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*THE STUDY OF FACTORS OF
ECONOMIC DEVELOPMENT OF
FRUIT PRODUCTION IN ZELETIN
AREA, BACĂU COUNTY*

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ABSTRACT

In INTRODUCTION we are presented the importance of fruit growing and of fruit for human alimentation, for economy, for pharmaceutical and processing industry. Thus, fruits represent special food for the healthy or sick persons due to their very complex structure. Fresh or cooked fruits are indicated in the hepatic, cardiovascular, renal diseases, in skin and lung infections, eliminate a series of toxins, reduce cholesterol and uric acid concentration. That is why fresh fruits have to reach at least 250-400 g daily in the menu of the healthy persons, increasing it for the sick, pregnant or those who make great effort.

Fruit growing actively develops intern and extern commerce, equilibrates currency balance, is a safe source of income, these being 6 to 10 times higher in comparison with cereal cultures.

A section of the first paragraph is dedicated to the particularities and **functions of fruit growing activity**. Among the functions of fruit growing activity we analyze the following: food, economic, energetic, ecological, social-cultural, psycho-social and esthetical safety, the first four being more emphasized.

Fruit growing plantations turn to better account the sloping, sandy lands and sands.

Fruit growing contributes to the development of upstream industries (chemical fertilizers, pesticides, tractors and agricultural machines) and downstream industries (packs, transport etc).

The first chapter of the presented paper, called **THE MAIN COORDINATES OF THE AGRICULTURE IN ROMANIA AND THE EUROPEAN UNION** is destined to an exhaustive analysis of the place and role of fruit growing within the national economy, by making conspicuous the content of the fruit growing activity, making a clear distinction between the economic activity and tree growing as an agricultural science, as background to distinguishing the relations between them.

Further, there are analyzed the main natural resources, the agricultural area and the dimension of the agricultural exploitations, the technological structure and the forms of agricultural exploitation. A great attention is paid to the elucidation of the multiple aspects regarding **labour resources in agriculture** which meet phenomena of aging and feminization.

Also, the fruit growing economic activity is analyzed according to performance in production. The performances of the agricultural sector are the result of a late process of

reorganization and buy-out which determined between 1990 and 2006 a decrease of the total agricultural production with the following results for the main categories of vegetal products.

Horticulture occupies 5% of the agricultural surface of Romania, about 13% of the total agricultural production value (2, 4 mil. tones vegetables, 1, 3 mil. tones grapes and 1, 1 mil tones fruits) and over 5% of the total agro-food exports.

The social-economic importance of fruit growing is presented in a special section and so are the problems regarding the real dimension of the agri-food system in the economy that has to be reconsidered.

In the second chapter called **RESEARCH STAGE, MATERIAL AND RESEARCH METHODS** comprises a series of contributions taken from the specialized literature regarding the factors of economic development of fruit production both worldwide and in Romania.

The methodological system used in the paper in order to process the gathered information, to present the results and to formulate the resulted conclusions, has methods based on sociological and geo-economic study of the searched area, the agricultural statistics and economic evidence, economic experiment, linear analysis and programming. The consultation of the bibliographic material in order to elaborate this paper had in view the necessity of making preliminary studies oriented on four main plans: the main coordinates of Romania and of the European Union, factor analysis which ensures the presence and development of fruit growing, management role as main factor of fruit growing development in Romania and the optimization of plantation structure and of fruit production in order to increase economic efficiency.

In the second paragraph presents the delimitation of the researched area (the area of Zeletin River) and its social-economic characterization.

Zeletin area is a natural system which belongs to the Tutova hillocks which also belong to Barlad plateau and is situated approximately in the center of Tutova hillocks.

From the administrative-territorial point of view, Zeletin area is situated at the Eastern extremity of the county, on the territory of seven villages: Izvorul Berheciului, Colonești, Stănișești, Răchitoasa, Motoșeni, Glăvănești și Podu-Turcului.

The Third Chapter called **FACTORS WHICH ENSURE THE PRESENCE AND DEVELOPMENT OF FRUIT GROWING** presents the three main important factors: natural factors, economic factors and human factor.

In the first paragraph it is emphasized the fact that in fruit growing the natural factors have had and still have a decisive role in obtaining the production. At present, we cannot say that all the natural factors are controlled; we can operate on soil with physical means (ploughing,

ballasting etc), chemical means and crop rotation, but there cannot be controlled the climatic elements such as water, temperature, wind and sun light intensity, white frost, frost and hail.

