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MARKETING PROBLEMS IN AGRICULTURE: ESPECIALLY IN THE FIELD OF GRAPE FARMING

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Abstract*: *Purpose. *The main purpose of the research study is to compare viticulture, one of the leading branches of Azerbaijani agriculture, in the world market and to develop this field by eliminating the marketing problems that arise during the analysis.* ***Need for the study.*** *The concept of marketing in agriculture includes all the activities in the process of preparation, standardization, storage, delivery to the market and finally delivery of the agricultural product, starting from the quantity and quality of the product to be produced by the producer. Recent times, the growing demand for food due to population growth has led to an increase in the demand for agricultural products. What needs to be done at this point is that agricultural producers can influence market demand with proper marketing efforts. Because the awareness of consumption of natural agricultural products affects the choice of products and purchasing behavior of consumers, and the reason for this is the presence of chemical substitutes for agricultural products in many countries.* ***Methodology.*** *The data required for the article were collected by survey method. Then, the statistical relationships of the data collected by the survey method were investigated.* ***Findings.*** *As a result, important problems of marketing of agricultural products were discovered in a number of regions of Azerbaijan.* ***Practical Implications.*** *Advertising factors were seen as the main negative effect during the research. It was recommended that work be done in this direction.*

Keywords: *agriculture marketing; farming; development; agricultural economy; environmentally sensitive*

INTRODUCTION

It is obvious that agricultural marketing refers to a system that includes processes such as purchase, sale and distribution of agricultural products and so on. It includes activities such as identifying consumer needs, promoting products, determining prices, advertising products, transporting, storing and distributing goods. Agricultural marketing is an important part of the agricultural industry for most countries in the world and plays an important role in the economy of many countries. Therefore, marketing and agriculture are closely related, and marketing plays an important role in the success and profitability of the agricultural industry. First of all, it can be noted that marketing is an important and integral part of market-oriented production, which realizes the production of agricultural products that meet the needs of customers. That is, by understanding customer demand, farmers can produce products that are more likely to sell at a fair price. Marketing, on the other hand, helps farmers differentiate their products from competitors in the marketplace by emphasizing quality, sustainability, or other unique features.

Thanks to this, farmers will stand out in a crowded market and offer products at a higher price. Effective marketing can help farmers introduce their products to new markets, both domestically and internationally. At the same time, marketing can help farmers improve their distribution channels, making it easier to market their products and increase sales, which means working with wholesalers, retailers and other intermediaries to ensure that their products reach customers in a timely and efficient manner.

It is also important to know the problems in this area after marking the importance of marketing in agriculture. If we look at the agricultural marketing of countries around the world, one of the most important problems is the price variability. The reason for this change is the issue of supply and demand, due to changes in weather conditions and other factors. Economic and environmental variating such as economic and environmental variations can effectively implement and manage production and marketing strategies. Another problem is little or no market information. That is, farmers cannot have modern market information. However, this information helps to produce, and decide where to be sold products. Problems in quality and standardization are also reflected in agriculture. Thus, in many cases, agricultural products are sold based on the quality and standards owned by small farmers. These standards (equipment, training and infrastructure) emerge large problems when small farmers do not respond. One of the main problems of agricultural marketing is the presence of market competition. Because farmers and agribusinesses enter the market, the competition in agriculture is growing and it can make them difficult to sell their products at a fair price. Consumers require a continuous growing product and weaken the production of organic and other sustainable agricultural products that can be difficult for manufacturing and marketers.

In many developed countries, industrial agriculture, characterized by large farms and high-yield production systems, dominates, and this process is gradually spreading to developing countries. GM crops, which are widely accepted in the United States and many other countries, remain a controversial issue in some countries due to their negative effects on the environment (Masters and Nelson 1995). A number of world researchers have mentioned the high post-harvest losses in agricultural fields in their countries, as well as in countries around the world, and have attributed these problems to farmers' lack of market information and weak marketing infrastructure (Jemal and Genet 2019). While discussing marketing challenges, lack of market information and poor road networks have led to significant losses of agricultural produce (Njaya 2014). Miljkovic (2015) says that most countries' food security efforts are based on the availability of supplies. Households in agricultural areas invest more in agriculture than in areas with less agricultural potential (Daidone et al. 2019). Dani Rodrik (2011) professor of economics at Princeton University, has conducted valuable research on emerging and existing problems in agricultural marketing worldwide. In his studies, he emphasizes that the development of the field as a solution to the problem in the field of agriculture will be provided by the joint activity of the public and private sectors. Amartya Sen (1999), an Indian economist and Nobel Prize laureate, draws attention to the problems of valuation and product standards in agricultural marketing in his research. In its study, the importance of applying a fair and transparent product standards and evaluation system is brought to the fore.

