

CONSIDERATIONS ON THE RURAL POPULATION AS A RESOURCE OF LABOR FORCE IN ROMANIA

Agatha POPESCU

University of Agricultural Sciences and Veterinary Medicine of Bucharest, 59 Marasti, District 1, Bucharest, 011464, Romania, Phone: +40213182564, Fax:+40213182888, Email:agatha_popescu@yahoo.com

Corresponding author: agatha_popescu@yahoo.com

Abstract

The paper aimed to analyze the dynamics of Romania's population and mainly of the rural population in the period 2005-2010. The following indicators were used: total population, rural population, the share of rural population in the total population, active population at national level, in the rural areas and the share of the rural active population in the total population, employment, unemployment, activity rate, employment rate, unemployment rate, employment rate by educational level, employment in agriculture by population's age, active persons by age group. As a conclusion, Romania's rural population accounts for 45 % of total population. A series of restraining factors such as: ageing, low training level, low capital and financial resources, lack of investments and other job alternatives affect the development of the rural areas where most of the population is dealing with agriculture. Rural space requires a multifunctional development meaning to achieve a balanced combination between agriculture, connected industries and services which could create jobs and raise the population income and living standard. This means investments both in agricultural and non-agricultural activities, a new national and local policy concerning the development of rural communities.

Key words: age structure, labor force, living standard, rural population, training level

INTRODUCTION

The development of rural areas has to be seen as a multifunctional use of land, human, capital and financial resources recognizing the limits imposed by the biological, geographical, economical and social environment [2].

Compared to other EU countries, in Romania about 45 % of the population is living in the countryside [7]. The rural space is characterized by many small households, people ageing, low productivity, lack of activity diversification the main economic branch being agriculture of low productivity, low training level of the most people, low chance for jobs and a low living standard. Migration to cities and other countries has become a common phenomenon in the last years looking for jobs[4].

Labor force is the most important factor contributing to the development of the economy. In the transition economies like the one of Romania, labor market is deeply influenced by privatization and restructuring

[6]. Employers require high trained people and especially young but experienced people [3, 5].

For this reason, population structure has to be changed in the best direction by a rational labor force policy both at national and local level. New alternatives and investments have to contribute to the durable development of the local communities and rural space [6]

In this context, the paper aimed to analyze the situation of Romania's population and especially of the rural population concerning employment, unemployment, training level, age structure and professional status in the period 2005-2010.

MATERIALS AND METHODS

The data were provided by the National Institute for Statistics for the period 2005-2010 and were processed using the index, share and comparison methods [8].

The following aspects have been approached: population at national and rural level, the

share of the rural population in the total population, active population at national and rural level, the share of active rural population in the total population, GDP created at national level and also in agriculture, hunting and fishing, BDP/inhabitant, agricultural production value, employment and employment rate at national and rural level, unemployment and unemployment rate at national and rural level, population structure by age group, training level and professional status.

RESULTS AND DISCUSSIONS

The position of the rural population in Romania's population

Romania's population has continuously decreased because of the reduced natality, natural gain and also because of the migration to some people to other countries looking for better paid jobs. In 2010, Romania had 21,431,298 inhabitants by 0.90 % less than in 2005. Urban population has the highest share in the total population: 54.94 % in the year 2005 and 55.05 % in the year 2010. Therefore, rural population has also an important weight in the total population compared to other EU countries. It represents around 45 % of the total population, that is in Romania many people live in the country side (Table 1).

Table 1. Romania's population by area, 2005-2010 (persons)

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2010/2005 % |
|-------------------------------|------------|------------|------------|------------|------------|------------|-------------|
| Total population, of which: | 21,623,849 | 21,584,385 | 21,537,563 | 21,504,442 | 21,489,959 | 21,431,298 | 99.10 |
| -Urban population | 11,879 | 11,913,938 | 11,877,659 | 11,835,526 | 11,823,516 | 11,798,735 | 99.31 |
| -Rural Population | 9,743,952 | 9,670,427 | 9,659,904 | 9,669,114 | 9,646,443 | 9,632,562 | 98.85 |
| Share of Rural population (%) | 45.06 | 44.80 | 44.85 | 44.94 | 44.89 | 44.95 | - |

Source: National Institute for Statistics, 2012. Own calculations.

