

## **THE INFLUENCE OF EDUCATION FACTOR OVER THE STAGE OF DEVELOPMENT IN THE RURAL AREAS REGARDING KNOWLEDGE TRANSFER**

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### **Abstract**

*The concept of economy based on knowledge shows that the main development direction of the economy, economic raise, creating new jobs and so improving humanwelth is produceing, transferring and using knowledge. Economic development doesn't request only a great number of people but also quality and training of those people so in the knowledge based society the accent can stand on raising people's qualifications, growing the education level so that information can have continuety, so it won't be lost. Peter Drucker considered that "knowledge becomes the only meaningful resource nowadays (Vreja, L.V, The concept of knowledge organization in the current economic environment). But where does Romania stand regarding the facilitation of knowledge transfer considering that we are way below the EU average of GDP, and the investments of GDP in the education sector are around 1 % and about 30% of population works in agriculture, struggles trying to develop economic activities because of: lack of training, lack of informations regarding bussiness opportunities, entrepreneurship, the low capacity of fund absorbtion, the old forms of commerce, undervaluation, the big number of intermediaries that are involved on the agricultural market, the lack of private and foreign investors, the lack of using ecological technologies in agriculture and mismatch between suply and demand.*

### **Keywords**

*knowledge-based economy; education; training; weak human resoruces*

### **Introduction**

The EU has realized that the world is changing and to remain one of the world powers it does not need more people, but that those who are to be well prepared, thus concluded that a society that continuously develops that is always informed and economically sustainable to be in progress continuously can provide future knowledge not only viable, but safety can not be surpassed, can not be ignored and secures again throughout history, a leader in keeping the reins of the entire world. Thus the Lisbon Strategy, adopted in 2000, establishes that the European Union must become "the most competitive and dynamic knowledge-based economy in the world capable of generating sustained economic growth, a high rate of labor employment and high social cohesion (Europe 2020). The Lisbon Strategy principles were preserved, processed and enhanced to the next period, 2010-2020, so 2010 came into force Europe Strategy or Europe 2020.

Europe 2020 is the EU's growth strategy for the next decade. In a rapidly changing world, the EU wants to become a smart, sustainable and inclusive growth. These three priorities are mutually reinforcing and are able to help the EU and its Member States to achieve a high level of labor employment, productivity and social cohesion. In practice, the Union has set five major objectives - on employment, innovation, education, social inclusion and environmental / energy - to be met by 2020. Member States have adopted their own national targets in these areas.

Whether we realize it or not, we live in a knowledge based society, even if we are only at the beginning of time. This new society is lifestyle superior in terms of quality which involves intensive use of information in all areas of business and human existence having a major economic and social impact. Knowledge based society involves public access to information, as a way of working that require high knowledge thus amplified the possibility of economic globalization, and increasing social cohesion.

Information and the ability to use it is a strategic asset for the development and survival of any economic activity, the progress we are witnessing is clear evidence that the role of knowledge in the global economy is the most important.

National economies today are based on international flows of goods, services, people, and not the least investment ideas. An economic entity is now thought of as an institution encompassing knowledge; this includes the application, operation, use and transfer of information. The success of an economic entity can be even greater as intangible assets held are used to maximum. A definition of these intangible assets given by Baruch Lev in "Intangibles - Management, measurement, and Reporting" refers to non-physical sources of future potential benefits enjoyed by an entity or, alternatively, all the economic entity exist alongside monetary and tangible assets, these intangible assets were acquired by exchange or domestically produced identifiable costs that have a finite life, have a different market value of the holding entity and are owned or controlled by economic entity. The literature shows the concept of intellectual capital, includes a range of activities, from collection, codification and dissemination of information, the acquisition of new skills through training and development to process (re)design of business. Intellectual capital is the sum of all the knowledge that you have all the people in an economic unit which gives the entity a competitive advantage in the market.

To participate at the market, one must know how to listen, read and be able to understand what you read to use and enhance the information, but what happens in a EU country where the level of living is well below the European average, and about 45% of the population lives in rural areas, are employed in the primary sector and lacks, most of the times, these basic skills to be considered participants based economy knowledge?