While investigating this area, it turned out that the views on agricultural marketing vary depending on the individual's field and experience. For example, according to scientists,

marketing is a critical component of the agricultural industry. Emphasizing the importance of use of information and scientific research, it is important to inform market trends and marketing decisions such as clear consumer choices. They also note that the role of marketing in promoting continuous agricultural practices such as waste reduction, increase efficiency and minimizing the environmental impact. According to scientists, agricultural marketing causes environmental degradation such as deforestation, soil erosion and water pollution. To solve these types of problems, marketing should prioritize practices that minimize these effects. They say that agricultural products must be safe for human consumption and contain no harmful contaminants, pesticides or antibiotic residues. Economists view agricultural marketing primarily through the lens of supply and demand. In other words, they say that efficient markets are essential, where information flows freely between buyers and sellers and where prices reflect the true value of agricultural products. On the other hand, they note that marketing has the potential to create market distortions and exacerbate income inequality for smallholder farmers. In addition, economists emphasize the importance of government policies and regulations to ensure that markets are fair and competitive. Marketers emphasize the importance of identifying target markets, developing effective advertising and promotion strategies, and building strong relationships with customers. That is, they see agricultural marketing as an important tool for farmers and agribusinesses to promote their products and increase brand awareness. According to marketers, digital platforms are the biggest chance for farmers in the era of digitization.

Introduction to agricultural marketing and agricultural economy

Any economic activity aimed at the production of plant and animal products or making these products more valuable is included in the definition of agriculture, and according to this definition, forestry and fishing is also included in the scope of agriculture. In other words, agriculture is the process of producing plant and animal products, improving their quality and effectiveness, protecting these products under appropriate conditions, developing them and putting them on sale. Agriculture has an important place in the economy. In recent years, as in all fields, marketing problems have emerged in the field of agriculture, and this has made the science of Agricultural Marketing more important than other disciplines included in its scope (Topcu 2004). Economic aspects of micro and macro economy are analyzed in agricultural economics. Issues aimed at improving agriculture in the country, regulating agricultural products in accordance with public interests, raising the welfare level of farmers, and protecting producers and consumers from excessive price fluctuations are discussed in the Macro evaluation. The topics covered at the micro level are mostly business management, business planning, production economics, accounting, investment, finance, marketing and cooperatives. However, it should be known that the topics discussed at the macro and micro level are closely related to each other. Given the recent developments and increased competitive conditions, as in all fields, marketing challenges have emerged in the field of agriculture, which has made the science of Agricultural Marketing more important than any other subject under its purview. Therefore, this area is one of the main areas that require recent research. Agricultural marketing is a branch of science that studies the events from the producer to the final consumer just as marketing studies the events on the way of commodities from the producer to the final consumer.

Agricultural marketing is an important field of activity that affects the economic development of every country (Government of Khyber Pakhtunkhwa 2012; Branson and Dauglass 1983). These effects can be seen in the table below:

Table 1. Factors affecting the country's economy

To reduce costs by increasing economic and technical efficiency;
To increase the purchasing power of producers in the modern market economy;
Increasing competition in the marketing system and reducing marketing margins;
Improve management skills in marketing organizations;
Increase the supply of high-quality products;
End waste reduction and inefficient use of resources;
Providing sufficient information about supply and demand and other market issues, changes in consumer preferences and general market conditions;
Build understanding and communication between manufacturers, marketing organizations and consumers.

The most important event in the sale of goods in the market is the formation of the price, and although the price in the market is thought to reflect the supply and demand, on the other hand, it may be necessary to support products that are important for the country's economy. In this case, agricultural marketing examines how prices are formed, checks whether the method of price formation is appropriate, and determines how and at what level products should be valued. Agricultural marketing has a significant impact on producer and consumer incomes, and therefore on the national economy, by delivering the product to the consumer without any loss, processing it, presenting it to the market in a good form, within the appropriate profit rates. In the period of closed economy, the first goal of the farmer in agricultural activity was to directly meet the needs of himself and his family. This type of situation is called auto consumption in economics. With the development of the barter economy, producers increasingly used agricultural products to buy other goods and services they needed (Reardon and Timmer 2005). Over time, farmers began to produce not only for themselves, but also for consumers. Consumers want the products they need at the most appropriate time, at the most affordable price, in the most appropriate quantity and in the most appropriate quality. It is clear that agricultural products go through a certain channel from the producer to the consumer and are subjected to some processes that increase their utility and economic value. Ways of bringing products to the market and the services provided for them are classified in different ways by different scientists.

