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The Marketing of Table Grapes and Farmers Organization in Turkey (Alaşehir Case Study)

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Abstract: In recent years, the importance of marketing of the raisins has become important because of yield increase and export incentives. The grape growers that have been organized for raisins with the rate of 50% have not been able to organize effectively in the table grape marketing. Eighty seven percent of the growers have been selling their product to traders and brokers without any guarantee of payment. The growers of the table grapes have established an agricultural development cooperative (shortly named ALA-KOOP) with the aim of marketing their products in the center of Alaşehir county and surrounding villages in 2000. This cooperative could not be activated because of the lack of interest of their members. Meanwhile, with the increase of the grape export in the last decade in Alaşehir county, 42 companies have been founded and these companies take an important role in rural industry and development. It is observed that the cooperatives which have been founded with the aim of organizing the growers, are in need of professional management and financial support to make them successful.

Key words: Table grapes, marketing, cooperative, organizing

INTRODUCTION

Turkey has one of the most suitable ecological zones in the world for producing fruits and vegetables. Although the total production of fruitvegetable is 40 million tons, only 2% of this can be exported (Anonymous, 2004). Turkey is the second in production and the first for exporting of raisins. The leader countries of exporting table grapes are Chile, Republic of South Africa, USA, France and Italy. The State of California provides 99% of the production in the USA. The rate for the global production is 11% (Anonymous, 2002). The California table grape association was established in 1968 and has 550 active members (Anonymous, 2005a). Table grape growers in India, the state of Maharaste have established 19 cooperatives comprised of 22,000 members under the supervision of agricultural marketing board. These cooperatives lead the growers from pre-cooling to packaging and even to export their products (Anonymous, 2005b). It is reported that in 2005's production season, there is a five times difference between the producers prices and the market prices in Italy. It is thought by the farmers that this difference is not caused by the operational and transportation costs but by the benefits of the agents and the brokers (Anonymous, 2001).

The major grape producer countries are France, Italy, USA, Australia, Chile and Turkey. Between 1998 and 2005 years, the rate of production has increased as follows;

Chile 40%, South Africa 30% and USA 20%. Although there are some yearly fluctuations in the production amounts, no significant change has been reported in the other countries (Table 1).

The global table grape export was 2.7 million tons and the total value of the grape exports was 2.5 billion \$ in 2001. The largest amount of table grape is exported by Chile and it has developed the rate to 20% in 1998-2004 periods. The other striking country is the Republic of South Africa with the rate of 100% increase rate. Turkey's table grape export has increased three times, from 54,000 tons to 160,000 tons in 1998-2004 periods and this is the best development in the list of proportional increase (Table 2).

It is observed that Chile ranks first in value followed by the USA and Italy (Table 3). The table grapes export of Turkey in value has increased four times from 21 million \$ to 82 million \$ (Anonymous, 2006a).

The table grape industry has been running under more difficult conditions than other fruit industries in Turkey. The reason for this is the limited usage of machinery and the high usage of labor in harvesting and production (Anonymous, 2001). The other problem for the table grape industry is that it is having a limited market in the basis of quality and price because of the competition with the other kinds of fruit (Anonymous, 2006b).

One of the important reasons of the increase in the export of table grapes in recent years is some marketing problems in the domestic market due to the production increase in dried sultanas. For this reason, seeking

Table 1: The production figures of global leading grape producer countries

	Year							
Grapes production (Mt)	1998	1999	2000	2001	2002	2003	2004	2005
Chile	1,642,093	1,575,000	1,899,943	1,800,548	1,750,000	1,985,000	1,900,000	2,250,000
France	6,919,069	8,040,710	7,762,582	7,225,357	6,853,482	6,307,112	7,542,036	6,787,000
Italy	9,256,801	9,361,924	8,869,500	8,653,086	7,393,880	7,482,936	8,691,970	9,256,814
South Africa	1,333,481	1,554,286	1,476,000	1,323,520	1,521,703	1,663,530	1,682,951	1,700,000
Spain	5,146,810	5,607,660	6,539,812	5,271,740	5,934,557	7,265,635	7,286,300	5,879,800
Turkey	3,600,000	3,400,000	3,600,000	3,250,000	3,500,000	3,600,000	3,500,000	3,650,000
USA	5,279,800	5,657,509	6,973,801	5,959,603	6,657,777	6,026,917	5,653,336	6,414,610
Total	33,178,054	35,197,089	37,121,638	33,483,854	33,611,399	34,331,130	36,256,593	35,938,224

