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CHARACTERISTICS OF THE ROMANIAN AGRICULTURE WORKFORCE

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Abstract

The article seeks to analyze the principal characteristics of the Romanian agriculture workforce by focusing on the dynamic and structure of rural environment agricultural labor between 2007 and 2013. We have analyzed the principal indicators of the labour market resources as provided by the statistical inquiry data, indicators such as: active population, the occupation rate within the work age appropriate population, unemployment rate and so on, all taking into account education levels, age, the span of the agricultural area available for use. The study on the evolution of worker categories involved in agricultural holding and the level of know-how in the subsequent management of the agricultural holding showcases the actual dimensions of the workforce resources in the field in rural areas, and furthermore, highlights the main problems within them.

Key words**:** *workforce, labour market resources, agricultural holding*

INTRODUCTION

The Romanian rural area of today is the result, in part, of the economic, political and social activities of the XXth century and on the other hand, of the agricultural policies implemented after 1989 [5].

The labor force in agriculture is the premise on which we can base any further development and performance in the Romanian rural area as a whole [6].

The National Strategy for Workforce Occupation 2014-2020 identifies the main challenges for the implementation of workforce occupation policies: the high rate of workforce occupation already in place in agriculture, the diminishing numbers of active population, the aging of the workforce, the high rate of unemployment among youth, the high rate of long term unemployment within the overall number of unemployed people, the low rate participation in continuous training programs[7].

In this context, the agriculture field remains a viable option, as the offers available in other economic sectors are reduced [3].

For an in-depth analysis of the workforce resources in agriculture, specifications regarding volume, structure and quality of said resources are needed [4].

MATERIALS AND METHODS

We have studied the agriculture workforce resources based on the statistical data provided by the Survey on the Household Workforce for 2013, tracking the progress of the following statistical indicators: occupation rate of work age appropriate population (15-64 years old), unemployment rate, long term unemployment rate, based on residence backgrounds. Starting from data of surveys processed by the ASA in 2007 and 2013, we analyzed the evolution of worker categories involved in agricultural holding in that timeframe. Also, we presented the level of training and skills of agricultural holding management and higher echelons, for 2013.

RESULTS AND DISCUSSIONS

In the year 2007, the number of people who lived within the agricultural holdings was 6,398,325, presenting the following structure: people aged between and above 55-65 years old represented 55% of the total number,

people aged between 35-54 were at 33%, while youth aged between 15-24 years old were a mere 12% (Fig. 1).

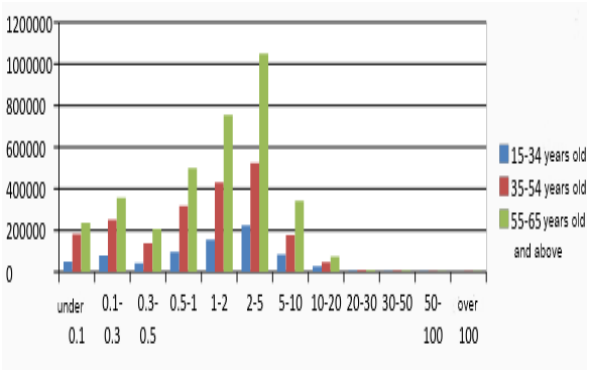

Fig. 1. People in individual agricultural holdings based on age and agricultural area size being used, in 2007. Source: ASA, 2007[1]

(1)The occupation rate of people age appropriate for work (15-64 years old) has similar values on both residential environments, higher in the rural one, of 60.7% compared to 58.9% in the urban areas. The occupation rate for people aged between 20 and 64 years old was of 65.7% in the rural environment, compared to the urban areas 62.5% occupation rate (Survey on the Household Workforce, 2013).

The occupation rate for the workforce residing in rural areas also indicates a large percentage of people with a medium level education (67.5%), similarly high as well as for people with a lower level education (51.3%) (Table 1).

Table 1. Occupation rate of work age appropriate population based on levels of education and location, in 2013

Level of education	Urban	Rural
Superior (short and long term university studies, including: Master's, PhD, post-graduate studies, post-doctoral studies)	82.0 %	79.2 %
Medium (high school, professional and complementary schools, apprentice levels, including stage 1, post-high school)	60.0 %	67.5 %
Lower (general, primary and uneducated)	23.4 %	51.3 %
Total	**58.9 %**	**60.7 %**

Source: AMIGO, 2013

(2)The unemployment rate is 3.6 percents higher in urban areas than in rural ones (8.9% in urban versus a 5.3% margin in rural areas). On age groups, the unemployment rate reached its highest point among the youth (15-24 years old), with a significant percent difference on location, of 33.3% in urban areas compared to the 17.1% in the rural ones.

