

## **EXPORT OPPORTUNITY AND CONSTRAINTS FOR FRUIT AND VEGETABLE PRODUCERS IN ALBANIA**

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### **INTRODUCTION**

The fruits and vegetable sector plays a very important role, not only as planted cultures in Albanian farms, but also for consumption by the Albanian population. Albania has a developing interior market and a non structured export market for fruit and vegetables. The main area for vegetable production in Albania is the coastal and hilly area of central Albania, including Fier, Berat and part of the Tirana region. Other important production areas are Shkodra (open field vegetables), Korça (potatoes and open field vegetables) and Lezha (melons) [Rural Development Strategy 2014–2020]. The most important region for vegetable production is Fieri.

The yield production from fruit and vegetable processing is used to fulfil the needs of the country for processed food, but also for export into the Eastern countries.

Albanian markets are dominated by domestic production [Skreli et al. 2009], except in the winter months. The export of fruit and vegetables in Albania in 2016 increased by 30% [INSTAT 2017] with the total value being approximately 60 million EUR.

Figures 1 and 2 show that the main exported vegetable in Albania is the tomato and the water melon is the most exported fruit. The main export markets are the East Balkan countries due to the increased demand for Albanian products. According to the INSTAT statistics from 2015, the main country that Albania exports to is Kosovo, followed by Monte Negro. There are a few wholesalers who export products to Kosovo and other Balkan neighbours. Recently, the export market is more dynamic due to the establishment of national and international wholesalers in the south-west of Albania like Doni fruits, Preniun Berry, Dupi-fruit etc. These markets are operating with the external markets, exporting Albanian agricultural products in many different European countries, such as in Poland, Switzerland, Netherlands, Italy, France, etc.

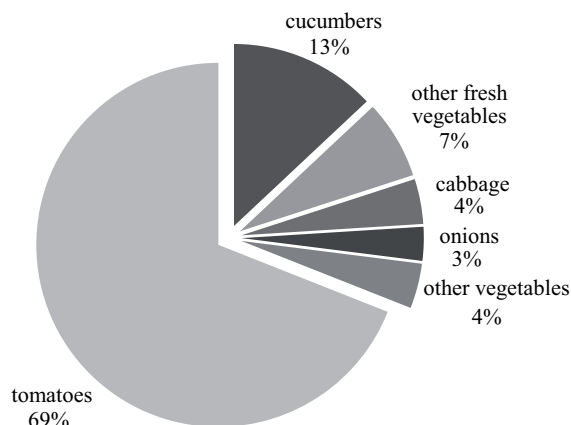


FIG. 1. Export of fresh vegetables in 2015

Source: Ministry of Agriculture and Rural Development, Albania

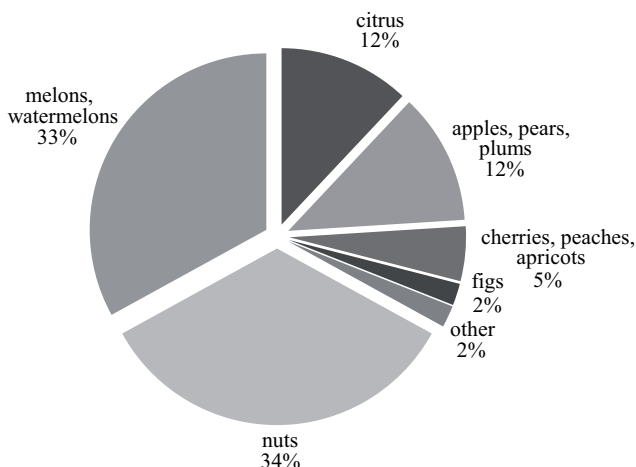


FIG. 2. Export of fresh fruit in 2015

Source: Ministry of Agriculture and Rural Development, Albania

## METHODS

The fruit and vegetable industry is considered as one of the most profitable in terms of capacity and at the same time one of the most problematic in terms of quality. The main goal of the survey was to identify the export constraints and opportunities for the fruit and vegetable sector in Albania and to test the probabilities for export growth. The principal aim of the study is to give a detailed picture of the fruit and vegetable sector in Albania and to identify the export growth opportunities. In order to reach the objectives of the study, primary and secondary data have been used during the elaboration process. The information is based on desk review which guided us during the selection of stakeholder

representatives on fruit and vegetables exporters. The survey was conducted in the south-west of Albania, more specifically in Fier and Berati. These areas are well-known for the production of fruit and vegetables. Fieri produced 326,663 tons of vegetables and Berati produced 105,641 tons in 2015 [INSTAT 2015].

