## Research Article Strategic Planning for Grapes Product Development in Takestan City Through using SWOT Matrix

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**Abstract:** Achieving development, particularly development in agriculture sector requires principled efficient planning and accurate implementation of the plan. This involves exact awareness of facilities, opportunities, capabilities and constraints in reaching a favorable situation. This study aims at identifying the strategies required for success and development in local and global markets of grapes through using SWOT (Strengths Weaknesses Opportunities Threats) method. It firstly studies the theoretical principles of strategic planning process and strategic management, then it gathers internal factors (weaknesses and strengths) and external factors (opportunities and threats) pertaining to the grapes product development via questionnaires distributed among the statistical universe and analyzes them through SWOT method. To recognize the attractiveness of the identified strategies, QSPM (Quantitative Strategic Planning Matrix) matrix has been applied. The results reveal that continuous assessment of the competitors and their services contributes to the improvement of the products value added; and creating marketing networks and extensive campaigns are the most appropriate strategies in penetrating into the regional and global markets in order to develop grapes product of Takestan City. Furthermore, endeavors to achieve financial resources through ventures with foreign and domestic investors and applying modern technology and updated scientific findings have a considerable impact on developing grapes product.

Keywords: Grapes, QSPM, strategic management, strategic planning, SWOT

## **INTRODUCTION**

Agriculture is one of the most important sectors of the economy which supplies food security and public health on the one hand and can provide the currency circulation through exporting agricultural products on the other hand. Thus protecting this sector against global competitors in the world of free trade is among the main tasks of authorities and researchers. Agriculture sector plays an essential role in strengthening the foundations of developing economy and economies in transition. Since agriculture sector is important in terms of supplying food and raw materials of the industries, providing the opportunity of employment and income, stability and continuity of agriculture sector is among the main factors contributing to the social stability and economic growth of the society. On the other hand, as agriculture plays an important role in creating food security in national and local levels, as it provides opportunities for employment and income and is regarded as the main job in Iran villages, improvement of productivity per unit area and agricultural development must be taken into account so as to actualize national development (Eskandari and Dinpanah, 2006). Agriculture sector in Iran, like any other developing country, plays a vital role in the economic development and if it is ignored it

not only breeds agricultural stagnation but it is also converted into a deterrent factor against economic development (NouriNaeini, 1993). Among agricultural traits of the developing countries compared with industrial developed countries, regardless of technology level, utilization and efficiency of manpower, one trait is related to the relation between price and income in the agriculture sector and its relation with the external sectors (Raeis, 1993).

In agriculture sector, the matter of waste prevention and preserving food through proper packaging and industrial processing may solve the existing problems to some extent. Thus food industry as an industry dependent upon and affiliated with the agriculture sector may contribute to and supplement the activities undertaken by agriculture sector and may play an important role in reducing wastes of food and agricultural products (Varzgar, 1993). Achieving development particularly sustainable agricultural development requires a principled efficient planning and exact implementation of the plan. This involves accurate awareness of facilities, opportunities, capabilities and constraints in the way of reaching a favorable situation. Agricultural planning considers matters and problems in producing and supplying agricultural products and endeavors to improve economic function of the farmers while attending to the nutrient requirements of the society and environmental problems. The main task of agricultural planning is analyzing and forecasting basic factors of production, production economization methods, demand and supply, agricultural products marketing and providing a clear image of the prospective nutrient requirements in national and global levels (Moteiee *et al.*, 2009). This study seeks to identify the strategies required for success in the local and global markets of grapes product via SWOT method. The implementation of this study may change the position of grapes product in Takestan City and strategies may be offered for being released from the current state by using SWOT method.

