

VULNERABILITIES IN ACHIEVING AGRICULTURAL POTENTIAL OF ROMANIA

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Abstract

The land fund of Romania represents a huge potential for agriculture. The potential has proved difficult to achieve, and among the main vulnerabilities researched lately, we have identified the decline in consumption of vegetable crops, fruit and meat, determined by the declining purchasing power in Romania and the European Union's common market. Therefore the degree of achievement of the agricultural potential is directly influenced by economic developments in Romania and EU Member States. The technical endowment of Romanian farmers is an old and still unresolved problem. Even though Romania has benefited from EU pre-accession funds and still benefits from it, they proved to be a poor solution for Romanian farmers with farm machinery equipment. Indicator analysis of the evolution of the number of tractors in Romania in the post-accession period, reveals that the actual number of tractors in the period under review increased overall, but even if the total number of tractors in Romania increased from 2007 until 2012, UAA (ha) per a tractor is almost constant.

Key words: agriculture, consumption, economics, agricultural machinery

INTRODUCTION

Analyzing the land of Romania, we will find that Romania's agricultural potential is huge. Still achieving, or obtaining it at an optimum level is far from being achieved. The total area of Romania is 23,839,071 ha in 2012. From which agricultural area is 14,615,057 hectares, arable land is 9,392,262 ha, areas occupied by the passion represent 3.27061 million hectares, areas occupied by meadows represent 1,544,957 ha, and areas occupied by vineyards and nurseries 210.475 ha. The area occupied by agricultural land is 9,224,014 ha. Romania has land surfaces from the first category of fertility class, considered the most valuable and suitable for any uses articles up to the 5th grade of fertility ultimately not providing conditions for plant growth. A crucial aspect of our country's is its agricultural potential. The utilized agricultural area represents 61.8% of the total area of Romania, with 39% arable land. In terms of size of population, agricultural area is 0.65 ha /capita arable land and 0.41 ha / capita (Istudor Nicolae, Compiled profile of economic organizations in Romania meet the

health food, veterinary and environmental of the European Union, 2008). [4]This positions take us at seven European Union countries. Given these issues, it is obvious that Romania has large areas with high fertility, which represents favorable conditions for obtaining a agriculture performance. But nevertheless, aspects "wealth" natural capital is not all the conditions for obtaining a competitive agriculture. During the research I highlighted two aspects that are vulnerabilities in terms of achieving Romania's agricultural potential. On the one hand food market consumption trends lately (negative influences related to Romania's economic downturn). And on the other side I will treat the issue of poor technical equipment of farm machinery agriculture in Romania. The evolution of consumption in Romania vegetable crops, fruit and meat in 2012. In the attempt to identify and analyze the main underlying vulnerabilities which load the road to achieve Romania's agricultural potential, we surprised, among other things, the economic developments of our country.

MATERIALS AND METHODS

In this paper, have been used data from National Institute of Statistics regarding utilized agricultural surface and the number of machinery used in agriculture by regions using a time series from 2007 – 2012. In order to quantify the endowment in the Romanian agriculture, it has been calculated the utilized agricultural surface for one tractor, as main indicator that shows the competitiveness of the sector. As well, in this paper has been analyzed the evolution of the agro-food products consumption in order to illustrate the socio-economical effects of the financial crisis in Romania and upon the agriculture.

RESULTS AND DISCUSSIONS

Influences of the financial crisis upon the consumption of agricultural products

Romania passed through a period of economic downturn caused by the financial crisis, with major impact in the European Union and beyond. Therefore it is considered determinant the consumption of crops, fruits and meat, to analyze the evolution of Romania's agricultural sector. The analysis shows a decrease in the average annual consumption of vegetable products per capita in Romania. The research analyzes the evolution of the main consumption crops, fruits and meat products. Wheat consumption in 2012 decreased by 8.4 kg (Availabilities of population consumption in 2012, National Institute of Statistics, 2013) compared to 2011. [1] Annual average consumption of fruit and fruit products decreased in 2012 by 3.6 kg (Feed balance in 2012, National Institute of Statistics, 2013). [7] The consumption of apples has decreased by 1.9 kg (Feed balance in 2012, National Institute of Statistics, 2013). At peaches and nectarines, cherries and sour cherries, it was a decrease of 0.6 kg. Rice consumption in 2012 over the previous year decreased by 1.3 kg (Supply balances sheet for major food products in 2013, National Institute of Statistics, 2014). In conclusion, we can say that very few products have maintained an ascending "trend" in terms of