Source: Anonymous, 2006a

Table 2: Table grape exports from selected countries

	Year						
Grapes exports-Qty (Mt)	1998	1999	2000	2001	2002	2003	2004
Chile	558,620	539,640	676,474	630,771	654,932	888,483	693,206
France	22,616	20,416	16,109	18,179	16,501	12,128	19,589
Italy	539,306	577,344	624,783	667,500	480,562	513,278	465,593
South Africa	146,140	183,684	186,413	180,104	207,491	198,264	237,110
Turkey	53,945	47,943	64,873	79,294	76,886	98,729	159,310
USA	249,303	280,155	345,993	346,031	370,949	366,174	391,398
Total	1,569,930	1,649,182	1,914,645	1,921,879	1,807,321	2,077,056	1,966,206

Source: Anonymous, 2006a

Table 3: Table grape exports-value from selected countries

Table 5. Table Stape export	Year	TOTAL TOTAL TOTAL					
	100						
Grapes exports-Val (1000\$)	1998	1999	2000	2001	2002	2003	2004
Chile	403,424	406,920	523,545	460,185	658,808	708,363	592,326
France	36,513	26,312	18,906	22,470	20,856	20,366	35,815
Italy	449,867	446,441	478,808	531,841	427,805	531,969	482,095
South Africa	141,795	175,324	161,320	132,766	127,383	183,952	282,786
Turkey	20,961	25,290	28,841	32,830	32,057	51,023	81,747
USA	334,794	382,333	454,802	475,834	493,648	515,429	591,582
Total	1,387,354	1,462,620	1,666,222	1,655,926	1,760,557	2,011,102	2,066,351

Source: Anonymous, 2006a

alternative crops and markets has started and table grape exporting has gained a great importance. It is believed that the incentive premium which was announced 50 \$/ton but paid 35 \$/ton in 2001 would lead to an increase in the production and marketing of the table grapes during the forthcoming period. Additionally, It can be said that the tendency of decreasing overseas prices and the rising of dried sultanas stock have an important effect for this production increase.

In Alaşehir county which has the biggest rate in raisins production with 17,435 ha (22.2%) in Aegean region, the exporting of the table grapes has considerably increased in recent years (Anonymous, 2003).

Parallel to this increase, many investors have come to Alaşehir from different parts of Turkey. By 2005, 42 companies have established their processing facilities especially for table grapes and other fruits in Alaşehir and neighboring county, Sarıgöl (Anonymous, 2005c).

These packing houses have approximately 60.000 m³ cold storage capacity. They are run between 180 or 350 days in a year. There are approximately 4000-5000 seasonal laborers employed in these companies in a season. The seasonal employment of these laborers in these packing houses has increased the labour demand

especially in the harvesting period. With the development of the processing and the packing industry in this region, agricultural laborers are employed both in the production and the processing and packing activities. The increase in the export of table grapes and processing of the other fruits (like cherry, apricot, chestnut, pomegranate, quince and so on) in Alaşehir and its neighborhood has made significant contributions to the region's economy.

Besides, some problems have occurred in Alaşehir and its surrounded district in the field of marketing of table grapes, such as, not or untimely paying the values to the growers, establishing poor standards about grape quality and unconscious use of pesticides. With the aim of solving these problems a new movement called (ALA-KOOP) has been started by Alaşehir Chamber of Agriculture, academicians and local leaders.

