STRUCTURE OF AGRICULTURAL PRODUCTION FOR NORTH - EAST REGION OF DEVELOPMENT IN ROMANIA (2009-2011)

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Abstract

The paper aims to specify the structure of agricultural production for the counties of the North - East Region, with its main industries specific to agriculture: crop production, livestock production and service sector. The study aims to give a sense of the relative importance of each type of activity and each administrative territorial units (county) - regionally. It starts from the presentation of regional issues and then it presents the analysis of the specific situation of the six counties parts of the region: Bacau, Botosani, Iasi, Neamt, Suceava and Vaslui.

Key words: *crop production, livestock production, total production, services, structure*

INTRODUCTION

In all countries, irrespective of social order, agriculture has always been an essential component of production materials. The progress of all countries was and is closely linked to the achievements in agriculture. Most developed countries are economically managed countries to develop their agriculture and which directly influenced the development of other sectors of national economy [2].

For Romania's national economy, agriculture is a key industries, serving to satisfy the population's agri-food consumption, materials manufacturing, export availabilities, etc.

Even for developed countries from economic point of view (USA, Canada, Germany, France etc.), agriculture is characterized by high levels of modernization and economic efficiency, special situations being encountered in US and Canada, countries that are large exporters of agricultural products.

Romanian Agriculture is a branch of goods producing - plant and animal - with a long tradition and has favorable natural conditions.

Place of agriculture in the economy of a country can be assessed by two categories of parameters: endogenous and exogenous [1].

Production Branch groups relatively homogeneous activities, running to obtain certain goods or services, characterized by the joint nature of the products produced, specialization of labor, community and technology inputs.

Production branch is part of the production activity of the agricultural unit, which are characterized by communion, the finished product, the means used and the qualifications of the workforce.

Specific features that define a particular branch of production and which individualize it are: the finished product obtained and its economic destination; the means of production used and applied technology; determinant of labor specialization [4].

MATERIALS AND METHODS

Preparation of the study called for the comparison method and the method of documentation. Besides temporal sequences included in the analysis, it was also used their average.

Comparison method. This method considers and compares them with the results of bases of reference to which they can appeal. The comparison can be done in time, in space, or may be a mixed one.

Correct use of comparison method involves certain conditions that ensure data comparability: the presentation of results

using the same system of indicators; ensure the unitary character of the contents, methodologies and metrics of the indicators used.

The comparison shows a general trend in researched processes and phenomena, this is based on their analysis of the terms of reference parallel.

If technical and economic analysis deals with the issue in terms of cause-effect relationship, the comparison is oriented towards examining the effects.

For the present study we used the value of agricultural production, expressed in thousand Lei current prices for the period 2009 - 2011. The level of the indicator is presented both as a whole and for the three component sectors of agriculture: crop production, animal production and nature of services agricultural (regional and district values) [5,6,7,8,9,10,11]. For perform the work, it appealed on determination of the structure of total production, taking into account the three components: crop production, livestock production and services.

Simultaneously were used dynamic indices: indices with fixed base and mobile base indices or chain.

The indices represent synthetic sizes which render variability - in time and space - of economic phenomena, they being expressed - always - in relative units [2].

RESULTS AND DISCUSSIONS

Table 1 presents data for agricultural production structure during 2009-2011 for the North - Eastern Romania [3].

For 2009, total agricultural production has reached a level of Lei 10,573,936 thousand, of which vegetable sector held a share of 57.21%, followed - downward - by the livestock sector with 42.27% and providing services such as agricultural 0.52%.

Afferent of the weights afore mentioned three sectors recorded absolute values of total production: Lei 6,050,339 thousand, Lei 4,470,524 thousand and Lei 53,073 thousand - crop production, livestock and provision of services respectively.

For 2010, the area is characterized by total sector production of Lei 48,374 thousand to services, Lei 3,821,656 thousand for industry of animal breeding and Lei 6,934,858 thousand in plants production, values that determine a general level of the indicator Lei 10,804,888 thousand.

Based on the data above, it was determined the structure of the indicator showing shares of: 0.46 % services, livestock 35.36 %, 64.18 % vegetable production sector.