consumption. Meat has registered a decrease in the average consumption in most meat products. Analysing these declining indicators we can say that the development of consumption is not influenced either by a weak agricultural year (which in most times would increase prices and hence a decrease in market demand or consumption), either low productivity or yield per hectare. The main cause is marked by changes in purchasing power export and domestic market. For example, in 2012 the export of apples was 49.6% lower than the years with the highest increases(2007-2008). Domestic consumption of apples in 2012-2013 decreased by 8.7% (Feed balance in 2012, National Institute of Statistics, 2013) over the previous year. [6]Pears to a decrease in consumption of 1.8% (Feed balance in 2012, National Institute of Statistics, 2013) in 2012-2013 over the previous year. These decreases are registered on most consumer food products. Small increases in consumption occurred on potato market. For example, imports of potatoes in 2012-2013 increased by 26.4% (Romanian Ministry of Agriculture and Rural Development, 2014) over the previous year, but exports fell by 29.1% (Romanian Ministry of Agriculture and Rural Development, 2014) over the previous year. [5]Analyzing overall from 2007 to 2013, the consumption of potatoes has increased. The effect is determined by the price, which made agricultural products more affordable to maintain a constant level of consumption or even increased slightly. These indicators examined show that the purchasing power of the Romans has been declining. The main reason is the economic contraction that has experienced a European Union as a whole, with a smaller or larger impact from a Member State or another. The financial crisis has affected our country, Romania recorded an economic contraction in GDP of around 6%, comparing the 2008 level by 2012. In Romania, only the level of GDP reached in 2013 slightly above GDP reached year 2008. Such an agricultural potential is directly influenced by economic developments in Romania and the Member States (especially

the economic development of countries with which we have developed significant economic relations). In the same vein, vulnerability or gap in competitiveness of agriculture in Romania to Europe Union agriculture are generated by the poor technical equipment of the Romanian farmers. [2]

Endowment of Romanian farmers -one of the main problems of competitiveness

Endowment of domestic farm is an old problem. Since 1990 Romania is confronted with poor technical equipment of machines.

Table 1.Number of tractors by regions in the period 2007 - 2012

Regions	Year 2007	Year 2008	Year 2009
	Number		
TOTAL	174003	174790	176841
NORD-VEST	27739	27972	29368
CENTRU	22616	22471	22657
NORD-EST	18912	19191	19622
SUD-EST	21339	21169	21323
SUD-MUNTENIA	32325	32493	32080
BUCURESTI – ILFOV	1275	1404	1301
SUD-VEST OLTENIA	22055	21956	22611
VEST	27742	28134	27879
Regions	Year 2010	Year 2011	Year 2012
	Number		
TOTAL	180433	183064	184446
NORD-VEST	31694	32163	32482
CENTRU	23390	24053	24414
NORD-EST	19944	20319	20594
SUD-EST	20532	20700	20765
SUD-MUNTENIA	32402	32155	32742
BUCURESTI – ILFOV	1273	1294	1295
SUD-VEST OLTENIA	23307	23625	23537
VEST	27891	28755	28617

Source: data processing, INS, TEMPO ONLINE

Which meant that in this time period so far, to see an unwanted "brake" in the development of Romanian agriculture. This finding has motivated my research orientation to analyze the degree of Romanian agriculture machinery equipment. We considered the indicator on the evolution of the number of tractors in

Romania in the post-accession period (2007-2012) as a reference, because most agricultural activities used tractor. Although the analysis may include other complementary machines, the equipment we extruded research on farm with essential equipment, without which a farmer can operate effectively. In this research we studied utilized agricultural area and the number of tractors in Romania in the period 2007-2012. In order to analyze the evolution of the number of tractors in Romania and found differences that occurred in various parts of the country, we appeal to this segment research development regions of Romania.

From Table. 1, we can see that the actual number of tractors in the period under review increased overall from 174 003 tractors in 2007-184446 units in 2012. However in the case of developing regions it can be noticed a decrease in the number of tractors. For example for the southeast region development is a decrease from 2007 to 2012 from 21,339 tractors in 2007 to 21.169 in 2008 to 21.323 in 2009 to 20.532 in 2010 to 20.700 in 2011 and 20.765 tractors in 2012. In the South-East and West was a decrease in the number of tractors from 23 625 in 2011-23537 in 2012 and from 28 755 tractors in 2011-28617 2012. Bucharest-Ilfov development region is in the same harmful evolution with an increase of only one tractor, from 1,294 in 2011-1295 in 2012.

However for Bucharest-Ilfov development region, analysis is not relevant because this region is predominantly urban and less rural and agricultural default.

In table 2, there is a total increasing of utilized agricultural area of Romania in the period 2007-2012, with a few exceptions. A variable evolution was recorded in Central Development Region, where the utilized agricultural area in 2007 was 550 077 ha, with a decrease in 2008-529973 ha, followed by an increase in 2009-556248 ha loss 2010-522903 ha, increasing 2011-563956 ha and a decrease in the utilized agricultural area 2012-552180 ha. Basically Bucharest-Ilfov region recorded the largest losses occupied with agricultural areas from 75 977 ha in 2007-56184 ha in

2012. Vast majority of these areas have been used either to develop residential and industrial areas. What can generalize but it is a drop in agricultural areas of analysis used the last two years.

