

## THE COMPETITIVENESS OF ALBANIAN TOMATO EXPORT

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### **Abstract**

*This paper examines the export performance of Albanian tomatoes in relation to quantities, destination market and quality standards. Recent increase of production in the country is followed by an increase of export volume and geography, with interesting developments. A series of business are developing a value chain favouring the exportation. The analysis covers factors that influence the further expansion of tomato exports from Albania.*

**Key words:** *trade, price, competition, strategy*

### **Introduction**

Albania has a favourable climate for cultivation of early vegetables (produced in greenhouses). This factor, combined with the geographical position and tradition, offer comparative advantages which have been already exploited by businesses in this agricultural sub-sector. In a free market, competitiveness is of fundamental importance (de Pablo Valenciano and Pérez Mesa, 2004).

Exportation of greenhouse vegetables dates back in the beginning of 70s to bring foreign currency to the isolated communist country, in a time when most of international trade was based on clearing payments. Tomato was the most exported vegetable. From 1000 tons in 1965,

exportation levels reached 34'000 tons of tomato in 1989. Among western European countries, destination markets were Austria, Germany and less Switzerland whilst in Eastern Europe were Czech Republic, Poland and Hungary. Vegetables from Albania were preferred for their taste due to higher use of manure relative to chemical fertilizers compared to more industrialised production in other countries like Spain, Netherland, Israel or Italy. Since then, production of early vegetables has been considered a comparative advantage of Albanian agriculture.

It took about 20 years after the fall of the centralised economy, that exportation of vegetables started again to become the indicators of competitiveness of Albanian agriculture. The quantities of tomato exported were 36'000 tons in 2014 and 57'000 tons in 2015. Nowadays, exporting companies have reached a good level of production and standardization enabling exportation of products. Although the majority of the production comes from field cultivation, the surface of protected cultivation has drastically increased in the latest year, fuelled by the demand and Government's subsidies. However, there reaching international standards on food safety are a prerequisite for further development of export markets.

Because of unstable export market, based on spontaneous business relations, producers receive conflicting market signals. Thus, in 2014, because of shortages in the market of tomatoes, farmers increased production in 2015, followed by a drastic reduction in demand and therefore price. Even the European market is facing a time of uncertainty due to overproduction in the European Union (EU) and a significant increase in competition from other Mediterranean countries (de Pablo Valenciano and Pérez Mesa, 2004).

The aim of this research was to examine the factors which influence the competitiveness of tomato export from Albania. This analysis has identified problems related to the exportation of tomato and potential markets. The importing countries are then analysed in order to know their capacity to continue buying tomatoes. The competitiveness of Albanian tomato exports will be studied. Other issues were the adaptation of technologies with the EU standards in order to improve competition and exports. The final goal is to draw conclusions and offer recommendations for policy makers on how to improve the competitiveness of Albanian tomatoes.

## Methodology and Data

The secondary data was retrieved from various statistical sources like Ministry of Agriculture, Rural Development and Water Administration (MARDWA), Institute of Statistics (INSTAT), UNSTAT, FAOSTAT<sup>[3], [4], [5]</sup>, etc. A thorough literature review of previous studies, reports, and articles was carried out as well and the list of the reviewed documents/studies is found in the bibliography.

In secondary data analysis, constraints were identified in the calculation of average prices as simple arithmetic averages, not weighed by quantitative flows. Since the production and sale of most agricultural products is characterized by high seasonality, and consequent seasonal price oscillations, using a simple average can lead to overestimate average prices. In this context, average national prices are not calculated based on a spatial weighted average, as there are obvious oscillations in prices between regions, affected by various factors, including different seasonality patterns. Furthermore, biased estimation of average prices at farm level leads to biased economic/output estimates, and makes it difficult to properly estimate the value and share of value of certain products.

The Export Performance Ratio (EPR) was estimated to examine the comparative advantage of Albania in tomato export, using the method suggested by Balassa<sup>[1]</sup>. Accordingly, the EPR of Albania in tomato and tomato products was estimated by equation:

$$EPR = S_{it} / S_{wt}$$

where,

$S_{it}$  = Share of tomato in Albania's total export, and

$S_{wt}$  = Share of tomato in the total world export.

EPR also called Revealed Comparative Advantage (RCA) because it is based on observed pattern of trade flows. If EPR/RCA is greater than unity, the country has the comparative advantage in export of the concerned commodity and vice versa.