The European Union has made a number of objectives to be met to achieve smart growth. The first objective is to increase public and private investment in research and development to 3% of EU GDP thus creating better conditions for research, development and innovation. In recent years research and development consumes no more than 2% of EU GDP, lower position against the main competitors in the field, the USA and Japan, which allocates the first 2.6% and 3.4% the second. Romania allocated to this area less than half the average percentage of the EU, which positions it on before last place among the EU countries. The second objective envisaged by the European Union refers to increasing employment rate to 75% for the population aged between 20 and 64, 2020 by the creation of favorable conditions for employability, especially for women, young, elderly or unskilled and legal immigrants. The third objective aims at better results in educational plan especially by reducing school drop to less than 10% and increased to at least 40% of the share of university graduates or equivalent in the population aged 30-34 years.

### **1. Literature review**

People acted jointly in ancient times to achieve objectives such as food security, defense, expansion, etc. As joint actions have been the native motivation for the state, the company has outlined two broad categories of activities: administrative state (state power) and economic/commercial (which produce goods and services for society) (Lăpușan, 2010). Today seems to be a new category, the transfer of knowledge, which is the highest strategic

goal of the European Union, the EU wants to be the most competitive and dynamic knowledge-based economy in the world capable of generating sustained economic growth, a high rate of labor employment and high social cohesion (Europe 2020 Strategy), which requires cooperation between people to be able to achieve. A population that owns the information, owns the world's economic power and the composition of the EU population in and people from rural areas, representing a particular segment of the population due to vested customs and traditions, and new resistance and reluctance, which maintains always (Istudor, 2006) specific features that have kept the authenticity and not need to lose for them to integrate in the new knowledge economy, but to adapt to new structures favoring ie cooperative structures. The new company is formed still differs from previous ones by features such as the accelerating pace of change - which implies an increased speed of response; rapid generation of knowledge needed to meet new demands and challenges; high degree of diversification of products and services; lower costs of dissemination of information and knowledge to the outbreak of modern techniques of communication such as the Internet (Miron, 2012). Rural areas is not removed from the equation, and this transfer of knowledge is at a high level, so the EU Member States there are a number of tools that helps and encourages the spread of information (European Network for Rural Development, Local Action Groups, etc.).

Cooperatives are structures that make a bridge between operators, between what conception EU, national governments and research institutions and development as potential solutions to current and future period, a period of aging population, declining birth rates, labor employment and average age, underlying trend in rural areas (agri-food sector development strategy in the medium and long horizon 2020-2030, 2014) and those who should be information consumers in the rural, "peasants", for example, that alone can not be a force in the food market and even less knowledge transfer market, but uniting cooperatives are active players in both markets, thus achieving the EU's objectives of social cohesion and job growth (Popescu, 2014). Given the quality of the intermediate, it collects, processes and relays information and knowledge, and from the cooperative members. As part of his position is twofold, being both consumer and provider of information and knowledge (Miron, 2012).

Coopertaiste major structures have the advantage of having a direct link between cooperative members, which facilitates the connection of knowledge and in-depth understanding of their needs. Allow farmers near bridging the gap between them and market information gaping (Piktialis & Greenes, 2008) in terms of communication, as the two main actors, the producers of information (in person research institutes and authorities) and information consumers (in person farmers) will not "talk" from high to low, the small can not to process the information received, but from sea to sea, on a par (Popescu, 2014).

Since Romania joined the European Union in 2007, functioned instrument grant to support the association and cooperation of any kind in rural areas so as to reduce regional disparities by increasing employment, level of education, improving infrastructure and living standards, leading indirectly increases the ultimate goal of developing the knowledge economy. In the period 2007-2013 were awarded funds for both setting up producer groups and local action groups (PNDR 2007-2013), both associative and newly created structures results led to the conclusion of experts to provide greater funding for creating cooperative structures and to support education (PNDR 2014-2020) the new programming period.

I believe that cooperative structures are the best solution for ensuring achievement of EU objectives and rural integration in knowledge transfer market.

## 2. The level of education in Romania as a European country

According to the work Labor market prospects of Romania in the context of Europe 2020, made for the National Commission for Prognosis, the structure of employment by education level Assn acquires increasingly higher, especially in the current period, the training is considered as a key progress. The level of education is the highest form of education a person exempted in accordance with International Standard Classification of Education in 1997, which translates to a diploma or certificate, where there is no certification is considered only completion full attendance. When general education classes are followed by education or training, they will be taken into account.

(Labor market prospects of Romania in the context of Europe 2020, Albu, Caraiani, Jordan).