### LITERATURE REVIEW

Arabshahi (2008) has tried to have a quick look at strategic management, its necessity and the obstacles of its application in the organizations. The results indicate that in the future, organizations are successful that have a clear vision of what they must do and can enjoy the required organizational systems and strong management. Zare et al. (2010) has endeavored to assess strengths, weaknesses, opportunities and threats in the agriculture and ranching sector through using SWOT model which is regarded as one of the most important strategic planning models. Then he used a complementary model for prioritizing strategies and determining the most appropriate strategy based on QSPM. The results show that organizing production centers and rural environments and settlements, providing a proper bed for employing young and expert human forces, assigning a part of research and executive affairs to the private sector and increasing participation are respectively the most important ways of developing agriculture and ranching in this region. Dehghanizadeh and Hosseinipour (2009) explained perspectives and strategies pertaining to the development of agriculture sector in Yazd Province by using the strategic planning model. The results suggest that in the current circumstances the threatening and destructive effect of external factors and internal weaknesses is more than opportunities and strengths existing outside and inside of the Province agriculture sector in achieving the favorable perspective. Alsadeghi and GhalSoleiman (2010) investigated capabilities of the agriculture sector in South Khorasan Province for sustainable development by using SWOT model and explained that various internal and external factors in the agriculture sector will set the stage of using environmental and human capabilities more favorably through a more proper planning to achieve sustainable development not only in the region but also in the national level. Javanmard and Mahmudi (2008) stated that targeted studies for identifying and analyzing opportunities in line with organic production for local markets and export are very important and necessary.

Studying problems and challenges related to the production, distribution and export of onion by SWOT matrix, Khaledi et al. (2011) stated that onion supply chain in East Azerbaijan has strengths by which and by proper policies and accurate management, weaknesses can be overcome and competitive advantage and profit may be achieved along the chain. Chen and Huang (2009) explained that there is a significant relation between strategic management functions of human resources and administrative and technical innovation and knowledge management may play an intermediary role between these practices and organizational innovation. Clough (2007) compared strategic management and leadership by investigating the authorities' opinions and institutes planning documents and stated that supervisory leadership is highly important in the official planning processes and strategic management will remain as an important factor in higher education management. Papas (2001) demonstrated that how both strategic knowledge of middle managers and the current social structure of the organization are interacting to pave the way of strategic innovation. Charles (2010) has carried out a research seeking to provide a set of concepts and ideas for promoting an integrated and flexible image of strategic planning, strategic prediction, organizational structure and its processes. Aldehayyat (2011) has investigated the effects of some organizational traits on the strategic planning function in Jordan Hotel. The results revealed that Jordan has affected hotels by using a number of techniques and natures of the strategic planning process based on the organization size rather than type of ownership.

### MATERIALS AND METHODS

sampling method and information Sample. collection: The statistical universe comprises planner experts and administrators of Agricultural Jihad in the specialized field of grapes as well as members of farmers union. Due to the specialized nature of the subject and the area of activity in Takestan City, the statistical universe equals the sample volume. By studying papers regarding strategic planning for developing grapes product, the required library information were gathered. Then by referring to the agriculture sector, data pertaining to the perspective, goals and strategies of the product development was collected. To identify weaknesses and strengths and opportunities and threats in the field of grapes product development, a questionnaire was prepared and distributed among agricultural experts.

**Measurement tool:** In this study two questionnaires have been used to gather the related data. Questionnaire No. 1 is related to determining the most important

indices of grapes development and their prioritization in Takestan City. Firstly the indices were identified by using library studies and then an interview was carried out with agricultural experts to complete the identified indices; by integrating these indices (library and interview) the final indices were selected. Questionnaire No. 2 is related to determining strengths, weaknesses, opportunities and threats in production for improving strategic plan of grapes product development in Takes tan City. These questionnaires were distributed among the statistical universe. The questionnaires were assessed by Cranach's alpha and SPSS software. Cranach's alpha value was estimated 0.72, thus the questionnaire reliability was approved. Following completion of the questionnaires, the first action is recognizing the most important factors among the identified factors. Hence Friedman test and SPSS software was applied.

**Data analysis method:** Data descriptive analysis refers to the features of the statistical universe and sample. In the present paper, these features consist of age, job and education which are referred in the first part of questionnaire. To analyze information and to determine strategies of grapes product development in Takestan City, Internal Factors Evaluation (IFE) matrix, External Factors Evaluation (EFE) matrix and Strengths, Weaknesses, Opportunities and Threats (SWOT) matrix were applied.

### RESULTS

Market factors ranking: "global price increase", "product foreign demand" and "competition status in market" are among the most important market factors. Ranking results are presented in Table 1. Climatic factors ranking: the rank of each climatic factor is presented in Table 2 according to which "temperature" and "rainfalls" are the most important effective climatic factors on grapes product. To formulate the strategy of grapes product development, strategy formulation comprehensive framework is applied. This framework provides tools and methods that are appropriate for all farmers and contributes strategists to identify, evaluate and select strategies. This framework comprises four main stages namely initiating, input, matching and decision stages. Tools applied to adapt factors are namely SWOT matrix, Internal and External (IE) matrix. Internal and external matrix identifies and implements the strategies identified in SWOT matrix (offensive, conservative, competitive and defensive strategies). Schematic view of these stages is presented in Fig. 1. To shorten, strengths, weaknesses, opportunities and threats are not mentioned as they are repeated in the section of quantitative strategy matrix.