The main **economic factors** which make the agricultural producers to orientate themselves to a certain structure of production are: demand of agricultural products, offer of agricultural products, competition, price of agricultural products, agricultural policies, production costs, profitability of agricultural production and farmers' income.

The demand of work force in agriculture has the necessary of workers in different fields and professions which can be effectively employed for the activities of an agricultural unit of a certain geographical area and for a certain period of time.

Having in view the qualitative dimension of offer of work force on the agricultural labor market it can also be shown that the more the work force in the rural area has a higher level of education, the higher the productivity is and the efficiency and general equilibrium of the employed gets consistency.

The persons weight employed in agriculture although it is falling from 73,3% in 1999 to 63,5% in 2004, continues to be very high leading to practicing the subsistence agriculture on a large scale.

The Fourth Chapter: **MANAGEMENT – DEVELOPMENT FACTOR OF FRUIT GROWING IN ROMANIA** has a series of theoretical, methodological and especially practical aspects and has in view rendering efficient the fruit growing activity by using management activities, specific to this activity sector, close connected with their impact on economic and ecologic performances.

At the beginning there are set off the particularities of the fruit growing management, on which it is analyzed its place and significance in the activity of fruit farms. The general conclusion which can be drawn from the analysis of the multiple aspects of management activity is the following: the appropriate assimilation and application and which creates specific activities of fruit growing management is one of the main ways of increasing economic efficiency in this field of activity, management generally being considered a new factor of production with benefic influences in economic and ecologic chains of fruit growing activity. That is why it is necessary to apply fruit growing management in the processes of administration of economic resources, drawn and used in the economic activity as well as in the processes of turning into good account its results.

In the Fifth Chapter: **DEVELOPMENT STAGE OF FRUIT GROWING IN ZELETIN AREA, BACĂU COUNTY** there are analyzed a multitude of theoretical,

methodological and operational aspects of great importance in improving the fruit growing activity.

In the first paragraph **The characteristics of fruit growing in the researched territory** there are made conspicuous the areas occupied with fruit plantations and their evolution, the surface structure on fruit species and also the average productions obtained in the fruit exploitations and the factors that influenced this indicator, which contributes to the accomplishing the total fruit production. At the level of Bacău County, the fruit areas have registered a regress from year to year because of land clearing, aging of plantations and lack of funds for setting up new plantations or of their retro ceding to former owners. As regards the grouping of fruit plantations, we have to mention that they are concentrated in the northern part of the zone, i.e. Izvorul Berheciului and Stănișești villages.

As regards the gravity of fruit areas of Zeletin area within the Bacău County, it is relatively reduced, oscillated in the studied period between 17 and 19%.

In Zeletin area, in 2004 the number of fruit trees on fructification (massively and isolated), has a gravity of approximately 12,12 % of the total of Bacău County registering about 23 350 trees, especially as a consequence of the trees existing in two well-known fruit tree centers: Stănișești and Răchitoasa.

In the second paragraph of this chapter the attention was drawn to the repartition of fruit production of Zeletin area. Fruit growing in the area has passed through a lot of structural transformations generated by agrarian policy orientation and also the use in production of the scientific fruit growing research results. As a consequence of wrong orientation in fruit growing policy the areas cultivated with fruit trees reduced and the outturns on ha have diminished considerably due to the lean technologies used in the households and the classical system of cultures. The **general conclusion** which can be drawn from the data presented is that the **average productions obtained are far from expressing the biological potential of the cultivated species, the efforts of the fruit scientific research and of great majority of farmers**. They are caused by a series of objective and subjective factors connected to the unassuming of material and energetic base to the level of investments but also the weak stimulation of producers, non-fitting the production to the market demands, the non-use of management elements and fruit marketing at the level of family exploitations and even at the level of commercial exploitations.

Also there has to be paid attention to the inherent modifications generated by the transition to the market economy and which has in view the property structure, comminuting of agricultural exploitations, economic recession, and incoherence of governmental decisions which led to the diminution of average production.

In this context, there has to be taken measures in order to improve the fruit potential of the researched area, in accordance to the tendencies which manifest themselves on a world wide level and firstly in the Community countries in the domain of production and fruit and processed products valorization , reaching in a short period of time the EU standards in order to be able to cope with the competition which can be found on the unique market.

In the Sixth Chapter called: **CASE STUDY REGARDING FRUIT PRODUCTION AND TURNING TO GOOD ACCOUNT IN THE SEARCHED AREA** there is presented a short history of the agricultural company which is representative in the area, SC BENEȘTI S.A., Stănișești village, the cultivated areas and the structure on fruit species, average obtained productions, the total production, main ways of valorization the fruit production and the financial-economic results obtained by the agricultural exploitation during a period of three consecutive years(2004-2006). The area of the agricultural company is of 100 ha orchard of which 10 ha with apple and cherry trees, 80 ha plum trees and 250 ha arable land cultivated mainly with wheat and rape.