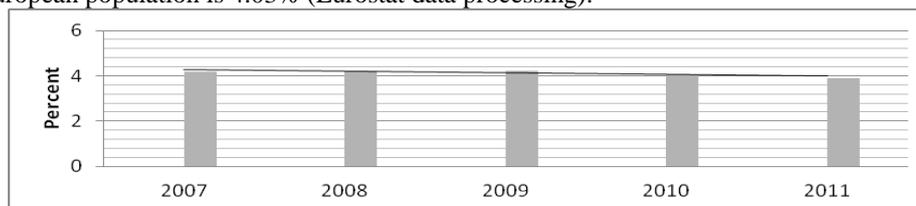
Population structure by level of education are taken into account conventional three groups: primary level, including pre-primary education (kindergarten), primary and lower secondary education level, secondary level includes post-secondary non-tertiary education and upper secondary and third level education tertiary. Number of students in the European Union - 27 ISCED education standards compared to Romania is structured in the following table:

**Table 1 The number of students in Romania and EU between 2007-2012**

| Area/Year                   | 2007     | 2008      | 2009      | 2010      | 2011      | 2012    |
|-----------------------------|----------|-----------|-----------|-----------|-----------|---------|
| EU 27                       | 10743422 | 107512143 | 107555952 | 108004781 | 108304870 | -       |
| Romania                     | 4488250  | 4553850   | 4532082   | 4401070   | 4228067   | 3988996 |
| Amount of participation (%) | 4.18     | 4.24      | 4.21      | 4.07      | 3.90      | -       |

Source: [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=educ\\_enr11t1&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=educ_enr11t1&lang=en)

If we consider the population of the EU27 and Romania, in the year 2012, there is a percentage of Romanian population in the total population of 4.02% EU (Eurostat data processing), but because there are no data on the total number of students Union this year, I will compare the data available in 2011 when the Romanian population share in total European population is 4.03% (Eurostat data processing).



Source: table 1

### Figure 1 – The percent of Romanian students in the total of European students

As can be seen in figure 1, although it is a downward trend in the period 2008-2011, the share of Romanian students in all European students that year is 3.90%. The figures are approximately equal, so we might say that Romania is a country that places great emphasis on higher education and promotes it, but even so, only a share of about 21% of students in total Romanian population can say the same thing, but this does not show, in fact, than the plight of the disparity in living standards and education, which are closely interlinked, from Romania, especially if we consider urban and rural residence.

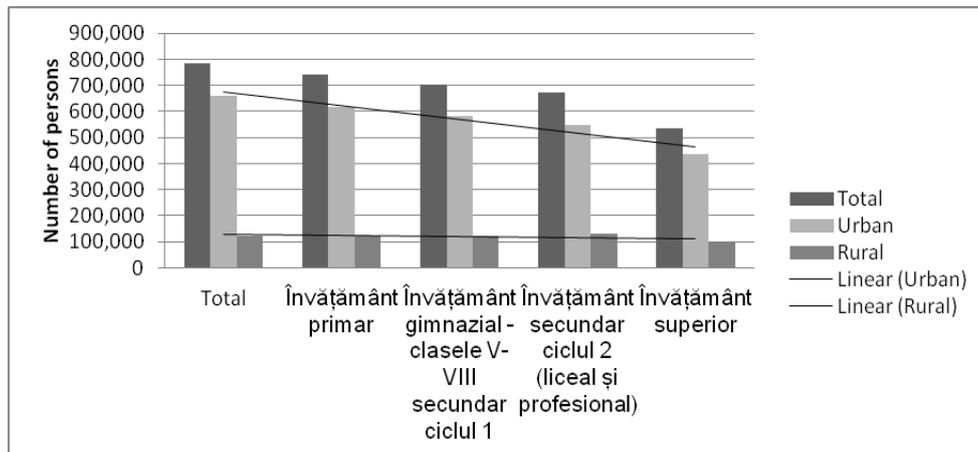
If we consider the data provided by the National Institute, the statistical number of graduates on the three levels of study, and by area of residence is:

**Table 2 Graduates by levels of education and residence in Romania**

| Level of education                             | Residence | Years                |           |           |           |           |
|--|-----------|----------------------|-----------|-----------|-----------|-----------|
|  |           | Year 2007            | Year 2008 | Year 2009 | Year 2010 | Year 2011 |
|  |           | UM: Number of people |           |           |           |           |
| Total  | Total     | 784,958              | 739,432   | 704,172   | 674,713   | 536,747   |
| -  | Urban     | 660,726              | 617,380   | 583,803   | 545,878   | 436,886   |
| -  | Rural     | 124,232              | 122,052   | 120,369   | 128,835   | 99,861    |
| Primary  | Total     | 205,178              | 201,693   | 196,721   | 227,130   | 182,609   |
| -  | Urban     | 111,745              | 108,011   | 104,269   | 117,771   | 96,047    |
| -  | Rural     | 93,433               | 93,682    | 92,452    | 109,359   | 86,562    |
| Secondary education -<br>secondary first cycle | Total     | 205,178              | 201,693   | 196,721   | 227,130   | 182,609   |
| -  | Urban     | 111,745              | 108,011   | 104,269   | 117,771   | 96,047    |
| -  | Rural     | 93,433               | 93,682    | 92,452    | 109,359   | 86,562    |
| Secondary education<br>second cycle            | Total     | 331,289              | 303,014   | 294,668   | 236,893   | 192,091   |
| -  | Urban     | 301,083              | 275,424   | 267,679   | 218,417   | 179,613   |
| -  | Rural     | 30,206               | 27,590    | 26,989    | 18,476    | 12,478    |
| Higher education                               | Total     | 232,885              | 214,826   | 191,291   | 186,900   | 136,671   |
| -  | Urban     | 232,690              | 214,700   | 191,174   | 186,740   | 136,571   |
| -  | Rural     | 195                  | 126       | 117       | 160       | 100       |

Source: www.insse.ro, tempo online, 29.04.2014

We can easily see from the following graph that the total graduates in Romania decreased from year to year, both in rural and urban areas.



Source: table 2

**Fig.2 Number of graduates in 2011 by level of education and residence**

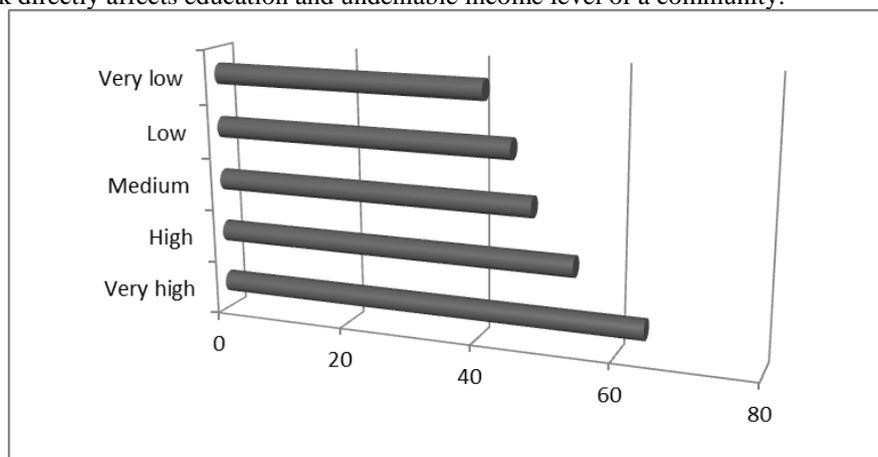
Marc is given that the Romanian population follows a ratio of about 1 area:3 areas, the enormous difference between the number of graduates in urban and rural areas. It can be said that in knowledge economy and continuing education, rural Romanian was completely forgotten, pushed aside, and the few students in these areas are not part of the conditions needed to study and contribute to the development of disadvantaged areas and that of the entire country as a member of the European Union. Given a very simple and pragmatic thinking we realize that we can not rely on these students or students to stay and help develop their areas of residence since their constitutional right, that education was respected within minimum as well as the right to health system performance, and even the right to life, because the environmental conditions of living very low in rural areas, this right can be considered to be violated.

### **3.The influence of education in rural development**

To present a clear statement of the level of development of all Romanian villages, Prof. Dumitru Sandu, along with other collaborators have developed a methodology for calculating the "Index of development of the municipality" (IDC), index that takes into account a series of ten statistics which describe the degree of development of a joint. Values and the calculation of the index acestiu shows where Romania ranks in terms of development and level of detail because common are hot spots that should act as much in order to address the low level of our country. In the construction and validation of IDC a large number of indicators have been taken into account provided by the National Institute of Statistics, Ministry of Interior, indicators describing the quality of life in most of the municipalities of the country in all respects. IDC construction were taken into account the following indicators:- Housing infrastructure - comprising living space per dwelling (m2), domestic gas consumption per household (m2), domestic water consumption per capita in the public system;Public Financial Resources - comprising revenues from own sources per capita capital expenditure per capita, public services and development expenses, housing, environment and water, per capita;Capital individual economic family - which takes into account the number of cars per 1000 inhabitants in the village (residing in the village);Human Capital Community conditioned age - life expectancy at birth, infant morbidity rate and average population age 15 years and over in its composition.

