

Extension and Education Factors Influencing the Success of Entrepreneurship among Rural Women in Northern Iran

¹Seyed Jamal F. Hosseini, ¹Seyed Mehdi Mirdamadi and ²Gholam Reza Haji Hosseini Nejad

¹Department of Agricultural Extension and Education, Islamic Azad University,
Science and Research Branch, Tehran, Iran

²Department of Education, Tarbiat Moalem University, Tehran, Iran

Abstract: Rural women in the Northern Iran were surveyed in order to explore their perception about the extension/education factors that influence them in the entrepreneurial activities. The methodology used in this study involved a combination of descriptive and quantitative research. The total population was 247 rural women entrepreneurs in the Provinces of Gilan, Mazandaran and Golestan. Based on the results of the study, contact with agricultural experts was the main influencing factor in entrepreneurial activities of rural women. It was found out that relatives and family members were the main sources of information for entrepreneurs. The results also show that there is need for more training and education of rural women in improving their entrepreneurial activities.

Key words: Rural women, entrepreneurship, agriculture, motivation, Iran

INTRODUCTION

The economic changes, significant rises in agricultural productivity, globalization and exposure to world markets have impacted on the social and economic infrastructure of Iran. Farming, especially in marginal areas is barely viable and male farmers have left the rural areas to find better jobs in the cities, leaving their female partners. One solution that has been offered is that women develop their entrepreneurial skills, which can increase their farm income and allow them to live on the land.

Agricultural activities in many developing countries to a great extent depend on women, who play an important role in farming and in improving the quality of life in rural areas. Women historically contribute considerably to household income through on-farm and non-farm activities. Migration of male members of family to urban areas resulted in feminization of farming. A small farm production is increasingly unattractive to males they frequently abandon agriculture in favor of greater opportunities in urban areas and women are left as the main labor force to eke out a living in rural areas (Stephens, 1995).

However, studies show that women are not given equal opportunities for empowerment, despite their contribution of specialized knowledge and a pool of highly skilled labor in areas of agricultural and rural development in many countries (Mumtaz, 1995).

Promoting micro and small businesses through entrepreneurship programs are increasingly seen as a means of generating meaningful and sustainable employment opportunities, particularly for those at the margins of the economy such as rural women.

In rural areas, the gender issue is usually a much stronger hindering factor to potential female entrepreneurs than it is in urban areas, their self-esteem and managerial skills being lower, when compared to urban women and access to external financial resources more difficult than in urban areas. Therefore, special programmes of assistance (technical and financial) to overcome these constraints should be developed and designed to meet the needs of rural women in order to be able to take an active part in entrepreneurial restructuring of their communities, to start to develop their own ventures, to expand their already existing businesses, or to function as social entrepreneurs since their number today is still below the potential one (Petrin, 1994).

Wennekers and Thurik (1999) identify three dimension of entrepreneurship the condition which leads to entrepreneurship, the attributes and the impacts of entrepreneurship. In regard to individual, the conditions for entrepreneurship are culture and incentives, elements are attitudes, skills and creativity and the impacts are self realization and income.

Evidence shows that even small efforts to informing rural population and increasing their knowledge about the entrepreneurship can have big results. However, the

promise has yet to be realized due to the lack of information among rural communities. Therefore, it is necessary to remove the impediments faced by rural population and provide basic information in rural areas to enable the spread of entrepreneurship.

The development of entrepreneurship among rural population especially women faces some challenges and obstacles. There is no single appropriate way to develop and enhance entrepreneurship in the developing countries: constraints and opportunities vary from country to country and therefore require location-specific approaches.

Some of the institutions that can make a difference to rural development based on entrepreneurship are agricultural extension services. However, to be able to act in this direction, they too must be entrepreneurially minded. They must see agricultural activities as one of many possible activities that contribute to rural development. They must seek new entrepreneurial uses of land and support local initiative in this respect. While, tradition is important it is nevertheless dangerous to be over-occupied with the past, otherwise the rural community may turn into a nostalgia-driven society. Networking between different agencies involved in the promotion of rural development through entrepreneurship, by pooling together different sources and skills, by reaching a greater number of would be entrepreneurs and by assisting a greater number of local entrepreneurial initiatives can have a much more positive effect on rural development than when each agency is working on its own (Petrin, 1994).