The main objective of this study is to examine this cooperative movement in general and to make some suggestions in order to solve the problems of the cooperative organization and marketing problems in this area. The other objectives are as mentioned above to evaluate the production and exporting of grapes both in Turkey and in the world.

MATERIALS AND METHODS

The main material of this study is the original data, has driven from the table grape growers in Alaşehir county of Manisa province which has the largest grape areas in Aegean region of Turkey by using survey method. This study was conducted in above-mentioned county in 2002. The research area has been determined with the negotiations of Ministry of Agriculture and Rural Affairs Alaşehir Agricultural County Directorate and 5 towns and 15 villages where dried sultanas and table grapes grown have been taken into consideration. Seven of these settlements have been chosen as the study area with the determination of Alaşehir Agricultural County Directorate. Later, the number of growers who would have been surveyed is calculated using the enrolment of Alaşehir Chamber of Agriculture by proportional sampling population formula (Newbold, 1995).

$$n = \frac{Np(1-p)}{(N-l)\sigma_{\hat{p}x}^2 + p(1-p)}$$

In this equality;

n : Sample volume

N : Total growers in selected villages

P: The proportion of table grape growers (to reach the maximum sample population the ratio of table grape growers has taken 0.50)

(1-p): The ratio of the grower who do not produce table

grape $\sigma_{\hat{p}x}^2$: Variance

The sample volume has been calculated 94 and the growers who would have been surveyed have been chosen randomly from the enrolment of Alaşehir Chamber of Agriculture. The data collected by survey have been analyzed and summarized by charts. Considering the size of the farms in the region, the farms have been examined in three groups; small (0.1-1.5 ha⁻¹), medium (1.6-5.0 ha⁻¹) and larger farms (5.1 ha⁻¹- +). In analysis average and percentage methods have been used.

RESULTS AND DISCUSSION

There are 66 villages and 6 towns in Alaşehir county. According to the data of the year 2000, the population of Alaşehir is 93.850 and 39.500 (42%) of this population live in rural area. 17.435 ha (45%) of the 39.061 ha agricultural land is used for viniculture. There are 11,500 farmers in Alaşehir by 2003. In recent years, in addition to Sultana and Round seedless grapes production, the varieties of Mevlana, Kardinal, Alfonse, Italia, Razakı, Kozak and

Yalova incisi (*Vitis vinifera* L.) have started to plant in the region. In a study which is conducted in this area, it is also highlighted that early varieties, medium varieties and lately varieties can be grown in low fertility of soils, in high fertility of soils and in highlands, respectively (Çoban *et al.*, 2002).

The production of the table grape in Mamsa province is denser especially in Alaşehir and Sarıgöl counties. In Salihli and Ahmetli counties of Manisa, the production and marketing of the table grape is also observed. Like in many other fruits and vegetables, the table grape is mainly bought by agents from unorganized producers and delivered to the consumers. The marketing channel of the table grape can be shown in Fig. 1.

The average farming land of the farms in the survey area is 2.39 ha. In a previous study in the area, the average viniculture area was stated as 2.14 ha (Çoban *et al.*, 2001). The average farming land in the first group (0.1-1.5 ha) is 0.97 ha, whereas 2.85 ha in the second group and 5.4 ha in the third group. In the examined farms, the average age of the farmers is 42.8 and the number of family per farm is 4.4.

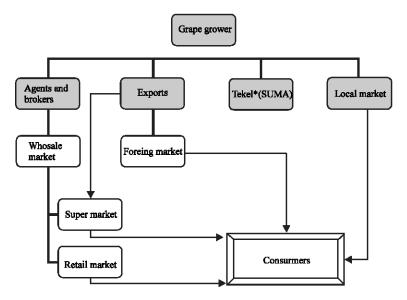
For the membership of the growers in the examined farms to the cooperatives are, 68% to Agriculture Credit Cooperative (ACC), 56.3% to Agriculture Sales Cooperative (ASC), 11.7% to Irrigation Cooperative and 14.8% to the new founded ALA-KOOP. The rate of the growers with no membership to the cooperatives is 13.8%.

