International Journal of Applied Business and Economic Research

ISSN : 0972-7302

available at http: www.serialsjournals.com

Volume 15 • Number 23 • 2017

Impact of Investment & Financial Ability of Manufacturers on Quality of Produced Dried Tea in Iran

Tahmoores Hasangholi Poor[1] and Hadi Motazarre[2]

[1]*Associate Prof, Department of Business Management, University of Tehran, Iran*
[2]*Ph.D. of Business Administration - Instructor of Islamic Azad University of Lahijan Branch*

ABSTRACT

Tea agro-industry plays an important role in the economic prosperity of tea-growing provinces of north of the country such as Guilan and Mazandaran and thousands of families are involved in various stages of cultivation, production and sale of tea. However, low quality of Iranian tea and lack of interest the consumers lead to reduction of selling domestic tea and their accumulation in warehouses with no standards and proper facilities. Furthermore, high costs of production and low income resulting from selling produced tea cause many problems in agricultural economy of the country especially in tea-growing district of north of country so that there is no required motivation for cultivation and production of tea in yeoman farmer and manufacturer and in case of continuing this process, thousands of people occupied in the various stages of production and selling will be unemployed and the country will face more severe economical problems. Thus, in this research in order to prevent these problems and with the objective of increasing the quality of domestic tea, impact of investment in tea agro-industry on quality of produced dried tea of the country is assessed. Method of library studies and field research were used and essential information for answering the research question was collected by applying interview and questionnaire. In this research Mean, Standard Deviation and Column Chart have been used as descriptive statistics for defining and describing variables and one sided T-Test has been used as inferential statistics for answering the research question. Obtained data from the questionnaires has been analyzed by using SPSS Software and the results of research have indicated that the research hypothesis is approved in 95% confidence level. Therefore, it can be stated that in 95% confidence level, investment in tea agro-industry has influence on quality of produced dried tea of country.

Keywords: Tea, Tea Agro-Industry, Tea Quality.

1. INTRODUCTION

Historical process of Iranian tea agro-industry having hundred years record has always had a lot of vicissitudes and despite of having potential talents in the field of production, processing and commerce has faced critical crisis in recent years for various social, economical and political reasons. However, some of the resources of country in agriculture, industry, finance and human sections have dedicated to this industry (1). In terms of production and employment in the country, tea industry is particularly important especially in tea areas of north of the country and over 70000 households make money via producing tea in two provinces of Guilan & Mazandaran (2). But unfortunately, domestic produced tea lacks require desirability and quality which leads to the fact that Iranian produced tea fails to compete with the well-known and high quality foreign teas and reduces its market share every day so that not only the foreign markets but also the major parts of domestic ones have been lost and also domestic consumers prefer to use the high quality foreign tea.

Quality of tea initially depends on quality of tea green leaf (primary material), then correct and full cares in all production stages and also observing the concluded tea making technical terms and standards (3).

Dried tea is made of young leaves of tea bushes so that the more the leaves are younger and tender, the more the tea has high quality; thus, the most desirable tea is made of terminal bud and then 1st and 2nd leave (4).

Factors such as condition and type of tea bushes, proper irrigation, type and combination of consumed fertilizer and in time pruning as to the designated standards are effective in quality of tea green leaf. However, about 84% of tea gardens of country are less than one hectare and are run by yeoman that regardless of lack of full productivity make it difficult to perform any breeding and crop improvement operations and apply modern methods of agriculture (5).

Age of some of tea gardens of country reaches to 100 years. The average age of tea bushes of Iran are estimated about 65 to 70 years. Consequently, most of existing tea bushes due to old age has no good economic productivity and should be gradually eradicated and instead of old and low-productivity bushes, new amended sapling should be cultivated. Nevertheless, implementing the replacement project till starting the full operation from new gardens will last 6 years and during this period each hectare tea garden needs remarkable amount annually for reaching to the production level. Therefore, providing such cost and not using the garden for a term of 6 years till starting operation is not possible for tea yeoman farmers that do not have required financial ability (6). As mentioned earlier, to produce high quality dried tea, in addition to high quality primary materials (tea green leaf), tea making operations should be conducted by observing the drawn up standards and after passing exact and full stages of tea making.