Extension due to its nature can have an important role in informing rural population about benefits of entrepreneurship. It also helps them to increase their knowledge and skills.

Extension's role in the local entrepreneurship initiative is likely to vary, but a number of possibilities exist. The major role of Extension agents and specialists is to act as facilitators and assist the community in understanding the program (Scorsone, 2003).

Given the key role that extension organizations have in influencing and persuading farmers to adopt new strategies such as entrepreneurship in developing rural areas, examining and understanding their role on success of rural women entrepreneurs may be critical for overall strategies of job creation in the rural areas.

Iran has a population of 70 million people and >30% of the population live in rural areas. Women accounts for nearly 50% of the rural population. Rural women in Iran, very much like their counterparts in many other developing countries, play an active part in agricultural activities however, they do not have the same access to

agricultural extension services as men. On average in Iran, women contribute approximately 40% of all labor related to agricultural production. Some estimates conclude that women contribute 70% of labor in the rice production and 90% in summer crops and vegetable. Rural women also accounted for 70% of labor in production of handicraft.

The focus of this study is rural women in Northern Iran (Gilan, Mazandaran and Golestan Provinces) play an important role in agricultural activities. Based on the latest statistics, the rate of women's participation in agricultural activities in this region is >75%. In Mazandran, for example, it is estimated that women comprise 65% of the workforce involved in agriculture. Rural women in the three provinces compare with the rest of the country had the highest rate of participation in agricultural activities.

Despite favorable natural resources and weather conditions in these provinces, most small farmer especially rural women still depend on subsistence farming. Increasing and encouraging rural women to develop entrepreneurial skills is necessary for long term economic prosperity of this region.

Prior research: Empowering rural women by establishing entrepreneurship business has been recognized as an important approach in developing countries. Entrepreneurship is conducive to economic growth and the creation of employment (Center for Rural Entrepreneurship, 2005).

What is clear is that the benefits of women's increased economic empowerment through the promotion of women's entrepreneurship are multiple. Studies show that among their benefits are women's greater independence and self assertion, their ability to stand up to abusive spouses and increased likeliness to serve as role model in the community.

Existing research clearly indicated that certain characteristics are conducive to entrepreneurial development. Pages and Markley (2004) cited four following key factors that appear to be important: diverse capital sources, an enabling culture, entrepreneurial networks and supportive infrastructure.

Hisrich and Brush (1988) found out that research experience, educational level, managerial skills, age, marital status and financial situation of women had impacts on success of women's entrepreneurship.

Research has identified a positive relationship between levels of entrepreneurial activity and economic growth across countries. A similar study found that no countries with high levels of entrepreneurship experienced low levels of economic growth (Pages and Markley, 2004).

The entrepreneur is also influenced by civil society. Norms and values are often part of the individual's sub consciousness. If starting a new business is unusual in a community, fewer people will think have becoming entrepreneurs compared to a community, where many people start and run their business. If an individual breaks with established practices, the social community may be more or less supportive depending on its norms and values (Ronning and Ljunggren, 2007).

For example, the results of a study about the interrelationships between entrepreneurship and religion show where religious salience is high, entrepreneurs will tend to use religious criteria to inform their decision making. Religious groups can also provide a resource for the generation of entrepreneurial social capital (Dodd and Gotsis, 2007).

The results of a study about entrepreneurship in the North Carolina rural areas show that the sense of isolation ranks near the top of concerns expressed by rural entrepreneurs. They believe that their community and state leaders support small business at the rhetorical level, but undertake few actions or initiative to nurture and support these companies (Pages and Markley, 2004).

