

Investigation the Pistachio Marketing Situation in Rafsanjan Township, Iran

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ABSTRACT

Agricultural products have a main role in nonoil exports. Pistachio is one of the country's most important export products. Thus, this study is aimed at evaluating and identifying pistachio marketing in Rafsanjan which is carried out in 2011. This is applied study and its methodology is correlation. The statistical population was 120 agricultural extension experts of Rafsanjan township were studied by survey. The main research tool was questionnaire. SPSS16 statistical software was used to analyze the data. Finding showed that most of the experts (38.5%) stated that situation of pistachio marketing is relatively desirable in the studied region. In relation to prioritizing the pistachio marketing dimension, calibration is in the first priority. Transportation, packing, harvesting, storage, and processing are the next priorities, respectively.

Keywords: Marketing; Pistachios; Marketing dimensions.

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INTRODUCTION

Nonoil exports are an important aspect of Iran's economy which could reduce the dependency to oil exports. Agricultural products have a main role in nonoil exports and is very important in bringing exchange to the country so, according to the agricultural products' stage in any country's economy, these products' marketing is important, too (Dixie, 1991).

Pistachio is one of the country's most important export products. According to the customs services of Iran, at the end of 2010, 123 thousand tons of different pistachio were exported to different countries having a 43 percent weight growth to the 86 thousand tones of the 9 months of last year. Considering the rate of pistachios export during the 2010s, an ascending of export is seen. Kerman province is the first with a 24.4 percent production of garden products; with 31 thousand hectares of pistachio gardens (74 percent of area under cultivation), is the largest forest mass in the world and is the first because of a 46.5 percent of the country's pistachios production. Value added of Kerman's agriculture sector is 29.1 and 65 percent of Iran's economical and agricultural sectors, respectively. 28.4 percent of Kerman's workers and labor are working in the agriculture sector. Rafsanjan Township provides 90 percent of the province's pistachio.

Inefficiency of the pistachio marketing in Iran is due to incorrect harvest, lack of processing amenities, pistachio culturists unawareness of doing marketing services, lack information about the market demands, culturists unawareness of the target market, unneeded brokers and intermediaries, cooperatives inefficiency, low interest of the gardeners in the production system, little and divided lands, low performance per hectare compared with international standards, market's lower-than-standard facilities, weak payment for product and seasonal limitations, weak storage facilities, problems of suitable and on time accessibility to credits, farmer's inability to sell the product, farmers' weakness in dealing and bargaining, lack of market transparency and lack of coordination between the related sectors (Ghorbani, 2009).

Marketing, in this study, is a set of activities in the stage of pistachio harvest and after it for a better and more profitable distribution including all extensional acts in the area of improving the harvest condition, harvest situation, collection methods, transportation, processing, packing and storage.

The first duty of marketing begins after the product production. Transportation is one of the basic marketing activities causing the market to be widespread. Packing means the protection, or act, granting the safety of the good from production to consumption. Processing is undeniable due to the differences between products' production form and consumption needs form in addition to the necessity of long term maintenance. Calibration means that production is divided into different groups based on their quality and suitable for market demands. Storage is also one of the most important marketing operations during which the product is maintained from the production date to date of consumption need (Feder *et al.*, 2001).

The necessity of the study is undeniable, in one hand, due to the agriculture duty of extension and education in the area of product in-garden preparation, packing, protection, product quality improvement, and put a stop to its wastage and, in the other hand, holding necessary training courses about the product's way of harvest, transportation from garden to maintain centers, conditions of maintaining the product in the store, and the quantitative and qualitative improvement of both agriculture products and gardeners' life. Thus, this study is aimed at evaluating and identifying suitable extension and educational methods in marketing Rafsanjan's pistachio.

MATERIALS AND METHODS

This is an applied study. The analysis used in this study involved a combination of descriptive and quantitative research and the main methodology is descriptive (non-experimental) and correlation. Statistical population was 120 persons of agricultural extension experts of Rafsanjan city were selected by survey. The main research tool is questionnaire. Content and face validity were established by a panel of experts consisting of faculty members and some specialists. Minor wording and structuring of the instrument were made based on the recommendation of the panel of

experts. A pilot study was conducted with 25 persons. Cronbach Alpha score was 0.86 %, which indicated that the questionnaire was highly reliable.

Dependent variable of this study is pistachio marketing, to assess it, 22 statements were used in the form of a five-point Likert scale (from completely undesirable to completely desirable), and the mean score of the answered questions was identified as the respondent's attitude. After computing the statements, they were examined on an interval scale.

For analysis data, central tendency (mean, median, and mode) and variability tendency (variance and standard deviation) were used. Statistical analysis was done through SPSS Version 16.

RESULTS AND DISCUSSION

Product harvest

In relation to the product harvest, 31.8 percent (most frequency) of the experts stated that the improvement of pistachios marketing in the area of product harvest is desirable (Table 1).

