

# AGRICULTURAL MICROZONES IN BACAU COUNTY ANALYSIS

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## Abstract

The study of zoning agricultural production envisaged allocation of agricultural production area, agricultural production in the future development orientation, creating economic development model of agriculture by the year 1990, finally aiming at optimizing the structure of agricultural production through a zonal specialization in crop production and livestock production. However, to achieve this goal were established and investments in irrigation facilities - 31,000 ha in the execution of land improvement works to combat excess irrigation and soil moisture and in the left side of Siret valley were left to carry the works to combat soil erosion.

Of course, in the current (dis) organization of agricultural production is not a matter distribution in the territory, however, established production areas in the study represents an important tool for those practicing in the field of agriculture, both at the micro level (farm ) but especially to those who are engaged in developing strategies Bacau county's agriculture.

**Key words:** zoning of agricultural production, competitiveness, strategy, policy development.

The study of the agricultural production zoning has been conceived as “a prognosis upon the agricultural production, a new horizon, a teritorial development hypotheses on the local level, which indicates the agricultural specialization trend on the production assessment, to specializing and concentration to the certain production structures” (Gavrilescu D., Giurca Daniela, 2002).

**The zoning of production** is the border establishing process between agricultural areas which due to certain production characteristics and natural and economic premises develop a certain zonal profile. The process consists in a division between the agricultural territory and the production tools based on the natural, social and economic characteristic feature, into separate units which shall be the object of further investments into new means of production in order to complete and put into value the ones already in use (Oțiman P.I., Oțiman O., 2005).

The zoning of the agricultural production aims at determining areas with omogene production profile, especially in what regards the main branch production. The basic production from each area will harmoniously combine with other sectors and with the national economy as a whole, in a specific way for each of the determined areas. By zoning the agricultural production a specific agriculture unit will follow with an optimum structure due to the given conditions resulted from the process. These actions will help the prognosis of the agricultural production in becoming a middle stage between the main tasks of the county and the

final zoning will focusing and specialising all the process from the agricultural enterprises (Maricica Stoica, 2005).

## MATERIAL AND METHOD

*Zone* is usually referred to as a certain area with specific omogen characteristics and profile determined by the structure of the production. The bordering process matter must be approached considering its own dynamic. Firstly, we should determine the territory of a *zone*, the area which is influenced by it as a *gliding territory*, which varies its size in report to the economical necessities, the means of production put into agricultural service, and not in the sole consideration to certain natural conditions. This way, determining the zone profile becomes a result of the complex and common action of the production factors, which complies with the optimisation of the agricultural process offered by the bordering process in determining the agricultural profile of territories (Krisztina Melinda Dobay, 2006).

### ❖ The communist period

The zonal approach of agricultural development was used shortly after the centralized economy was instated, going through the following steps:

- The first writing on the subject was released by the Romanian Academy in 1954-1959;
- The second writing which determined the national macrozones was conceived between 1961-1964;

• Between 1970-1975 the book which treated the matter of “bordering process between territories with omogene profile and their analysis from a productive and economic point of view”. There were Local Comision of Zoning the Agricultural Production established in each county, rounding up to 9-22 zones per each county and 500 zone units thoruhout the country (Agricultural production zoning in Bacau County – 1980 – 1985 – 1990 – synthesis studies).

The main principle which guided the zoning theories had its starting point in the **agricultural production intensification necessity**, a process conceived „not only as a slow and controlled evolution in which traditional methods and means improve or adjust to the new premises, but also as a rapid development capable of ensuring the ligning up to the international agricultural standards” (Maricica Stoica, 2005).

The intensification of the agricultural process was referring to the concentration and specialising process of agriculture production in certain areas established in considertion to criteria such as *favorability or comparative advantages* by which the population alimentary needs were covered and the *export tasks* were fulfilled as well. Finally, the priority of the two turned 180 degrees, the export becoming the first objective (by any means necessary) (Gavrilesco D., Giurca Daniela, 2002). The study became a working instrument for planing the economic sector by „*dividing the anticipated agricultural production in county territories for the country's new horizon, the structure of the zone being obtained by assign of the production tasks to the determined ecologic omogene areas*”, taking into consideration the principle of “*division of the county's agricultural system into secondary divisions and concentrating their resources in the purpose of putting in value the potential of the county's agricultural system*”.

In determining the omogen zones the starting point was studying the natural conditions of the county by analyzing the following elements: climatic characteristics, natural conditions, soil characteristics, the increasing value of agricultural lands.