And for the validation of IDC there were used other 10 indicators: The development of the village in 2002, aggregation index values DEVSAT02 (Score represents the factorial of four indices: 1) human capital village (stock education employees per thousand inhabitants, the proportion of people employed in agriculture); 2) biological capital village (number of inhabitants, the village population share common population, the proportion of working age population); 3) development of housing (housing with running water share, share housing with sanitation, living space per household); 4) The degree of isolation of the village (village administrative type and distance to the nearest town); Education in the common stock; Distance from the village center joint to the nearest town; Location village near a European road; Total fertility rate; Estimated poverty rate at level of common; Population growth rate in 2008 compared to 2002 = increase of population with permanent residence in the village for 2002-2008 to 1,000 people in 2002; New housing built in 2006-2008 to 1,000 people in 2007; Arrivals residing in the village in 2006-2008 to 1,000 inhabitants; Flotate net migration rate in 2008 on the difference between stable and resident population per 1000 inhabitants, the legal population.

Although it may seem insignificant, the stock of education at the village level, as can be easily inferred from studies of D. Sandu, has a strong influence in complementary areas of development, so that a low stock of education in rural areas, leading a low participation rate and jobs outside agriculture also villages with the lowest stock of education is in remote areas, away from roads and modern infrastructure. Infant mortality rate is another factor that seems, at first glance, to be influenced by the stock of education, but in fact much deeper clades, such as the stock of education is higher, the infant mortality rate decreases if the population of a town is better prepared, then you will be able to cope with infantile disease, the proximity of the health system, and the ability to prevent them. And finally stock directly affects education and undeniable income level of a community.

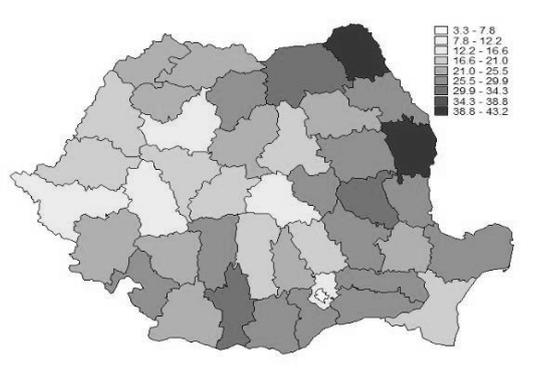


Source: Development communes in Romania, Sandu D., Voineagu V., Panduru F., București, 2009

**Fig.3 The average level of commune development by the population's stock of education**

Agriculture and the low level of education are leading directly to low income and the rural communities are represented by older population with low levels of education and agricultural occupation, so that the stock of education is low, so is the income, which threatens the quality of people's lives.

It can be said that the areas in which the stock of education is low, with a population mainly employed in agriculture, which are far away from roads and up infrastructure and a low income level are poor areas, and the phrase reverse is equally true, poor areas as described above features, such as made in Romania Poverty Map, it looks like this:



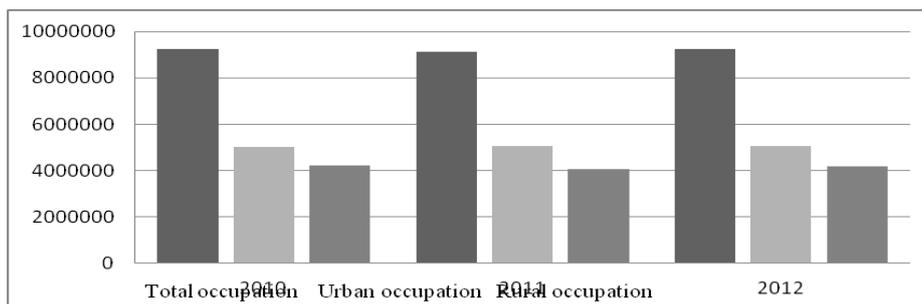
Source: World Bank calculation based on the data provided by the Population and Housing Census 2011 and EU-SILC 2011

**Fig.4 The poverty risk rate by countys**

It can be seen from the map that Moldova is the poorest region of Romania, followed by Oltenia; the only problem is that Bucharest has a poverty rate than the rest of the country is under the poverty or social exclusion.

