Identification and investigation of effective factors of organic products status in consumer basket of household goods

Fahimeh Ganjkhani [1]*, Mohammad Mohammadi [2], Hossein Zahedi [3]

1- Master's degree in Agricultural Management, Islamic Azad University, Islamshahr Branch

2,3- Assistant Professor and Faculty Member of Islamic Azad University, Islamshahr Branch

Abstract

The purpose of this study is to investigate the factors affecting the organic products status in the consumer basket of household goods in the west of Tehran. This research is a descriptive-correlational study using a survey method. The statistical population of this research, being 260 people, includes those who refer to fruits and vegetables in the west of Tehran. Using Karaji and Morgan tables, and according to the size of the population, the sample size was estimated to be 153 people. The samples were selected using simple random sampling. The main tool of this research is a questionnaire whose validity was obtained by the opinions of professors and experts in the field of agriculture. The reliability of the questionnaire was carried out through a preliminary test. The Cronbach's Alpha coefficient was 0.94. Besides, the results of parametric comparisons using Independent t-test and ANOVA showed that based on the average of the organic products status by gender and household head, there is a significant difference between the occupations of the people who consume organic products. Investigating the correlation between the factors identified in the factor analysis and the variability of the organic products status in the consumer basket of household goods showed that there is a positive and significant relationship between the educational, marketing, informational and cultural factors with the dependent variable of the organic products status in the consumer basket of household goods. The result of regression analysis is that the two variables of the marketing agent and the type of consumption of organic products are the most important independent variables affecting the dependent variable of the organic products status in the consumer basket of household goods, which accounts for 8.1% of the variations of the dependent variable of the research.

Keywords: Status, Products, Organic, Basket, Household goods.

Introduction

Today, all humans around the world are concerned about the increased degradation of agricultural land and the loss of vegetation. (Fukuoka, 2010) Sustainable agriculture originates from a philosophical and intellectual school before it is rooted in agriculture. According to Mac, there are the sustainable agriculture partners with a philosophy and system of agriculture. Sustainable agriculture is rooted in the values that represent a new awareness of the ecological and social realities and the ability of humans to perform efficient agricultural operations. The advent of organic farming is to address the serious environmental, health and safety issues of conventional agricultural systems. The literature emphasizes the natural nature of organic farming, which is often referred to as the abnormal nature of agricultural practice. It refers to the abnormality of common agricultural practice with simple examples such as the use of inorganic industrial

inputs, the use of genetically manipulated material and creatures and plant production An example of organic farming is the protest against the immense interference of human beings in the nature. Some researchers believe that protesting genetically engineered organisms is more than the cause of the protesters' concerns. In relation to its own health or the environment, the protest is not to interfere in nature. The fulfillment of human needs should not be accompanied by the deterioration of natural resources, and, of course, the preservation of environmental resources and water and soil should also not reduce the optimum crops yield. (Mahmoudi et al. 2008).

Theoretical Foundations

The advancement of technology, medical science, and the identification of the harmful and abnormal effects of chemical residues in agricultural production, causing a variety of cancers and harmful effects on the nervous system in humans and animals, lead to the consciousness of communities and welcome the products that are free of any residues. Is chemical (Samawat et al., 2008) identification of consumers characteristics of organic products, motivations and attitudes of consumers to these products, as well as factors influencing the consumption of organic products, are essential for the further development of these products? Food Chain is a contributing factor. In agriculture, they will see the result of their efforts to bring different products to the consumer community. It is believed that these products are so healthful that everyone can take them without any concern and any doubt to obtain the nutrients they need. Not to spoil the bitter taste of the poison (Lind et al., 2009). Although some studies suggest that there are no social-individual differences in the tendency of consumers to organic products, many studies show that organic shoppers usually have individual and social characteristics. Understanding these features helps us find the potential market for these products (Mahmoodi et al., 2008).

In 2009, a study was carried out on the influence of personal traits on the acceptance of organic products in Belgium. Values such as safety and pleasure in accepting organic products have contributed. Research in Jordan in 2013 shows that Jordanian consumers' awareness and information about organic foods is heavily influenced by factors such as education, occupation, marital status, income, desires, progress, and quality issues. Factors such as gender, age, and trademark are not affected by this.