## Discussions

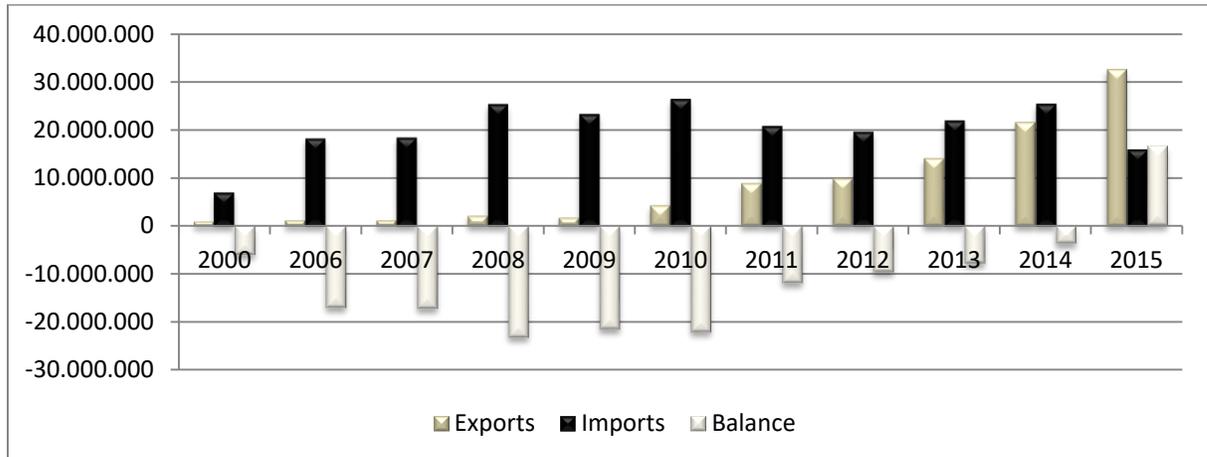
In the last 5 years, production of vegetables has increased by 10,5% and that of tomato more than 30% (see Table 1). During 2009 – 2012, the export of tomatoes has increased from

756'946 USD in 2009 to 5'670'812 US\$<sup>[8]</sup>. During the same period, imports of vegetables in general, including tomato, dropped by 20 per cent, from 26 million US\$ to less than 20 million. Albania has improved the trade balance of vegetables and, for the first time in 2015, it has become a net exporter of vegetables (see Figure 1).

Tomatoes are also the vegetable produced in by far the greatest quantities in Albania, although peppers are the most important to trade. A large part of production (estimated in not less than one third) is actually used for growers' own consumption. Tomatoes produced as protected crops are relatively competitive, as climatic conditions in the best production areas allow production without artificial heating for ten months of the year. This product has known some success in export, but the value chain is still disorganized with reference both to domestic and international markets.

Another comparative advantage of tomato production in Albania is represented by the reduced production costs, especially labour. The daily fee or agricultural wage in Albania is about 10 US\$/day while in Spain is above 45US\$/day. The cost of production of greenhouse tomato in Albania is 0.51 US\$/kg whilst in Italy is 1 US\$/kg. Such advantage has spurred the increase of greenhouse surface, about 100 ha every year in the last 5 years. In pace with such investments in production, there have been investments in the post-harvest infrastructure and services (collection points, cold storage rooms, packaing lines, etc.)<sup>[8]</sup>. Tomatoes produced in some area like Divjaka (Western coast) can be exported as early as April with sufficient quantities forexport markets.

Figure 1. Trade balance of vegetables 2000 – 2015 (in US\$)



Source: UNSTAT 2016

The structure of exporting destinations has changed in the last decade, with exporters targeting EU countries, with a greater purchasing power. Albanian exporters have been able to sell tomatoes in Switzerland and Denmark with 1.44 USD\$/kg while exporters of neighbouring countries have sold it with 0.34 US\$/kg. However, exportation to EU countries are more vulnerable as they require more certificates and is subject to more stringent marketing requirements compared to Eastern countries. Under such conditions, they look for free zones in the East, mainly Slavic countries. In 2012, almost 30 per cent of exports were to Bulgaria, Greece and Montenegro. Also the structure of exports has changed remarkably during the years. Before 2007, key export product were beans, reaching 67 per cent of total exports, but since then, tomato has become the most exported vegetable.

The production of open field tomatoes is yet profitable (1 ha with tomatoes gives an output of approximately 5560 US\$), but productivity is still low, when compared with international standards. It is characterized by a low level of standardization in terms of quality (thickness of skin, ripeness etc.) and size, which is a marketing weakness in comparison with greenhouse production, which is more standardized. This is due to the fact that the production of field tomatoes is subject to improper use of inputs and gaps in irrigation, which affect quality and yields. The range of varieties produced is too limited.

