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ОДЕСЬКА НАЦІОНАЛЬНА АКАДЕМІЯ ХАРЧОВИХ ТЕХНОЛОГІЙ

НАВЧАЛЬНО–НАУКОВИЙ ІНСТИТУТ ПРИКЛАДНОЇ ЕКОНОМІКИ ТА МЕНЕДЖМЕНТУ ІМ. Г.Е. ВЕЙНШТЕЙНА

МАТЕРІАЛИ

VII МІЖНАРОДНОЇ НАУКОВО-ПРАКТИЧНОЇ КОНФЕРЕНЦІЇ

15 – 16 жовтня 2019 р.

ЕКОНОМІЧНІ ТА СОЦІАЛЬНІ АСПЕКТИ РОЗВИТКУ УКРАЇНИ НА ПОЧАТКУ ХХІ СТОЛІТТЯ

Одеса

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Економічні та соціальні аспекти розвитку України на початку XXI століття. Матеріали VII Міжнародної науково-практичної конференції 15-16 жовтня 2019 р. Одеса: Одеська національна академія харчових технологій, 2019. – 230 с.

У матеріалах конференції знайшли відображення економічні та соціальні аспекти розвитку України на початку XXI століття. Були запропоновані шляхи вирішення найактуальніших та нагальних проблем багатьох сфер сучасного бізнесу та новітні управлінські технології в сучасних турбулентних умовах існування підприємств. В доповідях особлива увага приділялась прикладному характеру досліджень та їх впливу на поліпшення економічної ситуації в країні.

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ALTERNATIVES FOR CASH CROPS IN A SMALL FARM

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Abstract. The main purpose of this research is to find alternative approach towards cost optimization of high value added crops.

Authors focused on maintenance, logistics, storage and sales costs optimization in order to ensure a continue supply for each stage of production cycle for berries and edible rose.

Data were collected from the researchers conducted in the Didactic Experimental Field of University of Agronomic Sciences and Veterinary Medicine of Bucharest, production entities, whole and retail sellers and were processed through Life Cycle Cost Assessment (LCCA).

Key words: cost optimization, efficiency, organic rose, value chain management, real economy

The horticultural sector is of strategic importance for agriculture and for the 500 million European consumers. It represents almost 17% of the value of the final European Union (EU) agricultural production and targets about 1 million farms specialized in horticulture, fruit and citrus which contribute to the conservation of the environment, to the economic growth and to the creation of jobs throughout the EU [1]. Approximately 1.3 million hectares of land in the EU, out of which 138 thousand in Romania, were cultivated in 2017 by fruit trees, representing about 1% of the area used in agriculture. Over one third of the total area cultivated with fruit trees in the EU were apple orchards (37%), one fifth were oranges (20%), peaches (15%), mandarins (11%), pears (8%), apricots (6%)) and lemons (5%). In Romania almost 121 thousand hectares or 87% were plums and apple orchards, 65100 ha (47%) and 55500 (40%) respectively. In terms of yield more than half of total fruit production were apples (348, 4 thousand tones) followed by plums (270, 0 thousand tones). On the other hand about 60 % of plums and apple orchards are older than 25 years.

Despite the considerable potential, the yields in the Romanian agriculture, including in the horticultural sector, are modest, which indicates a use of the production factors well below the optimum values. Exploited appropriately, the existing potential allows for more productive employment, thus contributing to real progress in reducing rural poverty and eliminating income disparities from those in urban areas. As a result, the premises of economic growth, the efficient management of financial resources and the creation of a positive trade balance are created. [3]

Thus, the reorganization of the system of fruit production and exploitation is the priority objective of the National Program for Rural Development (PNDR) 2014-2020 as well for strategy at sectorial level [2], in order to use efficiently the particular

pedo-climatic conditions of the country, together with the improvement of the socio-economic level of the rural areas.

The competitiveness of fruit products must be associated with the sustainability of their production. The fruit chain contributes to ensuring the food safety and security of the population, so it is necessary to have a consolidated system that works regardless of the fluctuations of the various factors that influence it. For our country, the interdependence of the industry-agriculture, in a period when the industry is conditioned in its development and by the expensive imports of raw materials and energy, transforms the horticultural sector into a real base for economic growth. The horticultural sector also contributes to ensuring the food security and safety of the population, which will work regardless of the fluctuations of the various factors that influence it.

The short food chain of capitalization of fruit production implies a shortening of the circuit, by eliminating the intermediaries. Thus, the producer, immediately after harvesting, goes with the production directly to the market. In the Romanian market, there is a high concentration of capitalization and sale of consumer goods through supermarkets and hypermarkets, which is why the local producer receives quite difficult access, due to the production stability and the low quality. In our country, the storage of fruits under controlled regime is done for a small part of the production, the main causes being the lack of the infrastructure and the qualified personnel, the high costs with their maintenance in deposits at certain parameters of temperature, humidity, etc. These costs could be significantly reduced if an integrated association is established on the flow of a product recovery chain, both directly and through storing technologies. Better integration of agri-food producers in the market and value chain is necessary. For small producers, the focus should be on stimulating the association and improving access to investment loans, while for large players it is necessary to invest in modernization to meet EU requirements, as well as to increase competitiveness on the international market.

The newly amended National Plan for Rural Development 2014 – 2020 encourages the production of high value added crops assuring a lot of facilities (subsidies, investment funds etc.) to whole value chain. These facilities shifted the interest from tradition cash crops (wheat, corn, sunflower etc.) towards walnuts, berries, edible rose etc. that could be seen in the structure of arable land usage.

Berries represents the most known alternative for cash crops. Its industrial cultivation in Romania starts in 1958 with 1 hectare that cover over 250 ha in 1989 but ending with less than 30 ha in 2000. After 2008, the number of plantations and the total acreage in Romania increased, reaching 650 ha in 2015. The spreading of the blueberry highbush culture was made mainly in pre-mountain regions of Romania: Transilvania, Muntenia and Maramures. These regions account for more than 80% of the total area occupied by blueberry.

Taking into consideration the demand of blueberry fruit on the national and international market, the large areas with high favorability for highbush blueberry cultivation (especially in the submountain regions), we anticipate total acreage to increase to 298 over 1,000 ha by 2019.

Another option could be organic eatable rose. The technology brought new innovative elements and methods such as using the ameliorative species to improve the soil biological activity, climbing edible rose varieties with fragrance and repeated flowering, innovative pruning system, mulch variants etc. The technology applied registered an increase in petal production from 20-200% depending on the cultivated organic edible rose variety comparing to the traditional ones. This growth allows farmers to choose the most appropriate edible rose varieties in order to get a bigger profit.

Within the last three years researchers from the center for the study of quality food products held a lot of laboratory and field experiments that covered life cycle of berries and rose production. The necessity of the field experiment was caused by development of a technology for blueberry and organic edible rose crop and the main question was, besides the qualitative and health issues, if it was economically competitive in regards to existing traditional ways of growing.

From the processor point of view, the biggest losses are linked to transport costs, especially on the collecting phase due to relatively small scale farmers.

The final products are „sale friendly" as do not need many specific conditions of storing, transporting and maintenance on the sellers level that make it very attractable for exporters.

As a conclusion, be considering opportune to continue the research to evaluate the impact of the newly high value added crops in the market. We consider that blueberry and edible rose could be a highly added value crop through usage of recognized national or regional brands.

Meanwhile the processing industry could be developer as a result of farmers' cooperation for process and/or sale of blueberry and edible rose petals products.

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