Black tea is produced in two methods: Orthodox and Unorthodox. Process of producing black tea from green leaf in Orthodox method which is common in tea making factories of Iran includes withering, rolling, fermentation, drying and grading (7). However, most tea making factories are old and lack required efficiency and due to a mismatch between the capacity of the factories' equipment with delivered tea green leaf, in most years too much density of green leaf in spring harvest causes that to prevent from decaying tea green leaf, managers of factories proceed to make tea inevitably by reducing the duration of tea making operations in all withering, rolling, fermentation and drying stages which the result is low quality produced

dried tea (8). Considering the high cost of production and the resulting low income, manufacturers have no motivation to rebuilt factories and purchase advanced tea making equipment.

The above problems have indicated the necessity of performing vast research to find the ways of increasing the quality of produced dried tea of country and its correct application. Rofigari Haghighat & et. al (2009) have assessed the impact of time of harvesting tea green leaf on quality of produced dried tea and found out that the time of harvesting green leaf is effective on quality of black tea so that the tea resulting from harvesting green leaf in summer has higher qualitative specifications than spring and autumn harvests and tea resulting from spring harvest has higher rank than autumn harvest in terms of sensory properties and percentage of dissolved solids in the water (9). Moreover, Shokrgozar and Sanjeri (2001) have appraised the affective factors on tea quality in tea making operations and studied the factors such as standard harvesting of leaf, difference in harvest season, fertilizer and withering, fermentation and drying stages on quality of produced dried tea (10).

In this research with the purpose of finding strategies for increasing quality of produced tea and correct application of them to solve the existing problems of tea agro-industry of country and increase of quality and ability to compete the domestic tea with well-known foreign tea proceed to assess and analyze the impact of investment and financial ability of producers on quality of produced dried tea of Iran and the researcher hopes that the result of research plays a small share in economical prosperity and development of tea farms and increase of production and provide necessary field for enhancing employment in all stages of tea agro-industry of country.

2. METHOD OF RESEARCH

The method of this research is descriptive-analytical method. In addition to describe the existing status of tea agro-industry in Iran, the impact of investment in tea agro-industry on quality of produced dried tea has been assessed and analyzed. The base of research is field – survey research. To collect data, library studies and interview with experts and specialists of tea cultivation and production have been used. Also, to analyze the key variables of research, a questionnaire is designed and distributed among the samples. To define and distribute variables, Mean, Standard Deviation and Column Chart have been applied and one sided *t*-test is used to test the hypothesis in inferential statistics.

Statistical Population & Sample

Statistical population of this research includes all managers and experts of tea making factories of Guilan Province and all tea experts and specialists in tea organization and tea research institute of country and other related organizations with tea agro-industry.

Furthermore, all managers of tea making factories and experts and specialists of tea making of Lahijan City that tea was cultivated in its lands for the first time and is the 2nd city in terms of under cultivation surface and amount of tea production are selected as statistical sample of this research.

Hypothesis

Amount of investment and financial capability of manufacturers has no effect on quality of produced dried tea.

H_0: $\mu = 3$

Amount of investment and financial capability of manufacturer effect on quality of produced dried tea.

H_1: $\mu \neq 3$

Table 1
Distribution of Hypothesis (Amount of Investment and Financial Capability of Manufacturers)

Description	*Frequency*	*Percentage of Frequency*
Very low	0	0
Low	0	0
Average	1	0.9
High	4	3.8
Very high	100	95.3
Total	105	100

Considering the obtained data from the above table that is prepared by five items Likert scale, the respondents have answered the questions related to fifth hypothesis of research as below:

No answer was taken to "very low" and "low" items. 1 person selects the "average" item. 4 people have chosen the item "high" and 100 people have chosen the item "very high" which as a result, the item "very high" with 95.3 % has dedicated the highest coefficient.