G.D.P. created in agriculture and its share in GDP

Romania's GDP has been continuously developing. In 2010, it accounted for Euro billion 122, being by 54.04 % higher than in the year 2005. The GDP created in agriculture, hunting and fishing has also registered an increasing trend. In 2010, it

accounted for Euro billion 7.4 being by 11.35 % higher than in 2005 [1]. Therefore, GDP created in agriculture, hunting and fishing had a slower increase compared to GDP. As a consequence, the share of GDP created in agriculture, hunting and fishing recorded a decline from 8.45 % in the year 2005 to 6.11 % in the year 2010 (Table 2).

Table 2. Romania's GDP and GDP created in agriculture, hunting and fishing, 2005-2010

| | MU | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2010/2005 % |
|--|--------------|---------|---------|---------|---------|---------|---------|-------------|
| GDP | Euro Billion | 79.2 | 97.1 | 121.2 | 136.8 | 115.9 | 122 | 154.04 |
| GDP created in agriculture, hunting and fishing | Euro Million | 6,700.3 | 7,616.9 | 7,181.3 | 9,266.6 | 7,622.2 | 7,461.1 | 111.35 |
| Share of GDP created in agriculture, hunting and fishing | % | 8.45 | 7.84 | 5.92 | 6.77 | 6.57 | 6.11 | 72.30 |

Source: National Institute for Statistics, 2012. Own calculations.

GDP/capita

GDP per inhabitant registered an increasing dynamic from Euro 3,687.9 in 2005 to Euro

5,791.8 in the year 2011, the gain being represented by 57.04 %, reflecting an increasing living standard of the population (Table 3).

Table 3. GDP/inhabitant (Euro/capita)

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2010/2005 % |
|------------|---------|---------|---------|---------|---------|---------|-------------|
| GDP/capita | 3,687.9 | 4,530.4 | 5,787.7 | 6,499.2 | 5,508.5 | 5,791.8 | 157.04 |

Source: National Institute for Statistics, 2012. Own calculations.

Comparing the living standard in Romania with the one registered in all the other EU countries, one can notice that Romania comes on one of the

last positions taking into account GDP/capita as shown in Table 4.

Table 4. GDP/inhabitant in the EU countries, 2010 (Euro/capita)

| Country | GDP/capita | Country | GDP/capita | Country | GDP/capita | Country | GDP/capita |
|------------|------------|---------|------------|-------------|------------|----------------|---------------|
| Austria | 34,100 | Finland | 33,300 | Latvia | 8,600 | Romania | 5,800 |
| Belgium | 32,700 | France | 29,900 | Lithuania | 8,900 | Slovakia | 12,100 |
| Bulgaria | 4,800 | Germany | 30,500 | Luxembourg | 78,600 | Slovenia | 17,400 |
| Czech Rep. | 14,300 | Greece | 19,600 | Malta | 15,200 | Sweden | 37,300 |
| Cyprus | 21,00 | Hungary | 9,700 | Netherlands | 35,400 | United Kingdom | 27,500 |
| Denmark | 42,600 | Ireland | 35,000 | Poland | 9,200 | EU-27 | 24,500 |
| Estonia | 10,700 | Italy | 25,700 | Portugal | 16,200 | | |

Source: www.epp.eurostat.ec.europa.eu/statistics_explained

Agricultural production value.

Agricultural production increased by 19.19 from Euro million 12,844 in 2005 to Euro million 15,309 in 2010. This is a positive

aspect reflecting that agriculture is an important branch of the economy and is able to better cover population and industry needs regarding agro-food product offer (Table 5).

Table 5. Romania's agricultural production value, 2005-2010 (Euro million)

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2010/2005 % |
|-------------------------------|------------|------------|------------|------------|------------|------------|-------------|
| Agricultural production value | 12,844.162 | 14,370.719 | 14,299.966 | 18,191.518 | 14,143.059 | 15,309.762 | 119.19 |

Source: National Institute for Statistics, 2012. Own calculations.

Economically Active Population

Active population increased by 1.15 %, a low increase. However, in the urban area, active population registered a higher increase of 3.30 %. Rural population declined by about

17.43 %, from 5,361 thousand persons in 2005 to 4,427 thousand persons in 2010. As a result, the share of active rural population in total active population declined from 54.4 % in 2005 to 44.42 % in 2010 (Table 6).