The year 2011 is characterized by a total agricultural production of Lei 12,639,425 thousand, of which the plant has achieved Lei 8,585,793 thousand, the manufacturing sector Lei 4,006,369 thousand animal breeding and services supplied only Lei 47,263 thousand. In this case the share descendant of sectors in total is 67.92 %, 31.69 % and 0.39 % - crop production, animal husbandry, and service charges.

Data for the years 2009, 2010 and 2011 led to an average period of Lei 11,339,416.3 thousand - general level of the indicator - in whose structure can be found, in descending order: vegetable production sector - Lei 7,190,330 thousand, 63.41%; livestock – Lei 4,099,516, thousand 36.15%; the providing services for agriculture - 0.44% and Lei 49,570 thousand.

Based on existing values in the table was determined the share of the region at the national level, leading to the following position: 16.93% for total production; 16.17% for plant production; 18.74% for livestock production; 8.02% for services.

The data included in Table 2 presents the evolution - in dynamics - of total agricultural production and of the indicators across the three sectors, constituting this branch of economic activity.

In the case of total agricultural production, time development is strictly upward. In this sense testify mostly, the above par values of fixed based indices and mobile, making up the dynamic (except those with base mobile to the average period - 89.7% compared to term of reference).

Table 1. North - East Romania. The structure of agricultural production (2009-2011) * -Lei thousand current prices.

Year	Total*	Vegetal		Animal		Services	
		Lei thou*	% from total**	Lei thou*	% from total**	Lei thou**	% from total**
2009	10.573,936	6,050,339	57.21	4,470,524	42.27	53,073	0.52
2010	10,804,888	6,934,858	64.18	3,821,656	35.36	48,374	0.46
2011	12,639,425	8,585,793	67.92	4,006,369	31.69	47,263	0.39
Average 2009 - 2011**	11,339,416.3	7,190,330	63.41	4,099,516.3	36.15	49,570	0.44
Share at the national level (%)**	16.93	16.17	-	18.74	-	8.02	-

*http://www.neamt.insse.ro/cmsneamt/rw/resource/42r_productia.htm
** own calculation

Table 2. North East Romania 's agricultural production dynamics (2009-2011)*

Year	Total		Vegetal		Animal		Services	
	Ibf	Ibm	Ibf	Ibm	Ibf	Ibm	Ibf	Ibm
2009	100	100	100	100	100	100	100	100
2010	102.2	102.2	114.6	114.6	85.5	85.5	91.1	91.1
2011	119.5	117.0	141.9	123.8	89.6	104.8	89.1	97.7
Media 2009 - 2011	107.2	89.7	118.8	83.7	91.7	102.3	93.4	104.9

* own calculation

The first category of indicators - those with fixed base - exceeding base of the reporting - 2009, the increase was 2.2 %, 19.5 % and 7.2% in 2010, for the year 2011 and for the average period. For the mobile base indices, annual overruns of comparison terms were 1.02 times and 1.17 times in 2010 for 2011.

Referring to the situation of vegetable production sector, it is noted the outrunning of reporting base of 1.14 times in 2010 compared to 2009, bringing forward of terms of comparison to 1.41 and 1.23 times in 2010. For average of the period, fixed base indices are above base - 118.8 %, while mobile base indices are lower with 83.7 % than the reporting term.

If we refer to the specific situation of livestock sector, sequentially we see: for 2009, a decreased compared to baseline by 14.5%; 2010 an exceeding by 1.04 times of the situation in the previous year and a decrease of 10.4% compared to the first term of the dynamical series; period average is superior to the previous term of the dynamical series and decreased by 2.3 % compared to 2009 by 8.3 %.

In the case of service sector, the achieved production value decreases in 2010 and 2011 compared with all reporting databases.

The fixed base indices are strictly below (91.1% and 89.1% respectively in 2010 and 2011), as well as those with mobile basis - 91.1 % and 97.7% (for the years mentioned above).

The average period is lower by 6.6% compared to the first point of reference, but exceeds of 1.04 times the second term of comparison.