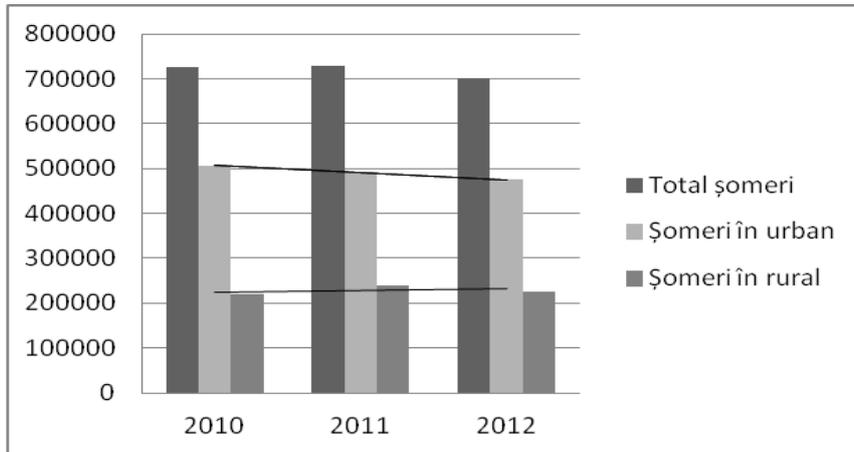
#### **4.Education and ocupation – the main objectives of Romania**

The first objective to adjust the issue of social inclusion in the EU are the employment and education in Romania is much deeper problem, the number of people without a job come in a greater proportion of rural where and preparedness is weak, so that in the last years the employment situation is shown in the next figure:



Source: www.insse.ro – tempo online, 7.05.2014

**Fig.5 Number of working persons**



Source: www.insse.ro – tempo online, 7.05.2014

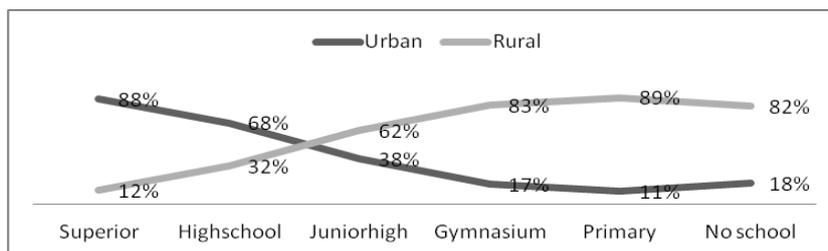
**Fig.6 Number of unemployed**

It can be seen that the total number of unemployed in rural areas is only following an upward trend, although in recent years agriculture has been the branch that saved Romanian economy, fever refurbishment and new equipment that increases productivity are making those responsible to overlook the fact that many people with no other qualification than agriculture lose their jobs and wealth instead of increasing the area actually creates pockets of poverty, which in time become increasingly difficult to "break".

Of the total number of unemployed, the highest proportion (42%) are high school graduates cycle, they show great potential in several ways, primarily their number if they could be employed in the labor market unemployment would decrease significantly, and secondly they are not completely needucași and qualifying courses may be directed to vacancies, but for which no staff, not least the huge wave of unemployed may become promoter qualification and continuous training and next arriving in their situation may follow suit, especially if we consider the power of education that has experience.

By level of education, rural areas, although with a population of 1:3 in total, bringing 82% of the unemployed without any form of your education, even if their number seems small (2297 people), we can not be sure that they only because there are many people who do not want to answer inquiries INS and are not recorded in any databases authorities. High percentage of unemployed in rural areas, 47% and 54%, occurring on levels of primary education, secondary education, respectively, a rate of only 14% is the university graduates, but given the small number of total graduates this cycle, belonging to rural areas is understandable that the number of unemployed is low.