The results obtained in this study have implications for the expansion and growth of organic food markets both inside and outside the country. Therefore, in order to assess the consumer's desire for organic products, it is very important to understand the motivations that make this a tendency. In a survey conducted in southern Italy in 2003, it was found that the most likely reason for consumers to consume organic products is health. Iran had 97956 hectares of organic

farming products in 2013, out of which 46700 hectares were from natural areas and the remaining 51256 hectares were of agricultural land. Currently, 164 countries produce organic products at 68 million hectares of land. It takes about 35 million hectares. It is a natural field and the rest of the fields and gardens are managed and controlled by farmers. Australia, with 12 million hectares, is the world's first cultivator. In terms of the cultivation of organic products, Iran ranks 5th in Asia and 50th in the world. Besides, in terms of organic farming, Iran ranks 2nd. To this effect, the United Nations Agriculture Organization has registered Iran as a land of agriculture. Because of Iran's ranking 17th in agricultural climates, it hosts 11 climates, which, on this basis, have the greatest advantage for agricultural development. In the region, due to the high geographic and climatic abilities, his products reach a higher position. Increasing consumers' awareness in food safety issues and health concerns are the main reasons for the rise of demand for organic products. Various findings suggest that the selection of organic food products by consumers is due to a lack of trust in non-organic products and a fear of the presence of compounds and chemical additives being common in the products. In Rangier Wamidy's survey (2014), it was determined that health knowledge, knowledge of organic products, motivation and age of consumers account for 32% of the variability in the attitude of organic products. Research by Mozafari (2014) has identified factors such as awareness of antibiotics, exposure to organic products and education in this purchase as the factors affecting the purchase of organic chicken in Tehran. In another study conducted by Ahmed (2010) in Malaysia, the results show that the intention to buy organic products is heavily influenced by the awareness and observation of the value of buying organic products and believing in the health and safety of these products. Respondents were classified into two groups, organic buyers and non-buyers. Among organic food buyers, many believed that organic food was more conventional, more healthful, more delicious and environmentally friendlier than food. If our country wanted to take steps to develop this agricultural system, it would be more needed than everything to pay attention to the consumers' attitude and increase their awareness of organic products and to be well-designed in this regard. Therefore, education and awareness of the importance of organic products are very important, as consumers receive more education and nutrition issues and more agricultural products as they are more likely to accept and buy organic products. However, knowing the characteristics of consumers, organic products are very important for farmers who intend to produce and export these products to the domestic and international markets (Mahmoudi et al., 2008). As we know, they spray plenty of fruits and vegetables to fight their pests and diseases. Protests further state that the residual effects of these pesticides are low or short-lived. But environmental studies have shown that the remains of these toxins in a small, harmful and residual mixture of several types of poisons are more dangerous and can be problematic for human health (Rezaani, 2008). The research done by the

Cancer Diagnostic Guide (2005) indicated that children in the first two years of life were more likely to be exposed to cancer. This is further added by another study (2001) showing that children who fed on organic foods are less at risk. In 2006, a study was conducted to measure the amount of insecticide called organophosphorus before and after the introduction of an organic diet in 23 preschool children. The study found that the amount of organophosphorus immediately decreased after replacing an organic diet. These studies helped to develop an organic food system for children. Maternians are worried about giving their food to their children because their small body is very sensitive to toxins (Hasanzadeh and Gholinejad, 1393). Acrobi et al. (2008) conducted a research in Iran whose topic was to study the attitudes of agricultural experts about the effective components. The use of organic agricultural products has shown that experts are the largest media outlet for informing consumers of radio and television, and the most important way to supply organic products through organic labels. The most important factors affecting the adoption of organic products among consumers of information in the effect of consumption of pesticides and chemical fertilizers in agriculture and the emergence of various diseases and taking measures to protect producers in line with the marketing of these products. Qadimi et al. (2013) in Iran was conducted in Fryden city. The research topic was to investigate the factors affecting attitudes of farmers toward organic farming (Case study of Frieden County).

