Science Arena Publications
Specialty Journal of Agricultural Sciences
Available online at www.sciarena.com
2016, Vol, 2 (1): 28-36

Surveying the develop and promotion of organic farming to the view of agricultural professionals in Damavand city

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Abstract: The present study examines the surveying development and promotion of organic farming in the views of experts in agriculture of Damavand city. The purpose of this present study is applied, in terms of data collection, rate of monitoring and control of variables and the ability to generalize is descriptive – correlation which was conducted through a survey by using the questionnaire. Spatial and geographical scope of this study is in the level of Jihad Agriculture Organization expert l in Qom. In this study statistical population study consisted of the experts who involved in the vice of plant, deputy of Agricultural Extension and Education, Institute of Higher Education, Science and Applied Research Institute of Agricultural Economics and Rural development of dependent to the ministry of Agriculture that the number were 320 persons; to sampling between the statistical population of stratified random sampling method which is obtained based on a sample size of 175 experts Morgan. In this study, two main methods were used for gathering information from the documents and the field. In the field of survey was used to collect information. Questions conducted by using the framework and research and research hypotheses, which was designed to determine the validity and reliability of the necessary reforms were carried out on it and the field of method was used to complement and fill it. To assess the validity of the questionnaire, 20 copies of it by the same statistical population was filled with the same statistical population. The completed questionnaires by using the software SPSS16 and was measured by the Cronbach's alpha method that alpha coefficient were obtained equal to 89%. The results of Spearman correlation coefficient showed that agricultural professions about the causes of educational / promotional, technical factors and the possibility development and promotion of organic farming, there is a significant correlation in the 1% error. 2 variables educational factors and technical factors were entered respectively into a multivariate regression equation by using the stepwise method; finally, the independent variables were explained the 32/0% of the variability.

Keywords: Surveying, development and promotion, Organic agriculture, agricultural experts, Damavand city.

Introduction

In the third millennium, food safety and security is as a major problem in many countries, and recognized the largest concerns to many governments. Reducing the environmental risks, occupational Health, economic productivity, income and health are the major factor of function under a variety of nutritional and health food products consumed by society, which is not only important in terms of quantity, quality and variety of food, but also in terms of time and consumption rate (consumption patterns) is also important that must be met within the framework of food security (Sharifi Moghaddam, 1387). Projections indicate that the world's population is about 11 billion in the year 2050 and will reach 30 million (UN, 2009). Following the global increasing of population during the twentieth century, agricultural systems production have been relied more and more to input and external operations of food for security. However, the yield of agricultural crops increased in the form of dramatically during this period; but current approach is based on the development of new technology instruments which is not only lead to food security, also in many cases, causing ecological

Technical, economic and social consequences especially in developing countries (Pour sayid, 1389). General approach of agricultural Organic in the field of pests and plant diseases is rather than addressing the symptoms of pests and diseases to cause them. Therefore, the management is prior to control. The basis of agricultural organic is for prevention of problems to treat them. The principle is considered in management of weeds. The proper management of weed in organic farming includes the conditions that prevent the growth of weed in inappropriate time and space and as a result of creating the problems to prevent the growing crops (Rafiee and Fakharzadeh, 1389). There is this claim that organic agriculture is a sustainable system. But what does sustainability mean? In the case of agriculture, the stability of the successful management of agricultural resources that apply to meet human needs and at the same time maintaining and improving the quality of the environment and conserve natural resources. Therefore, Looking at the sustainability in organic agriculture that should be consider the comprehensive perspective of ecology (ecological), the economic and social And can be called a stable system when only is completed the three mentioned aspects above (Rafiee and Fakharzadeh, 1389). the findings of Naseri and Yagubi (1389) to examine the strategies of reducing the supported work of organic farmers show that the main barriers to the production of organic and safe products are the inadequate knowledge and skills of farmers and experts in Iran, the absence of specific markets for organic products and also the absence of welcomed by farmers of this agriculture method to economic reasons. Also were specificities according to the survey results which modifying the consumption patterns of domestic consumers, making laws and issuing of specialized certificates in the production and packaging of organic products, creating a separate market for organic products, holding the conferences and celebrations of the leading and successful organic farmers, purchase of guaranteed organic products and Insurance of organic products is the most important development strategies and support the production of organic products and health of country. Mina ruk and Muller (2009), In a study with as a view of experts to promote the concept of sustainable agriculture to examine the attitudes, which included an individual image about a concept based on the knowledge, feelings and actions focused on that shape. Accordingly, researchers 5 concept that was based on sustainable agriculture extracted and orientation evaluated in relative to the concepts. These include shared vision, knowledge, teamwork, community intervention and systemic thinking and problem solving in the field of research. The findings showed that the shared vision attitude of respondents reflects their shared vision for a strong commitment to sustainable agriculture (Minarovic & Muller, 2009).