Purpose of the Research: Hypotheses Testing

The aim of the research is analyzing whether the variables selected have positive impacts on marketing success/performance or not. Below, the hypotheses used in the research are listed:

- ✓ “The marketing success of grape is positively correlated with the effectiveness of the distribution system”.
- ✓ "Price favorably influences grape marketing performance."
- ✓ "Product features favorably affect grape marketing performance."
- ✓ "Promotional factors favorably affect grape marketing performance."

Research Approach

The deductive technique was applied in this study. The adoption of the deductive method was motivated by the statement made by Saunders et al (2013) that using the deductive approach, research hypotheses are formed and research strategies are advanced with the purpose of evaluating them. Arbitrary sampling processes, empirical testing and controlled variables such as independent and dependent variables are all included in this technique (Scotland, 2013).

Sample Size

The sample size was calculated using Yamane's (1968) calculation for a population of 220 farmers.

$n = \frac{N}{1+N\cdot(e)^2}$), where

n - estimated sample size

e - level of precision (e = 0.05 for the research)

N - population size

After the calculation estimated sample size was obtained to be equal 142. According to Kotler (2001), excellent reliability may be achieved with a sample size of 1.5% drawn from the population. According to Sekaran (1992), a sample size of larger than 25 but fewer than 450 is suitable for most investigations. According to the data, 142 is greater than 25 but less than 450, as indicated by Sekaran (1992).

Data collection

Data are opinions, facts and statistics that have been gathered and documented for future study or reference (Saunders et al. 2013). For this research particularly, data was collected by questionnaire. Two types of the data used in the research: primary data, and secondary data. Primary data were obtained with the help of the survey conducted, and from literature review the secondary data results were used to confirm whether the obtained results are similar or not.

Questionnaires

Snell-Hornby (2006) defines this term as a series of questions that should be answered by a certain number of individuals in order to acquire the appropriate data. A closed-ended questionnaire was created for the current research in order to obtain data from the study's intended respondents. The benefit of utilizing this approach is that it is simple to collect a big amount of information from the responder in a short period of time.

Table 2. Summary of Measurement of Parameters

Parameters	Items	Scales
Place/Distribution	• We possess distribution systems that are efficient and effective. • We have secure and economical transportation systems.	STRATADAPT

	• Our product has a sufficient channel for distribution. • To store the harvested grapes, we have an effective storage system. • We have an extensive clientele for our goods.	
Pricing	• The grapes have resulted in high prices. • The price of grapes is high due to the increased demand from consumers • We are knowledgeable on how to negotiate for the price of our grapes. • The cost of grapes is as anticipated. • We are extremely pleased with the present grape pricing.	STRATADAPT
Product	• We are paid more for our product. • We pay particular attention to the grape's quality. • We make grapes in the color the consumers prefer. • We make grapes that meet the clients' taste requirements. • We produce grapes in the size and weight that our consumers like. • We have the resources, expertise, and understanding necessary to create superior grapes.	STRATADAPT
Promotion-related factors	• We put a lot of effort into packing our grape fruits. • We have been promoting our grape fruits through public relations. • To boost grape fruit sales, we deploy sales promotion. • For personal sales of our grape fruits, we offer a skilled sales team. • We are promoting our goods through advertising approach.	STRATADAPT
Marketing performance	• Grape sales are quite profitable for us. • Grape have a significant profit margin where we operate. • We are happy with the payment.	FOS (financial output scale)

Source: Compiled by the author

2.6 Data Analysis. Descriptive statistics and multiple regression analysis were applied in the current research to assess the data collected. The descriptive statistics including percentages, frequencies, and figures were utilized to analyze the responses' data. The correlation between the dependent variable (marketing profitability of grapes) and the independent factors (pricing, distribution system, product features and promotion related elements) were examined using multiple linear regression. Multiple regression equation therefore has the following form:

$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4$, where:
X_i – independent variable i;
a – constant;
b_i – regression coefficient of the ith independent variable.

Assumptions Underling Multiple Regression Analysis

Shayo (2018) argued that in order to prevent drawing the wrong conclusions, assumptions must be tested. Consequently, the following presumptions were examined in this study; Linearity was tested using multidimensional scatter plots for each of the variables. Additionally, this study used kurtosis and skewness to make sure the data it had obtained was normal. Multicollinearity and homoscedasticity were also examined.