The result of stepwise regression showed that from the first, participating in educational and educational classes related to organic farming, education and the application of organic farming techniques and technologies, about 42% of the variance in the attitude of farmers towards organic farming Explaining factors affecting the purchase of organic products in Tehran (case study of organic chicken). The results of the research indicate that buying organic chicken, knowledge about antibiotics, familiarity with organic products and education affect sex, marriage, age and income, and 83 percent are willing to spend more on organic chicken. The most important reason for not eating organic chicken is unavailability of these products. Rajabi et al. (2013) conducted a research on the components of tendency to use organic products from consumers' point of view (a case study of Karaj city). The findings of the research showed that the level of knowledge and awareness of people about organic products is moderate. In addition, people's attitude towards organic products is moderate and favorable. Finally, factor analysis, multi-factor proved as effective factors on the acceptance of organic products. Ranjbar Shams and Omidi Najafabadi (2014) did a research in Tehran. The subject of the study was the factors influencing the attitudes of consumption of organic products in Tehran. The results of regression analysis showed that variables of health awareness, knowledge of organic

products, motivation and age of consumers accounted for 32% of variations in the attitude of organic products. In his research on the effect of using vermicompost in production of products, Azizi (2015) concluded that there is a meaningful relationship between the increase in the production of farmers and the success rate in using vermicompost. Rigby Acris (2000), in their research on the relationship between organic farming systems and sustainable agriculture, found that organic farming itself leads to sustainability and agricultural development. Research by Scotsler, Joop de Bauer and Borsima (2012) conducted a study in the Netherlands. They discussed issues such as the desire to return to a more natural way of life, distance from materialist lifestyles, and a return to a more meaningful, ethical life. Based on a series of careful and in-depth interviews, the study showed that such issues affect the current customers of organic foods, and this alone increases the importance of the connection with nature, consciousness and purity. It is said that these values are not limited to current organic food customers but rather they are common to a broader part of the Dutch community. Strengthening cultural values in terms of choosing more durable foods can help expand the number of organic consumers and help moving towards more durable ingredients. Research conducted by Hofkensa et al. (2010) in Belgium entitled "Food and Chemical Toxicology" has been selected by two distinct groups. Their study is based on the first group of people who used organic vegetables and the other group To those who have used ordinary vegetables, the nutrients and concentrations

of the nutrients found in these two groups have been studied and their effects on both groups. The Turanian and Sankhivist (2005) research was conducted in Finland. Research Findings _ the modified TPB correction model that matches the data _ shows that the role of individual principles in buying organic foods is different from the theory of planned behavior. Individual principles in purchasing organic food can be indirectly affected by the formation of attitudes and behaviors. In addition, the results show that the TPB model can predict the willingness to buy organic food better than the original model. Based on the results, it can be stated that the intention of customers to purchase organic food can be predicted by their methods and routines, which can, in turn, be predicted by the individuals' principles, intentions and behavioral desires. It can be well predicted of self-esteem behavior. Nahbia Ahmad (2010) in Malaysia's Valley of Kalanque research results show that the intention to buy organic products is heavily influenced by the awareness and observation of the value of buying organic products and believing in the health and safety of these products. Respondents were classified into two groups, organic and non-buyer buyers. Among organic food buyers, many believed that organic food was more conventional, more healthful, more delicious, and better for the environment. Research by Astirtsen et al. (2009) found that values such as the safety of organic products have been effective in its adoption. Eltrauna's (2013) research shows that Jordanian consumers' knowledge and information about organic foods is heavily influenced by factors such as education, occupation, marital status,

income, desires, progress, quality of life, health issues and the source of the product. The results obtained in this study have implications for the expansion and growth of organic food markets both inside and outside the country. E et al. (2005) concluded that the impact of food health and environmental protection on purchasing organic products has shown to have a direct impact. Accordingly, a study was conducted to investigate the factors affecting the status of organic products in the consumer basket of household goods in Tehran. This had the following sub-targets:

- Investigating the effect of individual characteristics on the status of organic products in the consumer basket of family goods in Tehran.
- Identification of factors affecting the status of organic products in the consumer basket of household goods in Tehran.
- Investigating the relationship between the identified factors and the status of organic products in the consumer basket of household goods in Tehran.