Based on the research results of Alsabai (2010), as attitude of experts about sustainable agriculture in the excessive area of saudi Arabia, general attitude of experts were not related with age, place of birth, Place of residence education level and specialized areas. The lack of difference has been approved between the overall attitude towards the concept of sustainable agriculture based on location, education level and professional fields of research findings (1995 Sisk,) in (Ali Beigi, 1386) as perceived by promoters of sustainable agriculture in South America " (2010, .Al-Subaiee et al).

Materials and methods:

This study is an applied research and is used the descriptive correlation techniques. The objective for the present study was functional, in terms of data collection, amount of supervision and the degree control of variables and the ability to generalize is the type of descriptive - correlation Which was conducted by using a survey method and questionnaire instruments. Temporal and geographical scope of this study is at the level of the expert in Jihad Agriculture Organization of Qom. In this study the population of statistical present study consisted of involved experts in the deputy of plant, deputy of Agricultural Extension and Education, Institute of Higher Education and Scientific applications and research Institute of agricultural economics and Rural Development, under the Ministry of Agriculture that their numbers was 320 persons. To obtain a sample among the target population in stratified random of sampling is used with proper attribution method. The sample size of 175 subjects is from experts which are obtained according to Morgan table. In the present study were used two main methods for gathering information from the documents and the field. In comprehensive review documents method was performed in documents and were reviewed various theories with the literature and ideas of thinkers and relevant conclusions based on the research objectives, was put into operation that will strengthen the theoretical and editing the framework of research in the field of survey was used to collect the information. Questions conducted by using the framework of research and assumptions of investigation was designed after the determining of validity and reliability needed reforms were carried out on it and was used of the field method to complement and fill it. To assess the reliability of questionnaire, 20

copies of it was filled by the same data Community with the same statistical population. Completed questionnaires was measured by the software SPSS16 and Cronbach's alpha method that alpha coefficient were obtained equal to 89%. In this research by using the descriptive statistics, Indexes tend to center (average and median) Statistical dispersion(Variance and standard deviation) frequency and frequency percentage calculated and checked upon all of variables, in debating inferential statistics of determined correlation and significant relationships between variables was used of test and Spearman correlation coefficients, regression and analysis of variance.

Results and discussion:

Based on the information gathered was determined that 77.7% of respondents were male and 22.3 percent of respondents are women, this result indicates that the number is more male experts. Checking the status of education experts suggest that 0.76 of the frequency of 133 experts are in BA degree which has highest frequency and 1.1 percent of respondents with a frequency of 2 people have a Ph.D. degree that had the lowest frequency and the rest of individuals are master's degrees. Surveying the respondent's situation indicated that 30% of the graduated experts are of agriculture field; in addition, 4.3% of respondents are graduated from the field of plant technology production that allocated the highest and the lowest frequency. Most respondents are 11 to 15 years of work experience that have been allocated 36.6 percent of respondents to themselves, In addition, 0.6% of respondents are 26 to 30 years of work experience which naturally will have the lowest frequency.