The valorization of agricultural production gathers all the economic and technical-organizational actions which take place in agriculture, respectively within fruit exploitations after obtaining the production. We have in view the conditioning, selection, storing and transport to the beneficiary of the production which is meant to be valorized. A superior valorization is planned since the moment of planning the production and continues along its accomplishing by technical and organizational measures which have in view large productions which should be cheap and of high quality.

Taking into consideration all above, the commercial company BENEȘTI S.A., Stănișești village, was able to get a valorization of the fruit production obtained in accordance with the market demand through different means, depending on the product and local conditions.

Valorization of apple production was done directly at the “gate of the farm”, for consumption as fresh for the local markets or market network of the private economic agents and state companies specialized in direct supply with fruit or for processing industry.

Analyzing the total profit gained in species the plum tree makes by far the greatest profit due to the large area of cultivation within the plantation, although, if analyzing the profit to the area unit, the cherry tree brings the highest profit per hectare.

Taking into consideration the indicators which determine economic efficiency of fruit production at S.C. BENEȘTI S.A. Bacău County, we can consider that the production determines a positive profit rate in all the analyzed years and to all the species.

In chapter VII: **OPTIMIZATION OF PLANTATION STRUCTURE AND FRUIT PRODUCTION IN ZELETIN AREA, IN ORDER TO INCREASE ECONOMIC EFFICIENCY OF PRODUCTION** it is grounded from the theoretical point of view the action of optimization of the dimension of fruit exploitations, giving examples from BENESTI S.A. as regards the optimization of the structure of fruit plantations on species, on varieties of fruit plantations as well as production technologies for apple and plum cultures.

The chapter end with a special paragraph referring to the possibilities of result implementation obtained according to the fruit production in Zeletin area.

In the last chapter of the paper **CONCLUSIONS AND PROPOSALS** there are presented a series of theoretical and practical issues taken from the investigation of processes and phenomena specific to the fruit growing activity, as well as proposals which have in view ways of improving fruit growing activity, elimination or improvement of lack that persist in the fruit growing activity and which are obstacles in the efficient integration of this sector of activity in the EU agrarian structures.

Great difficulties meet the farmers of the researched area as regards the valorization of product surplus. Generally, as a consequence of price freedom and total lack or inefficiency of legislation for peasant protection, they work permanently in loss, with the exception of some products and conjuncture which ensure them profit.

Of the total area of fruit plantations, after the optimization of the structure of fruit plantation on species, the seed species represent a weight of 33, 3% (apple), while the broolly species (cherry and plum) have the highest weight.

Getting a large fruit production of a high quality and under conditions of high efficiency can be accomplished only after applying the adequate production technologies, differentiated according to species, varieties and types of plantations.

The long term fitting out of fruit plantations of the society, of the irrigation system (by drop), together with fertilization, all that ensures getting large and constant productions, longevity of plantation, low water consumption, growth of work productivity.

Giving a great importance to the knowledge and acquaintance of fruit farmers with recommended species and varieties regarding the setting up of new fruit plantations, it is a problem which should be taken into consideration by the decision factors of the agriculture of Bacău County in order to make efficient fruit growing activity. Problems of fruit growing start to appear at the last chain of agro-technical measures, at fruit picking and preservation, essential aspects of product policy which do not correspond to the quality standards practiced on a national and international scale.

The existing situation within the agricultural exploitations with fruit growing profile of the Zeletin area imposes future measures:

- a. Reconsideration production technologies as regards optimum allocation of production factors determining for the outturn;
- b. According to the necessary effort, expressed by costs, there have to be foreseen average productions which ensure the necessary equilibrium between incomes and outgoes, permitting at the same time the accomplishment of a suitable profit;
- c. Re-dimensioning the specialized car and tractor park which allows the execution of the whole volume of agricultural works in the optimum periods;
- d. Completion of empty spaces in the young plantations;
- e. Creation of own funds in order to sustain production technologies and investment accomplishment;
- f. Elaboration of rehabilitation programmes for the plantation that have reached the economic limit of exploitation;

It is not of little importance to take into consideration that studies and researches in different domains are necessary in order to discover and make valuable all that natural and human potential and its integrity within the general effort of the development of Bacău County, the north-eastern region and the whole country.