Since internal factors of grapes product development are placed in the first home in terms of strategic status, it encounters with more strengths in terms of internal factors and more opportunities in

Index	Friedman coefficient
Global price increase	6.78
Product foreign demand	6.76
Competition status in market	6.43
Predicted price in the farm of product	6.09
Product industrial demand	5.59
Distribution channels status	5.18
Substitute consumer goods price	5.08
Price of competing crops	4.87
Growth rate of domestic consumption	4.82
Product import	3.41

able 2: Ranking of climatic factors	
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Table 2: Ranking of climatic fa	actors
Index	Friedman coefficient
Temperature	3.57
Rainfall	3.16
Wind	2.87
Moisture	2.78
Topography	2.63

Stage 1: Initiating stage							
Determining mission and preparing the organization mission							
statement							
Stage 2: The input stage							
Internal factors evaluation matrix	External factors						
	evaluation matrix						
Stage 3: Matching stage							
Internal and external matrixes	SWOT matrix						
Stage 4: The decision stage							
Quantitative strategic planning matrix							

Khorshid and Ranjbar, 2010

Fig. 1: Strategy comprehensive framework

1	2	3	4		
Conserva	tive strategy	Offensive	strategy	4	s evaluation
	are suddy		, survey,	~	ernal factor
Defensi	ve strategy	Competitiv	ve strategy	2	score of ext
				_	3.03 = Final

2.68 = Final score of internal factors evaluation

Fig. 2: Internal and external factors evaluation matrixes of grapes product development

terms of external factors. So strategies must be adopted by which this product can enjoy more growth in terms of internal and external factors (Fig. 2).

To create quantitative strategy matrix, identified offensive strategies were firstly derived from interview with experts. These strategies are namely:

- Strategy 1: Applying modern technologies and updated scientific findings in the field of grapes
- Strategy 2: Endeavor to access financial resources through ventures with local and foreign investors
- Strategy 3: Penetrating into the regional and global market

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Table 3: Quantitative strategic planning matrix with regard to the internal factors