Table 1; Frequency distribution of respondent's personal characteristics

(Age (years)	Frequency	Percentage of Frequency	Percentage of valid
21-30	47	2507	25.7
31-40	103	58.9	84.6
41-50	26	14.9	99.4
51-60	1	0.6	100
total	175	100	

Marital status	Frequency	Percentage of Frequency	Percentage of valid
Married	149	80.1	81.9
Merely	33	17.7	18.1
Unanswered	4	2.2	
total	175	100	

Level of education	Frequency	Percentage of Frequency	Percentage of valid
BA	133	0.76	0.76
Ma	40	22.9	98.9
Ph.D.	2	1.1	100
Total	175	100	

(Work experience (years	Frequency	Percentage of Frequency	Percentage of valid
1-5	50	28.6	28.6
6-10	41	23.4	0.52
11-15	64	36.6	88.6
16-20	17	9.7	98.3
21-25	2	1.1	99.4
26-30	1	0.6	100
Total	175	100	

Field of Study	Frequency	Percentage of Frequency
Agriculture	52	0.30
Medical of plant	41	4.23
Irrigation	26	8.14
Machineries	23	1.13
Agricultural Extension and Education	20	11.42
Pedological	7	0.4
Production of Plant Technology	6	42.3
Total	175	100

-Holding the extension- training courses in the field of organic agriculture:

Studies show that 44 percent of respondents with a frequency 77 persons have been held the courses of extension education in the field of organic agriculture and 56 percent of respondents with a frequency of 98 have not attended in these courses. Well as from among experts who have organized this training-extension data according to Table 4-5, the majority of experts involved in training classes with a frequency of 62% and 4/35 individually. Well as experts who have participated in educational workshops individually with a frequency of 15 and 8.6 percent allocated the lowest frequency to themselves. It should be mentioned.

Table 2: Distribution of respondents according to the holding of training-extension

Cumulative percentage	Frequency	Percentage of Frequency	Percentage of valid
Educational courses	62	35.4	35.4
Educational visit	37	21.1	21.1
Educational Workshop	15	8.6	8.6

total	114	65.1

View = Holding of training Class

Analysis statistical:

To test the hypotheses of research was used the Spearman correlation coefficient. Spearman correlation coefficient is displayed with P or rs which is always fluctuates between +1 and -1 and in terms of the evaluation is sequential and is a kind of symmetric (Kalantari, 1382). . The results of this test have been titled as follows:

First hypothesis:

There is a significant relationship between the perspective of agricultural experts compared to educational / extension and their views on the feasibility of developing and promotion of organic farming, the results of the Spearman correlation coefficient between the two variables of educational / extension and the feasibility application of organic farming indicate that There was a significant relationship between the two variables at 1% level of error; therefore, the hypothesis research was confirmed with 99% confidence and confirmed the hypothesis which based on the existence of relationship.

The second hypothesis:

There is a significant relationship between the views of experts in agriculture in compared to economic factors in the possibility promotion of organic farming. The results of the Spearman correlation coefficient between the two variables of economic factors and the feasibility application of organic farming indicate that there is no significant relationship between the two variables, So assuming the hypothesis of confidence is not approved and be rejected the hypothesis which based on the existence of relationship.

The third hypothesis:

There is a significant relationship between the views of agricultural experts towards technical factors and the possibility promotion of organic farming. The results of the Spearman correlation coefficient between the two variables of technical factors and the feasibility application of organic farming indicate there is significant relationship between the two variables, therefore, the hypothesis research was confirmed with 99% confidence and confirmed the hypothesis which based on the existence of relationship.

The fourth hypothesis:

There is a significant relationship between the views of experts in agriculture in compared to management factors in the possibility of promoting organic farming. The results of the Spearman correlation coefficient between the two variables of management factors and the feasibility application of organic farming indicate that there is no significant relationship between the two variables, So assuming the hypothesis of confidence is not approved and be rejected the hypothesis which based on the existence of relationship.

The fifth hypothesis:

There is a significant relationship between the views of experts in agriculture in compared to Social factors in the possibility of promoting organic farming and the use of organic farming. The results of the Spearman correlation coefficient between the two variables of Social factors and the feasibility of application of organic farming indicate that there is no significant relationship between the two variables, So assuming the hypothesis of confidence is not approved and be rejected the hypothesis which based on the existence of relationship.

The sixth hypothesis:

There is a significant relationship between the views of agricultural experts in compared to policy in the use of organic farming technologies and the possibility application of organic farming. The results of the Spearman correlation coefficient between the two variables of political factors and the feasibility application of organic farming indicate there is significant relationship between the two variables, therefore, the hypothesis research was confirmed with 95% confidence and confirmed the hypothesis which based on the existence of relationship.

