU countries which registered a higher rate than the EU mean were Ireland, Luxemburg, Cyprus, Lithuania, Belgium, Netherlands, Spain, France, Estonia, Denmark. For this indicator, the lowest rate was achieved by Romania and Italy (Table 4). In the rural areas, the average rate of the EU-27 accounted for 21.4%. Rates higher than the EU mean were carried out in Ireland, Belgium Luxemburg, Slovenia, Sweden, Cyprus, France, Estonia, Lithuania, Malta, Spain, Netherlands, Finland, Austria (Table 4 and Fig. 5). Smaller rates than the EU-27 average were noticed in Croatia, Italy, Hungary, Bulgaria and Romania (Table 4).

A comparative and synthetic situation is presented in Figure 6, which shows that:

- For the levels 0-2, the EU mean rate rural areas exceeds the average rate for all the areas (urban and rural) by +0.6 pps;
- For the level 3-8, the EU average rate is a little below the EU mean for all the regions, more exactly by - 0.6 pps.
- For the level 3-4, the EU mean in the rural areas is by 7.4 pps higher than the EU average for all the regions;
- For the level 5-8, in the rural areas the EU average rate is by 8.1 pps smaller than the EU mean rate for all the regions (Fig. 6).

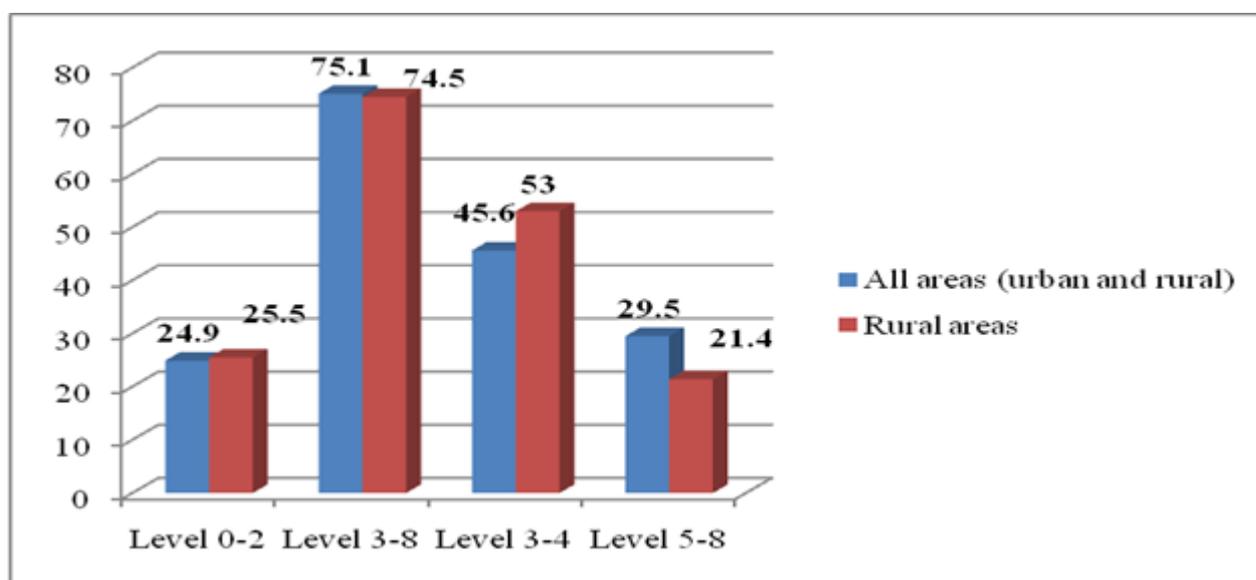


Fig. 6. The EU average rate of education level for the population aged from 15 to 64 years in the rural areas compared to the average rate in all the regions by level of educational attainment in the year 2021
 Source: Own design based on Eurostat data, 2022 [18, 19].

It is obvious that education should start with the basic levels of education (1-2) and to continue with the following superior levels (3-5) and it is possible with the level (5-8), but not all the people is able to perform in this way, so that we could discuss of pyramidal distribution of the educated people, at the peak of the pyramid being situated the people with the highest education level.

The development of the rural areas depends on the level of education of each individual who could attend a form of another of education and training The higher the education level of the rural population, the

higher the economic and social development of the rural areas.

However, based on their research, [26] found that "a 10 per cent increase in secondary education leads to a 1.5 per cent increase in economic growth, while an increase of 10 per cent in tertiary education increases economic growth by 0.9 per cent, *ceteris paribus*".

Also, they affirmed that secondary education is not statistically significant for economic growth, which depends on GDP recent history, physical capital, labour force and public government expenditure on education. But this does not diminish the importance of

secondary education. A higher education level has a deep impact on economic growth [26].

For this reason, the EU pays a special attention to education and training in the rural areas starting from a new concept on the rural schools and teaching strategy which have to be focused much more on competence than on knowledge, or, in other words, much more on scholars or students than on the curriculum.

The Europeanisation process has imposed a new vision on the development of skills deeply anchored in the reality, in the real requirements of the economic and social development.

For this reason, the teaching staff has to be highly qualified and competent to help the scholars to get the necessary knowledge and mainly skills.