Table 3 presents a summary of the regional structure of total agricultural production value (average of reporting period) and by sector (crop production, animal husbandry and agricultural services) [5], [6], [7], [8], [9], [10].

The existing situation for total output value, has the following structure: 12.49 % Vaslui; 13.51 % Neamt County; 14.39 % Bacau County; 17.59 % Botosani County 18.84 % of Iasi County; 23.18 % Suceava (fig. 1).

Regarding the structure of crop production dominates the counties of Suceava and Iasi with shares of 23.0 % and 20.51% respectively, followed by 17.86 % Botosani County, with 13.44 % Bacau, Neamt County with 13.01 % and 12.18 % in the final Vaslui - situation is similar as order to that shown above (Fig. 2.).

Table 3. Region North - East Romania. Structure of agricultural production by county. Average 2009 - 2011

Specification	Production							
	Total		Vegetal		Animal		Services	
	Effective* -Lei thou Current prices	Str. ** -%-	Effective* Lei thou current prices	Str. ** -%-	Effective* Lei thou current prices	Str. ** -%-	Effective* Lei thou current prices	Str. ** -%-
Bacău	1,631,531.7	14.39	966,686.7	13.44	661,659.0	16.15	3,186.0	6.43
Botoşani	1,994,930.3	17.59	1,284,178.3	17.86	707,221.7	17.25	3,530.3	7.12
Iaşi	2,136,116.0	18.84	1,474,855.7	20.51	634,651.3	15.48	26,609.0	53.68
Neamţ	1,531,206.7	13.51	- 934,830.4	- 13.01	589,870.0	14.39	6,506.3	13.12
Suceava	2,629,165.6	23.18	1,654,073.3	23.00	973,180.3	23.73	1,912.0	3.86
Vaslui	1,416,466.0	12.49	875,705.6	12.18	532,934.0	13.00	7,826.4	15.79
Total regional	11.339,416.3	100	7,190,330.0	100	4,099,516.3	100	49,570.0	100

*http://www.bacau.insse.ro/main.php?lang=fr&pageid=422,http://www.botosani.insse.ro/main.php?lang=fr&pageid=499,http://www.iasi.insse.ro/main.php?lang=fr&pageid=499,
http://www.neamt.insse.ro/cmsneamt/rw/resource/42_productia%20ramurii%20agricultura.htm,
http://www.suceava.insse.ro/main.php?lang=fr&pageid=422,
http://www.vaslui.insse.ro/main.php?lang=fr&pageid=422
** own calculation

For livestock sector, Suceava county is noted with the largest share (23.73 %), followed by the counties of Botosani (17.25 %), Bacau (16.15 %), Iasi (15.48 %), Neamţ (14.39 %) and Vaslui (13.0 %) (Fig. 3).

The production value generated by services, present the most imbalances structure predominant being Iasi County with 53.68 %, followed at a distance by Vaslui County with 15.79 % and by county Neamţ with a share of 13.12%.

The other counties are below 10% of the total, as follows: 7.12 % Botosani, 6.43 % and 3.86 % Bacau Suceava (Fig. 4).
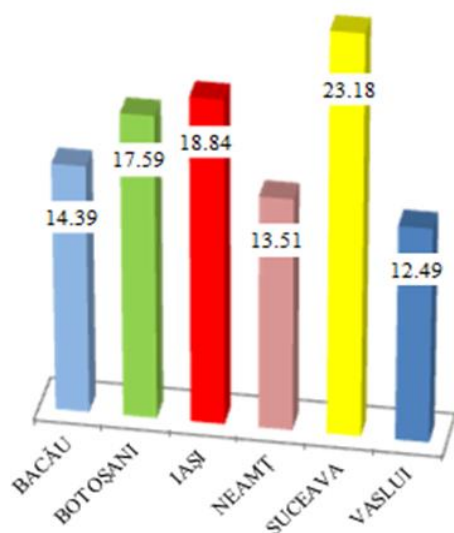
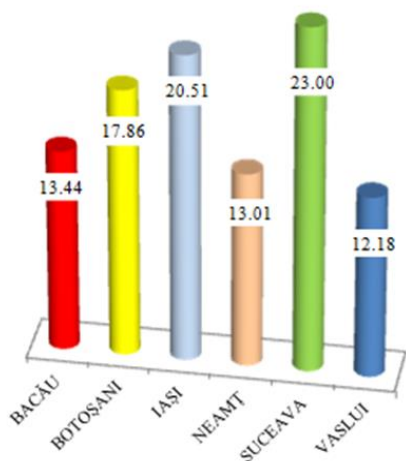Fig. 1. North-east. Agricultural production - the county structure (%)