		Strategy 1		Strategy 2		Strategy 3		Strategy 4	
		Attractiveness		Attractiveness		Attractiveness		Attractiveness	
	Importance	score	Sum	score	Sum	score	Sum	score	Sum
Strength (S)	0.10		0.10	2	0.20	1	0.10	2	0.20
Adjacency to 5 provinces Adjacency to the capital to supply the product	0.10	4	0.10	1	0.20	2	0.10	2	0.30
Export capacities for city products (2)	0.08	2	0.16	3	0.24	4	0.32	1	0.08
Experienced and active farmers	0.06	3	0.18	1	0.06	1	0.06	4	0.24
Training accurate haras	0.06	2	0.06	2	0.06	5	0.18	3	0.06
Favorable domestic market (2)	0.07	2	0.14	4	0.28	2	0.14	1	0.07
Product compatibility with the region climate	0.06	1	0.06	3	0.18	3	0.18	2	0.12
Possibility of constructing product converting industries from sour	0.08	2	0.16	2	0.16	1	0.08	1	0.08
Conversion into raisin in case of grapes had price	0.07	1	0.07	4	0.28	1	0.07	3	0.21
High durability of raisin and grape	0.07	1	0.07	3	0.21	4	0.28	4	0.28
Geographical location	0.10	1	0.10	1	0.10	2	0.20	1	0.10
Water and soil climatic conditions	0.10	1	0.10	1	0.10	1	0.10	4	0.40
Parmers scientific and technical information Potential of increasing orchards capacity	0.08	2	0.08	2	0.08	4	0.32	2	0.16
Grape desirability in terms of quality (2)	0.06	2	0.12	4	0.24	1	0.06	3	0.18
Potential of converting the product into several by products (4)	0.08	3	0.24	1	0.08	1	0.08	4	0.32
Approximately high durability of the product on the bush	0.07	1	0.07	3	0.21	2	0.14	1	0.07
Product quality (4) Product health	0.07	2	0.14	1	0.07	1	0.07	1	0.07
Effect of growth rate	0.09	1	0.09	1	0.09	4	0.36	1	0.08
Diversity of grapes cultivars (2)	0.03	2	0.06	2	0.06	1	0.03	2	0.06
High employment (4)	0.06	3	0.18	3	0.18	3	0.18	3	0.18
High acreage	0.05	1	0.05	4	0.20	1	0.05	1	0.05
Sugar percentage appropriate for grape and raisin	0.08	2	0.16	1	0.08	4	0.52	3	0.24
Climate appropriate for grape production (3)	0.00	3	0.27	3	0.27	3	0.27	2	0.18
Being windy (3)	0.08	3	0.24	4	0.32	1	0.08	4	0.32
Sunny area at the time of product maturity (2)	0.07	2	0.14	1	0.07	1	0.07	1	0.07
Proper climate (4)	0.10	4	0.40	2	0.20	2	0.20	4	0.40
Adjacency to the sale market	0.03	1	0.03	5	0.13	4	0.20	4	0.05
Soil type (2)	0.06	2	0.12	4	0.24	1	0.06	1	0.06
Moisture appropriate for the region	0.07	1	0.07	2	0.14	3	0.21	2	0.14
Proper growth	0.10	1	0.10	2	0.20	1	0.10	3	0.30
Being placed in plain geographically	0.07	2	0.14	3	0.07	4	0.28	1	0.07
High freshness	0.07	1	0.07	1	0.07	4	0.28	1	0.07
Weakness (W)									
Lack of credits with low interest	0.06	2	0.12	2	0.12	1	0.06	2	0.12
Strict conditions of delivering boo thin the vegetables fields of	0.07	1	0.07	1	0.07	3	0.21	1	0.07
Low insurance compensation	0.08	2	0.16	3	0.24	4	0.32	3	0.24
High insurance tariffs (2)	0.08	3	0.24	1	0.08	2	0.16	4	0.32
Lack of inputs and high production costs (2)	0.07	2	0.14	1	0.07	1	0.07	1	0.07
Lack of familiarity with updated technology for production	0.05	1	0.05	2	0.10	2	0.10	4	0.20