Brush (1992) identified responsibility for family, lack of access to capital and limited training as main constraints in developing entrepreneurship for women. Data from a study shows that government should invest more resources for women who initiate businesses without formal training and this resulted in making them stand on their own (Ganesan *et al.*, 2002).

Research has identified the need for success and self satisfaction as main motivators for women entrepreneurs in the United States who want to start a new business.

In general, more active entrepreneurs have a stronger vision and strategy toward integrated crop protection and lower levels of pesticide use and environmental burden than passive colleagues (Smit, 2004).

Mitchell (2004) pointed out that female entrepreneur in the South Africa more than males were motivated by the need to keep learning and the need for more money to survive.

Sidhu and Kaur (2006) in a research about women entrepreneurs in Punjab found out that technical knowledge, managerial skills, innovation and work experience influenced the entrepreneurship empowerment.

An understanding of extension factors influencing the entrepreneurship among rural women in Iran is crucial for informing them about benefits of entrepreneurial activity is very critical. The question is what are the extension/education factors influencing success of rural women's entrepreneurship in Northern Iran?

The purpose of this study is twofold. First, it determines the extension/education factors that influence rural women's entrepreneurship in the Northern Iran. Second, the study examines relationship of these factors with the success of rural women entrepreneurs in Northern Iran.

MATERIALS AND METHODS

The methodology used in this study involved a combination of descriptive and quantitative research. A series of in-depth interviews were conducted with some senior experts in the Department of Entrepreneurship in the Ministry of Labor and experts in the Ministry of Agriculture to examine the validity of questionnaire. A questionnaire was developed based on these interviews and relevant literature. The questionnaire included both open-ended and fixed-choice questions. The open-ended questions were used to gather information not covered by the fixed-choice questions and to encourage participants to provide feedback. A 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) was used as a quantitative measure.

Content and face validity were established by a panel of experts consisting of faculty members at Islamic Azad University and experts in the Ministries of Agriculture and Labor. A pilot study was conducted with 30 rural women who had not been interviewed before the earlier exercise of determining the reliability of the questionnaire for the study. Computed Cronbach's Alpha score was 85.0%, which indicated that the questionnaire was highly reliable.

Independent variables in the study included extension/education factors influencing the extent of and support for rural women entrepreneurship. The dependent variable in this research study was the success of entrepreneurship by rural women.

The research population included all rural women entrepreneurs in the Provinces of Mazandaran, Gilan and Golestan in Northern Iran (N = 691). Using stratified sampling and the results of the pilot test, a sample of 247 women entrepreneurs was constituted. For measurement of correlation between the independent variables and the dependent variable correlation coefficients have been utilized and include pearson test of independence.

RESULTS

The average age of rural women was 38 years and 39% of respondents were between 36-45 years old. The findings also show that slightly >27% of respondent were between 26-35 years old.

Table 1: Categories of occupation as reported by respondents

Occupations	No.	Reporting (%)
Animal husbandry	77	35.8
Farming	18	8.4
Handicraft	54	25.1
Others	66	30.7
Total	215	100.0

Table 2: Likert-scale responses to 6-statements that pertaining to factors, which motivate women entrepreneurs (1 = strongly disagree; 5 = strongly agree)

Perception statement	No. of respondents				
	5	4	3	2	1
Increasing income	70	69	56	12	3
Improving living conditions	84	75	41	11	4
Creating jobs	39	65	43	39	23
Providing new innovations	39	58	31	29	39
Helping to improve society	51	65	57	24	12
Improving the social status	11	22	30	48	71

More than 34% of the respondents had high school diploma and 17% of them were illiterate. Of those who responded to question, slightly >14% had degree higher than a diploma. The results show that nearly 15% of rural women were single and >74% were married.

Table 1 shows the type of occupation of respondents. Of those who responded to questions, nearly 36% were involved in animal husbandry. With regard to the involvement of rural women in handicraft production, slightly >25% were working in producing handicraft.

Response numbers for the 6 perception statements are shown in Table 2. Majority of respondents agreed that increasing income would motivate the rural women entrepreneurs. A majority of respondents also agreed that improving family living conditions would motivate the rural women entrepreneurs. Nearly one-third of respondents agreed that improving social status would influence the rural women entrepreneurship.