Long term unemployment (the rate of people without a job for 12 months or more, out of the active population) was more strongly emphasized in the urban areas, at 49.1% than in the rural zones (Table 2).

Table 2. Long term unemployment rate based on age and location, in 2013

Incidence of long term unemployment	Urban	Rural
TOTAL	**49.1%**	40.8%
of which: 15-24 years old	61.4%	58.0%
25 years old and above	51.6%	41.7%

Source: AMIGO 2013

Also, the unemployment rate based on levels of education is smaller in the rural areas, especially on the lower education indicator (Table 3).

Table 3. Unemployment rate on levels of education and location, in 2013

Level of education	Urban	Rural
Superior (short and long term university studies, including: Master's, PhD, post-graduate studies, post-doctoral studies)	**8.9%**	**5.3%**
Medium (high school, professional and complementary schools, apprentice levels, including stage 1, post-high school)	9.2%	6.0%
Lower (general, primary and uneducated)	19.1%	4.2%
Total	**8.9 %**	**5.3%**

Source: AMIGO, 2013

(3)**Workforce categories involved in agricultural holdings**

While the number of permanent employees decreased significantly on holdings of 1-2 hectares (-565 permanent employees), the number of permanent workers in holdings over 50 hectares is increasing (over 8,525 permanent employees). The number of temporary employees has been steadily decreasing, especially in holdings with a surface raging 2-5 hectares (-956,613 temporary employees). The decrease in temporary workers between 2007 and 2013 is quite dramatic, with no more than 1,927,794 people (Table 4).

The number of bosses and management level staff has increased in all used agricultural area size classes. But the biggest increase is registered among management on areas over 100 hectares (+2,257) as well as at those with a surface of under 2 hectares (+4,256). We are actually noting the existence of a polarizing tendency in agricultural holding based on used area size towards the extreme (over 100 hectares and under 2 hectares respectively).

Table 4. Employees that worked in agricultural holdings, on categories and size classes of the used agricultural area, between 2007-2013

Size classes of used agricultural areas (hectares)	2007			2013		
	Employee categories (people)			Employee categories (people)		
	Management	Permanent employees	Temporary employees	Management	Permanent employees	Temporary employees
under 0.1	348	4,764	33,031	993	4,628	53,783
0.1-0.3	731	124	173,617	1,616	226	202,327
0.3-0.5	349	422	155,720	1,006	210	160,431
0.5-1	629	239	465,032	1,687	512	351,304
1-2	993	1,071	953,880	2,004	506	570,122
2-5	2,564	1,221	1,758,732	3,233	1,129	802,119
5-10	2,529	1,467	662,993	2,815	1,063	284,367
10-20	1,269	1,434	200,478	2,141	1,787	90,708
20-30	409	837	40,910	923	914	25,638
30-50	573	1,445	32,953	1,140	1,443	26,629
50-100	1,219	3,353	33,254	1,916	3,800	28,866
over 100	7,179	36,598	134,602	9,436	44,672	121,114
Total	18,792	52,975	4,645,202	28,910	60,890	2,717,408

Source: ASA 2007, ASA 2013 [1, 2]

The number of management staff employees and bosses increased in 2013 both for men and women, even more so for men, with a total of 1,250 women and 8,868 men (Table 5) (Table 6).

Table 5 Categories of employees (male) that worked in agriculture between 2007 and 2013.

Size classes of used agricultural areas (hectares)	2007			2013		
	Employee categories (male)			Employee categories (male)		
	Management	Permanent employees	Temporary employees	Mana Gement	Permanent employees	Temporary employees
under 0.1	295	2,829	19,926	815	2,789	31,406
0.1-0.3	548	80	88,903	1,354	157	123,216
0.3-0.5	306	297	79,395	823	137	97,297
0.5-1	539	155	241,161	1,490	293	210,302
1-2	883	585	500,264	1,795	325	329,310
2-5	2,339	810	870,537	2,963	759	460,520
5-10	2,376	956	365,009	2,611	704	166,530
10-20	1,147	907	114,149	1,941	1,212	55,843
20-30	360	555	23,568	814	656	16,832
30-50	503	1,018	18,804	1,004	1,076	17,289
50-100	1,090	2,425	20,950	1,690	2,760	19,915
over 100	6,430	29,392	86,964	8,384	36,920	85,400
Total	16,816	40,009	2,429,630	25,684	47,788	1,613,860

Source: ASA 2007, ASA 2013 [1, 2].