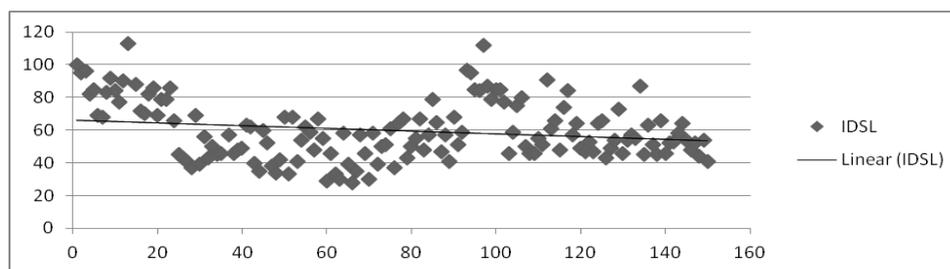
If we carefully observe the number of employees by level of education and area of residence in urban see that most graduates are employed by higher education cycle and fewer free trials, while in rural areas the proportions are reversed, the senior high school education is the only stage where the two media engages in roughly equal proportions.



Source: calculation based on [www.insse.ro](http://www.insse.ro), tempo online, 07.05.2014

**Fig.7 The percentage of working graduates**

Since Dumitru Sandu made calculations for the index Development communes (IDC) so was calculated, by the same author, the IDSL - index of social development town, the advantage is that is applicable to communities and cities. The index has calculated values for all municipalities and cities of the country in 2008 (<https://sites.google.com/site/dumitrusandu/bazededate>), IDSL values in the chart we can see a very large scattering of the 3180 localities studied.



Source: <https://sites.google.com/site/dumitrusandu/bazededate>, 29.04.2014

**Fig.8 IDSL**

Ordinates were made IDSL values calculated from the average values of 66.15, we see a higher concentration of localities are below average, as represented on the poverty map, Dumitru Sandu's calculations show that the Northeast is the poorest in Romania, followed by some areas of the South, the highest form of development is in Ilfov County - Voluntari Corbeanca and city in Timiș County - Dumbrăvița, in Predeal and Bușteni, which are the only places that exceed the threshold 100 units, and Bucharest has 100 units. For Bucharest we do not need explanations because it is Romanian development pole; for Corbeanca and Voluntari, as well as for Dumbrăvița explanations are simple, highly trained people with good jobs, ie tending towards EU goals, as each of us wanted to withdraw from the bustle of the city and thus have moved their families in these communities, we have raised the standards to which they were accustomed, even more, the same thing is possible in mountainous localities, urban population wanted an oasis of tranquility so brought home comforts and conditions, the locals also switching to them, which is evidence that the development is a slow process, but it can be learned, especially by example and financial support of the European Union.

Development Index of the municipalities in counties points out a harsh reality but a reality that leaves no room for optimism or projects delayed for various reasons, Botosani and Vaslui are the least developed, with a value of IDC only 35, no other counties are much better, but Sibiu (67), Brasov (67), Timis (69) and Ilfov (91) that rise above average overall

common parts of the country. Because only 4 of the 42 Romanian counties may appoint developed in terms of the 10 indicators that make up the IDC situation is more than alarming and viable solutions to be implemented quickly. There is no time to think about their own solution, because so far all have been unnecessary, the collages and adaptations of the solutions seen on TV, considering the example of other countries that have been in our situation, but managed to get off the last places in the negative charts. EU adopted these methods by studying and substantiating a long-term plan in Romania, we can become from a country with a developed growth potential, a full member of EU.

### **Conclusions**

Romania is one of the last places in the European Union in terms of level of development, our students are well prepared, and the whole world is in an era of knowledge transfer, the age we lose again start because the already lost and not yet recovered.

Romania is a country with agricultural industrial profile in the industry was gradually dismantled, and agriculture still weak performance is breath which saves the economy every year.

Although we are promoters of knowledge the general population is not sufficiently prepared to face the transfer of information that can process long enough to renew and to send them on.

The proportion of Romanian students in all European students is equal to the proportion of the total Romanian population in the European population, but the proportion of rural students in total Romanian students is much lower.

Romania must reduce the degree of social exclusion across the country by increasing education and employment; they are factors without which the EU can not achieve the objective.

Another dangerous phenomenon encountered disparity Romania is not uniform all over the country are developed, so that we find highly developed areas where the standard of living is high, citizens have access to the education, health and infrastructure, and areas that oppose any idea about the quality of life that we might have.

Education system has to be restructured to meet the new challenges of the modern world and the needs of people to work and to raise living standards.

The largest pockets of poverty are located in Botosani and Vaslui Countys in the North-East of the country, they have the lowest development index communes of only 35.

Living standards influence the education of an area, but if not initially invest in education so that the educated may work, bring ideas and technology and so, create new jobs and raise living standards.

Without equal development of municipalities we can not speak about active participation in the knowledge economy of the twenty-first century, the development is a cornerstone of public education.

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