Table 6. Romania's active population by area, 2005-2010 (thousand persons)

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2010/2005 % |
|-------------------------------|-------|--------|-------|-------|-------|-------|-------------|
| Active population, of which: | 9,851 | 10,041 | 9,994 | 9,944 | 9,954 | 9,965 | 101.15 |
| -urban population | 4,490 | 4,446 | 4,500 | 4,473 | 5,495 | 5,538 | 103.30 |
| -rural population | 5,361 | 5,595 | 5,494 | 5,471 | 4,459 | 4,427 | 82.57 |
| Share of rural population (%) | 54.4 | 55.7 | 54.9 | 55.0 | 44.79 | 44.42 | 81.65 |

Source: National Institute for Statistics, 2012. Own calculations.

Employment has continuously increased since 2006 to 2009, but in 2010 it decreased at national level. However, in 2010, its level accounted for 9,240 employed persons, being by 1.01 % more than in 2005. In the rural areas, employment declined by 1.18 % from 4,258 thousand persons in 2005 to 4,208 thousand persons in 2010. In the urban areas,

the situation looks to be better because in 2010 the employed population accounted for 5,032 thousand persons being by 2.92 % higher than in 2005. As a result, the weight of the employed persons in the rural areas remained relatively stable at 45.54 % in 2010 like in the previous years (Table 7).

Table 7. Employment by area, 2005-2010 (thousand persons)

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2010/2005 % |
|-------------------------------|-------|-------|-------|-------|-------|-------|-------------|
| Total employment, of which: | 9,147 | 9,313 | 9,353 | 9,369 | 9,310 | 9,240 | 101.01 |
| -rural employment | 4,258 | 4,198 | 4,281 | 4,268 | 4,280 | 4,208 | 98.82 |
| -urban employment | 4,889 | 5,115 | 5,072 | 5,101 | 5,070 | 5,032 | 102.92 |
| Share of rural employment (%) | 46.5 | 45.0 | 45.7 | 45.5 | 45.54 | 45.54 | 97.93 |

Source: National Institute for Statistics, 2012; Own calculations.

Unemployment

Unemployment increased at country level, reaching 725 thousand persons in 2010, by 2.98 % more than in 2005. However, looking at the data in Table 8, one can see that in 2007 and mainly in 2008 when the economic crises started, the employment registered the lowest levels. Rural employment has recorded

a continuous decline started from 2007. In 2010, 219 thousand people were employed in the rural areas, by about 5.61 % less than in 2005. As a consequence, the share of the employed persons in the rural areas represented about 30 % of the total employment with a decreasing trend starting from 2009 (Table 8).

Table 8. Unemployment by area, 2005-2010 (thousand persons)

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2010/2005 % |
|---------------------------------|------|------|------|------|------|------|-------------|
| Total unemployment, of which: | 704 | 728 | 641 | 575 | 644 | 725 | 102.98 |
| -rural unemployment | 232 | 248 | 219 | 205 | 219 | 219 | 94.39 |
| -urban unemployment | 472 | 480 | 422 | 370 | 425 | 506 | 107.20 |
| Share of rural unemployment (%) | 32.9 | 34.0 | 34.1 | 35.6 | 34.0 | 30.2 | 91.79 |

Source: National Institute for Statistics, 2012; Own calculations.

Activity Rate

Activity rate is higher in the rural space compared to the urban one in the period 2005-2010, despite that a decreasing trend was noticed starting from 2005 till 2010. This

aspect was the consequence of the high weight of the population in the rural areas and also of the economic development encouraged by the EU (Table 9).

Table 9. Activity rate by area 2005-2010 (%)

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|------|------|------|------|------|------|
| Total | 62.4 | 63.7 | 63.0 | 62.9 | 63.2 | 63.6 |
| Rural | 65.3 | 65.2 | 65.1 | 64.5 | 64.3 | 64.4 |
| Urban | 60.3 | 62.6 | 61.6 | 61.7 | 61.2 | 61.6 |

Source: National Institute for Statistics, 2012; Own calculations.

Employment Rate

Employment rate was also higher in the rural area compared to the urban one. In the year 2010, it reached 60.9 % compared to 58.8 % in the urban environment. But, rural

employment rate has continuously decreased from 61.6 % in 2005 to 60.9 % in 2010, while in the urban areas it has slowly increased from 55 to 56.9 % in the same period of reference (Table 10).