Table 3 shows the means of respondents' views about factors, which motivate women entrepreneurs. As can be shown in Table 3, the highest mean refers to improving living conditions (mean = 4.04) and the lowest mean refers to improving the social status (mean = 2.20).

Table 4 shows the perception of respondents about the role of education/extension factors in success of rural women entrepreneurs. Slightly more than half of respondents indicated that contact with agricultural experts would influence the success of rural women entrepreneurs. Of those responded to the questions, less than one third agreed that visiting sample enterprises would influence the rural women's entrepreneurial

Table 3: Means of respondents' views about factors which motivate women entrepreneurs (1 = strongly disagree; 5 = strongly agree)

Perception statement	Mean±SD
Improving living conditions	4.04±1.19
Increasing income	3.90±1.18
Helping to improve the society	3.57±1.35
Providing new innovations	3.15±1.77
Improving the social status	2.20±1.67
Creating jobs	3.27±1.23

Table 4: Likert-scale responses and means of education/extension factors, which influence the success of rural women entrepreneurs (1 = strongly disagree; 5 = strongly agree)

Factors	No. of respondents					Mean
	5	4	3	2	1	
Training classes	19	54	59	19	65	2.70
Contact with agricultural experts	44	53	33	32	27	3.29
Visiting the sample enterprises	13	29	39	47	65	2.36
Contact with extension agents	19	54	59	19	53	2.83

Table 5: Sources of information about training, financial resources and supporting services

Sources	Training and advisory service		Financial resources		Supporting services	
	No.	%	No.	%	No.	%
Bank experts	46	20.3	43	18.9	34	10.6
Agricultural experts	75	33.0	15	6.6	40	17.8
Members of council	34	15.0	5	2.3	30	13.2
Providers of inputs	33	14.6	13	5.3	43	18.9
Extension agents	63	27.8	12	5.3	34	15.0
Service providers	29	12.8	32	14.1	45	19.9
Family members	15	42.0	70	30.8	94	41.4
Relatives	76	33.5	22	9.7	55	24.3
Neighbors	61	27.0	7	3.1	41	18.1
Friends	67	29.5	10	4.4	34	15.1

activities. As can be shown in Table 4, the highest mean refers to contact with agricultural experts (mean = 3.29) and the lowest mean to visiting the sample enterprises (mean = 2.36).

Nearly 70% indicated that they attended between one to three training classes within last year. It was also reported that only 8 respondents attended >6 entrepreneurship training classes. The perception of respondents about the participation in rural organization shows that >60% of rural women (n = 107) indicated that they are members of cooperative. Slightly >5% were members of Islamic rural council and 8% were active in religious organizations.

Table 5 shows the perception of respondents about the sources of information in the areas of training and advisory service, financial resources and supporting service. Slightly >33% indicated that relatives helped them to know where they can get training and advisory services in entrepreneurship activities. Of those responded to the questions, <18%

Table 6: Likert-scale and mean responses to using communication channels to get information about entrepreneurship (1 = very little; 5 = very much)

Communication channels	No. of respondents					Mean
	5	4	3	2	1	
Agricultural publication	10	15	33	2	107	1.92
Magazine	5	21	37	16	87	2.04
Extension publications	4	14	29	20	88	1.88
Radio	13	18	38	22	74	2.30
Television	38	35	49	21	37	3.09
Visits to other enterprises	54	55	45	12	29	3.48
Internet	11	8	20	18	105	1.78
Attending training classes	37	28	32	13	66	2.76

Table 7: Likert-scale responses and means of perception of the rural women about their success in entrepreneurial activities (1 = very little; 5 = very much)

Perception statements	No. of respondents					Mean
	5	4	3	2	1	
Sale of products and services	8	134	45	20	9	3.52
Profitability	7	130	55	19	10	3.47
Resources	16	88	101	10	5	3.45
No. of employee	13	73	107	15	5	3.53
Capital	15	116	66	13	6	3.56
Skill of employee	23	126	52	5	5	3.73