The analysis of the elements presented above concluded in the determination of **13 production zones in Bacau county** (tab.1).

Starting from these aspects, giving the complex process of zoning, not only the internal structure of each zone, but how the potential of the products was to vary from o zone to another was also took into count. The multiple mapoverpose and the analysis of economic indicators resulted in combinations of products grouped into divisions of 12 which can determine the profile of the zone (tab.2).

Table 1  
Production areas in the county of Bacau

Zone	Agricultural surface (ha)	Arable land (ha)
1. Buhusi	12,514	8,183
<b>2. Bacau</b>	<b>35,213</b>	<b>28,854</b>
<b>3. Parincea</b>	<b>27,748</b>	<b>20,248</b>
<b>4 Oncesti</b>	<b>98,026</b>	<b>31,696</b>
5. Podu turcului	24,730	17,558
6. Tatarasti	11,741	9,086
7. Luizi Calugara	10,771	7,457
8. Racaciuni	8,904	6,778
9. Sascut	15,240	11,913
10. Trotus	22,712	13,000
11. Livezi	25,913	13,443
12. Tazlau	16,883	8,528
13. Comanesti	57,700	9,097

Table 2  
Specific agricultural products for each zone profile

Nr. crt	Specification
1.	<i>Milk, meat, sugar cane, corn, grain</i>
2.	<i>Sugar beet, milk, meat, vegetables</i>
3.	<i>Meat, milk</i>
4.	<i>Grapes, grain, corn</i>
5.	<i>Grapes, grain, corn, milk, meat</i>
6.	<i>Grapes, grain, corn, meat</i>
7.	<i>Sfeciă zahăr, meat, grapes, vegetables, milk</i>
8.	<i>Grapes, meat, sfeciă zagăr, milk, vegetables</i>
9.	<i>Meat, grapes, sugar beet, milk, vegetables</i>
10.	<i>Milk, fruit, sugar beet, meat</i>
11.	<i>Fruit, meat, grain, corn</i>
12.	<i>Meat, fruit, milk</i>

\*Source: Agricultural production zoning in Bacau County – 1980 – 1985 – 1990 – synthesis studies

Based on these groups, 5 zone types were found in Bacau:

Table 3  
Zonele de producție grupate pe principalele produse

Nr. crt.	Zone profile	Zone
1.	Grain – grapes	Podu-Turcului, Tătăraști, Oncești
2.	Milk-corn-plante tehnice	Buhuși, Bacău, Luizi-Calugăra, Răcăciuni
3.	Meat-grapes	Sascut
4.	Fruit-grain-wool	Trotuș, Livezi, Tazlău
5.	Milk-meat-grain	Parincea

#### ❖ The zoning – transition period

The lack of suport from a long-term strategy, the transition's agricultural policies were bound to manifest a pragmatic sense of realism sustained by no systematic vison whatsoever, this being the solid proof of their own incohercnce and incosequence.

Still, the agricultural production issue becomes more and more referred to from the market involving poithn of view. (local, regional, national, intra or extracomunitary).

#### ❖ Zoning Romania, the candidate to E.U. aderation

After becoming a candidate to aderation in 2000, a series of a nationwide studies and

analysis at national level was started in the with the objective of identifying path to follow in creating premises of agriculture and rural area development. The need of teritorial zoning was approached from different principles. The main pillar was the Common Agricultural Policy.

From 2011, under the coordination of the Romanian Academy, a team of experts in all development areas collaborated in the **Fundamental Program ESEN-2: Issues Romania's integration in the E.U. – evaluation and requirements.** The main challenge for the producers was, as it has been defined, opening a wider agro-alimentary market characterised by a stronger absorption rate, a higher buying power and price stability. On the other side, in the Unique Market, the competition is as tough as it can get in what regards offer and demand and product promoting policies as well. Producers were to face exponents of a top agriculture in what regards **means of production, resource exploitation efficiency and experience in the specific multinational markets.**

It made it natural that the discussions were to be directed from **the zoning of the agricultural production to the development of rural areas.** The most exhaustive document written in that time on the subject was the National Teritorial Arrange Plan (NTAP) – 2005 (National Research Institute – National Teritorial Arrange Plan (NTAP)- section VIII – Rural Areas, 2005). This book was meant to offer a *strategic orientation frame completing the zoning of the agricultural production with the highlighting of teritorial disparities* in the matter of natural resources and deveopment expectations. The complex development strategy would take into count the specific features such as social and economic context and the effects of EU adhesion. The sudy resulted in the zoning of the teritory into groups of villages with similar synthetic development degree.