Unemployment Rate

Unemployment rate registered a decreasing trend determined both by Romania's economic development in the period 2005-

2008 and external migration of some people looking for better paid jobs.

Table 10. Employment rate by area, 2005-2010 (%)

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|------|------|------|------|------|------|
| Total | 57.7 | 58.8 | 58.8 | 59.0 | 58.6 | 58.8 |
| Rural | 61.6 | 61.1 | 61.5 | 61.2 | 60.7 | 60.9 |
| Urban | 55.0 | 57.2 | 56.8 | 57.5 | 57.2 | 56.9 |

Source: National Institute for Statistics, 2012; Own calculations.

Then it increased year by year reaching 7.3 % in 2010, when it was higher than in 2005 because of the impact of economic crisis and the lack of jobs. Unemployment rate declined in the rural areas from 5.2 % in 2005 to 5 % in

2010. A worse situation was noticed in the urban environment where the unemployment rate is very high. However, it declined from 8.8 % in 2005 to 6.9 % in 2010 (Table 11).

Table 11. Unemployment rate by area, 2005-2010 (%)

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------|------|------|------|------|------|------|
| Total | 7.2 | 7.3 | 6.4 | 5.8 | 6.9 | 7.3 |
| Rural | 5.2 | 5.6 | 4.9 | 4.6 | 4.8 | 5.0 |
| Urban | 8.8 | 8.6 | 7.7 | 6.8 | 6.7 | 6.9 |

Source: National Institute for Statistics, 2012; Own calculations.

Employment in agriculture and its share in the national employment

At national level, employment increased by 10.13 % from 8,390 thousand persons in 2005 to 9,240 thousand persons in 2010. In agriculture, hunting and fishing, employment increased only by 3.80 % from 2,678 thousand persons in 2005 to 2,780 thousand persons in 2010. As a result, the share of

employment in agriculture, hunting and fishing in the national employment has slightly declined from 31.9 % in 2005 to 30.08 % in 2010. This is due the larger possibilities in the cities to find a job compared to the rural areas, where mainly agriculture is developed, small industry and services are not well represented (Table 12).

Table 12. Employment in agriculture and its share in the national employment (thousand persons)

| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2010/2005 % |
|------------------------------------|-------|-------|-------|-------|-------|-------|-------------|
| Total employment | 8,390 | 8,469 | 8,726 | 8,747 | 9,310 | 9,240 | 110.13 |
| Employment in agriculture | 2,678 | 2,518 | 2,465 | 2,421 | 2,610 | 2,780 | 103.80 |
| Share of employment in agriculture | 31.9 | 29.7 | 28.2 | 27.6 | 28.3 | 30.08 | 94.29 |

Source: National Institute for Statistics, 2012; Own calculations.

Employment by age group

At national level, the highest employment is situated at the 35-44 years group (28.9 %), then at the 26-34 years group (26.5 %) and 45-54 years group of persons (20.8 %). Therefore both young and mature persons are well employed compared to older people which had a low percentage, only 4.5 %.

In agriculture, hunting and fishing, the age groups have a very close percentage, except the

35-44 years persons which are on the top position with 21.1 %. Also, the young persons of 15-24 years old and the old persons of 65 and over represented 10 % and respectively 14 % showing that the population working in agriculture is aging (Table 13).

Rural Population Age Structure by participation in economic activity reflects that economically active persons represented 45.8 % in 2008 and the uneconomically active persons 54.2 %, as a consequence of people ageing in

the rural communities. The employed people represented 43.5 %. The lower employment rate of 32 % belonged to one third of the rural population younger than 25.

Therefore, the highest employment rate was registered by people older than 25 years (Table 14).

Table 13. Structure of employment by age group at national level and in agriculture, hunting and fishing in 2010 (%)

| | MU | Age groups (years) | | | | | |
|--|------------------|---------------------|-------|-------|-------|-------|-------------|
| | | 15-24 | 26-34 | 35-44 | 45-54 | 55-64 | 65 and over |
| Employment at national level | Thousand persons | 7.8 | 26.5 | 28.9 | 20.8 | 11.4 | 4.5 |
| Employment in agriculture, hunting and fishing | Thousand persons | 10.2 | 17.7 | 21.1 | 17.4 | 18.9 | 14.7 |

Source:National Institute for Statistics, 2012.