Table 8: Correlation measures between independent and dependent variable

Independent variables	Dependent variables	Rural women	
		R ²	Sig.
Agricultural publications	Success of rural women entrepreneurs	0.084	0.224
Magazine	Success of rural women entrepreneurs	0.090	0.220
Extension publications	Success of rural women entrepreneurs	0.489	0.002**
Radio	Success of rural women entrepreneurs	0.360	0.000**
Television	Success of rural women entrepreneurs	0.344	0.000**
Visit to other enterprises	Success of rural women entrepreneurs	0.345	0.000**
Internet	Success of rural women entrepreneurs	0.107	0.511
Attending training classes	Success of rural women entrepreneurs	0.094	0.563

reported that bank experts were the sources of information about financial resources. More than 40% stated that their families were the sources of supporting service.

The respondents' perception about using communication channels to get information about entrepreneurship shown in Table 6. Nearly 100 respondents indicated that visit to other enterprises has been the most important channels for them to get information about entrepreneurship. The results show that the highest mean refers to visit other enterprises (mean = 3.48) and the lowest mean refers to internet (mean = 1.78).

In regard to perception of rural women entrepreneurs about their success in last 3 years, majority of respondents (n = 149) indicated that the skills of employees have increased considerably in the last 3 years.

The results show that the highest mean number refers to skills of employees (mean = 3.73) and the lowest mean number refers to resources of their enterprises (mean = 3.45). The perceptions of rural women's

entrepreneur about information sources which help them in their entrepreneurial activities show that rural women have received information from their relatives than other information sources (Table 7).

Pearson coefficient was employed for measurement of relationships between the perceptions of rural women about communication channels, which influence their success in entrepreneurial activities. Table 8 shows the results, which show that there were relationship between success of rural women entrepreneurs and extension publications, radio, television and visit to other enterprises. The results indicate that these communication channels could influence rural women in their entrepreneurial activities.

CONCLUSION

As the results of the study showed, the extension/ education factors influence rural women entrepreneurial activities. This result is consistent with Hisrich and Brush (1988) observations that rural women favored more

entrepreneurial education. The findings highlight the need for providing additional entrepreneurial training. Brush (1992) also indicated that one of the main problems for developing entrepreneurship of rural women is limited training.

In regard to motivation factors, the result of this study is in accordance with findings of a study about rural women in South Africa. The results show that rural women entrepreneurs are motivated to learn and make more money. Majority of respondents in this study indicated that increasing income is one of the most important factors in motivating them in entrepreneurial activities.

The results of the study show that rural women entrepreneurs are influenced by family members and relatives. Entrepreneurs have grown up in a social environment that has shaped the individual. If this individual becomes an entrepreneur and start a business he or she is still situated in a social context, which influences his/her business (Ronning and Ljunggren, 2007).

The rural women in this study indicated that contact with agricultural experts have helped them in their entrepreneurial activities.

The role of experts in providing technical knowledge is necessary for success of rural women entrepreneurs. Sidhu and Kaur (2006) in a study about women entrepreneurs in Punjab found out that technical knowledge influenced the entrepreneurship empowerment.

Based on the results of the study, only one third of rural women indicated that extension agents had influences on their entrepreneurial activities.

The result is inconsistent with Scorsone (2003) conclusion in which the major role of extension agents was mentioned to be facilitators and assist the community.

IMPLICATIONS

The role of entrepreneurship in agriculture has been the subject of intense debate. The perception of rural women about the extension and education factors influencing the success of entrepreneurial activities was discussed in this study.

The results demonstrated that extension factors had limited influences on success of entrepreneurs. There is need for more training and education of rural women and enhance their confidence about the role of entrepreneurship in improving their living conditions.