Method and Material

This research is based on the purpose-oriented research categorization as an applied theoretical research. In terms of research method, it is a descriptive-correlative type that has been surveyed. This research was carried out in 2015 and the statistical population of this research is based on average daily referrals of fruits to farmers and employees employed in fruit gardens in west of Tehran. The statistical population is 260 people. Using Karaj and Morgan tables, and according to the statistical population, the number of samples was estimated to be 153 people, who were selected by simple random sampling. The main instrument for collecting information is a two-part questionnaire. The first part consists of personal characteristics and the second part includes effective factors. In order to determine the validity of the research tool and the experts' panel method and to determine the reliability of the questionnaire, Cronbach's Alpha coefficient is used. Regarding the results, the reliability of the questionnaire was 0.942 and is acceptable. In order to achieve the research objectives, descriptive statistics such as percentage and frequency of independent and dependent variables were investigated. Using Spearman and Pearson test, the correlation between the factors was identified in the factor analysis and the variability of the status of organic products in the consumer basket of household goods. We will review the difference between the mean of organic products status in terms of individual characteristics which is also analyzed by means of independent t-test and ANOVA. Then, using the regression test, we analyze the role of independent variables in the research on the variability of the dependent variable. Data and computations of this research were done using SPSS16 software.

Discuss

Descriptive findings of the research:

Findings showed that 30.7% of the respondents with the frequency of 47 women in the group were 69.3% with a frequency of 106 men in the group. The range of age variations in the population was 19 years old and the most average age of the population was 19 years and the oldest was 75. 33.3% with the abundance of 51 had a bachelor's degree with the highest frequency or mode of study. The most frequent or fashionable employees are 58.2% with an abundance of 89 people whose majority are employees. The percentage of respondents' expenditure indicated that 88.2% of the respondents with the most abundance of 135 people had expenditures of 300,000-200,0000 USD, and the range of variable expenditures in the population was 300,000 to 2,000,000 Tomans, with the lowest expenditures of 300,000 and the highest of 8,000,000 Tomans. The study of income variable among respondents showed that 57.5% of the people with a prevalence of 88 people had income ranging from 2,000,000 to 3,000,000 USD, the lowest income of the population was 700,000 USD and the maximum of 12,000,000 USD and its index is also 2,000,000-700,000 Tomans. The distribution of variable frequency of the type of organic product used in the statistical population showed that 16.3% of the people with a frequency of 25 were chicken, 25.5% with a frequency of 39 vegetables, 2.6% with a frequency of 4 persons, 12.4% With an abundance of 19 carrots, 3.3% with a frequency of 5 legumes, 11.1% with an abundance of 17 fruits, 7.2% with an abundance of 11 nuts, 3.3% with a frequency of 5 n make-up products-hygiene products. In this study, it has been shown that the most consuming people or fashion is the consumption of vegetables. The study also showed that the highest preference is for chickens or fashion. Moreover, 33.3% of the people with a high incidence of 51 people are expected to account for 1-10% of their own income from organic products, the pattern of 32 in this population is related to those who are willing to spend 1-10 % of their income on organic products, meaning people are not eager to buy organic products. The findings of correlation analysis and factor analysis were used to identify the factors affecting consumption of organic products. The results obtained from factor analysis showed that the significance of the Bartlett test with the value of 263/3 rejected the zero assumption and showed that the correlation matrix has significant information and there are minimum conditions for factor analysis as shown in Table 1 indicating the results of the Bardelt test and the degree of freedom. The significance level was 496.33 263.3. Based on the results of the factor analysis, six factors that could explain the part of the variance of all variables were extracted. After the factor rotation of the variables extracted using the varimax method, it was found that the six factors in total accounted for 64.31% of the change variation of the organic products in the consumer basket of household goods. The six factors and their contribution to variance are shown in the table below:

Table1. Factors extracted from Agent Factor Analysis

FACTORS	Special value	percentage of variance explained	Percentage of cumulative variance
First factor	723/11	634/36	634/36
Second factor	662/2	319/8	953/44
Third factor	889/1	902/5	855/50
Fourth factor	514/1	732/4	587/55
Fifth factor	444/1	512/4	100/60
Sixth factor	347/1	211/4	31/64

