VALUE CHAİNS OF APPLE SECTOR OF REPUBLİC OF MOLDOVA

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Abstract: *The purpose of this article is to identify the entire value chain of apple production sector from Republic of Moldova, beginning with production and ending with final consumer. Value chains of apple sector is important to structure a frame of actual situation on the production sector, varieties, consumers 'habit, export possibilities. The research main aim is to underline the situation in apple production sector at actual time and to plan a strategic overview for a future development. This will make possible for entire sector to make necessary changes for example to access new export markets or to change apple varieties. Another reason is to rise productivity and quality productions, as well as to orient investment possibilities in right direction. To achieve this goal, we used research methods such as analysis and synthesis, comparison, generalization, statistical analysis, expert assessments and surveys, structural and logical.*

It should be noted that apple sector is one very important for Republic of Moldova economy from the export perspective. Analysis of the surveys and researches literature shows that today, among researchers and practitioners, there is no clear vision of the sector and approach of development of apple sector.

Keywords: value chain, development, apple sector, apple export, consumer habit

Introduction

Republic of Moldova agricultural sector has perspectives to develop fruit production segment to satisfy internal and external market demand. Studying value chain of apple production sector can bring up the solutions on identified problems.

According to FAO reports until 2050 the demand on agro-industrial products will rise up to 70 % and the sector has to be a strategic priority to development for food safety and security.

Fruit sector characteristics in Republic of Moldova

The production of high value crops, especially fruit, offers the best potential for increasing profits and incomes in rural area. Economic indicators obtained per unit of area (hectare) is higher for fruit compared to field crops.

Market economy trends orient agricultural producers to practice and respect following aspects:

- Implement modern intensive technologies
- Develop value chain on product
- Practice commercial agriculture
- Develop market-oriented infrastructure
- Promote cooperation and association of producers
- Accessing new markets

An important operator in the fruit sector is the European Union, both in fruit production as well as their consumption. Next, we aim to analyze the state of the fruit sector in the EU, because it is in the immediate board of the Republic of Moldova and is a strategic market for our country, moreover as it is ratified the Association Agreement with the EU, which provides some facilities for marketing fruit. The agreement allows some marketing facilities of fruits, namely: 80 thousand tons of apples, 10 thousand tons of plums and 10 thousand tons of grapes, it benefits from exemptions from customs duties and thus offers clear opportunities for market access from EU countries. A big problem in the apple trade is the quality of fruits and the certification of GlobalGAP.

Areas cultivated with apples in the EU tend to decrease in 2016 compared to previous years, because all the orchards that are planted are intensive and super-intensive, which ensures the competitiveness of apples.

The important EU countries that produce apples are Poland (19.7%), Italy (15.8%) and France (13%). Poland in the last 6-7 years has doubled the volume of apple production and is an important operator on the EU market.

The current low efficiency of the agricultural sector is due to poor market connection and low-level competitiveness of agricultural products. This state of affairs is determined by a string of inefficiencies of interconnected markets, which together form a vicious circle difficult to face.

Modernization of fruit production technology, increasing the level of intensity and planting orchards with perspective varieties have contributed to increasing the volume of fruit in recent years compared to previous years, which is a good thing and is sustainable for the given sector.

Analyzing the registered apple harvest of 430 thousand tons in the Republic of Moldova and the structure by sorts, we conclude, that the assortment range is not the best, because the massive plantings of the last 10-15 years have not been correlated with the demands of related markets and manufacturers are forced to adjust business based on current conditions. In the structure of the volume of apple production Idared holds the lead with 26.7%, followed by Golden with 17.9%, Florina with 9.8%. For the last ones 3-5 years there is a tendency to improve the assortment quality of planted apples, but this effect will be felt after a longer period as soon as the orchards come into fruition.

For the sustainable development of the fruit production sector in the Republic of Moldova it is important to intervenes for the correct orientation of producers to grow the fruits that are required and have demand in regional markets.

The fruit sector is expected to grow rapidly for the next 10 years, wherever they want be invested considerable money, because it is a highly profitable sector and has an interest increased for the business environment in the rural sector of the country. The positive aspects that will ensure increase in fruit yields per hectare are: (i) efficient innovations and technologies, (ii) planting of intensive - and super-intensive orchards, (iii) varieties with high production and market potential.

Analysis of companies operating in the fruit sector of the Republic of Moldova

According to the Cadastre Agency on January 1, 2017, the land area with agricultural destination was 2.04 million hectares or 60.2% of the total area of republics. 800,000 people work 33 acres.