Table 1: Respondents view in relation to situation of pistachio harvest (n=116)

Level	Frequency	Percent	Valid percent	Cumulative percent
Completely undesirable	15	12.9	13.6	13.6
Undesirable	15	12.9	13.6	27.3
Moderate	31	26.7	28.2	55.5
Desirable	35	30.2	31.8	87.3
Completely desirable	14	12.1	12.7	100
Non respond	6	5.2	-	-

Mode: Desirable

Prioritizing the product harvest items shows that providing the product with more quality with the maximum average is the first priority. Harvesting on a suitable time, harvesting with new methods and reducing the amount of pistachios loss are the next priorities, respectively (Table 2).

Table 2: Prioritizing of pistachio harvesting dimensions

Priority	Items	Mean	Sd
1	Providing the good quality products	3.37	1.17
2	Harvesting on a suitable time	3.24	1.28
3	Harvesting with new methods	3.03	1.29
4	Reducing the amount of pistachios loss	3.17	1.15

1: Completely undesirable; 2: Undesirable; 3: Moderate; 4: Desirable; 5: Completely desirable

Product rating

Regarding the product rating, 38.7 percent (most frequency) of the experts stated that the pistachios marketing in the area of product rating is desirable (Table 3).

Table 3: Respondents view in relation to situation of pistachio rating (n=116)

Level	Frequency	Percent	Valid percent	Cumulative percent
Completely undesirable	15	12.9	13.5	13.5
Undesirable	15	12.9	13.5	27.0
Moderate	21	18.1	18.9	45.9
Desirable	43	37.1	38.7	84.7
Completely desirable	17	14.7	15.3	100
Non respond	5	4.3	-	-

Mode: Desirable

Prioritizing the product rating items (Table 4) shows that providing the rated products with the maximum average should be the first priority. Rated product's value added and pistachios rating methods are the 2nd and 3rd priorities, respectively.

Table 4: Prioritizing of pistachio rating dimensions

Priority	Items	Mean	Sd
1	Providing rated products	3.36	1.26
2	Rated product's value added	3.35	1.27
3	Pistachios rating methods	3.34	1.17

1: Completely undesirable; 2: Undesirable; 3: Moderate; 4: Desirable; 5: Completely desirable

Product packaging

Concerning the product packaging, 33.6 percent (most frequency) of the experts stated that pistachios marketing in the area of product packaging are desirable (Table 5).

Table 5: Respondents view in relation to situation of pistachio packaging (n=116)

Level	Frequency	Percent	Valid percent	Cumulative percent
Completely undesirable	19	16.4	17.3	17.3
Undesirable	14	12.1	12.7	30
Moderate	23	19.8	20.9	50.9
Desirable	37	31.9	33.6	84.5
Completely desirable	17	14.7	15.5	100
Non respond	6	5.2	-	-

Mode: Desirable

Table 6: Prioritizing of pistachio packaging dimensions

Priority	Items	Mean	Sd
1	Effect of the packaging method on selling the product	3.36	1.32
2	Product packaging suitable to the market delicacy	3.34	1.25
3	Using new methods of product packaging	3.08	1.33
4	Situation of the city's agriculture product packaging	2.93	1.18

1: Completely undesirable; 2: Undesirable; 3: Moderate; 4: Desirable; 5: Completely desirable

Prioritizing the product packaging items (Table 6), effect of the packaging method on selling the product with the maximum average is the first priority. Product packaging suitable to the market delicacy, using new methods of product packaging and the situation of the city's agriculture product packaging are the next priorities, respectively.

Table 6: Prioritizing of pistachio packaging dimensions

Priority	Items	Mean	Sd
1	Effect of the packaging method on selling the product	3.36	1.32
2	Product packaging suitable to the market delicacy	3.34	1.25
3	Using new methods of product packaging	3.08	1.33
4	Situation of the city's agriculture product packaging	2.93	1.18

1: Completely undesirable; 2: Undesirable; 3: Moderate; 4: Desirable; 5: Completely desirable

Product transportation

In relation to the product transportation, 57.6 percent (most frequency) of the experts stated that the pistachios marketing in the area of product transportation is moderate and desirable (Table 7).

Table 7: Respondents view in relation to situation of pistachio transportation (n=116)

Level	Frequency	Percent	Valid percent	Cumulative percent
Completely undesirable	13	11.2	11.7	11.7
Undesirable	17	14.7	15.3	27.0
Moderate	32	27.6	28.8	55.9
Desirable	32	27.6	28.8	84.7
Completely desirable	17	14.7	15.3	100
Non respond	6	4.3	-	-

Mode: Moderate & Desirable

Prioritizing the product transportation items (Table 8), product transportation and movement on a suitable time with the maximum average are the first priority. Situation of communication roads from the production region to the markets, using proper methods of product transportation and the availability of speedy and inexpensive vehicles to transport the product to the target market are the next priorities, respectively.

Table 8: Prioritizing of pistachio transportation dimensions

Priority	Items	Mean	Sd
1	Product transportation on a suitable time	3.41	1.18
2	Situation of communication roads	3.09	1.22
3	Using proper methods of product transportation	3.08	1.22
4	Availability of speedy and inexpensive vehicles	3.06	1.22

1: Completely undesirable; 2: Undesirable; 3: Moderate; 4: Desirable; 5: Completely desirable

Product storage

On the subject of the product storage, 30.9 percent (most frequency) of the experts stated that the pistachios marketing in the area of product storage is desirable (Table 9).