Lack of familiarity with methods of reducing production costs Probability of high dealing when hervesting (4)	0.05	1	0.05	4	0.20	1	0.05	2	0.10
Lack of industrial planting, harvesting and selling	0.07	1	0.07	3	0.09	1	0.07	4	0.09
Lack of specific cooperation for farmers at the time of sale	0.07	2	0.14	1	0.07	1	0.07	3	0.21
Traditional state of most orchards (3)	0.08	2	0.16	1	0.08	2	0.16	1	0.08
Water shortage problem in all areas of Takestan	0.08	1	0.08	2	0.16	4	0.32	4	0.32
Expensiveness (nigh costs of labor, poisons, etc.) (2) Presence of traditional farmers	0.08	2	0.16	4	0.32	1	0.08	2	0.16
Lack of a proper packaging and ranking system (5)	0.10	4	0.40	3	0.30	1	0.12	4	0.40
Cargo transportation by improper vehicles (2)	0.04	3	0.12	2	0.08	2	0.08	2	0.08
Lack of strong cooperative company for affecting market real price	0.07	1	0.07	4	0.28	4	0.28	1	0.07
Not using capacities of industrial preserving and gradual entrance of the product into the market	0.08	1	0.08	1	0.08	1	0.08	4	0.32
Not using modern mechanized system of culturing and irrigation	0.07	1	0.07	2	0.14	4	0.28	2	0.14
Not publishing the information of the grapes research center	0.08	2	0.16	3	0.24	2	0.16	3	0.24
Unwarranted expectations of farmers	0.07	1	0.07	1	0.07	1	0.07	1	0.07
Lack of information regarding pest control	0.07	2	0.14	1	0.07	1	0.07	4	0.28
of orchards	0.04	5	0.12	1	0.04	1	0.04	2	0.00
Lack of cooperation of vines owners and grapes owners union	0.06	1	0.06	2	0.12	3	0.18	4	0.24
High wastes in transportation	0.06	2	0.12	2	0.12	1	0.06	3	0.18
Lack of alliance among orchards owners	0.08	3	0.24	4	0.32	2	0.16	1	0.08
Not creating converting industries	0.07	4	0.28	2	0.07	1	0.14	1	0.14
Lack of proper advertisements and marketing (2)	0.08	3	0.24	4	0.32	1	0.08	3	0.24
Lack of standard necessary for warehousing (2)	0.07	2	0.14	3	0.21	1	0.07	2	0.14
High difference between production and consumption prices	0.07	1	0.07	1	0.07	2	0.14	1	0.07
Lack of consultation and promotion facilities	0.07	1	0.07	2	0.14	1	0.07	4	0.28
Lock of grapes market in the city	0.08	3	0.18	1	0.08	4	0.24	1	0.06
Lack of brand	0.10	2	0.20	3	0.30	1	0.10	4	0.40
Low rainfall in the region in proper times (3)	0.06	3	0.18	1	0.06	4	0.24	3	0.18
Exposure to Iraq dust	0.06	1	0.06	2	0.12	1	0.06	2	0.12
Low levels of ground waters (3) Lack of appropriate management on the surface waters	0.05	2 4	0.10	4	0.20	5 1	0.15	4	0.05
Traditional irrigation	0.06	3	0.18	ĩ	0.06	2	0.12	5	0.20
Prevailing wind of region (3)	0.08	2	0.16	2	0.16	1	0.08	1	0.08
Being placed in the climatic dry region	0.07	2	0.14	4	0.28	1	0.07	2	0.14
Lack of agricultural machinery in unfavorable climatic conditions	0.05	1	0.05	1	0.05	4	0.20	1	0.05
Probability of rainfall in the harvest season	0.04	1	0.04	1	0.04	3	0.12	4	0.16
Water shortage	0.05	4	0.20	3	0.15	1	0.05	2	0.10
High pests (3)	0.07	4	0.28	2	0.14	4	0.28	1	0.07
Not mechanized orchards	0.09	3	0.27	4	0.36	2	0.18	2	0.18
Traditional culture and harvest (2)	0.10	4	0.12	3	0.30	1	0.10	4	0.18
Sum			12.50	-	13.06		13.38		14.54

