

**Research Article**

## **ATTITUDE OF WOMEN WITH HOUSEHOLD JOBS AGRICULTURE TOWARD INNOVATION MANAGEMENT IN MASJED SOLIMAN TOWNSHIP, KHOUZESTAN PROVINCE, IRAN**

**Shahrzad Faraji and \*Azade N. Noorivandi\***

*Department of Agricultural Management, Shoushtar Branch, Islamic Azad University, Shoushtar, Iran*

*\*Author for Correspondence*

### **ABSTRACT**

The purpose of this research was analyzing attitude of women with household jobs agriculture toward innovation management in Masjed Soliman Township, Khuzestan Province, Iran. The population of this study included women with household jobs agriculture in Masjed Soliman Township. The total number of members was 100 people. Due to the low number of population, census methods were used to collect data. Questionnaire reliability was estimated by calculating Cronbach's alpha and it was appropriate for this study. Data were analyzed using the Statistical Package for the Social Sciences (SPSS). To reach the research objectives, appropriate statistical procedures for description were used. Data analysis was carried out through data description and data inferential analysis. The results of research showed the correlation between creativity, entrepreneurship, social participation, initial capital, income and attitude toward innovation management was significant. Therefore, we can conclude that woman with high level of creativity, entrepreneurship, social participation, initial capital, income had high attitude toward innovation management. The result of regression analysis by stepwise method indicated creativity, entrepreneurship, social participation, initial capital, income may well explain for 53.7% changes ( $R^2 = 0.537$ ) in attitude of women with household jobs agriculture about innovation management.

**Keywords:** *Attitude, Women, Household Jobs Agriculture, Innovation Management*

### **INTRODUCTION**

The conception of innovation has evolved significantly over the last forty years. During the 1950s, innovation was considered a discrete development resulting from studies carried out by isolated researchers.

Nowadays, innovation is no longer conceived as a specific result of individual actions, but more as the following (European Commission, 2004):

- A process, more specifically a problem-solving process.
- A process occurring primarily within commercial firms, where the role of government agencies or public laboratories is to a certain extent secondary.
- An interactive process involving relationships between firms with different actors. These relationships are both formal and informal and position firms within commercial networks.
- A diversified learning process. Learning may arise from different issues: learning-by-using, learning-by-doing or learning-by-sharing, internal or external sources of knowledge and the absorption capacity of firms.
- A process involving the exchange of codified and tacit knowledge.
- An interactive process of learning and exchange where interdependence between actors generates an innovative system or an innovation cluster.

In the knowledge-driven economy, innovation has become central to achievement in the business world (Ommani, 2015). The knowledge-driven economy affects the innovation process and the approach to innovation. The traditional idea that innovation is based upon research (technology-push theory) and interaction between firms and other actors is replaced by the current social network theory of innovation, where knowledge plays a crucial role in fostering innovation (European Commission, 2004).

### **Research Article**

Innovation is also a vital element in the success of small firms (e.g. those with less than 250 employees) (OECD, 2004). Innovation in business has been studied by multiple researchers (Kleefl, 2007; Kotelinkov, 2008; Kwamena, 2008).

Innovations management uses the systems and business to make the organization more innovative (Ommani, 2011). Innovation management is driven by different knowledge-intensive organizations that build knowledge as their primary value-adding process.

They can be denned as organizations where employees with a high degree of knowledge are critical to the primary function of the organization.

They have relatively little financial capital but instead have as main assets the knowledge and competence of their personnel (Kipping and Engwall, 2002). In comparison with traditional mechanistic command and control management, innovation management entails a fundamental change in the strategic perception of the organization, which accordingly has to consider the following management challenges (Hidalgo and Albers, 2010):

- Manage human capabilities in a strategic manner. Modern management has to face the perpetual challenge to place the human being at the forefront of operations, and understand that an organization is a collection of different human beings.
- Network with internal and external partners. People have different attitudes, different customs, different professional backgrounds - management should focus on integrating the web of formal and informal relationships inside and outside the company.
- Create adaptive and interactive organizational structures. If the organization is to remain responsive to external change, a flexible and adaptable organizational structure is a necessity.
- Balance order and chaos - process efficiency versus destructive innovation - and individual and corporate motivation by developing an innovation strategic vision.

Agriculture also needs to produce more food for a growing population, using a limited amount of farmland, while at the same time reducing its greenhouse gas emissions to avoid worsening climate change. This suggests that agricultural production needs to use knowledge more intensively, which means it must innovate (IICA, 2014).

## **MATERIALS AND METHODS**

The population of this study included women with household jobs agriculture in Masjed Soliman Township. The total number of members was 100 people. Due to the low number of population, census methods were used to collect data.