Table 9: Respondents view in relation to situation of pistachio storage (n=116)

Level	Frequency	Percent	Valid percent	Cumulative percent
Completely undesirable	17	14.7	15.5	15.5
Undesirable	19	16.4	17.3	32.7
Moderate	28	24.1	25.5	58.2
Desirable	34	29.3	30.9	89.1
Completely desirable	12	10.3	10.9	100
Non respond	6	5.2	-	-

Mode: Moderate

Prioritizing the product storage items (Table 10), awareness of the storage advantages with the maximum average is the first priority. Awareness of storage methods and necessities, situation of the city's available springhouses and the rate of accessibility to the suitable stores equipped with proper equipments are the next priorities, respectively.

Table 10: Prioritizing of pistachio storage dimensions

Priority	Items	Mean	Sd
1	Awareness of the storage advantages	3.24	1.3
2	Awareness of storage methods	3.12	1.28
3	Situation of the city's available springhouses	2.97	1.22
4	Rate of accessibility to the suitable stores	2.88	1.21

1: Completely undesirable; 2: Undesirable; 3: Moderate; 4: Desirable; 5: Completely desirable

Product processing

In relation to the product processing, 30.3 percent (most frequency), of the experts stated that the pistachios marketing in the area of product processing is desirable (Table 11).

Table 11: Respondents view in relation to situation of pistachio processing (n=116)

Level	Frequency	Percent	Valid percent	Cumulative percent
Completely undesirable	16	13.8	14.7	14.7
Undesirable	23	19.8	21.1	35.8
Moderate	28	24.1	25.7	61.5
Desirable	33	28.4	30.3	91.7
Completely desirable	9	7.8	8.3	100
Non respond	7	6	-	-

Mode: Desirable

Prioritizing the product processing items (Table 12), the situation of terminals recording the available city's pistachios with the maximum average is the first priority. Awareness of agricultural products' processing and using the modern equipments of changing industries are the next priorities, respectively.

Table 12: Prioritizing of pistachio processing dimensions

Priority	Items	Mean	Sd
1	Situation of terminals recording pistachios	3.18	1.16
2	Awareness of agricultural products' processing	3.01	1.22
3	Using the modern equipments of changing industries	2.91	1.29

1: Completely undesirable; 2: Undesirable; 3: Moderate; 4: Desirable; 5: Completely desirable

Totally, about 38.5% of the experts (most frequency), in relation to improvement of pistachio marketing in Rafsanjan, stated that pistachio marketing is relatively desirable in the studied region. Only 11% of experts assessed the marketing situation as undesirable (Table 13).

Table 13: Respondents view in relation to situation of pistachio marketing (n=116)

Level	Frequency	Percent	Valid percent	Cumulative percent
Completely undesirable	14	12.1	12.8	12.8
Undesirable	12	10.3	11	23.9
Moderate	42	36.2	38.5	62.4
Desirable	26	22.4	23.9	86.2
Completely desirable	15	12.9	13.8	100
Non respond	7	6	-	-

Mode: Moderate Median: Moderate

In relation to prioritizing the pistachio marketing dimensions (Table 14), calibration is in the first priority and transportation, packing, harvesting, storage, and processing are the next priorities, respectively.

Table 14: Prioritizing respondents view in relation to dimensions of pistachio marketing

Dimensions	Mean	Sd	Priority	Mode
Calibration	3.28	1.26	1	Desirable
Transportation	3.2	1.22	2	Desirable
Packing	3.17	1.32	3	Desirable
Harvesting	3.16	1.22	4	Desirable
Storage	3.04	1.24	5	Desirable
Processing	2.96	1.20	6	Desirable

1: Completely undesirable, 2: Undesirable, 3: Moderate, 4: Desirable, 5: Completely desirable

CONCLUSION

This study showed that most of the experts (38.5%) stated that situation of pistachio marketing is relatively desirable in the studied region. In relation to prioritizing the pistachio marketing dimension, calibration is in the first priority and transportation, packing, harvesting, storage, and processing are the next priorities, respectively.

Results showed that product harvest was not good and acceptable, so it is suggested that extension policy makers, authorities, and planners provide the necessary educational courses of using new pistachios harvest methods to the gardeners.

Rating of the product in the area of providing rated products, value added of the product, and pistachios rating methods was relatively desirable, which all necessities should be considered to improve the mentioned items.

Methods of packaging the pistachios affects the sell of this product; packaging methods should be applied suitable for the internal and external market, so new international packaging methods should be more used so that this product can be presented or can compete with the global market.

The condition of roads from the production region to the market is not desirable; consequently, considering the proper methods of pistachios transportation, policies should be taken in order to use speedy and inexpensive vehicles for transporting the product to the target market.

The rate of awareness of the pistachios storage advantages and methods was desirable but the city's springhouses were not, for which necessary preparing measures should be carried out and new equipped springhouses with more accessible and necessary equipments should be produced.

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