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#### Table 4: Quantitative strategic planning matrix with regard to the external factors

¥ ¥ ¥ ¥		Strategy 1		Strategy 2		Strategy 3		Strategy 4	
		Attractiveness		Attractiveness		Attractiveness		Attractiveness	
	Importance	score	Sum	score	Sum	score	Sum	score	Sum
Opportunities (o) Quality of products among countries	0.08	4	0.32	3	0.24	2	0.16	4	0.32
Converting grapes into raisins and transporting to far markets	0.06	2	0.12	2	0.12	1	0.06	1	0.06
Capability of mechanizing orchards of the region	0.10	1	0.10	1	0.10	4	0.40	4	0.40
Water shortage and using pressurized irrigation system	0.08	1	0.08	4	0.32	3	0.24	2	0.16
Entrance of updated technology for production with better quality	0.05	2	0.10	1	0.05	4	0.20	3	0.15
Product packaging by updated global standards	0.05	3	0.15	3	0.15	2	0.10	1	0.05
Creating high seasonal job opportunities (3)	0.06	1	0.06	1	0.06	1	0.06	4	0.24
Establishing raisin factories	0.05	1	0.05	4	0.20	2	0.10	1	0.05
Exporting in the form dried fruit in small packages (like grape	0.10	4	0.40	3	0.30	1	0.10	4	0.40
Exerting the guarantee rate in the recent years	0.06	2	0.12	2	0.12	1	0.06	2	0.12
Difference between dollar rate and Rial rate with regard to the	0.07	3	0.21	4	0.28	4	0.28	1	0.07
raisins export	0.40		0.4.0						
Updating raisins factories Extensive domestic and foreign advertisements	0.10	1	0.10	3	0.30	2	0.20	3 1	0.30
Gaining the market (3)	0.07	2	0.14	2	0.14	3	0.21	3	0.21
Constructing converting industries (3)	0.08	2	0.16	1	0.08	1	0.08	1	0.08
Export development High knowledge level of farmers	0.06	3	0.06	3	0.18	3	0.18	3	0.18
Adjacency to the countries of the target market	0.09	1	0.09	4	0.36	2	0.18	4	0.36
Creating cooperation by producers (2)	0.08	2	0.16	1	0.08	2	0.16	1	0.08
Accurate pricing	0.08	1	0.08	2	0.16	4	0.32	2	0.16
Creating facilities for export	0.05	3	0.14	4	0.20	2	0.10	4	0.20
Financial support for farmers	0.06	4	0.24	2	0.12	4	0.24	1	0.06
No need for complicated technology for production	0.06	2	0.12	1	0.06	1	0.06	1	0.06
Possibility of autumn harvest	0.03	2	0.14	1	0.07	2	0.14	3	0.24
Modification of scaffolding system of grapes orchards	0.07	3	0.21	3	0.21	4	0.28	2	0.14
Using local knowledge of farmers in this regard Conditions of constructing road between farms and orchards	0.05	3	0.15	2	0.10	1	0.05	2	0.10
Employment creation in agricultural plans with regard to the	0.06	1	0.06	2	0.18	3	0.00	1	0.12
region climatic conditions									
Using technology for controlling environmental factors	0.05	1	0.05	4	0.20	2	0.10	4	0.20
Scaffolding orchards	0.07	1	0.10	4	0.10	2	0.30	3	0.10
Possibility of testing soil	0.10	1	0.10	1	0.10	4	0.40	2	0.20
Training via media Holding advestignal courses by agricultural jihad for formers	0.10	1	0.10	2	0.20	3	0.30	1	0.10
On time distribution of inputs	0.10	3	0.10	2	0.10	3	0.40	2	0.40
Possibility of using water of Taleghan and AbharRud dams	0.07	1	0.07	1	0.07	2	0.14	4	0.28
Controlling surface waters	0.08	3	0.24	1	0.08	2	0.16	2	0.16
Foreign investment	0.07	2	0.21	3	0.07	2	0.07	4	0.28
Identifying lost markets	0.07	3	0.21	4	0.28	3	0.21	2	0.14
Substituting modem methods for traditional ones	0.08	2	0.16	1	0.08	1	0.08	1	0.08
Using potentials existing in the converting industries	0.08	3	0.08	1	0.10	3	0.08	4	0.24
Creating motivation for producers	0.07	2	0.14	4	0.28	1	0.07	1	0.07
Lack of appropriate climatic conditions in most neighboring	0.05	4	0.20	1	0.05	4	0.20	2	0.10
Mechanizing orchards	0.10	2	0.20	2	0.20	2	0.20	4	0.40
Creating healthy courts for raisins	0.10	3	0.30	1	0.10	3	0.30	1	0.10
Threats (1) Eluctuations of the currency rate in the market (5)	0.08	4	0.32	2	0.16	2	0.16	3	0.24
Increasing production costs in the area unit	0.08	1	0.02	3	0.24	1	0.08	1	0.08
Crisis and embargo in the country	0.07	2	0.14	4	0.28	4	0.28	4	0.28
Improper packaging for export I ack of familiarity of merchants with the market for more export	0.04	2	0.08	3	0.12	4	0.04	2	0.08
Not using new industrial methods in all stages	0.08	1	0.08	1	0.08	3	0.24	4	0.32
Threat of ground waters shortage and lack of winter and spring	0.07	2	0.14	4	0.28	1	0.07	2	0.14
floodwaters Negligence of the authorities	0.06	3	0.18	1	0.06	3	0.18	1	0.06
Lack of experienced agricultural expert in the region	0.05	1	0.05	2	0.10	2	0.10	4	0.20
Water shortage	0.09	2	0.18	1	0.09	4	0.36	1	0.09
Lack of cooperation of experts in agriculture bank Embargo and not purchasing due to political reasons (4)	0.06	3	0.18	1	0.06	4	0.24	4	0.24
Not purchasing due to quality (that leads to product return)	0.05	1	0.25	3	0.15	3	0.15	2	0.10
Not issuing permission for some of the product converting	0.05	1	0.05	2	0.10	1	0.05	1	0.05
Industries for export	0.05	2	0.10	1	0.05	3	0.15	3	0.15
Lack of schedule and control for changing the traditional system	0.07	1	0.07	2	0.05	2	0.13	1	0.07
in to mechanized one to reduce production costs				_					
Loosing foreign market (3) Competition with other countries	0.08	2	0.16	3	0.24	4	0.32	2	0.16
Extreme use of agricultural inputs in the product	0.09	3	0.03	1	0.09	3	0.27	2	0.12
Lack of stability in prices	0.06	1	0.06	3	0.18	1	0.06	3	0.18
Grapes import (3) Extensive marketing and advertisements of the competing	0.06	3	0.18	4	0.24	1	0.06	1	0.06
countries (2)	0.08	2	0.10	+	0.52	1	0.00	4	0.52
Improper packaging for distribution	0.06	1	0.06	4	0.24	2	0.12	2	0.12
Soil degradation (3) Weather events including shower strong wind dust atc.) (4)	0.07	2	0.14	2	0.14	3	0.21	1	0.07
Decrease in ground water storage	0.06	1	0.06	3	0.18	3	0.18	3	0.18
Soil degradation	0.02	2	0.04	1	0.02	3	0.06	3	0.06
Shattered agricultural lands Lack of capability for purchasing equipments of controlling the	0.03	2	0.06	2	0.06	4	0.12	4	0.12
effect of environmental factors on the product	0.05	•	5.05		5.20		0.00	-	0.10
Drought (2)	0.06	3	0.18	1	0.06	2	0.12	4	0.24
High rainfalls and moisture creation Lack of awareness of some farmers about proper time of poison	0.04	1 2	0.04	2	0.08	1	0.04	1 2	0.04
spraying									