Questionnaire reliability was estimated by calculating Cronbach's alpha and it was appropriate for this study. Data were analyzed using the Statistical Package for the Social Sciences (SPSS). To reach the research objectives, appropriate statistical procedures for description were used. Data analysis was carried out through data description and data inferential analysis.

## **RESULTS AND DISCUSSION**

### **Results**

#### *Demographic Profile*

Table 1 shows the demographic profile and the descriptive statistics for some characteristics of the women with household jobs agriculture. The results of the demographic information of the women with household jobs agriculture indicated that the age of 27% of women with household jobs agriculture was between 20-30 years.

The minimum age of participant was 14 years and the maximum age was 60 years. Based on educational levels, a greater proportion (32%) of them had elementary educational level. Based on the income, 46% of them had 5-10 million rial in month.

## Research Article

**Table 1: Demographic profile of women with household jobs agriculture**

variables	Frequency	Percentage	Cumulative Percentage	
Age				
14-20	16	16	16	Mean=34.7
20-30	27	27	43	Sd= 12.71
30-40	23	23	66	Min=14
40-50	16	16	82	Max=60
50-60	18	18	100	
Educational level				
illiterate	19	19	19	
elementary	32	32	51	
Guidance school	18	18	69	
High school	16	16	85	
Diploma	15	15	100	
Income (Million Rials)				
1.5-5	37	37	37	
5-10	46	46	83	
10-15	5	5	88	Mean=7.2
15-20	5	5	93	Sd=5.5
20≤	7	7	100	

### **Attitude of Women with Household Jobs Agriculture toward Innovation Management**

In this study, for analyzing attitude of women with household jobs agriculture, the Likert scale was used. The ratings on the Likert scale were from one to five (1. Strongly Disagree, 2. Disagree, 3. No opinion, 4. Agree, 5. Strongly agree). The final computed score represented the overall level of attitude. The Table 2 revealed the answer of women with household jobs agriculture to each item of attitude toward innovation management in and Table 3 identified the level of overall attitude toward innovation management after computing 8 items of attitude.

**Table 2: Frequency of women with household jobs agriculture to each item of attitude toward innovation management**

Items	1	2	3	4	5	Mea n	sd	CV
With the development of innovation, entrepreneurship can be developed.	4	6	7	63	20	3.89	0.930	0.23
The possibility of improving the situation, with the use of existing facilities, is always possible.	11	10	18	34	27	3.56	1.28	0.35
The innovator to seek the most appropriate way to achieve the goals.	12	5	26	18	39	3.67	1.35	0.36
Innovation improves performance.	12	10	12	28	38	3.70	1.38	0.37
Innovation makes optimum use of resources.	7	24	14	19	36	3.56	1.37	0.38
There are always opportunities to improve the situation.	14	16	30	20	20	3.16	1.30	0.41
Innovation enhances the marketability of the product.	10	26	8	24	32	3.42	1.42	0.41
The innovator is always looking to create favorable conditions.	20	26	4	19	31	3.15	1.57	0.49

1. Strongly Disagree, 2. Disagree, 3. No opinion, 4. Agree, 5. Strongly agree

## Research Article

**Table 3: Level of overall attitude toward innovation management**

Attitude	Frequency	Percent	Cumulative percent
Very low	13	13	13
Low	76	76	89
Moderate	11	11	100
Total	100	100	

## Correlation Study

Spearman correlation coefficients to test hypotheses was used, the results of this test are as follows (Table 4):

The results of table 4 showed the correlation ( $r=0.359$ ) between level of creativity and attitude toward innovation management at the level of 0.01 was significant. Therefore, the null hypothesis is rejected. It means that with 99% of confidence, we can conclude that women with household jobs agriculture with high creativity level had high attitude.

Also the results of table 4 showed, the correlation ( $r=0.283$ ) between entrepreneurship and attitude toward innovation management at 0.01 was significant. Therefore, the null hypothesis is rejected. It means that with 99% of confidence, we can conclude that women with household jobs agriculture with high entrepreneurship level had high attitude.

Also the results of table 4 showed, the correlation ( $r=0.189$ ) between social participation and attitude toward innovation management at 0.05 was significant. Therefore, the null hypothesis is rejected. It means that with 95% of confidence, we can conclude that women with household jobs agriculture with high social participation had high attitude.

The results of table 4 showed, the correlation ( $r=0.296$ ) between the initial capital and attitude toward innovation management at 0.01 was significant. Therefore, the null hypothesis is rejected. It means that with 99% of confidence, we can conclude that women with household jobs agriculture with high initial capital had high attitude.

