

STUDY CONCERNING THE TERRITORIAL ALLOCATION IN OPEN FIELD OF THE VEGETABLE GROWING AND THE POSSIBILITIES OF ENSURING OF THE CONSUMPTION OF VEGETAL GROWING FOR THE POPULATION FROM THE MICRO ZONE “LUNCA SIRETULUI, BACĂU DISTRICT”

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In the year 2006, in Bacău district, a surface of 6791 hectares was cultivated with vegetables, out of which 99,8 % of the surface has belonged to the private sector.

The total offer of vegetables realized in the year 2006 within Bacău district was about 102 thousands tones, with an average production per hectare of 15,01 tons.

In the same year, in the micro zone “Lunca Siretului - Bacău district”, the vegetable growing in open field occupied 2906 hectares, representing 42 % of the total surface cultivated with vegetables in Bacău district and the production of vegetables was of 45,2 thousands tones, representing 44,4 % of the total production within Bacău district. The average production per hectare in the micro zone “Lunca Siretului” was 15,6 tons, being superior with 3,93 % to the average production obtained per district.

*The territorial allocation of the vegetable growing in Bacău district emphasizes that 16 localities from the micro zone “Lunca Siretului” cultivated 77,8 % from the total surface occupied by vegetables of the studied area and produced 78,04 % of the total production of vegetables obtained in the studied area. **The correlation between surface and total production** was positive, in consequence of the dominant influence of this indicator realized in the localities Bacău, Buhoci, Corbasca, Hemeiuș, Letea Veche, Mărgineni, Nicolae Bălcescu, Pâncești and Rahova, which cultivated 39,5 % of the surface occupied by vegetables in the micro zone “Lunca Siretului” and realized 48,9 % of the total production of vegetables obtained in the studied micro zone.*

The authors noticed that in the year 2006, the biggest production of vegetables per hectares was obtained in the commune Pâncești, exceeding with 71,2 % the average production per hectare of the micro zone.

Taking into account the vocation for vegetable growing in the studied micro zone, the authors established the necessary of the yearly consumption of vegetables for the population of the micro zone "Lunca Siretului", as following: 125 kg/inhabitant/year in the first variant - V_1 and 180 kg/inhabitant/year in the second variant V_2 .

The authors elaborated three variants of structure of the vegetable offer in the micro zone "Lunca Siretului", which were compared to the necessary of consumption for the population of the studied area, on both variants corresponding to the minimum level of consumption (V_1) and to the maximum level of consumption (V_2).

It has been found that in all variants there is ensured the minimum necessary of consumption, resulting a surplus which increases from V_1 to V_3 , while in the variant with the maximum consumption of 180 kg/inhabitant/year, it is not possible to ensure the total necessary of vegetables, resulting a deficit between 5651 tons (V_3) and 7929 tons (V_1).

Key words: territorial allocation, vegetable growing, consumption

The complex development of romanian current should be oriented towards increasing production and not limit it, because, currently, local supply is lower than consumer demand.

Currently, romanian agricultural policy is not coherent and not based on a clear legislation and funding is not safe and effective.

Lack of a farm system organized into sectors that operate on principles of fair competition, had an extremely negative impact on economic efficiency of vegetable growing. The current states of vegetable growing impose measures of modernization and organization to increase the total supply and to stabilize prices to producers and consumers.

Meanwhile, the development of vegetable growing producers should ensure higher incomes and a decent quality of life, comparable to other economic sectors or from other countries with developed vegetable growing.

The reestablish of vegetable growing, the raising of economic efficiency and correlation with the national interests can be achieved by reconsider the positive elements and the introduction of new elements of performed management and marketing, which respects the principles and guidelines developed by the European Commission in Bruxelles.

Documentul de față este aranjat astfel încât să poată fi utilizat ca model. De asemenea, el este un șablon pe care se poate lucra în mod direct prin înlocuirea paragrafelor corespunzătoare.