Validity

According to Saunders et al. (2013), valid data collecting methods evaluate exactly what they were designed to measure. The methodology was piloted on a small group of chosen respondents in the Azerbaijan to determine the validity of this study. It was observed that the few chosen responders, however, had no trouble answering the questionnaire.

Reliability

According to Saunders et al. (2013), reliability refers to how well data gathering procedures provide consistent results. However, the reliability of this research was examined using Cronbach's Alpha method. It has been emphasized that a study with an internal consistency coefficient of 0.7 or higher is more reliable, and vice versa (Santos 2000).

Ethical Issues

Research ethics is concerned with how we define and justify our research subject, plan our study and secure access to gathering information, store and process our data, analyze our data, and properly and morally communicate our findings (Saunders et al. 2013). The researcher in this study made sure that the respondents' privacy, rights and welfare were protected throughout the process of data collecting, presentation, analysis, and reporting. The researcher also gave harmlessness, free consents, secrecy, and anonymity some thought.

Results overview

Based on the respondents' gender, educational background, and years of grape fruit farming and marketing experience, the results are presented. Additionally, it gives research results based on the study's particular goals on variables influencing grape marketing performance.

Results of Reliability Statistics

This study used Cronbach Alpha to gauge statistical reliability. The study's findings showed that the Cronbach Alpha scores fall between 0.737 and 0.793. This suggests that the research's data were more internally consistent. The claim made by Santos (2000) that research with a coefficient of 0.7 or higher expected to exhibit a strong internal consistency of results, and vice versa, is therefore validated by the findings of this study. Table 3 displays the reliability statistics findings.

Table 3. Reliability Statistics

	Cronbach's Alpha	Number of Items
Price	0.760	6
Promotion aspects	0.763	5
Product attributes	0.737	5
Distribution system	0.775	5
Price	0.793	3
Promotion aspects	0.760	6

Source*:* Public information.

Background Information of the Respondents

According to their gender, educational background, and duration of grape farming and marketing experience, the responses are profiled in this section.

Gender of the Respondents

This study found that 14 (or 10%) of the total respondents were female, with 128 (90%) of the respondents being men. This suggests that men are responsible for grape farming and commercialization in Azerbaijan. The findings of the respondents' gender are displayed in Table 4.

Table 4. Respondents' Gender Data

Female	Frequency	Percentage
Female	14	10
Male	128	90
Sum	142	100

Academic Qualification of the Respondent

The results of this survey show that over half of the respondents—66 (47%)—had received their elementary education certificates, 39 (28%) had completed their secondary education, and 6 (4%) had received their certificates. Therefore, it was shown that 8 (6%) of the participants had a diploma, 20 (14%) of all respondents had earned a bachelor's degree, and a tiny portion of all respondents had earned a master's degree. These results suggest that the majority of individuals with just an elementary education are responsible for a large portion of the grape production and commercialization in Azerbaijan. In Table 5, the results of the respondents' academic background are shown.

Table 5. Respondents' Educational Background

Education	Frequency	Percentage
Primary	66	47
Secondary	39	27
Certificate	6	4
Diploma	8	6
Bachelor	20	14
Master	3	2
Sum	142	100

Experience in Grape Marketing and Cultivation

According to the research's findings, 109 (77%) of the total respondents had between 4 and 10 years of experience in grape cultivation and marketing, compared to 19 (13%) of the total respondents who had experience between 0 and 4 years. Accordingly, 13 (or 9.2%) of the total respondents said they had between 10 and 15 years of experience in grape marketing and cultivation, while just 1 said he had more than 15 years.

These findings show that many participants had substantial expertise in the manufacturing and marketing of grapes and were thus aware of the variables affecting the marketing success of the fruit. The results of the participants' years of marketing and agricultural experience for grape fruits are shown in Table 6.