Table2. Introduction of extracted factors and variables of each factor

Factor	Related variables	Factor load
Educational	organization of workshops in organic products festivals	0/800
	One day's name is Healthy and Organic Food	0/772
	Organizing Organic Products Festivals	0/761
	Organizing workshops on organic products for women	0/664
	Organizing workshops for schools in relation to organic products	0/660
	The variety of organic products	0/598
	Global advertising of organic products	0/587
	Organize organic products through posters, brochures and promotional gears	0/533
Food security	Taste organic products	0/705
	The health of organic products	0/635
	Shelf life of organic products	0/561
	Promote Organic Products Via Media (Radio and Television)	0/555
	The cost of organic products	0/546
	The presence of experts in organic food supply locations	0/504
Marketing	The supply of organic products through fruits and vegetables	0/700
	The availability of organic products in organic food supply locations	0/704
	The supply of organic products through school buffets	0/664
	Organic products delivery through large stores	0/586
Awareness	Organic promotion of organic products	0/754
	Organic delivery in the form of packaging	0/669
	Organic products delivery through special stores	0.631
	Organize organic products through publications (journals and newspapers)	0/516
Economic	Inflation rate	0/735
	Individuals' income	0/690
	Organic products price	0/650
	The quality of organic products	0/619
	The appearance of organic products	0/600
Cultural	Presence of specific labels on organic products	0/808

Then, we use the matrix of load factors to identify variables related to each factor and also to interpret the factors. In the matrix, each variable that has more load on one

factor is considered to be the factor, and variables with factor loadings greater than 0.5 have a significantly acceptable level with the relevant factor. Investigating the relationship between the correlation between the factors identified in the factor analysis and the variability of the status of organic products in the consumer basket of households showed that there is a positive and significant relationship between the educational, marketing, informational and cultural factors and monthly income with the dependent variable of the status of organic products in the consumer basket of households. There was no significant relationship between independent variables of food safety factor, economic factor, age, number of household members, individuals' education and monthly cost with dependent variable of organic products status. Comparative analysis of the mean of organic products status in terms of sex, marital status, head of household, specific disease, occupations, people's living area, type of organic products consumption and the need for organic products using independent t-test and ANOVA showed that There is a significant difference between the average of organic products by gender, household head, their occupations, consumption of organic products. Also, there is no significant difference between the mean of organic products status in different groups according to marital status, specific disease, living area and need for organic products.

Table 3. The correlation between organic product status and independent variables

First variable		Second variable		Test	Correlation coefficient	Sig level
Variable	indexes	Variable	Indexes			
Educational factor	Semi – Interval	status of organic products	Interval	Pearson	0/0171	0/034
Food safety	Semi – Interval	status of organic products	Interval	Pearson	-0/003	0/968
Marketing factor	Semi – Interval	status of organic products	Interval	Pearson	0/182	0/024
Notification factor	Semi – Interval	status of organic products	Interval	Pearson	0/198	0/014
Economic factor	Semi – Interval	status of organic products	Interval	Pearson	0/054	0/510
Cultural factor	Semi – Interval	status of organic products	Interval	Pearson	-0/214	0/008
Age	Interval	status of organic products	Interval	Pearson	0/089	0/273
family members	Interval	status of organic products	Interval	Pearson	0/044	0/592
income	Interval	status of organic products	Interval	Pearson	0/164	0/043
Household expenses	Interval	status of organic products	Interval	Pearson	0/070	0/390
Level of Education	ordinal	status of organic products	Interval	Pearson	0/002	0/981

Source: Research finding

Table 4. Comparative analysis of the mean of organic products status with independent variables in different groups

j	Variable	Test	F	Sig
1	Sex	Independent t-test	18/781	0/00
2	marital status	Independent t-test	0/416	0/520
3	Head of household	Independent t-test	8/027	0/005
4	Having a specific disease	Independent t-test	0/356	0/552
5	jobs	ANOVA	3/286	0/003
6	People's living area	ANOVA	0/671	0/571
7	Type of consuming organic products	ANOVA	3/405	0/018
8	The need to consume organic products	ANOVA	2/045	0/053

Source: Research findings

Multiple Regression Analysis: In order to analyze the role of independent variables of research, which has a significant relationship with the situation of household products in the consumer basket of household goods, multiple stepwise regression was used. The results of the research showed that there is a significant difference between the independent variables that have a significant relationship with the dependent variable. The extracted factors from the factor analysis have a significant relationship with the individual characteristics. The results of regression analysis also indicate that the type of consumption of products Organic and marketing agent are the most important independent variables that affect the status of organic products in the consumer basket of household goods that account for 8.1% of the variations of the dependent variable of the research.