The results of table 4 showed, the correlation ( $r=0.314$ ) between income and attitude toward innovation management at 0.01 was significant. Therefore, the null hypothesis is rejected. It means that with 99% of confidence, we can conclude that women with household jobs agriculture with high income had high attitude.

**Table 4: Relationship between attitude toward innovation management and independent variables**

Independent variable	Dependent variable	r	p
Creativity	attitude toward	0.359	0.003
Entrepreneurship	innovation management	0.283	0.009
Social Participation		0.189	0.023
Initial Capital		0.296	0.008
Income		0.314	0.005

## Regression Analysis

Table 5 shows the result for regression analysis by stepwise method. Liner regression was used to predict changes in attitude by different variables. Creativity, entrepreneurship, social participation, initial capital, income may well explain for 53.7% changes ( $R^2 = 0.537$ ) in attitude of women with household jobs agriculture about innovation management.

$$Y=9.183+0.556x_1+0.382x_2+0.432x_3+0.512x_4+0.328x_5$$

## Research Article

**Table 5: Multivariate regression analysis**

Independent variable	B	Beta	T	Sig
Creativity	0.556	0.224	3.356	0.000
Entrepreneurship	0.382	0.391	3.492	0.000
Social Participation	0.432	0.175	2.575	0.000
Initial Capital	0.512	0.427	2.623	0.000
Income	0.328	0.325	2.434	0.000
Constant	9.183	----	2.455	0.000

$R^2=0.537$   $F=8.329$ ,  $Sig= 0.000$

## Conclusion

The results of research showed the correlation between creativity, entrepreneurship, social participation, initial capital, income and attitude toward innovation management was significant. Therefore, we can conclude that woman with high level of creativity, entrepreneurship, social participation, initial capital, income had high attitude toward innovation management. The result of regression analysis by stepwise method indicated creativity, entrepreneurship, social participation, initial capital, income may well explain for 53.7% changes ( $R^2 = 0.537$ ) in attitude of women with household jobs agriculture about innovation management.

Therefore, to development of the attitude of women with household jobs agriculture toward innovation management, considering variables of creativity, entrepreneurship, social participation, initial capital, income are essential. This should be considered by agro-industry managers and planners.

## ACKNOWLEDGMENT

This paper is part of MSc thesis of Shahrzad Faraji graduate student of agricultural management department, Shoushtar branch, Islamic Azad University. Thus, appreciate of professors and lectures of agricultural management department.

## REFERENCES

- European Commission (2004).** Innovation Management ation Management and the Knowledge - Drivedge - Driven Economy. ECSC-EC-EAEC Brussels-Luxembourg.
- Hidalgo A and Albors J (2010).** Innovation management techniques and tools: a review from theory and practice. Available: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.465.5322&rep=rep1&type=pdf>.
- IICA (Inter-American Institute for Cooperation on Agriculture) (2014).** Innovation in agriculture: a key process for sustainable development. Available: [http://argus.iica.ac.cr/Esp/Programas/Innovacion/Documentos%20de%20Tecnologa%20e%20Innovacin/I nnovation\\_PP\\_En.pdf](http://argus.iica.ac.cr/Esp/Programas/Innovacion/Documentos%20de%20Tecnologa%20e%20Innovacin/I nnovation_PP_En.pdf)
- Kleefl J and Roome V (2007).** Developing Capabilities and competences for sustainable business management as innovation: a research agenda. *Journal of Cleaner Production* **15** 38-51.
- Kotelinkov V (2008).** Systematic Innovation, the new holistic approach. Available: [http://www.innovarsity.com/1000ventures/business\\_guide/innovation\\_systemic.html](http://www.innovarsity.com/1000ventures/business_guide/innovation_systemic.html).
- Kwamena A (2008).** Innovation and experience economy. Regional Studies Association Regions: The Dilemmas of Integration and Competition, 27th -29th May 2008, Prague, Czech Republic. Available: [vbn.aau.dk/files/16527264/conference\\_paper.pdf](http://vbn.aau.dk/files/16527264/conference_paper.pdf).
- OECD (2004).** Promoting Entrepreneurship and Innovative SMEs in a Global Economy: Towards a more responsible and inclusive globalization; ICT, E-Business and SMEs. *2nd OECD Conference of Ministers Responsible for Small and Medium-Sized Enterprises (SMEs), Istanbul, Turkey 3-5 June 2004*, Available: <http://www.oecd.org/cfe/smes/31919286.pdf>
- Ommami AR (2011).** Analyze of Predictive Model of Innovation Management in Processing and Complementary Industries of Livestock Products. *International Journal of Agricultural Management and Development* **5**(1) 27-32.