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Table 4: (Continue)									
Water shortage in most vine regions	0.06	2	0.12	3	0.18	4	0.24	3	0.18
Soil pollution due to chemical poisons	0.06	3	0.18	2	0.12	1	0.06	1	0.06
Movement of climatic conditions from semi-arid to arid	0.05	3	0.15	2	0.10	3	0.15	2	0.10
Not implementing water storage projects by present	0.06	2	0.12	2	0.12	12	0.72	4	0.24
Not allocating water share of Takestan city from Taleghan dam by	0.05	1	0.05	4	0.20	4	0.20	1	0.05
present									
Industrial pollution due to constructing abundant factories and	0.06	2	0.12	3	0.18	1	0.06	3	0.18
lack of supervision									
Import of weak inputs	0.06	1	0.06	2	0.12	3	0.18	1	0.06
Ground warming due to industrialization	0.05	3	0.15	1	0.05	1	0.05	5	0.15
Sum			12.36		13.69		15.11		14.31

#### Table 5: Strategies prioritization

	Internal factors	External factors	Total
Strategy	evaluation	evaluation	score
Applying modern technologies and updated scientific findings in the field of grapes	12.50	12.36	24.86
Endeavor to access financial resources through ventures with local and foreign investors	13.60	13.69	27.29
Penetrating into regional and global markets via marketing networks and extensive campaigns	13.38	15.11	28.49
Improving products value added through continuously assessing competitors and their services	14.54	14.31	28.85

• **Strategy 4:** Improving value added of products by continuously assessing competitors and their services

Then quantitative strategic planning matrix was creating with regard to the internal factors (strengths and weaknesses). To create this matrix, importance coefficient and attractiveness score of the product strengths and weaknesses were determined for each strategy and the final score of each factor strength and weakness was specified by multiplying importance coefficient by attractiveness score. It is presented in Table 3. In the following, the sum of final scores of all strengths and weaknesses for each strategy was obtained (Table 4). Ultimately to prioritize strategies, sum of internal and external factors scores for each strategy was determined (Table 5).

### **DISCUSSION AND CONCLUSION**

In this study, market and climatic factors indices were separately ranked via Friedman test and SPSS software. According to the results obtained, among market factors indices, global price increase, product foreign demand and competition status in market have respectively the highest ranks. Among climatic factors indices, temperature and rainfall and wind have the highest ranks. Also to evaluate internal factors (strengths and weaknesses) and external factors (opportunities and threats) of grapes product development in Takes tan City, SWOT analysis was applied and the results are as below:

• In internal factors evaluation matrix of grapes development, the final score was estimated 2.68; and in external factors evaluation matrix of grapes development, the final score was estimated 3.03. Having drawn diagram of internal and external factors evaluation matrixes, it was specified that grapes product development have offensive strategy which indicates that this product has been encountered with more strengths in terms of internal factors and more opportunities in terms of external factors. So offensive strategies must be adopted to develop this product so as to enjoy higher growth

- In decision-making stage (quantitative strategic planning matrix), four offensive strategies were identified among which below strategies are proper offensive strategies compared with other strategies for grapes development:
- Improving value added of the products by continuously assessing competitors and their services
- Penetrating into the regional and global markets by creating marketing networks and extensive campaigns

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