Table 6. Respondents' Experience

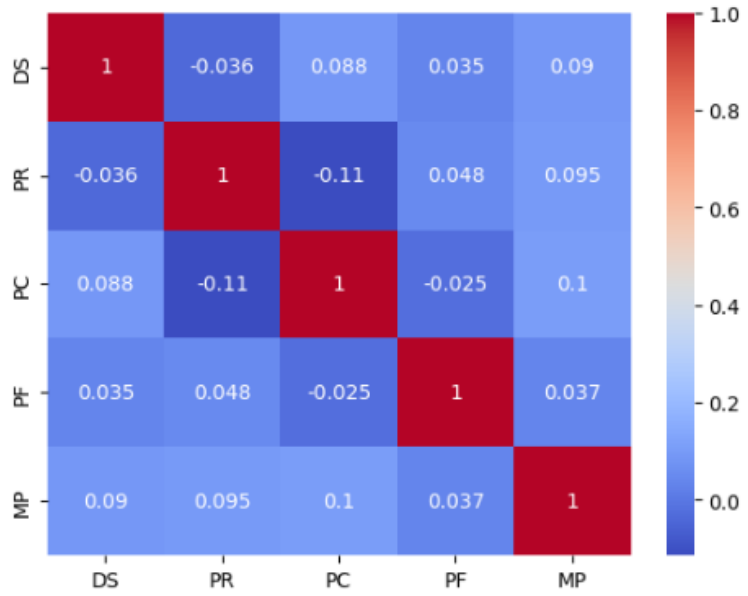
Years of Experience	Frequency	Percentage
0-4	19	13.38
4-10	109	76.76
10-15	13	9.15
15+	1	0.71
Sum	142	100

Correlation Matrix and Factor Analysis

Here, 4 predictor variables -Distribution systems (DS) Price (PR) Product characteristics (PC), Promotion related features (PF), and one dependent variable – Marketing

Performance (MP) were used in order to build a regression model. Before doing the regression analysis, factor analysis should be performed, and Correlation Matrix should be constructed:

Figure 1. Correlation Matrix



Here, lower coefficients indicate that neither of variable has a dependency with the other ones, and factor analysis conducted, and eigenvalues for these variables will give this the array of [2.1, 4.6, 7.9, 1.6, 3.3] respectively, as a consequence as the eigenvalue values are greater than 1, all variables should be recommended to kept for further analysis.

Model Coefficients and P- Values

Price was discovered to have an impact on the market performance of grapes with a positive coefficient and statistical significance at the 5% level (β = 0.371, P = 0.031). This suggests that a rise in price per unit is correlated with an increase in grape market performance of 0.032 times. Price thus had a significant role in how well this fruit did on the market. Additionally, according to the research's findings, product characteristics had a positive coefficient and were statistically significant at the 5% level of significance in affecting the market performance of grapes (β= 0.292, P= 0.0028). This translates to a 0.292 times improvement in market performance for grapes for every unit increase in product characteristics. This indicates that a key factor affecting the market performance of grape fruits was their product characteristics. Additionally, it was shown that promotion related features did not significantly impact the market performance of grapes (β = -0.098, P = 0.411) and had negative coefficients. This suggests that increasing promotional methods by more units won't result in better grape market performance. Furthermore, it was shown that the distribution systems exhibited a positive coefficient and was significant in statistical terms (β = 0.430, P = 0.0068) to affect the performance of the grape market. This suggests that a distribution systems unit increase is correlated with 0.429 times rise in grape market performance. As a result, the grape market performance included the distribution system as a key factor. Table 7 summarizes the findings of the model confidences and P-Values for each variable included in the regression model on the variables impacting marketing performance.

Table 7. Coefficients and P –Values

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Error (std)	β		
Coefficient	-0.136	0.482		-0.282	0.001
Distribution systems	0.430	0.157	0.227	2.746	0.007
Price	0.371	0.171	0.181	2.171	0.031
Product characteristics	0.292	0.096	0.252	3.050	0.028
Promotion related features	-0.098	0.119	-0.072	-0.828	0.411

In accordance with the research's outcomes, the correlation formula is as follows: Marketing performance = - 0.136 (Coefficient) + 0.430 (Distribution systems) + 0.371 (Price) + 0. 292 (Product characteristics)

Promotional factors, nevertheless, are not included in the formula since they were determined to be negligible; as a result, they make no impact to the research's model.

Testing of Regression Assumptions

Testing for regression assumptions has been advised as being crucial to prevent drawing incorrect inferences (Shayo 2018). The assumptions of normality, multicollinearity, homoscedasticity and linearity were examined in this research.

Multicollinearity Test

Multicollinearity, as defined by Pallant (2011), happens when variables that are independent have a significant correlation. Nevertheless, in this study, tolerance and the variance inflation factor (VIF) were used to test for multicollinearity. According to Shiu et al. (2006a; 2006b) the tolerance values for multicollinearity ought to be in excess of 0.1 and the values for the VIF ought to be lower than 5. Additionally, the findings of the current research's multicollinearity test indicate that tolerance values range from 0.872 to 0.942, whereas the values for VIF range from 1.062 to 1.146. This result suggests that the multicollinearity condition was satisfied by the research's data. The outcomes of the test for multicollinearity are shown in Table 8.