Table 14. Rural population structure by participation in economic activity by age group in 2010 (%)

| Age group | Total population | Active persons | | | Unactive persons |
|------------------|------------------|----------------|----------|------------|------------------|
| | | Total | Employed | Unemployed | |
| Total, of which | 100 | 45.8 | 43.5 | 2.3 | 54.2 |
| 15-64, of which: | 100 | 64.4 | 60.9 | 3.5 | 35.6 |
| 15-24 | 100 | 37.8 | 32.0 | 5.8 | 62.2 |
| 25-34 | 100 | 72.3 | 68.3 | 4.0 | 27.7 |
| 35-44 | 100 | 80.3 | 76.9 | 3.4 | 19.7 |
| 45-54 | 100 | 75.1 | 72.5 | 2.6 | 24.9 |
| 55-64 | 100 | 56.0 | 55.1 | 0.9 | 44.0 |
| 65 and over | 100 | 22.4 | 22.4 | - | 77.6 |

Source:National Institute for Statistics, 2012.

Structure of employed population by educational level

For the young people of 25-34 years group, employment rate is higher for the people with a higher education level both at national level (40.6 %) and in the rural areas (39.3 %).

The 35-44 years group with a medium educational level had the highest employment rate at national level (34.2 %). In the rural areas, the highest share belonged to the 25-35

years old people with high education level (39.3) and to the 35-44 year old group with a low training level (35.9 %). Therefore, in the rural areas, high and also low educated people are preferred to be employed. This is a negative aspect reflecting a low training level of rural population with a deep impact on economic development of rural communities (Table 15).

Table 15. Structure of employed population by educational level in 2010 (%)

| Educa tion level | Empl oyed popula tion (Thou sand person s) | To tal 15- 64 | Of which, age (%) | | | | | |
|------------------------|---|------------------------|-------------------|----------|----------|----------|----------|---------------------------|
| | | | 15 24 | 25 34 | 35 44 | 45 54 | 55 64 | 65 an d ov er |
| NATIONAL LEVEL | | | | | | | | |
| Total countr y | 9,240 | 95. 5 | 7. 8 | 26 .6 | 28 .9 | 20 .8 | 11 .4 | 4. 5 |
| -High | 1,480 | 99. 6 | 3. 9 | 40 .6 | 29 .0 | 18 .1 | 8. 0 | 0. 4 |
| - Mediu | 5,437 | 99. 3 | 7. 5 | 25 .4 | 34 .2 | 23 .4 | 8. 8 | 0. 7 |

| m | | | | | | | | |
|--------------------------|-------|----------|----------|----------|----------|----------|----------|----------|
| -Low | 2,323 | 84. 0 | 11 .0 | 20 .4 | 16 .7 | 16 .4 | 19 .5 | 16 .0 |
| RURAL AREAS LEVEL | | | | | | | | |
| Total countr y | 4,208 | 90. 5 | 10 .3 | 22 .2 | 26 .3 | 17 .6 | 14 .1 | 9. 5 |
| -High | 145 | 97. 6 | 6. 8 | 39 .3 | 22 .5 | 17 .5 | 11 .5 | 2. 4 |
| - Mediu m | 2,112 | 98. 3 | 9. 8 | 23 .7 | 35 .9 | 19 .9 | 9. 0 | 1. 7 |
| -Low | 1,951 | 81. 6 | 11 .0 | 19 .4 | 16 .1 | 15 .2 | 19 .9 | 18 .4 |

Source:National Institute for Statistics, 2012.

Structure of employed population by professional status and age group

At national level, the highest share belonged to employees (65.60 %), self workers (20.32 %) and family contributing workers (12.49). In the rural areas, there is a similar distribution by professional status: employees 35.67 %, self workers 36.95 % and 26.68 % family contributing workers.

At national level, the employees are preferred to be between 35 and 54 years old, while in the rural areas the employees are preferred to be between 25-54 years old. Selfworkers are mainly older than 35 years both at national level and in the rural areas. Family contributing workers belong mainly to the younger categories between 15- 34 years (Table 16).