REFERENCES

- Brush, C.G., 1992. Research on women business: Past trends, a new perspective and future directions. *Entrep: Theor. Pract.*, 17 (4): 5-30. http://findarticles.com/p/articles/mi_hb6648/is_n4_v16/ai_n28619961.
- Center for Rural Entrepreneurship, 2005. Energizing the entrepreneurial economy, Policy Brief, No. 2, RUPRI, Kansas City, pp: 1-8. http://www.nmccap.org/files/nationalbrief_ctr_rural_e-ship.pdf.
- Dodd, S.D. and G. Gotsis, 2007. The interrelationships between entrepreneurship and religion. *Int. J. Entrep. Innov.*, 8 (2): 93-104. <http://www.ingentaconnect.com/content/ip/ije/2007/00000008/00000002/art00001>.
- Ganesan, R., D. Kaur and R.C. Maheshwari, 2002. Women Entrepreneurs. *J. Entrep.*, 11 (1): 75-93. DOI: 10.1177/097135570201100105. <http://joe.sagepub.com/cgi/content/abstract/11/1/75>.
- Hisrich, R. and C. Brush, 1988. Women Entrepreneurs: Problems and Opportunities. In: Rose, S. and L. Larwood (Eds.), *Women's Career: Pathways and Pitfalls*. Praeger, New York, pp: 193-207. http://www.lin.ca/Uploads/cclr9/CCLR9_07.pdf.
- Mitchell, B.C., 2004. Motives of entrepreneurs: The Case Study of South Africa. *J. Entrep.*, 13 (2): 167-183.
- Mumtaz, K., 1995. Gender issues in agricultural and rural development. *Gender Issues in Agricultural and Rural Development Policy in Asia and the Pacific*. Bankok, FAO, pp: 87-104. <http://www.fao.org/gender/en/rural3-e.asp>.
- Pages, E.R. and D.M. Markley, 2004. Understanding the environment for rural North Carolina. Center for Rural Entrepreneurship, Kansas City, Missouri, pp: 1-61. <http://www.ncruralcenter.org/entrepreneurship/markelpagesreport.pdf>.
- Petrin, T., 1994. Entrepreneurship as an economic force in rural development. Keynote paper presented at the Seventh FAO/REU International Development Summer School, Herrsching, Germany, Sept. 8-14. http://www.fao.org/DOCREP/W6882e/w6882e02.htm#P44_8010.
- Ronning, L. and E. Ljunggren, 2007. Community Entrepreneurship: Building Entrepreneurship-facilitating social capital, Nordland Research Institute, Norway, pp: 1-27. <http://www.ssu.missouri.edu/agecon/mccel/materials/ronning-ljunggren.pdf>.
- Scorsone, E., 2003. Encouraging entrepreneurship in rural communities: The University of Kentucky entrepreneurship initiative program. *J. Ext.*, 41 (6). <http://www.joe.org/joe/2003december/iw5.php>.

- Sidhu, K. and S. Kaur, 2006. Development of Entrepreneurship among Rural Women. *J. Soc. Sci.*, 13 (2): 147-157. <http://www.krepublishers.com/02-Journals/JSS/JSS-13-0-000-000-2006-Web/JSS-13-2-000-000-2006-Abst-Text/JSS-13-2-147-149-2006-410-Sidhu-K/JSS-13-2-147-149-2006-410-Sidhu-K-Text.pdf>.
- Smit, A.B., 2004. Changing external conditions require high levels of entrepreneurship in agriculture. *Acta Hort. (ISHS)*, 655: 167-173. ISBN: 978-90-66050-56-3. http://www.actahort.org/books/655/655_21.htm.
- Stephens, A., 1995. Gender issues in agricultural and rural development. *Gender Issues in Agricultural and Rural Development Policy in Asia and the Pacific*. Bangkok, FAO, pp: 87-104. <http://www.fao.org/DOCREP/0177e/x0177e00.htm>.
- Wennekers, A.R.M. and A.R. Thurik, 1999. Linking entrepreneurship and economic growth. *Sm. Bus. Econ.*, 13 (1): 27-56. DOI: 10.1023/A:1008063200484.