MATERIAL AND METHOD

The study was done in micro zone "Lunca Siretului - Bacau County" and was aimed at analyzing the territorial allocation of production of vegetables and the possibilities of securing consumer needs for the population of the area investigated.

In was elaborated three versions differentiated by the structure of vegetable crops, which were projected the production likely to be done at the horizon year 2012,

which were compared with the needs of vegetables supplied to the local population from micro zone "Lunca Siretului - Bacău County", on two variants: the minimum consumption (125 Kg / loc. / year) and maximum consumption (180 Kg / loc. / year).

The potential for micro zone production taken in study will provide a minimum consumption of vegetables for the local population, and results in a surplus of capitalization on the domestic market, while in the case of the second variant, will result in a deficit, which differentiate on the three versions of projected structure.

RESULTS AND DISCUSSIONS

The zonation and territorial repartition of vegetable production constitutes an expression of the process of development and economic growth because to allocate a territory on a certain amount of production is necessary to know more elements such as:

- development strategy in the future of farming and vegetable growing employment throughout the overall development of national economy;

- local and national requirements for food (including vegetables) to ensure the local population of food, for prime materials needed in processor industries necessary for securing state rezerves and ensuring availability for export.

- the favorability of production of factors (natural, economic, social) for the production of high unit area, for certain vegetable species;

- the stimulation of agricultural producers through various levers for the application of advanced technologies, to ensure the achievement of future production increases, effective economically.

The process of zonation and territorial distribution of vegetable production and the establishment of regional structures can be done on the basis of economic and mathematical models, whose solution is based on the use of specifically software.

The information used in preparing them cover three main aspects:

- *information on natural conditions (climate and soil);*
- *information on the development strategy of intensive production, based on the use of some technologies, differentiated by species;*
- *information on employment resources and rational use of labor.*

Bacău County has the vocation for the cultivation of vegetables in the field, making part of the area I, subarea I of favorability. In the year 2006, in the county of Bacău were cultivated with vegetables 6791 hectares, of which 99.8% in the private sector.

The territorial distribution of vegetable production in Bacău County, reveals that the largest share is occupied by dry onion (18.9%), followed by tomato-total (17.5%), cabbage - total (17.4%), the vegetable for root - total (10.9%), pepper-total (8.5%), dry garlic (7.7%).

The total production of vegetables achieved in Bacau County was 101953 tones, with an average yield per hectare to 15.01 tones.

From **an analysis of the territorial distribution of vegetables culture in Bacau County**, results that in micro zone "Lunca Siretului", 16 localities (Bacău, Bistrita-Berești, Letea Veche, Orbeni, Pâncești, Racova, Sascut, Tâmași, Traian, Corbasca, Săucești, Filipești, Gârleni, Mărgineni, Negri, Tătăraști) have grown 77.8 % (**2261 hectares**) of the analyzed mycrozones occupied area with vegetable and yielded 78.04 % (**35303 tonnes vegetables**) of the mycrozones total production of vegetables, **the corelation "surfaces: total production"** being significant as a result of dominant positive results influence obtained in the localities *Bacău, Buhoci, Corbasca, Hemeiuș, Letea Veche, Mărgineni, Nicolae Bălcescu, Pâncești and Rahova*, which have grown 39.5 % of the area with vegetables and have achieved 48.9 % of the total vegetables production of studied mycrozones.

Vegetable growers of micro zone "Lunca Siretului-Bacău County", cultivated with vegetables 2906 hectares, which represented 42.0 % of the total area under vegetables to the county of Bacău and made 44.4 % of the total production of vegetables produced in the county Bacău (*tab. 1*).

It is remarkable, also that in 2006 in the village Pâncești it was achieved the highest average production of vegetables per hectare (26.7 tones), exceeding the average of micro zone (15.6 tones) with 71.2%.

The share which has a **consumption of vegetables** in feeding the population constitutes a measure of assessing the living standards of a people (*tab. 2*).