In the examined farms, 37.2% of the growers have some other income except farming, 13.8% of these farms have 25% agricultural income, 10.6% of the farms have 50 and 12.7% of the farms have 75% or more of their income through farming.

In the examined farms, the stockbreeding is mainly done for the household needs. In fact, in small farm group there is only in 15 farms that have cattle and the rate of cattle per farm is 1.67. Although there are no cattle in the medium farm group, but there are 4 cattle each in four farms in larger farm group. The number of sheep breeder farm is seven in general and the average number of sheep per farm is 16.

For the usage of tractor and equipment in the examined farms; the number of tractor is 18 (38.2%) in the first group, 22 (75.8%) in the second and 18 (100%) in the third. It is determined that the tractor owner growers have most of the other needed equipments.

In examining the usage and the source of credit by the growers; 48 farms from ACC, 19 from ASC, 13 from banks and other unorganized resources obtain the credit and the rest 14 (14.9%) are nonusers. In the total amount of the credit usage, bank credit takes the first place followed by ASC and although its function is giving credits to the producers, ACC takes the third place (Table 4).



*Tekel is the short name of the general directorate of salt and alcohol management

Fig. 1: The marketing channel of table grapes

The average amount and the average producer prices of raisins by its desination are given in Table 5.

In the examined farms, it is observed that the growers who sold to the agents ranks first. For the sales prices point of view, TARİŞ's price is a bit higher. The result of the new policy of not buying low quality raisins applied by TARİŞ since 2000, there is a relatively decrease in sales of raisins to TARİŞ in Alaşehir county.

In examining the amounts and prices of the table grape, the average sales amount per farm is 22.5 tons and the price is 0,23 kg/YTL (Table 6). The most preferred channel of sales for table grape is the agent-broker (87.2%), followed by the exporters.

When Table 5 and 6 are compared in general due to the prices, it can be easily seen that the price of the table grape is higher than sultana (this is calculated with the hypothesis of producing 1 kg raisins from 4-5 kg fresh grape). However, when the risks of using chemicals for pest control, irrigation, selecting - shelling and storage, it can be said that the price difference is not an important fact for the growers. As a matter of fact, in the examined year 2001, the yield of raisins which was realized 30-40% less compared to the former years caused price increases in table grapes because of high demand.

With respect to the costs of raisins and the table grape of the examined farms; generally at the beginning of the season, the growers do not make a decision on whether they growraisinsor table grape. Besides, due to the lack of accountancy recording system, the costs are dealt as a whole. According to the figures in 2001 season, the cost of raisins per ha are; 2184 YTL for group 1, 2005 YTL for group 2, and 2120 YTL for group 3. The average yield is found as 5000 kg ha⁻¹ for raisins and the

cost is calculated 4260 YTL ha⁻¹. According to a cost study made by TARİŞ for the same period, the cost of raisins is found as 0.42 YTL kg⁻¹ (Anonymous, 2001/2002)

As a general evaluation, although there is an increase in the farms for fertilizing, irrigation, taking out leaves, raring bunches and picking expenses; there is no expense on drying the fresh grapes. As a result, when the harvesting time (September-mid and later) becomes longer in the farms; an important increase in costs emerges (because of employment of extra labor and using chemicals). In the examined farms, it has been declared that 64.8% of them do a preparation before the table grape growing season. As an inference, it can be said that the growers are in favor of selling table grapes but they whether decide on table grape orraisins due to the quality, climate and price.

For the approach of marketing table grape of the growers; 85% of them prefer selling table grape for the higher price compared to dried sultana. It has been declared by the farmers that; 58.5% of them are not contented with the current table grape marketing system, 32.9% are contented and 8.6% are partly contented.

In marketing table grape, the most important three problems of the growers were declared as; not having a guarantee of yield payment with 68.1%, low price of table grape with 52.1% and not having a guarantee of marketing with 43.6%. The other problems are; lack of price stability, the higher cost of growing of table grape and the complain of few farmers is that the lower amount of table grape harvesting from the vineyard. The answer to the question How to want to market the table grape? is answered 92.5 % via cooperatives.