#### ❖ România – member of the EU

The new context made zonning more complex. Firstly, zoning consisted in environment protection, too, EC Regulation no. 1257/1999 instating the areas affected by specific handicaps. The Regulation provided 3 types of less-favoured areas: **mountain areas** (Article 18), **other less-favoured areas** (Article 19) and **areas affected by specific handicaps** (Article 20). The CAP provided a brand new approach of agricultural production zoning especially in consideration of rural development, the LEADER program explicitly imposing the zoning. The LEADER philosophy adopted Local Development policies and identified omogene teritories (micro-zones, micro-regions) with a population between 10.000-15.000. The *bottonn up zone development* encouraged the population from the rural area in taking part in de teritorial development, identifying the representative members of the rural communities and creating connections between local representative in the purpose of identifying common priorities.

## RESULTS AND DISCUSSIONS

The complexity of *agricultural zoning* is generated by the great economic gaps observed from one region to another. For instance, diffrences may be identified in what regards the degree of (under)development, traditions, organisation frame, infrastructure (roads, social, information), business diversity, etc. All demanded different parametres in the rural teritory zoning different from the ones taken into count when analyzing a *zonal profile*, with the assignment of the zone-specific products which were compulsory to become priority

An important element of differentiation between teritories was the important local role played by the economic agents (regardless of them being involved in agriculture or not), an aspect which explained the local development's dynamics, indicating the market orientation of products and services, and the giant leap from the subsistence agriculture to the massive comercial agriculture exploitations.

By comparing the number of commercial companies with the number of communities (villages), it can be easily observed that rural areas adjacent to urban areas manifest a stronger entrepreneurial sense due to the cities in their proximity. Meanwhile, rural areas with no urban influence indicate a slower development taking into consideration the number of commercial companies per population (*tab. 4*). In such a ranking, the top positions have been ocupied by urban or periurban areas as follows: Bacău- one company/25 persons, Comănești – one company/71 persons), while 100 % rural areas like Parincea or Oncești shew a low entrepreneurial spirit (one company/374 persons and one company/374 persons).

Table 4  
**Business activity in rural microzones in Bacau**

Zone	Number of villages	Number of companies
1. Buhusi	20	465
2. Bacau	46	8.246
3. Parincea	36	61
4. Oncesti	51	81
5. Podu Turcului	18	114
6. Tatarasti	17	23
7. Luizi Calugara	10	212
8. Racaciuni	13	130
9. Sascut	13	104
10. Trotus	34	2.326
11. Livezi	33	135
12. Tazlau	27	159
13. Comanesti	57	2.200

Source: The County Statistics Department – Infostat 2009.

Another aspect taken into consideration was the different performances of the plants cultivated. Statistics indicate that a stronger interdependence between zone development and economic activity in the certain area, rather than in relation to the natural conditions that facilitate the cultivation of one plant instead of another. This can be easily concluded from the medium autumn grain production that seldom exceeds 2300 kg/ha, the first in line being the Bacău – Săucești area with 2669 kg/ha, the Livezi – Bârsănești area with 2495 kg/ha, the Parincea- Horgești area with 2348 kg/ha and the Troțuș – Bogdănești area with 2320 kg/ha, although even these examples indicate production lower than the natural potential of the area.

The most inefficient of all remains the corn production which, in spite of the large area cultivated, is usually situated around 1700 kg/ha.

From a wider point of view, the purpose of a pertinent territorial agricultural development strategy consists in stimulating the growth of a certain area by increasing its economic capacity and the quality of life. Instating realist objectives, effective measures and actions to be taken on short term in respect to the strategy, leads in a resources mixing process (including human and financial) which can both maximise the profit and respect the environment, preserve the resources and strengthen human intercourse, as well

## CONCLUSIONS

The agricultural production matter is becoming more and more stringent as it is analysed from the market control it is analysed

from the market control perspective (local, regional, national, intra or extracomunitare). As a clear result, **competititvity** becomes primordial in this process.

Transposing these realities at a regional level, it is obvious that an agricultural development strategy is essential at a zonal level. It would follow specific objectives fit to match local necessities. The best example would be the public-aid mechanism (primes, subventions, compensatory payments) to be redirected to proper administration by the county's leading structures in consideration to the specific of the microzones which and especially the real needs of the agricultural communities. From this point of view zoning becomes a more and more actual concept.

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