In the countries of the European Union - 15, average annual consumption of vegetables per capita was made of 120.8 kg, lower than the average from the developed countries (*Italy - 173, Belgium - 137.4, France - 123.3 etc.*).

For Romania, consumption of vegetables has been affected either directly offer local and indirectly by the purchasing power of people and traditions of consumption. If in the year 1990, the average annual consumption of vegetables per capita was 65 kg in 2000 rose to 113 kg, because in 2002, to double it (*131 Kg*).

The offer of total vegetable production has increased from 2.74 million tones achieved in 2002 to 4.77 million tones in 2004, with an average yield of 15476 kg / ha compared to 11660 kg / ha in 2002.

For Romania's population, the total consumption of vegetables, estimated at a calendar year, is about 3.77 million tons, resulting an available of one million tones, which may be intended for processing or capitalization on the market.

It requires a replace of vegetables production on normal criteria, which will increase the interest of romanian producers within the meaning of modernization and development of vegetable production at the level of external market requirements, promoting a real and effective competition.

Table 1

The territorial distribution of vegetable growing in micro zone "Lunca Siretului - Bacău County" (2006)

Specification	Area		The total production		The average production		Obs
TOTAL MYCROZONE	2906	100,0	45233	100,0	15,6	100,0	
from which : Bacău	165	5,7	3150	7,0	19,1	122,4	*
Berești-Bistrița	162	5,6	1702	3,8	10,5	67,3	
Buhoci	42	1,4	773	1,7	18,4	117,9	*
Cleja	54	1,9	804	1,8	14,9	95,5	
Corbasca	117	4,0	2065	4,5	17,7	113,5	*
Dămieniști	46	1,6	530	1,2	11,5	73,7	
Faraoani	30	1,0	435	1,0	14,5	92,9	
Filipești	102	3,5	1470	3,2	14,4	92,3	
Gârleni	87	3,0	984	2,2	11,3	72,4	
Hemeiuși	75	2,6	1410	3,1	18,8	120,5	*
Horgești	50	1,7	763	1,7	15,3	98,1	
Letea Veche	171	5,9	2925	6,5	17,1	109,6	*
Luizi-Călugăra	62	2,1	887	2,0	14,3	91,7	
Măgura	74	2,5	990	2,2	13,4	85,9	
Mărgineni	100	3,4	1775	3,9	17,8	114,1	*
Negri	99	3,4	1191	2,6	12,0	76,9	
Nicolae Bălcescu	85	2,9	1380	3,0	16,2	103,8	*
Orbeni	146	5,0	2180	4,8	14,9	95,5	
Pâncești	186	6,4	4974	11,0	26,7	171,2	
Parava	39	1,3	538	1,2	13,8	88,5	
Răcăciuni	60	2,1	916	2,0	15,3	98,1	
Racova	208	7,2	3700	8,2	17,8	114,1	*
Sascut	147	5,1	1720	3,8	11,7	75,0	
Săucești	122	4,2	1738	3,8	14,3	91,7	
Tămași	217	7,6	2332	5,2	10,7	68,6	
Tătăraști	100	3,4	1535	3,4	15,4	98,7	
Traian	127	4,4	1862	4,1	14,7	94,2	
Valea Seacă	33	1,1	504	1,1	15,3	98,1	

*semnificative corelation

Also, it is necessary to elaborate a national program to promote local consumption of vegetables, fresh and industrial processed, based on the following ways:

- *publicity and commercial advertising in the most diverse forms;*
- *meetings, round tables and dialogues with experts in the field;*
- *gastronomic exhibitions to promote culinary arts based on diversified consumption of vegetables;*
- *organization of scientific symposium and seminars on nutrition themes; • organization of annual contests with prizes and awards for the stands and shop windows in the recovery of fresh vegetables, and by organizing fairs vegetables storage areas in typical production.*