Table 2.Utilised agricultural surface in the period 2007 – 2012

Region	Year 2007	Year 2008	Year 2009
TOTAL	7777174	7798075	7884101
NORD-VEST	841230	735411	712111
CENTRU	550077	529973	556248
NORD-EST	1190291	1146317	1155451
SUD-EST	1585102	1707790	1736042
SUD-MUNTENIA	1787495	1802225	1855086
BUCURESTI – ILFOV	75977	54727	55592
SUD-VEST OLTENIA	981675	1031765	1033718
VEST	765327	789867	779853
Region	Year 2010	Year 2011	Year 2012
TOTAL	7807379	8081613	8058329
NORD-VEST	722597	725261	700984
CENTRU	522903	563956	552180
NORD-EST	1130502	1166806	1252490
SUD-EST	1766107	1799198	1736558
SUD-MUNTENIA	1815491	1877798	1884369
BUCURESTI – ILFOV	64781	55808	56184
SUD-VEST OLTENIA	1023571	1050067	1038754
VEST	761427	842719	836810

Source: data processing, INS, TEMPO ONLINE

Thus, only the north-east and Muntenia region recorded increases in agricultural land used by the 1,166,806 ha ha 2011-1252490 in 2012 and 1,877,798 ha 2011-1884369 2012. Besides analyzing agricultural area used whole region in 2012 to the year 2011 there is an alarming drop from 8,081,613 ha to 8,058,329 ha.

In table 3 we processed the data in Table 1 and Table. 2 and obtained UAA incumbent a tractor on each development region of Romania.

From the analysis we can see that in most developing regions of Romania is a decrease

of the utilized agricultural area which lies a tractor.

Table 3.Utilised agricultural surface for one tractor by regions, period 2007 - 2012

Regions	Year 2007	Year 2008	Year 2009	Year 2010	Year 2011	Year 2012
	ha/tractor					
TOTAL	44.70	44.61	44.58	43.27	44.15	43.69
NORD-VEST	30.33	26.29	24.25	22.80	22.55	21.58
CENTRU	24.32	23.58	24.55	22.36	23.45	22.62
NORD-EST	62.94	59.73	58.89	56.68	57.42	60.82
SUD-EST	74.28	80.67	81.42	86.02	86.92	83.63
SUD-MUNTENIA	55.30	55.47	57.83	56.03	58.40	57.55
BUCURESTI - ILFOV	59.59	38.98	42.73	50.89	43.13	43.39
SUD-VEST OLTENIA	44.51	46.99	45.72	43.92	44.45	44.13
VEST	27.59	28.08	27.97	27.30	29.31	29.24

Source: data processing, INS, TEMPO ONLINE

Thus, in the north-west in 2007 to 30.33 ha was for a tractor. In the same region there is a decrease each year covered up to the value of 21.58 ha incumbent on a tractor in 2012. Similar decline occurring in the Central region, northeast region, the Bucharest-Ilfov. Exceptions are southeast and west region, both registering growth of 74.28 ha which lies a Trace year 2007 to 83.63 ha incumbent on a tractor in 2012 and from 27.59 ha what it returns a tractor in 2007 to 29.24 ha incumbent of a tractor in 2012. South-west region,Oltenia maintains constant UAA incumbent a tractor from 44.51 ha in 2007 to 44.13 ha in 2012. South-Muntenia Region has a utilized agricultural area that lies an equal tractor in 2009 with 2012 (57.83 ha / tractor versus 57.55 / tractor).

Although vulnerabilities in achieving agricultural potential of Romania are numerous, they require extensive and detailed research; These two analyzes made in the research: the evolution of consumption in Romania vegetable crops, fruits and meats in 2012, and the endowment of Romanian farmers-one of the main problems of competitiveness, is an analysis to highlight and address the main vulnerabilities of agriculture in Romania . In the first part of the analysis there is a decrease in consumption in major crops, fruits and meats in 2012. Primary

cause is marked by changes in purchasing power export and domestic market. Achieving agricultural potential is directly influenced by economic developments of the Member States (especially the economic development of countries with which we have developed significant economic relations).

CONCLUSIONS

Reviewed the progress indicator on the number of tractors in Romania in the post-accession period (2007-2012) reveals that the actual number of tractors in the period under review increased overall from 174 003 tractors in 2007-184446 units in 2012. However reality shows that one region decreases in the number of tractors registered since 2007 until 2012, and in three regions decreases the number of tractors in 2012 compared to 2011. In comparison with other EU countries, in 2009 the are notable differences (Eurostat, 2010): Germany 681,200 tractors, Lithuania 118,041 tractors tractors, Luxembourg 6,527 tractors, Poland 1.57729 million, Spain 1,320,599 tractors, Romania 176,841 tractors)

Even if the total number of tractors in Romania increased from 2007 until 2012, the utilized agricultural area (ha) per a tractor is almost constant. Situation found can be worrying, because after five years the European Union in 2012 did not record almost any progress in terms of utilized agricultural surface in Romania. Even though our country has received funding through the SAPARD Programme in the pre-accession period and still receive funds for the purchase of machinery patterning by Measure 121, it still have a low endowment in agriculture.

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