Thus, most of the agricultural land - 754,169 hectares (37%) are processed by 35,545 LLCs, of which only 100,000 are own lands, and about 87% are leased. Of the 654 thousand leased hectares, only 38,785 are for a term more than three years, which is not sustainable for agricultural producers and requires costs for their completion after the expiry of the lease term. 351,268 Peasant (farmer) households process 515,629 hectares or about 25.3% of total. Thus, the average per GT is almost 1.5 hectares. One third of GTs have less than one hectare of agricultural land, and 56.7% from one to five hectares. Only 754 GTs have areas of land of 50-100 hectares, and over 100 hectares - 16,931 GT, which own a total of 92,398 hectares.

Another 239,724 hectares of agricultural land are cultivated independently by 799,850 individuals. Here the average area is only 0.33 hectares.

There are 2,709 Agricultural Cooperatives that own over 87,500 hectares, and 152 Companies on shares manage almost 30 thousand hectares. Over 272 thousand hectares of agricultural land belong to the state, and about 70 thousand local public authorities.

Agricultural enterprises processes 78.8% of the orchard area per republic, and 21.2% is concentrated at peasant households (farmers).

The distribution of seed orchards in territorial profile is mainly concentrated in the northern area - 75.5%, followed by the central area with only 19.1% and the southern area 5.4%. Area northern is attested with the best conditions for seed fruits.

Internal consumption of fruit by the value chain cluster, namely processing plants (which should be an important operator) is an important one, but it is not always balanced in the purchase price of apples (which from one season to another can be 2 times higher and vice versa, and where the price of apple concentrates on international stock exchanges does not have such big price jumps)

Examining the domestic consumption of fresh fruit by the population of the country it is found that is one below the permissible norms (the per capita norm of fruit consumption is only 28.1% of the norm or only the fourth part) and is an insignificant one of approx. 7% of the volume total production.

Analyzing the data on the structure of fruit exports of the Republic of Moldova, we conclude that fruit export earnings on EU markets are more advantageous in comparing to CIS countries (here persists the form of cash payment, fruit customs have indicative customs price and cannot be assessed qualitatively). Quantitative fruit exports are lower in the EU, but generates much higher revenues compared to CIS countries.

It is worth paying attention to the comparison of the average export prices of Moldovan fruits on different markets strategic. Thus, we find that the export prices of local fruits are much lower those of import. This is explained by the fact that Moldovan fruits are oriented on lower segment of consumers, due to low competitiveness (quality, packaging, appearance, varieties).

Examining the structure of apple imports in the Russian Federation in 2017, we find that Moldova has an important place in the import of apples with 32.5% of the total, followed by Serbia - 23.8% and China -14.2%. Local apples are sold in the lower niche of the fruit, where those are offered lower prices because they are not washed, calibrated and packaged properly.

Conclusion

The fruit sector is of strategic importance for agriculture of Republic of Moldova. Fruit production contributes to environmental conservation, economic growth and generating many direct jobs and indirect in rural localities.

The fruit sector in the Republic of Moldova has managed to increase the quality, but we do not have all the options competitors, which hinders the successful development of the business. Positive denoted results are the following:

- More attractive wooden packaging and have cardboard packaging and their production lines
- Only 28 fruit packaging lines
- From the total volumes of refrigerators (220-230 thousand tons) approx. 150-200 thousand tons are destined fruit storage (especially apples and plums)
- Positive trend in planting orchards based on intensive and super-intensive technologies, which ensures the quality / competitiveness of fruit production
- 10 manufacturers have a GlobalGAP certificate and there is an increased interest among them of fruit producers to access EU markets (30 producers).

The fruit sector of the Republic of Moldova is becoming more organized and the following can be elucidated positive aspects obtained in these directions:

- Simplified procedure for the recognition of phytosanitary products and fruit sorts approved in the EU is beneficial to the given sector
- Consolidation of producers into producer groups for joint marketing
- Consolidation of fruit volumes by exporters and organization of stable deliveries
- Weak synergy in the relations Association - exporter - processor - producer
- Traditions and historical experience of fruit production, funds available for investments and increased business interest
- Favorable conditions for the development of organic agriculture
- The government together with the donor’s support and understand the importance of the development of fruit growing as branch of High Value Agriculture.

The fruit sector in the Republic of Moldova needs essential and continuous modernization for ensuring sustainable development and increasing the competitiveness of Moldovan fruits. This imperative must be ensured by the most efficient interconnection of all actors in value chain.

The largest share in the quantity of fruit purchased by enterprises processing consists of apples (92%) and plums (2%).

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