Table 16. Structure of employed population by professional status and age group, 2010 (%)

| Professional status | Employed population | Of which in age (%) | | | | | | |
|----------------------------|---------------------|---------------------|-------|-------|-------|-------|-------|-------------|
| | | Total 15-64 | 15-24 | 25-34 | 35-44 | 45-54 | 55-64 | 65 and over |
| NATIONAL LEVEL | | | | | | | | |
| Total, of which: | 9,240 | 95.5 | 7.8 | 26.6 | 28.9 | 20.8 | 11.4 | 4.5 |
| Employee | 6,062 | 99.9 | 6.5 | 30.3 | 32.4 | 22.5 | 8.2 | 0.1 |
| Employer | 119 | 99.5 | 1.4 | 20.7 | 37.0 | 29.7 | 10.7 | 0.5 |
| Self worker | 1,878 | 85.0 | 4.7 | 17.3 | 24.2 | 19.6 | 19.2 | 15.0 |
| Family contributing worker | 1,177 | 88.9 | 20.3 | 22.9 | 17.8 | 12.6 | 15.3 | 11.1 |
| RURAL LEVEL | | | | | | | | |
| Total, of which: | 4,208 | 90.5 | 10.3 | 22.2 | 26.3 | 17.6 | 14.1 | 9.5 |
| Employee | 1,501 | 99.9 | 9.4 | 28.6 | 35.6 | 19.6 | 6.7 | 0.1 |
| Employer | 26 | 99.7 | 2.0 | 26.7 | 36.6 | 24.6 | 9.8 | 0.3 |
| Self worker | 1,555 | 82.5 | 4.0 | 15.5 | 23.2 | 19.2 | 20.6 | 17.5 |
| Family contributing worker | 1,123 | 88.8 | 20.4 | 22.9 | 17.8 | 12.6 | 15.1 | 11.2 |

Source: National Institute for Statistics, 2012.

CONCLUSIONS

About 45 % of Romania's population is living in the rural areas. The main activities are represented by agriculture and raw material processing in the household.

The lack of technical endowment and financial resources, people ageing, the lack of jobs, low training level and low productivity are the main characteristics of the rural areas.

Agriculture had a higher and higher contribution to GDP, but investments in this sector are still modest, so that productivity is still at low level. Non agricultural sectors are less developed in the rural communities and oblige mainly young people to look for jobs in the cities or to emigrate in other EU countries. Modernization of the rural space involves the multifunctional development combining

agriculture, connected industries and services which could create jobs and raise the population income and living standard. This means investments both in agricultural and non-agricultural activities, a new national and local policy concerning the development of rural communities.

A special attention has to be paid to the young people in order to encourage them to remain in the local communities, to set up farms and develop their own business, to work in the public administration etc.

The development of the rural areas requires a change of population behaviour and mentality, more involvement of the decision makers both at national and local level to find the best solutions for stimulating the multifunctional development of the rural space.

ACKNOWLEDGEMENTS

All the support offered to the author by National Institute of Statistics in order to collect the data required by this study is gratefully acknowledged.

REFERENCES

- [1] Amariei Razvan, 2011, How Romania's GDP has developed compared to 1989, Revista Capital, May 19, 2011
- [2] Dachin Anca, 2006, Perspectives of reducing rural-urban disparities in Romania after accession to the EU, in "Multifunctional agriculture and rural development-development of local communities", Belgrade, December 7-8, 2006
- [3] Dostie, B., Sahn, D., 2006, Labor Market Dynamics in Romania during a period of Economic of Liberalization, Forschungsinstitut zur Zukunft des

Arbeit, Discussion Paper No. 2511, IZA, Bonn, Germany.

[4] Popescu Agatha, Grigoras M.A., 2011, Research concerning Rural versus Urban Population – Present and Prospect, Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, Vol.11, Issue 2/2011, p.157-161

[5] Svejnar, J., 1999, Labor markets in the transitional CEECs economies. Handbook of Labor Economics, vol. 3 b, p. 2809-2858, Amsterdam, Elsevier Science.

[6] Voicu, A., 2005. Employment dynamics in the Romania labor market: A Markov Chain Monte Carlo approach. Journal of Comparative Economics: 33(3); 604-639.

[7] Zahiu Letitia, Toma Elena, achin Anca, Alexandri Cecilia, 2010, Agriculture in Romania's Economy, CERES Publishing House, Bucharest, p. 43-46.

[8] Romania's Statistical Yearbook, 2012

[9] Eurostat, Statistical Database, 2012, www.epp.eurostat.ec.europa.eu/statistics_explained