The seventh hypothesis:

There is a significant relationship between the views of experts in agriculture in compared to Psychological factors in the possibility of promoting organic farming and the use of organic farming. The results of the Spearman correlation coefficient between the two variables of Psychological factors and the feasibility application of organic farming indicate that there is no significant relationship between the two variables, So assuming the hypothesis of confidence is not approved and be rejected the hypothesis which based on the existence of relationship.

Table 3: Results of inferential statistics which used for hypothesis

Number of hypotheses	Independent variable	Dependent variable	The correlation coefficient	Sig	P value	results
1	Educational factors	The possibility application of organic farming	Spearman	0.000	0.622	Confirmed
2	Economical factors	The possibility application of organic farming	Spearman	0.67	0.158	Rejected
3	Technical factors	The possibility application of organic farming	Spearman	0.000	0.567	Confirmed
4	Management factors	The possibility application of organic farming	Spearman	0.089	0.321	Rejected
5	Social factors	The possibility application of organic farming	Spearman	0.42	0.05	Rejected
6	Policies	The possibility application of organic farming	Spearman	0.08	0.08	Rejected
7	Psychological	The possibility application of organic	Spearman	0.015	0.015	Rejected

		farming				

Regression analysis:

Regression analysis provides it possible for researcher to predicted the changes of dependent variable through the independent variables and determine the contribution of each independent variable on the explained dependent variable (KALANTARI, 1382). In this section discussed to examine the statistical method which uses a stepwise method (Stepwise Method) 2 variable factors as training and technical factors were into a multivariate regression equation, in stepwise method entered strongest variables one to one in the equation and this will continue until that significantly error test get to 5%, continue to investigate this method:

Table 4: The various entry steps of independent variables on the feasibility application of organic farming

Steps	Variables	R	R square	Adj R square	Std
1	Educational factors	0.501	0.292	0.296	0.500
2	Technical factors	0.539	0.321	0.310	0.520

Table 5: the effectiveness value of the variables that influence to the feasibility application of organic farming

Steps	Variables	B	The standard error of B	Beta	T	Sig
1	Educational factors	0.42	0.10	0.301	4.15	0.000
	Fixed number	2.43	0.42	٢/٤٣	5.72	0.000
2	Educational factors	0.46	0.10	0.327	4.49	0.000
	Technical factors	-0.17	0.81	-0.158	-2.16	0.032
	Fixed number	3.02	0.42	-	6.03	0.000

In the first stage, that variable entered in to the equation is teaching / extension factors, this means that the aforementioned variables have the greatest impact, at this point correlation coefficient is equal to R=0.50 and the coefficient of determination is ٢R=0.29 and the adjusted coefficient of determination is AD2R=0.296 this indicates that the variable educational factors makes alone about 29% of the variation dependent variable in the feasibility application of organic farming. In addition, with respect to the coefficients in Table 4.3.2of the linear equation in first step is as follows:

$Y=a+b_1x_1+b_2x_2+ . . .+ b_nx_n$

Y=2.437+0.429xl

In the second stage, that variable entered in to the equation is technical factors; which at this point, correlation coefficient is equal to R=0.539 and the coefficient of determination is ˇR=0.321 and the adjusted coefficient of determination is AD2R=0.310this indicates that the variable educational factors makes alone about 10% of the variation dependent variable in the feasibility application of organic farming. In addition, with respect to the coefficients in Table 4.3.2of the linear equation in second step is as follows:

$Y=a+b_1x_1+b_2x_2+ . . .+ b_nx_n$

Y=3.028+0.466xl-0.176 2x

Suggestions:

According to the results of the regression are offered following suggestions:

- Must be paid particular attention to all aspects of educational factors and try to promote of organic farming through creating an educational infrastructure that at the beginning can be start by holding the training classes and courses for farmers after creating educational courses of farmers should be prepared the economic grounds to implement such that it can be used to provide subsidies for the purchase of equipment and cited to organic inputs

-Technical factors are also in completion of work in high value that can be provided in form of support services and expert recommendations and creating the multidisciplinary team Of researchers and experts.

According to the results of the prioritization of psychological factors suggest the following:

- Fetching the trust of farmers to the purchase of organic inputs.

- Regarding to the outlook and attitude of farmers to not using chemical inputs

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