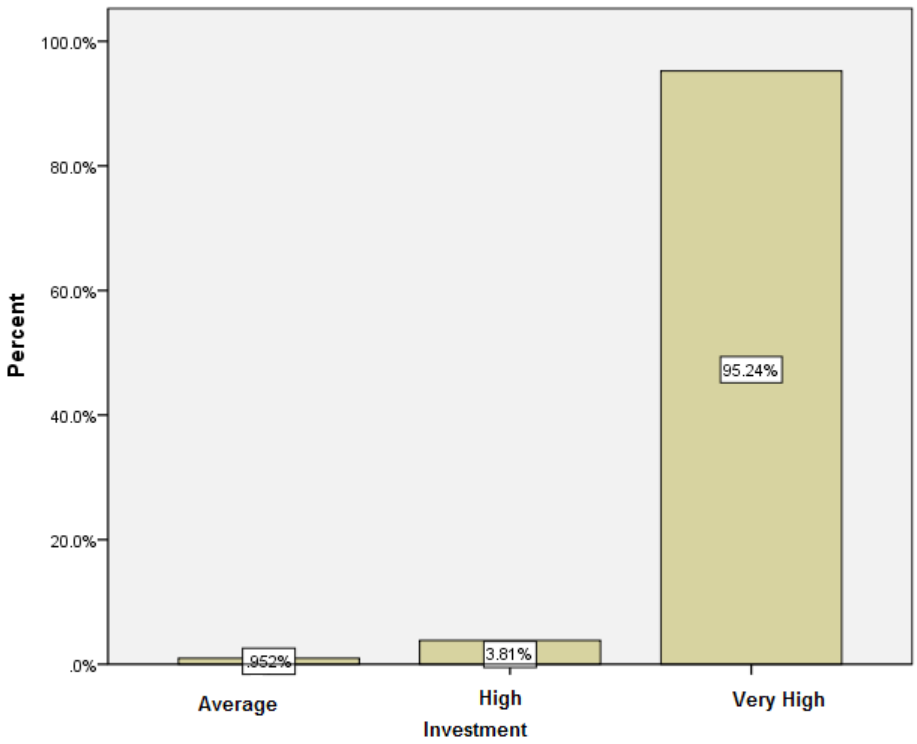

Diagram 1: Distribution of Frequency Percentage related to Hypothesis (Amount of Investment and Financial Capability of Manufacturers)

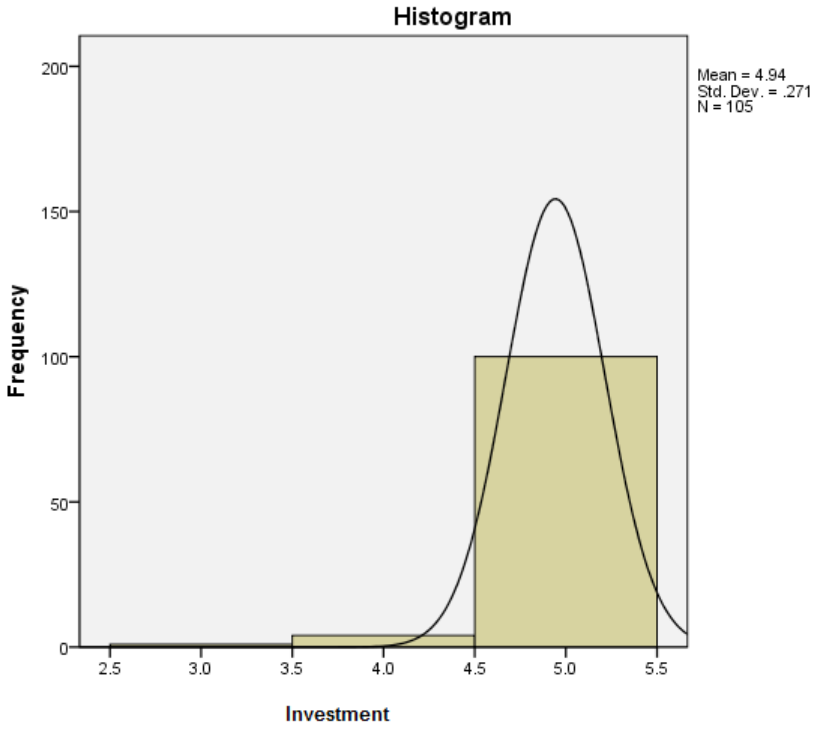

Diagram 2: Test of Hypothesis (Amount of Investment and Financial Capability of Manufacturers)

Table 2
Result of Test of Hypothesis (Amount of Investment and Financial Capability of Manufacturers)

Hypothesis	*Sample Volume*	*Mean*	*Standard Deviation*	*Mean of Measurement Error*
Amount of Investment and Financial Capability of Manufacturers	105	4.94	0.271	0.026