Table 8. Multicollinearity Test

Model	Collinearity Test	
	VIF	Tolerance
Coefficient	-	-
Price	0.926	1.082
Promotion related factors	0.872	1.146
Distribution system	0.935	1.070
Product attributes	0.942	1.062

Normality Test

Skewness and kurtosis have been used in this investigation to evaluate the assumption of normalcy. Hair et al. (2014) and Osborne and Waters (2019) emphasized that the skewness and kurtosis values for the parameters must be between +2.5 and -2.5 in order to achieve the normality condition. Nevertheless, the research's results showed that skewness levels fall between -0.002 and 0.734. As a result, the range of kurtosis values is between -0.145 and 1.067. These results suggest that the research's normality criterion was met. The test's outcomes are shown in Table 9.

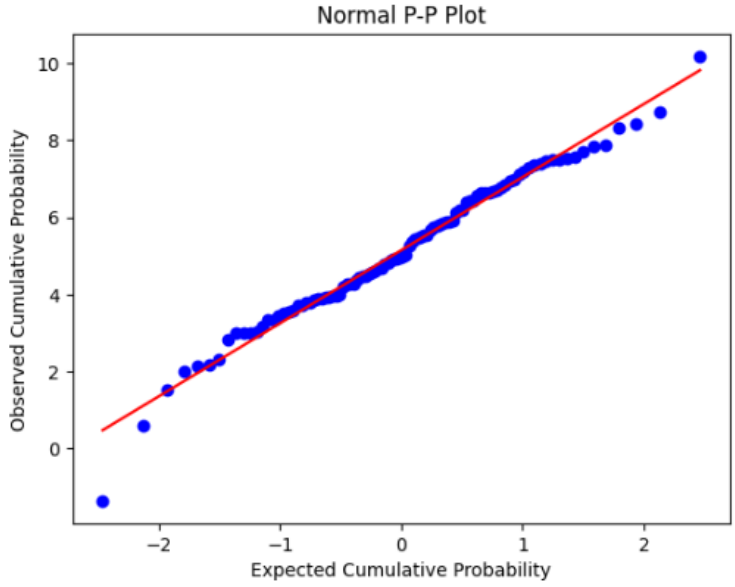
Table 9. Skewness and Kurtosis outcomes

	Skewness		**Kurtosis**	
	Stat.	**Error (Std)**	**Stat.**	**Error (Std)**
Price	0.300	0.202	-0.145	0.404
Promotion related factors	0.734	0.202	-0.410	0.404
Distribution system	0.721	0.202	1.067	0.404
Product attributes	-0.002	0.202	-0.165	0.404

Linearity Test

To determine if the connection between the variables is linear, a linearity test was carried out. By employing a scatterplot of the results, the linearity assumption in this study was verified. According to Pallant (2011), the requirement of linearity has to be satisfied for the scatterplot of scores to follow a straight line. According to the research's outcomes, title circles move along straight lines. This indicates it has a linear relationship between the variables in this research. The outcomes of a linearity test are shown in Figure 2.

Figure 2. Linearity Test

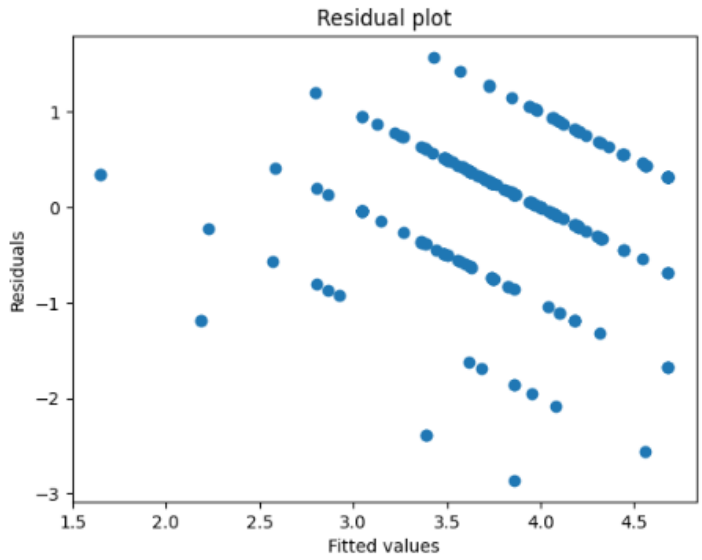


The Ramsey test coefficients are also greater than 0.05 (0.86 -linear and 0.83-logarithmic). This concludes that the data can be approximated as linear.