Table 4: Credit usage in the examined farms (YTL)

	Bank	·	ACC		ASC		Total/Average	
Farm groups	No. of farms	Credit per farm	No. of farms	Credit per farm	No. of farms	Credit per farm	No. of farms	Credit per farm
Small	1	1200	25	919	7	1197	33	986
Medium	9	2100	15	627	5	1400	29	1217
Large	3	1700	8	2100	7	2200	18	2072
General	13	1938	48	1025	19	1619	80	1314

Table 5: Sale of raisins in examined farms

	Tarış (ASC)		Agents and brokers		Exporters		
Dried sultana	Average amount (ton)	Average price (kg YTL ⁻¹)	Average amount (ton)	Average price	Average amount (ton)	Average price (kg YTL ⁻¹)	
Group 1	1.7	0.76	3.0	0.73	-	-	
Group 2	3.5	0.79	6.5	0.71	5	0.78	
Group 3	8.5	0.81	11.8	0.80	13	0.81	

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Table 6:	Marketino	of table oran	e 10 e	examined farms

	Agents and brokers			Exporters			Tekel			Total/average		
Marketing of table grape		Average price (kg YTL ⁻¹)	Average amount (ton)	No. of	Average price (kg YTL ⁻¹)	Average amount (ton)	No. of	Average price (kg YTL ⁻¹)	Average amount (ton)	No. of	Average price (kg YTL ⁻¹)	Average amount (ton)
Group 1	42	0.23	9.2	5	0.22	7	-	-	-	47	0.23	9.0
Group 2	23	0.22	25.3	5	0.23	35.2	2	0.11	5	30	0.22	25.4
Group 3	17	0.25	41.1	2	0.32	126	1	0.09	30	20	0.25	49.9
General	82	0.23	20.4	12	0.25	38.5	3	0.10	11.7	97*	0.23	22.5

^{*:} The reason of the farms which are more than 94 is the farms which sell berry grape to TEKEL

THE ALA-KOOP CASE IN ALAŞEHIR

With the aim of solving the above-mentioned problems of the table grape marketing, a series of meetings were held in 2000 with the participation of Alaşehir Chamber of Agriculture, Ministry of Agriculture and Rural Affairs Alaşehir County Directorate, Celal Bayar University Alaşehir Vocational Training School Agricultural Cooperative Programme and villages headmans and at the end, it was decided to initiate the activities of organization under the roof of an Agricultural Development Cooperative. Instead of undertaking of expenses and formalities of establishing a new cooperative, It was decided to adapt the regulations of a cooperative which had been established with the aim of collecting milk by the four of the participant headmans at the beginning of 2000. Then, the aim of the cooperative was transformed to act both for milk and table grape marketing. The regulation changes and general assembly of this cooperative were held in November 6,2000 and the name has been changed to ALA-KOOP. In the mean time, the milk collecting and marketing activities were ended because of several marketing problems. In this framework, the main aim of this cooperative is primarily to organize table grape marketing and the growers under the roof of a cooperative. At the beginning, individual efforts were made and an office which was allocated by the Alaşehir County Administrative was used during the cooperative's establishing process. In the village seminars, the aim of the cooperative and the plans for forthcoming five years

are given with mutual discussions to the members and who plan to be a member of the cooperative. When the cooperative taken over there were only 72 cooperative members, but in a short time such as in a three month period it increased to 373. The number of the members has reached to 403 at the end of 2001.

The training meetings and member recordings were held in villages and towns after having legal entity of ALA-KOOP. In these meetings, the current situation of table grape marketing was explained and discussed and the problems were determined and possible solution suggestions were discussed. The main problems determined were setting the prices and the guarantee in yield payment.

The opinions due to the meetings in villages and towns and the activities of the cooperative are given below chronologically; It is observed that excess supply to raisins has a lowering effect on the price. Therefore, the growing amount of table grape should have been increased considerably.