We conducted 50 face-to-face interviews with farmers, agro-food processing companies and wholesalers in the south west area of Albania. The selection of the sample was made randomly through farmers, agro-food processing companies and wholesalers who export their products. The interviews were made during March–April 2017. The instrument used for the survey was a closed questionnaire. The questionnaire has been designed based on the literature review and through consultations with relevant stakeholders of the sector.

Database elaboration was made through the SPSS program. An ordinary probit regression was used to evaluate the constraints of fruit and vegetable producers in Albania. The model we applied was the ordered probit model elaborated from McKelvey and Zavoina [1975] and previously by Aitchison and Silvey [1957]. The probit model is a statistical probability model with two categories in the dependent variable [Liao 1994]. The model that satisfactorily fulfils the criterion falls within the group of qualitative choice – more specifically the ordinal probit model [Pindyck and Rubinfeld 1991].

The regression model for the study is ordered probit  $P(y_i = j) = P(y_i \times \text{falls within the } j\text{th category of } y_i)$ . The probit model is a statistical probability model with two categories in the dependent variable [Liao 1994].

## RESULTS

The export growth in Albania is hampered by different problems. The main duty of Albanian farmers and fruit and vegetable processors is the furnishing of the urban centres. Albanian producers and processors are suffering from a lack of standards. The internal market in Albania is not so much in need of quality standards and for this reason farmers do not try to increase the production costs. International standards do not guarantee higher profits because they have limited farm surface environs 0.26 ha [Rural Development Strategy 2014–2020].

Exportation is limited and is covered only by big producers of fresh fruit and vegetables. The absence of the economic structures in the process of collection and distribution of the products has encouraged the development of the direct circuits of commercialization, from rural producers to intermediaries, or from agro enterprises to regional intermediaries.

In our model we have evaluated only the significant variables, with different values from zero. The estimation of the model parameters are presented in Table 1.

The reference category of the model is: Profits from export activities. As a result of our calculations, the restricted log likelihood value is estimated  $-70.32$  and McFadden [1973] Pseudo  $R$ -square is estimated at 0.36. Furthermore, the correlation coefficient McFadden Pseudo  $R$ -square is 0.36, which show good relations between the variables involved in the study. These tests show the significant correlation between model variables. So, the model explains the factors influencing export growth possibilities for farmers and enterprises in Albania.

TABLE1. Model parameters estimation

Specification	Coeff.	Std. Error	b/St.Er	P[ Z >z]	Mean (x)
Constant	4.086	1.484	2.255	0.0014	
Black market in Albania	-0.235	0.143	-2.102	0.0267	3.435
High level of costs	-0.547	0.232	-2.832	0.0045	4.034
Serious partners for exports	0.245	0.178	-1.910	0.0556	3.642
VAT (Value added tax)	-0.323	0.189	-1.700	0.0879	3.776
Week consolidation of processed stakeholder for the right quantity in export markets	0.346	0.158	-2.085	0.0367	3.727
Body certificate for standards and quality	-0.286	0.175	-1.688	0.0912	3.816
Presence of government with subsidize or regulatory	-0.225	0.167	-1.880	0.0610	3.837
Years involved in exports activity	1.034	0.233	4.372	0.0020	2.534

Source: the authors calculations.

The approach of the ordered probit estimates the empirical effect of explanatory variables on the probability of a firm's export growth falling into the observed value  $j = 1$  to 5 (Likert scale) categories of the observed dependent variable  $y$  (which is used as an approximation of the unobserved 'true'  $y$ ). The binary dependent variable  $y$  takes on the values of zero and one [Aldrich and Nelson 1984].

According to the results, the explanatory variables that have an important influence in export growth of fruit and vegetables are: black market in Albania, high level of costs, serious partners for export, VAT, week consolidation of processed stakeholders for the right quantity in export markets, body certificate for standards and quality, presence of government with subsidize or regulatory and years involved in export activity. The growth of exports in Albania is based only on individual initiatives, by national or international wholesalers. The lack of a proper regulatory framework in production and the lack of subsidy schemes for the farmers has led to a much higher level of informality. The prices for the farmers fruit and vegetables are established by the wholesalers at the moment of the product collection. The farmers are only price takers.

Calculated marginal effects based on the estimated coefficients in Table 2 should be interpreted as follows: a 1-unit change in "Black market in Albania" increased the probability of being in category  $y_i, j = 1$ . Consequently, a black market in Albanian incentives lowered the probability of being in the category of firms with medium or high profits from exports. The number of years that a firm had already been involved in export activities significantly increased the probability of performing either at medium or moderate export profitability. However, changes in this variable did not seem to substantially affect the probability of being among the firms with the highest profits from exports (marginal effect only 0.022 for  $y_i, j = 5$ ). F&V processors or big exporters calculate only the turn over and make random market analysis. They are not making market evaluations and marketing plans in the mid and long term period.