Table 6. Categories of employees (female) that worked in agriculture between 2007 and 2013.

Size classes of used agricultural areas (hectares)	2007			2013		
	Employee categories (female)			Employee categories (female)		
	Management	Permanent employees	Temporary employees	Management	Permanent employees	Temporary employees
under 0.1	53	1,935	13,105	178	1,839	22,377
0.1-0.3	183	44	84,714	262	69	79,111
0.3-0.5	43	125	76,325	183	73	63,134
0.5-1	90	84	223,871	197	219	141,002
1-2	110	486	453,616	209	181	240,812
2-5	225	411	888,195	270	370	341,599
5-10	153	511	297,984	204	359	117,837
10-20	122	527	86,329	200	575	34,865
20-30	49	282	17,342	109	258	8,806
30-50	70	427	14,149	136	367	9,340
50-100	129	928	12,304	226	1,040	8,951
over 100	749	7,206	47,638	1,052	7,752	35,714
Total	1,976	12,966	2,215,572	3,226	13,102	1,103,548

Source: ASA 2007, ASA 2013 [1, 2]

The number of permanent male employees in holdings over 10 hectares has risen by 8,237 people, while the number of permanent female employees has grown with only 658 people in holdings over 50 hectares.

The number of temporary employees is again dropping significantly, especially more for women (-1,112,024 people) than for men (-815,770 people) (Table 5 and 6).

(4)The training and skills level of agricultural holding management

The level of training and education of upper management of agricultural holdings indicates a very low percentage of 0.01% people with a full agricultural training, 0.03% of people with a basic agricultural training and 0.96% with just a practical, direct training, on-sight and in the field. (Table 7).

Table 7. Agricultural holdings management on age and training levels

Training level of management	Age groups						
Training level of the agricultural holding management	15-24	25-34	35-44	45-54	55-64	65 and over	Total
Only practical experience	12,989	143,854	478,955	582,827	821,116	1,459,127	3,498,868
Basic agricultural training	583	5,946	25,459	30,411	26,496	24,850	113,745
Full agricultural training	132	1,267	2,391	3,835	5,690	3,728	17,043
Total	13,704	151,067	506,805	617,073	853,302	1,487,705	3,629,656

Source: ASA 2013 [1, 2].

The number of men involved in agriculture as a field is higher than that of women on all three levels of training (+1,248,080 people). We are identifying the typical gender segregation thus keeping agriculture as a predominantly male work field.

Considering the challenges raised by the workforce resources in the rural areas, the need to ensure the necessary assets (financial, logistic and legislative) to implement and monitor active measures of occupying the workforce in the rural areas.

In this context, it's mandatory to improve the quality of professional training of management in agriculture holdings, through the involvement of educational institutions in the field, encompassing especially medium and higher learning.

CONCLUSIONS

The structure of the population that in 2007 lived in agriculture holdings shows an accentuated aging process, thus: people aged between 55-65 years old and over represent 55% of the total number, while people aged between 35-54 were at 33%, with youth aged between 15-24 years old were just 12%.

The occupation rate for age appropriate workforce (15-64 years old) in the rural areas is superior to that in the urban ones, but the medium and low levels of education are predominant. The unemployment rate is also reduced, especially on the bottom specter of the education levels, in comparison to the urban environment.

Between 2007-2013, the main categories of workers in the agricultural field have shown the following tendencies:

-the number of management staff has increased on all levels of used agricultural area size. We note the existence of a polarizing increase to the extremes in accordance to size (over 100 hectares and under 2 hectares respectively);

-the number of permanent employees dropped substantially for 1-2 hectares holdings, while the number of permanent employees for holdings spanning 50 hectares is on a steady increase;

-the number of temporary employees is reduced even further for holdings with a surface of 1-2 hectares, amounting to a staggering 1,927,794 people, in the designated timeframe.

The level of training and know-how dissemination of upper management of agricultural holdings indicates a very low percentage of 0.01% people with a full agricultural training, 0.03% of people with a basic agricultural training and 0.96% with just a practical, direct training, on-sight and within the agricultural holding.

We thus insist that the necessity to improve the quality of professional training of management in agriculture holdings, through the involvement of educational institutions in the field, encompassing especially medium and higher learning, is paramount at this time.

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