Table 3
Result of Test of Hypothesis (Amount of Investment and Financial Capability of Manufacturers)

Hypothesis	*Calculated T*	*Freedom Degree*	*Significance Level*	*T of Table*	*Deviation of Mean*	*Confidence interval for the mean difference from the theoretical mean*	
						Low level	*High level*
Amount of Investment and Financial Capability of Manufacturers	73.354	104	0.000	1.9830	1.943	1.89	2.00

$$t = \frac{\bar{x} - \mu}{\frac{s}{\sqrt{n}}} = \frac{4.94 - 3}{\frac{0.271}{\sqrt{105}}} = 73.354$$

Decision Making

Considering the obtained results from the above table, since the amount of calculated *t*-test is larger than the *t* of the table, H_0 is rejected in error level of 5% and H_1 (impact of amount of investment and financial

capability of manufacturers on quality of produced dried tea) is accepted. Because statistics of t is in H_1 area, it can be said that in confidence level of 95%, amount of investment and financial capability of manufacturer effects on quality of produced dried tea.

Considering the result of research and in order to remove the existing problems in tea agro-industry of country, there are some suggestions as below:

1. Pass laws to prevent the division of the tea gardens in order to make better use of advanced technology in all stages of tea cultivation, nursing and harvesting
2. Encouraging farmers and manufacturers to organize tea cultivation and production complexes and cooperatives to fulfill the following objectives:
   (a) Integrating tea gardens.
   (b) Constructing tea making factories near the tea farms to reduce the time of delivering tea green leaf from garden to factory.
   (c) Unique (centralized) management of all stages of tea cultivation and production.
   (d) Aggregating limited capitals of farmers and manufacturers to provide required capital for performing breeding and crop improvement affairs and using modern agricultural methods.
3. Financial support of government from tea cultivation and production complexes via granting low-interest or no interest loan.

References

Aminnaseri, Mohammadreza – Moradi, Morteza; Overall Architecture of Iranian Tea Supply Chain, Quarterly Journal of Commerce, No. 46, Spring 2008, Pages 119 to 120.

Gholizadeh, Mohammadhassan & et. al; Measurement & Analysis of the Effective Factors on Utilization of State Tea Processing Industry, Agriculture & Development Economy, 17th Year, No. 67, Autumn 2009.

Moradmand, Mohammadtaher - Ashpari, Farajollah; Evaluation of Effects of Harvesting the Product, Oxidation & Rolling Times on Quality of Produced Tea in Tea Making with Orthodox Method, Islamic Azad University of Lahijan Branch, 2002, Page 63.

Willson, K.C. and Clifford, M.N. (1992). Tea Cultivation to Consumption. Chapman & Hall. London, PP. 768.

Khodayegani, Hosseinali; Studying the Impacts of Utilization Management on Quality of Iran's Tea with assist of Dr. Mohammad Taleghani, M.A Thesis of Public Administration, Research & Education Center of Guilan Province; 2006, Page 7.

Adham, Seyed Ali; Tea in view of Agriculture, Industry & Commerce in Iran & the World, Sokhan Gostar Publication, 2003, Pages 175 & 194.

Nejadghanbar, Amir; (2011). Effect of Packaging Materials and Storing Time on Tea Quality based on Orthodox Model. Information Technologies & Management, ISSN 1829-071X, Page 178-182.

Moradmand, Mohammadtaher - Ashpari, Farajollah; Assessment of Ratio of Turning Green Leaf to Dried Tea in Tea Production with Orthodox Method, Islamic Azad University of Lahijan Branch; 2009, Page 58.

Rofigari Haghighat, Shiva & et. al; Studying the Impact of Harvesting Time of Tea Green Leaf on Quality of Black Tea, Agriculture & Natural Resources Science & Technology, 13th Year, No. 47, Spring 2009, Pages 437 to 442.

Shokrgozar, Seyed Ahmadtaghi – Sanjeri, Mohsen; Affective Factors on Quality of Tea in Tea Making Operations, Technical & Scientific Journal of State Tea Organization, No. 2; 2001; Pages 22 to 26.

Tastan, S.B., & Davoudi, S.M.M. (2013). A study of the relationship among organizational justice, psychological empowerment and organizational citizenship behavior, Innovation, Communication and Engineering, 325.