Table 5. The results of stepwise regression analysis

Level	Independent variable	B	SE(B)	Beta	t	Sig
-	-	3/872	1/048	-	3/694	0/000
First step	Kind of organic consumption	-0/217	0/077	-0/220	-2/809	0/006
Second step	Marketing	-0/159	0/065	0/191	2/433	0/016

Using the step-by-step method, the regression equation was obtained as follows:

$Y = 3.872 + (-0.217X1) + (-0.159X2)$

Conclusion and Recommendations

The obtained data showed that the prevalence of consumption of organic products in case of need was 57.5% of the subjects with 88 cases of chicken, 4.6% with a frequency of 7 with vegetables, 7.2% with a frequency of 11, 2% with the frequency of 4 animals, 17.6% with the frequency of 27 beans, 2.6% with the frequency of 4 fruits, 17.6% with the frequency of 27% of dried fruits, 2.6% with the frequency of 4% cosmetic products and 1.3% with the frequency of 2 people of

these products In terms of consumption of organic products. The data showed that in the statistical population, the type of consumption was 16.3% of the subjects with a frequency of 25 Chicken, 25.5% with a frequency of 39 vegetables, 6.2% with a frequency of 4%, 12.4% with a frequency of 19%, 3.3% with an abundance of 5 legumes, 11.1% with an abundance of 17 fruits, 7.2% with a prevalence of 11 nuts, 3.3% with an abundance of 5 cosmetic products and 18.3% with an abundance of 28% of these products. This study has shown that the highest consumption of people or the mode of consumption of vegetables is shown in this study. It has been the most preferred way to consume or to consume chicken.

Likewise, the results showed that there is a positive and significant relationship between income, educational, marketing, informational and cultural variables in the statistical population. Besides, the average of the organic products status in the consumer basket of household goods are by job occupation, head of household and gender There is a significant difference between the use of organic products and the multiple regression analysis. Independent variables such as the use of organic products and the marketing factor with the variables of the organic products status in the consumption basket of household goods are significant. Altraaune (2013), Ahmed (2010), Ranjbar et al (2014), and both Aran (2013), M. (2014), Akbari et al (2008) found similar results in their study as hereunder.

1- Because there is a positive and significant relationship between income level and organic products status in consumer basket of households good, decreasing prices of organic products by reducing the prices of inputs, producer support by different organizations and institutions will cause people with to have different revenues. Use these products.

2- Since there is a positive and significant relationship between the type of organic product consumption and the organic products status in the consumer basket of household goods, it is possible to use more organic products with more production of these products.

3-Since there is a positive and significant relationship between the allocation of the head of household to the organic product and the organic products status in the consumer basket of household goods, it can be noted that the more awareness is raised in the head of household regarding organic products, the better position of these products in the basket of household consumption.

4-Since the education of individuals and their knowledge of the organic product with the organic products status in the consumer basket of household goods has a positive and significant relationship, it is possible to hold different educational classes related to organic products by different organs of the family awareness level relative to organic products.

References

-Iranfam, Ayub. (2007). Principles of production of agricultural organic products. East Azarbaijan: the promotion and exploitation system of East Azarbaijan Jihad-e-Agriculture Organization.

-Akbari, Morteza (2008). Attitude of Agricultural Experts on Effective Components on Consumption of Organic Agricultural Products. A Journal of Agriculture, 2.13-26.

-Hassanzadeh, Abdullah and Gholinezhad, Ismail (2014). Sustainable agriculture. Armieh: Academic Jihad.

-Rezan, Mohammad. (2008). Natural Agriculture, away from the use of chemical and harmful substances, Shiraz: Keshma Mehrsmawat, Saeed, Pazaki, Ali, Ladan Moghaddam, Alireza Vesmawat, Samaneh. (2008). Applied principles of organic materials in agriculture .German: Islamic Azad University, Azizi, Mohammad (2015). Master's Degree in Rural Development, Islamic Azad University, Islamshahr Branch, Tehran.

-Old, Alireza (2012).Reviewing the Effective Factors of Agricultural Attitude toward Organic Farming. Agricultural Research Promotion and Education Research. 4. Lindh, Lyfar, Schlofer, Theodorefromyther. (2009/1388). Organic Fruit Growing. (Translator: Mohammad Reza Naeini and Ahmad Kajjani): Tehran

-Ayzhum Mohammadi, Hossein, Mahdavi Damghani, Abdolmajidoliaghati, Homan (2008). A trend towards organic farming. Mashhad: Mashhad University Jihad.