The increase of the education level in the rural areas needs a close communication and contact with the urban educational units in order to exchange experience, models, ideas to attain a better performance.

The rural schools need highly competent teachers, a new orientation of the purpose of education programmes which have to be competence-oriented, using modern tools regarding infrastructure, digitalization, teaching staff mobility and develop school partnerships and networks, exchange of experience and good practices, creating educational platforms and internet connections to ensure the permanent interlinks in the community and in the territory between rural communities and the urban ones [47].

This supposes a more intense collaboration between schools, local authorities, universities, private business sector and voluntary organizations for improving education level of the rural population.

More than this, an important financial support is also required and in this respect, there are many alternatives among which the most important ones are:

-CAP 2021-2027 destined to promote knowledge transfer and innovation, social inclusion and economic development;

-The European Regional development Fund (ERDF) which is destined to sustain technical vocational education and training oriented to

smart specialization, a better employable work force adapted to market requirements;

-The European Social Fund (ESF) as well as EaSIF- European and Social Innovation Fund focused on the school digitalisation to enable the leavers to become more employable as required by labour market;

-ERASMUS Programme sustains the teaching staff mobility and learning for various purposes such as: study periods, traineeships, apprenticeships, staff exchange etc in any country of the EU;

This programme helped more than 4 million people to study and train abroad between 2014 and 2020.

-Horizon 2020 is focused on the research and innovation development based on projects which have to respond to the major problems of agriculture, food, rural development and other fields.

Taking into account that agriculturists have the highest share among the rural population, the increase of their education and training level will help them to be more competitive and successful in developing their business in agriculture and various services especially in agrotourism, to increase their income, living standard and also to sustain the development of their communities. In other words this means an improvement the local population's social, cultural and economic situation as well as of the local community [7, 49].

CONCLUSIONS

The paper analyzed education level in the rural areas of the EU-27 countries and pointed out the differences compared to the urban areas.

Also, it synthesized the main factors which influence education level in the rural areas and accentuate these gaps that could be only partially diminished.

As long as in the year 2022, the EU-27 rural population is 22.3% of its total population and in more than 50% of the member states is over this mean, ranging between 31.3% in Croatia and 44.9% and 44.7% in Slovakia and Romania, this is a challenge which will led to

both to decreases and increases in rural population as well as in urban localities.

The decline in rural population will diminish the potential reserve of labor force in the future, which actually is facing a real crisis in many countries. This lack of work force should have to be compensated by more productive technologies which have to be aligned to the Green Deal for a sustainable agriculture.

The early school-leaving rate is the highest in the rural areas, and for the other education levels, rural areas have lower percentages in comparison with the urban localities. Tertiary education of the people aged 30-35 years in the rural areas accounts for only 28%. Bulgaria and Romania has a lower share than 10%, the smallest level of tertiary education.

Taking into consideration ISCED classification of education levels, in the year 2021, the population aged from 15 to 64 years living in the rural areas presents the following situation:

- For *Less primary, primary and lower secondary education (level 0-2)*, the EU-27 average is 25.5%, and only in 9 countries: Portugal, Spain, Italy, Greece, Malta, Bulgaria, Romania, Denmark and Hungary is higher;

- For *Upper secondary, post secondary non-tertiary education (level 3-8)*, the EU-27 average is 74.5% and a lower level was registered in only in nine countries: Hungary, Denmark, Romania, Bulgaria, Malta, Greece, Italy, Spain and Portugal.

-For *Upper secondary and post secondary non-tertiary education (level 3 and 4)*, the EU-27 average is 53% and a higher education level was performed only by seven countries: Czechia, Slovakia, Poland, Croatia, Romania, Hungary and Germany.

-For *Tertiary education (levels 5-8)*, the EU-27 average is 21.4% and a higher education level was performed only by fourteen countries: Ireland, Belgium Luxemburg, Slovenia, Sweden, Cyprus, France, Estonia, Lithuania, Malta, Spain, Netherlands, Finland, Austria.

Education and training are and will remain key factors which could contribute to the

development of the local communities and sustainable development of the rural areas from an economic, social and cultural point of view.

The challenges through which rural areas are passing at present require to be surmounted only by increasing education level of the rural population.

However, outmigration will remain a restraining factor which will diminish the potential labor force in the rural areas, as getting a higher education will enable people to look for better paid jobs which could be found only in the urban areas. Local authorities have to find effective solutions to diminish migration outflow.

Rural schools have to adopt a new strategy in the development of education of the scholars being more oriented on competence and useful skills as required by labor market and employers.

IT and digitalization skills have to complete the large range of abilities and knowledge as they offer access to information and communication with the whole world and strengthen work efficiency, personal and community development.

A modern infrastructure, a higher qualified teaching staff, competence based educational programmes, partnerships and networks, exchange of experience and good practices, educational platforms and internet connections to ensure the permanent interlinks in the community and in the territory represent solutions to improve educational level of the rural population and work force in the local communities and diminish the gaps versus the performance in the urban areas.

The EU funding provided by CAP 2021-2027, European Regional development Fund (ERDF), European Social Fund (ESF), EaSIF- European and Social Innovation Fund, ERASMUS Programme and Horizon 2020 is destined to sustain the increase of education level in the rural areas and completed the allocations from the budget of each EU member state to the field of education.

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