Homoscedasticity Test (White test)

According to this presumption, there should be little variation in the scores for variable X across the board for all values of variable Y. If residuals do not spread equally throughout the line, heteroscedasticity is shown (Hair et al. 2014; Osborne and Waters 2019). Additionally, the assumption of homoscedasticity was verified using a visual study of the plot of the standardized regression residuals. According to the research's outcomes, residual values are equally distributed on the X-axis below and above zero and on the Y-axis scatterplot to the left and right of zero. Thus, the hypothesis of homoscedasticity was satisfied by the investigation. The White test is a statistical significance test used to identify heteroscedasticity in regression analysis. Heteroscedasticity is a circumstance where the variance of the errors in the regression model cannot stay constant throughout the whole range of values for the independent variable. This violates homoscedasticity, a fundamental tenet of linear regression models. The White test is used to determine whether heteroscedasticity exists in the data being investigated by correlating the squared residuals from the regression model with the independent variables. If the test's p-value is less than the chosen significance limit, which is frequently 0.05, there may be evidence of data variability. In our research the p value is 0.24, and the results passes White test. The homoscedasticity test results are shown in Figure 3.

Figure 3. Homoscedasticity Test



Results of the Grape Marketing Performance Factors study

The findings of the elements influencing the marketing effectiveness of grapes are presented in this part: ANOVA testing, P-values and model coefficients were applied.

Findings of ANOVA test

The degree to which the data were gathered fit the model of regression was evaluated using the ANOVA test. F (Regression df (4), Residual df (137) = 5.06, P = 0.001 is what the model reveals. Given that the significance value (P) is less than 0.05, the regression model is a significant predictor of the variables influencing grape marketing success. Table 10 provides a summary of the ANOVA test findings.

Table 10. ANOVA test outcomes

Model	SS – sum of squares	Df	Mean square	F	Sig.
Regression	4.6	4.0	1.13	5.06	0.001
Residuals	30.8	137.0	0.23		
Sum	**35.4**	141.0			

Research Hypotheses Testing

The results of testing hypotheses are presented in this section. Using multiple regression analysis, the proposed relationships were evaluated against various correlation values.

According to this study, there is a strong correlation between grape marketing success and the efficiency of the distribution system. Consequently, it was proposed that: *"The marketing success of grape is positively correlated with the effectiveness of the distribution system".*

Nevertheless, the results showed that the distribution system's effectiveness had correlation coefficient values of 0.430 and P values of 0.0068. It follows that that the effectiveness of the distribution systems is statistically important at the 5% level of significance and is thus more likely to have an impact on the marketing success of grapes, supporting the study's initial premise that: *"The marketing success of grape is positively correlated with the effectiveness of the distribution system".*

Additionally, this research revealed a favorable correlation between grape price and marketing success. The study nevertheless managed to discover a regression coefficient of 0.371 and a P value of 0.031. This suggests that price had a statistically important effect on the market performance of grapes at the 5% level of significance, validating the investigation's second hypothesis (H2) that: *"Price favorably influences grape marketing performance".*

Additionally, the study indicated a favorable correlation between grape product features and marketing performance. Outcomes of the regression showed a coefficient of 0.292 and a P value of 0.0031. This suggests that product features were statistically significant at the 5% level of significance and more likely to have an impact on the market performance of grape fruits, supporting the research's third hypothesis (H3). That: *"Product features favorably affect grape marketing performance."*

In addition, it was suggested in this study that there is a positive correlation between promotion-related factors and the marketing effectiveness of the fruit. Nevertheless, the outcomes of the regression showed a coefficient value of -0.098 and a P value of 0.411. This refutes the fourth hypothesis (H4) of the present investigation, which states that: *"Promotional factors favorably affect grape marketing performance."*

The overview of the testing of hypotheses is shown in Table 11.

Table 11. Hypotheses Testing

Hypotheses	β	T	Sinq	Result
H1	0.430	2.746	0.008	Accept
H2	0.371	2.171	0.033	Accept
H3	0.292	3.050	0.004	Accept
H4	-0.098	-0.828	0.411	Decline

DISCUSSION

The purpose of the research was to evaluate the variables influencing the marketing success of grapes in Azerbaijan. As a consequence, the discussion of the results of the research takes into account how they compare to and contrast with earlier findings on the topic.