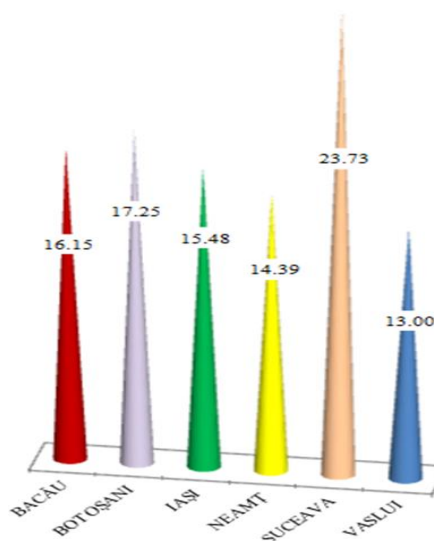Fig. 2. North - East. Crop production - county structure (%)

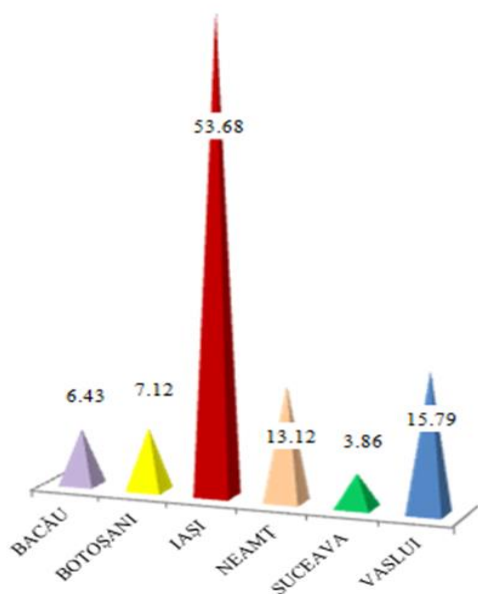Fig. 3. North - East. agricultural production livestock - county structure (%)

Fig.4. North - East. Agricultural production services - county structure (%)

CONCLUSIONS

North - East Romania region stands out in all components, of dynamic series, the preponderance of vegetable production sector (over 57 % - 57.21 %, 64.18 % and 67.92 % respectively in 2009, 2010 and 2011), followed at considerable distances from farm animals (42.27 %, 35.36 % and 31.69 % for 2009, 2010 and 2011), while services supplied exceeded the 0.5 % only in 2009 (0.52 %);

The dynamics is one similar to that encountered at national level (overall upward trend for crop production, swing for animal farming and downward on services);

At the regional level, stands out three administrative units prevailed (Suceava, Iasi and Botosani exceeding the average share of 16.66 % - 23.18 %, 18.84 % and 17.59 % respectively), the remaining counties are below average share (14.39 %, 13.51 % and 12.49 % - Bacau, Neamt and Vaslui respectively).

Suceava County is ranked first in terms of the share in the case of the plant sector and livestock (23.0 % and 23.73 %), while the level of the services it ranks last (3.86 %).

The county with the lowest share is Vaslui (12-18 % for crop and livestock production 13.0 %).

Iasi County, it is noted especially by the share

of service activities - 53.68 % of the region; it should be stressed the need to reinvigorate level livestock production, at the regional especially for Bacau, Neamt and Suceava that have significant potential (hills and mountains), but also of service sector for all counties.

It should not be neglected the related potential of crop production which is not used properly, in most of the cases (smallholding, poor technical equipment, limited financial resources, the need to apply a differentiated agro technical large areas of land, etc.).

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