The idea of undertaking the marketing task of TARİŞ for raisins as an example for the cooperative has got attention by the majority. It was also suggested to establish a table grape marketing cooperative similar to TARİŞ in a former study conducted in Alaşehir and Buldan counties (Coban et al., 2001).

It has been stated that the finance of the cooperative would be claimed from the members; that was the membership capital, which was 40 YTL and 1/4 of this (10 YTL) was collected as the capital share.

With the aim of obtaining the establishment expenses and ensuring a strong unity, membership to the cooperative were offered to the Union of Supplying Service for Villages (USSV) of Alaşehir, central and district municipalities. Although all the legal authorities approached positively, until the end of 2001; only the Union of Supplying Service for Villages of Alaşehir, Alaşehir Municipality and Kemaliye Municipality have become members.

A place was allocated by Alaşehir Fresh Fruit and Vegetables Wholesale Market Directorate to the cooperative. All relevant documents were prepared in accordance with the wholesale market regulations for the cooperatives and buyers.

To market the table grape, Ministry Of Defense and some hyper-markets were corresponded. However, this attempt has failed because of the lack of staff and yield payment guarantee.

The negotiations with the hyper-markets have failed because they didn't give a letter of guarantee (such as a letter of guarantee of a bank) for yield payment. The lack of yield sale/payment guarantee is one of the most important problems of the present marketing system.

The growers did not encounter to a lot of problems in table grape marketing because of special conditions and small amount of yield in 2001. Therefore no member has demanded to market their table grapes by the cooperative.

In addition, to inform and make the growers conscious, a free brochure-newspaper which had only two issues was published and distributed.

At the end of 2001 the 85% of the membership commitment capital had not been paid. The ratio of the members who paid the total amount of membership share (40 YTL) is about 10%.

The cooperative was in a financial crisis because of the establishment and office expenses, so the staff was expelled in October 2001. The common marketing problems faced by the growers which had already seen in former years were not seen, because the yield was low and TARIŞ entered the market with a higher purchasing price more than expected.

In the examined farms, to the answer of the question about the opinion of ALA-KOOP, 41.5% of the growers think positive about the attempt, 40.5% did not make any comment and 18% gave negative declaration because they believed that this attempt would have not been successful. It can be concluded that the growers are not informed enough for taking part in a cooperative like this when it is considered that only 18% of the growers in the examined farms are the members of ALA-KOOP. Although

they approach positively to the marketing method through cooperative, they do not approach positively to burden on the necessary expenses of these operations.

The founding committee of ALA-KOOP had been in charge since 2002 and at the end of the same year it transferred its authority to the new committee. The new committee tried to continue their activities with the support of the Alaşehir Chamber of Agriculture. However, it could not be successful. The present administration transferred its authority to another in 2004. The new administration applied to Ministry of Agriculture and Rural Affairs for a livestock loan contrary to the aim of the cooperative which is marketing of the table grape. ALA-KOOP has been trying to be active with the individual efforts but without the support of professional management method.

As a result, the aim of solving the problems of table grape growers has not been achieved by this movement. The main reason of this is; the farmers have repudiated the expected financial obligations and continued the usual insecure trade. Additionally, the negative approach of the local leaders to the cooperatives and the prejudice for an unsuccessful future of the cooperatives-only two (13.3%) of the representatives of the villages and towns are the members of ALA-KOOP)-is another factor. Although it has been announced in seminars to the members that the outcomes would be able to be fulfilled in five years time, they want to see the activity of the cooperative immediately. The growers want ALA-KOOP to act like TARIS but they do not take into consideration that they pay a capital share (TARİŞ takes 5% as member capital payment in total delivery price). It seems that there is no chance for the farmers to continue the growing of raisins without TARIS. It can be clearly seen that most of the table grape growers, who are members of TARİŞ at the same time; will be able to get organized under the roof of a cooperative and solve the problems of marketing.

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