Table 1. Dynamics of supply structure of tomatoes and related indicators (tonnes)

Item	2000	2005	2006	2007	2008	2009	2010	2011
<b>Production (000)</b>	162	152	165	160	164	163	192	205
<b>Import</b>	2 263	6 514	7 985	6 033	4 184	3 662	3 429	3 061
<b>Export</b>	0	123	216	482	1 355	2 123	6 573	11 349
<b>Supply (000)</b>	164	158	173	166	167	164	189	197
<b>Export/import</b>	0%	2%	3%	8%	32%	58%	192%	371%
<b>Export/production</b>	0.0%	0.0%	0.0%	0.0%	0.0%	1%	3%	6%
<b>Import/supply</b>	1.4%	4.1%	4.6%	3.6%	2.5%	2%	2%	2%

Regarding the production of tomatoes for processing, production costs are relatively high, as economies of scale are not in place (i.e. fragmentation of production base), and improper use of production technologies. As a result, average yields are about 60 tonnes per ha, which is 50 percent below the production potential, resulting in higher unit costs. In addition, very often the variety used is not suitable for mechanized harvesting and for processing needs, with the final product having very little dry matter (lower water content). To be profitable producers will require large commercial and highly mechanized farms, or well-functioning cooperatives or producers' organizations.

Table 2. Imported (IM) and exported (EX) quantities of tomatoes (tons) from Albania, their value (000 US\$) and average price

Indices	2011		2012		2013		2014		2015	
	IM	EX								
<b>Qty</b>	3061	11349	3080	17315	2615	25245	2612	32992	3055	57547
<b>Value</b>	2291	5443	2122	5671	1874	8382	1891	13265	1856	22252
<b>Price</b>	0.75	0.48	0.69	0.33	0.72	0.33	0.72	0.40	0.61	0.39

It can be noticed that the imported quantities of tomatoes are almost fixed which means that the domestic demand for imported tomatoes has not changed. Beside out-of-season tomatoes, shown by their higher price, there are also frequent cases of imports during the main season as the domestic market is very sensitive to large volumes being exported. Quite the contrary, the exportation of tomatoes has almost doubled every year and obviously the domestic total production.

Calculation of EPR/RCA gives us a value of 20.5 which is very good, revealing a great competitiveness advantage. Not only tomatoes, but vegetables in general are one of the key components of Albanian exports and are leading total agricultural exports (10 million EUR).

The statistics shown above, including the EPR/RCA index, show an increasing capacity of Albanian traders to compete with some products in international/regional markets, which would not have success in compensating a gradual loss of competitiveness for Albanian fresh products in the domestic markets. In fact, the latest has suffered recurrent price crises (0.90 USD\$ to 0.29 USD\$ in 2013 but no change in 2012, being not lower than 0.41 US\$ despite the large production), due to scarce market information, while on international markets quantities are still quite small.

The production contracts made in the last few years by some processors with some larger farmers or with many smaller ones represent a progress, as compared with the situation in the early 2000s, when ensuring regular supplies of tomatoes for industry was almost impossible (due to price, quality, respect of contracts and logistics).

## Conclusions

Research presented in this paper has shown that tomatoes for fresh consumption, especially early tomatoes, are very competitive agricultural product, provided that the downstream value chain and services to farmers (market information, post-harvest, etc.) are improved. Quantities remain small, not using the economy of scale, because wholesalers are not regular exporters, which would require better harvesting techniques, better logistics, excellent marketing skills and higher financial capital<sup>[6]</sup>.

The rapid trend towards orientation to exports is becoming a characteristic feature of the Albanian tomato. This requires better packaging, labeling, calibration and general quality improvements, including minimum residue levels and phytosanitary standards. Albanian tomato exports are not diversified, which is clearly an advantage from the point of view on risk.

Profitability in open field vegetable production is relatively low and competitiveness in vegetable production for industry is poor. This is mostly due to the lack of economies of scale and to the inappropriate use of inputs. When production is more intensive and know-how of farmers is better, results can be quite rewarding. This requires integration between value chain

actors, especially between consolidators and farmers<sup>[7]</sup>. Besides, there is a need to support the development of farmers' groups and cooperatives but actions in this field will be difficult to be undertaken, due to the fierce individualism of Albanian farmers.

## References

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