Table 2

**The consumption of vegetables in some areas and countries of the world
(kg / capita / year) – 2002**

Zone / Country	The vegetables consumption
Africa	48,8
Asia	105,8
The Central America	44,2
Europa	110,3
European Union - 15	120,8
The North America	120,5
Oceania	92,7
The South America	44,4
Australia	91,7
Belgia-Luxemburg	137,4
Brazil	38,6
Etiopia	8,9
France	123,3
Germany	79,4
Italy	173,2
Romania	131,0
U.S.A.	121,1

Sursa: work out after F.A.O. data base, 2002

Regarding the **vocation for the vegetable culture in the studied micro zones**, was determined the annual vegetable consumption needs for the population from micro zone "Lunca Siretului", the two variants: 125 Kg / loc. / year (V_1) and 180 Kg /loc./year (V_2).

There were projected three structural variant of vegetables supply from micro zone "Lunca Siretului" (*tab. 3*), which were compared with consumption needs of the local population from the studied micro zones, on the two variants (*minimum level and maximum level of consumption*).

In conjunction with the area under cultivation and average yield per hectare in micro zone "Lunca Siretului-Bacau County," **the projection of the total supply of vegetables** was differentiate within the three variants, compared with reference variant:

- **in the variation of ensuring the minimum consumption of vegetables (125 kg vegetables / loc./year)**, in V_1 is designed to ensure requirements, resulting in a 9041 tons available, which can be capitalized on the Bacău county market;
- **in V_2** ensure consumption needs and a resulting available of 10817 tones;
- **in V_3** is recorded the highest available (11320 tones).

In the case of variant with a maximum consumption of 180 kg/loc./year will not be able to ensure total vegetable requirements, the deficit will meet between 5651 tones (V_3) and 7929 tons (V_1).

Table 3

Projections on the development strategy of total supply of vegetable species in micro zone "Lunca Siretului-Bacău County," on the horizon year 2012

Specification	The total vegetable production						
	Average 2002-2006 (V ₀)	V ₁		V ₂		V ₃	
	tones	tones	%/V ₀	tones	%/V ₀	tones	%/V ₀
Total vegetable, from which:	44478,0	47613,0	107,1	49388,3	111,1	49890,5	112,2
Dry onion	8271,8	8767,4	106,0	8767,4	106,0	9675,4	117,0
Dry garlic	1759,0	1814,2	103,1	1814,2	103,1	2267,8	128,9
Yellow parsnip	4430,3	4910,4	110,8	5703,6	128,7	5288,1	119,4
Eggfruit	1344,2	1636,1	121,7	1636,1	121,7	1422,7	105,8
Tomato-total	9561,3	11395,2	119,2	11395,2	119,2	11015,4	115,2
Pepper-total	5100,6	5364,9	105,2	6469,4	126,8	5522,7	108,3
Yield cucumber	2337,7	2574,4	110,1	2574,4	110,1	2574,4	110,1
Cabbage-total	9960,0	9870,0	99,1	10105,0	101,5	11327,0	113,7
Other vegetable	1713,1	1280,4	74,7	923,0	53,9	797,0	46,5

CONCLUSIONS

1. The zonation and territorial distribution of vegetable production is a main factor of development and economic growth.

2. The territorial distribution of vegetables culture in Bacău County reveal that the largest share of occupying has the dry onion, tomatoes and cabbage, while, the vegetable for root, peppers and garlic were placed on the last seats.

3. In micro zone „Lunca Siretului”, were cultivated with vegetables 42.0 % of the area with vegetables and the county of Bacău has been made 44.4 % of the total production of vegetables.

4. Depending on the vocation for vegetables culture of studied micro zone was designed three structural variants of vegetables supply to ensure the vegetables consumer needs of the local population in, two variants of consumption: the minimum and maximum level.

5. In perspective, will be able to ensure minimum consumption needs, and resulting in a surplus of 9041 to 11320 tones, while, in the maximum consumption needs, the deficit will stay between 5651 tones (V₃) and 7929 tons (V₁).

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