As a consequence Albanian agricultural exports constraints are as follows:

TABLE 2. Marginal effects (dy/dx) in each category of  $y =$  "Export growth over last three years"

Likert category j from the answering scale:	1(low)	2	3	4	5(high)
Black market in Albania	0.037	0.211	-0.079	-0.127	-0.022
High level of costs	0.044	0.138	-0.062	-0.128	-0.023
Serious partners for exports	0.032	0.078	-0.035	-0.061	-0.0015
VAT (Value added tax)	0.041	0.153	-0.053	-0.119	-0.026
Week consolidation of processed stakeholder for the right quantity in export markets	0.026	0.078	-0.032	-0.068	-0.014
Body certificate for standards and quality	0.031	0.121	-0.039	-0.084	-0.018
Presence of government with subsidize or regulatory	0.024	0.079	-0.031	-0.056	-0.016
Years involved in exports activity	0.028	0.132	-0.033	-0.083	-0.022

Source: the authors calculations.

- Small producers are facing organization and standardization problems required from European markets. Meanwhile, producers should unify the production standards with export requirements.
- Albanian Government has no clear policies to support or subsidize export growth.
- Farmers are not market oriented because they choose the seeds and fertilisers according to input distributors advice.
- Lack of specialized units and large scale to exploit the positive elements of the climate and the increase of earliness index of agriculture products.
- Post-harvest services (cold storage facilities, packing houses, etc.) are limited. Limited cold storage facilities present an obstacle in the assurance of continuous demand for agricultural products. This is one of the main factors that increase the loss of products and at the same time prices pass through a high volatility curve.
- The big export wholesalers decide about the product price taken from the farmers.
- In Albania, the VAT for inputs is high at 20% and this fact increases the price of fertilizers and also the price of agricultural products. Sometimes the use of cheaper fertilizers imported from China are preferred but these are not standardized, therefore, the quality of agricultural products is compromised.

## CONCLUSION AND RECOMMENDATIONS

Traditional rural areas in Albania are distinguished by a subsistence economy. The export of fruits and vegetables in Albania during 2016 increased by 30% and the total value is approx 60 million EUR. On the other hand, farmers and Albanian producers are faced with constraints due to the small surface area of the farm 1.26 ha [Mardwa 2014], an informal sector and public policies. The small farm size [Biba 2001, Civici 2001, 2003] and the fragmentation are a major handicap to the improvement of agriculture

productivity and to the sustainable development of the agriculture sector [Dishnica and Topulli 2011].

Private farming in Albania is dominated by a large number of farms operating only on a subsistence or semi-subsistence level. This fact shows the necessity for organizing in cooperatives. Albanian producers and processors in a lot of cases are incapable of penetrating into foreign markets because in the majority of cases they don't have the right education and it is difficult for them to act as international marketing managers. Albanian producers should assure continuity with regard to the quality and quantity of their production. In this case it will be very useful to encourage them to collaborate together only in terms of marketing. Albanian producers and processors need to invest for label improvement or relabelling. Large scale companies are more likely to have full knowledge about EU grant programs. Meanwhile, the small enterprises are not very well-informed. However, for both of them it is very difficult to apply in such structures because they don't have the necessary assets to do so. The difficulties are bigger for Albanian producers. Previous experiences have shown that Albanian farmers can't operate together in terms of cooperatives because of lack of transparency from cooperative directors or the decision makers. The fruit and vegetables export growth will be more consistent and successful long term if all the value chain stakeholders will take their responsibilities and strongly collaborate in the future.

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**Summary.** Albania has considerable potential for growth in the fruit and vegetable market. Its climate-arable conditions are very adequate for the successful growth of a wide range of fruits and vegetables. Albania has an interior market in development and a non structured exporting market. The study is aimed at estimating and identifying export growth opportunities and constraints for fruit and vegetable exporters. The paper investigates the opinions of producers and exporters in south-west Albania. A face-to-face interview survey method was conducted. Database elaboration was made through the SPSS program. An ordinary probit regression was used to evaluate the constraints of fruit and vegetable producers in Albania. We conclude that there are several problems that hamper exportation growth in Albania. Albanian producers are usually not able to penetrate into foreign markets because they are not part of consolidated marketing distribution channels.

**Key words:** exportation, fruit and vegetable producer, distribution channel

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