The Connection Between the Grape Market Performance and the Distribution System. The present investigation aimed to determine if grape marketing performance was favorably influenced by the distribution system, subsequently was found that the distribution system was statistically significant and positively correlated with market performance of Azerbaijan grapes. The results of this study are consistent with those of Farooq et al. (2017), who found that road accessibility had an impact on Pakistani fruit producers' productivity.

The Connection Between Grape Marketing Success and Price. The purpose of this study was to investigate the connection between grape prices and marketing success. However, it was discovered that price had a significant and positive correlation with the market success of grapes. The results presented imply that a particular product's market success depends on the price of grape fruits. The results of this research seem to agree with those of MITM (2009) who found that pricing had a significant impact on Tanzanian farmers' productivity. On the other hand, according to (Anand and Negi 2016) pricing was not mentioned as a major variable impacting the fruit sector in India.

The Connection Between Grape Market Performance and Product Attributes. This study was designed to determine whether product characteristics may have a favorable effect on grape market performance. Nevertheless, it was discovered that product characteristics significantly affected the marketing success of grape fruits and had a strong positive correlation with it. The conclusions of this study are consistent with those of Nguni (2014) and MITM (2009) who found that bad harvests and product standards were the main problems affecting farmers in Tanzania. Classification and uniformity hampered the selling of agricultural goods in Timor Leste, according to Diaz and Negi (2006) on several occasions.

The Connection Between Market Performance and Grape Promotion. The primary finding of this research was that grape fruit marketing effectiveness is favorably influenced by promotion factors. The findings of the hypotheses test, however, showed that marketing had a negative connection and was not statistically important in affecting grape fruit market performance. The findings of this study conflict with those of Farooq et al. (2017) and Lasvai et al. (2019) who anticipated that marketing of fruits was highly impacted by promotion factors such packing, purchase locations, and marketing information.

CONCLUSIONS AND RECOMMENDATIONS

Using the research's findings as a foundation, this chapter presents a number of recommendations and conclusions.

Grape Market Performance and Distribution System. The current research aimed to investigate the connection between grape market success and distribution system. Distribution system was discovered to have a positive link and be statistically significant in influencing grape fruit market performance. As a result, it was determined that the distribution system is a significant factor affecting the market performance of grapes.

Grape Market Performance and Price. The current research investigates the connection between grape fruit pricing and marketing success. It was shown that pricing had a

substantial impact on the market success of grape fruits and was positively connected with it. The findings from this study implies that a certain item's market performance might benefit from a greater pricing for grape fruits. The results of this study are corroborated by MITM's (2009) results that the performance of Tanzanian farmers was significantly influenced by price. Therefore, it can be claimed that a fair price for grapes is crucial to the success of grape marketing in Azerbaijan.

Grape Market Performance and Product Attributes. This study looks at the connection between grape fruit market performance and product features. Nevertheless, the outcomes of the research showed that the characteristics of the product had a strong positive correlation and had an important influence on how well grapes were marketed. Thereby, it may be established that agriculturalists should continuously maintain and improve the characteristics of grapes, such as teste, color, weight, and size, since these features tend to show an enormous effect on how well it performs on the market.

Grape Market Performance and Promotion Aspects. The primary assumption made in this research was that grape fruit marketing effectiveness is favorably influenced by promotion factors. The findings of the hypothesis test showed that the influence of promotion on the market success of grapes had a negative connection and was not statistically important. Therefore, it can be coming to the conclusion that, in the context of Azerbaijan, the promotion factor is not an important consideration when evaluating the marketing effectiveness of grapes.

Recommendations

Price has been found to be a significant factor affecting the market success of grapes. Therefore, the research suggests that producers of grape fruits be paid well. The research's results also showed that grape marketing success was significantly influenced by product features. Farmers are advised to enhance and preserve product characteristics. In addition, since it plays a significant role in the grape market performance, the distribution system's enhancement needs to be put into consideration. Farmers are going to be able to keep, maintain, and represent their goods to the intended clients effectively and efficiently with an adequate distribution system.

Limitations and Subjects Deserving More Research

The focus of this investigation was grape products. Other fruits do exist, though, and they weren't included in this study. Future research should thus concentrate on additional fruit varieties in an effort to evaluate the factors affecting those fruits' market performance.

This study also concentrated on the elements influencing the success of fruit products on the market. Future research may therefore be conducted on other categories of agricultural goods, including cucumber and tomato.

The impact of promotional factors on the market performance of grapes was also shown to be minimal. As a result, additional research may examine its relevance in evaluating the performance of other fruits on the market.

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