



Analysis of effective mechanisms on the development of entrepreneurship among rural women in Kurdistan province

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Abstract

The present research was conducted in order to analyze and identify effective mechanisms on the development of entrepreneurship among rural women in Kurdistan province. The nature of this applied research was done by survey method. The research tool was a questionnaire made by the researcher, whose reliability was obtained by using the pilot test and calculating Cronbach's alpha. The statistical population of the research was 27,560 rural women of Kurdistan province, and using the Cochran formula, the sample size was determined to be 204. The sample people were selected by stratified random method. The results show that there is a positive and significant relationship between the individual-psychological, economic, socio-cultural, educational, infrastructural and marketing structure with the advantages of entrepreneurship development among the rural women of Kurdistan province. Multiple regression analysis was used to predict changes in the dependent variable, i.e., the advantages of entrepreneurship development among rural women in Kurdistan province, by independent variables, i.e., managerial, social, cultural, educational, economic, infrastructural, individual, psychological, and marketing structures. The multiple correlation coefficients in this research is equal to 0.781. According to the calculated coefficient of determination, the aforementioned constructs were able to determine 61% of changes in the dependent variable, i.e., the advantages of entrepreneurship development among rural women in Kurdistan province.

Keywords: analysis, mechanism, entrepreneurship development, rural women, Kurdistan province.

Introduction

Women account for about half of the population of rural communities. Apart from the poor social, economic and cultural situation, rural women play a significant role in society (Patnaik, 2020). In addition

to the responsibility of household management and raising children, rural women have also taken a significant part in agricultural and animal husbandry activities. Accordingly, principled and scientific investment in the field of rural women's entrepreneurship is of

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considerable importance (Nakhai et al., 2018). Agriculture is considered as the main factor in resource protection, self-sufficiency (in the basic products of every country), rural development and social and cultural benefits (Patnaik, 2020). The agricultural sector in the economy of many developing countries is one of the important sectors of the national economy. Therefore, many development experts believe that the support and driver of rural development is agricultural development (Bignotti et al., 2021). Agricultural development has a main role in sustainable rural development (KeyKosravi et al., 2022).

Entrepreneurship is an innovative and creative process in which there is the potential of adding value to products, creating job opportunities, increasing productivity, reviving and diversifying markets, improving social welfare and wider development for economic development (Esfandiar et al., 2019). Entrepreneurship is the process of creating something of value by allocating necessary time and effort, assuming financial, psychological-social risks and receiving rewards resulting from financial, personal satisfaction and independence (Aggarwal, 2021).

Problems such as inequality in employment, inefficiency of government policies, lack of infrastructure development, inefficiency of the support system, erosion of natural resources and production capacity, weakness of human capital in the agricultural sector have caused the rural areas of Iran to remain far from the real potential for progress. . In the meantime, paying attention to the issue of entrepreneurship is proposed as a basic

solution to solve the above problems (Rezaei Moghadam et al., 2017).

Agricultural entrepreneurship is a solution for empowerment in rural areas in order to achieve sustainable development. Because the growth and development of the agricultural sector provides a necessary basis for the growth and development of other sectors and it becomes the basis for creating investment, employment and services in rural areas and reducing unemployment and creating jobs in this sector. Therefore, through agricultural entrepreneurship, by identifying the advantages, limitations, weaknesses, and strengths of the agricultural sector of rural communities and appropriate planning, it is possible to help its all-round growth and move rural areas towards creativity and Entrepreneurship is a guide (Farahani and Jahansozzi, 2018).

The development of women's entrepreneurship in agriculture is very important in developing countries. This work focuses on how the combination of factors such as gender discrimination, extensive unpaid work activities due to care obligations, lack of appropriate training programs, barriers to access to quality jobs and starting new businesses disrupts the economic outlook (OECD, 2021).

The results of Mazhari et al.'s research (2016) showed that factors such as having a spirit of groupism and the existence of communication and social network among villagers, self-confidence, initiative, individual creativity and high motivation have the greatest impact on the development of rural entrepreneurship and increasing the level of entrepreneurial skills. It has villagers.



Based on the results of Raisi et al.'s research (2015), five economic, social, environmental, behavioral and promotional factors play a role in the development of agricultural entrepreneurship. Therefore, a foundation should be provided to help farmers receive financial and credit facilities (financial support) for agricultural entrepreneurship, facilitating network synergy and increasing farmers' competitiveness (free market space).

Rural entrepreneurship can help to increase production, create employment and reduce rural migration; rural areas should become attractive and the government should create empowering environments for rural entrepreneurs through their policies and other assistance (Okeke and Nwankwo, 2017).

The research results showed that demographic factors (age, gender, household income, employment status, education level), cognitive factors (opportunity perception, risk perception and self-efficacy) and social capital factors (social network) are the most important determinants of agricultural entrepreneurship and inclination. They are starting an investment in the agriculture sector (Arafat, 2020).

The findings of Valizadeh et al.'s research (2022) showed that entrepreneurship education, social capital and entrepreneurial skills were the factors affecting the entrepreneurial opportunities of rural women members of Kermanshah microcredit funds.

The results of Lakhanya's research (2018) showed that all over the world, many entrepreneurs in rural areas use digital

marketing in the field of advertising and marketing and introducing their businesses (Lekhanya, 2018).

A study by Xie et al. (2022) showed that rural residents face many challenges when starting their own e-commerce companies, and local governments and rural e-commerce platform businesses have difficulty providing accurate assistance to rural entrepreneurs (Xie et al., 2022).

Zand and Arfaee (2022) results revealed that economic factors, psychological factors, managerial factors, and socio-cultural fact affect the development of entrepreneurial skills and innovation in agricultural cooperatives positively.

Chalabi et al (2022) showed that the factors affecting the improvement of rural products marketing, economic, educational and promotional components had the highest contribution and role in explaining the mentioned dependent variable.

Battista's study (2021) showed that women and men have different motivations to become entrepreneurs. This study showed that women enter entrepreneurship for reasons of desire, such as creating and managing projects by themselves or participating in management processes, while men mainly enter entrepreneurship for forced reasons, such as looking for a job or leaving work (Batista, 2021).

The results showed that educational, economic, infrastructural, individual, and environmental and policy factors have a significant relationship and effect with the development of entrepreneurship skills in determining and predicting the development of entrepreneurial skills (Shanga et al., 2021).

The research results of Mardan Shahi and Nizamzadeh (2018) showed that there is a relationship between political, socio-cultural, technical and economic factors and entrepreneurial capabilities. Multiple regression showed that political and socio-cultural factors could explain 22.7% of the variation of entrepreneurial capabilities (Mardanshahi and Nezamzadeh, 2018).

The research findings of Tabares et al. (2022) showed that it provides research opportunities in emerging issues related to social entrepreneurship, governance and institutions, livelihood growth and environmental entrepreneurship to expand the boundaries of rural entrepreneurship from the framework of sustainable livelihoods. The entrepreneurship literature has mainly focused on urban entrepreneurship (Tabares et al., 2022).

Kurdistan province is located in the west of Iran. According to the results of the general population and housing census in 1401, the population of this province is 1,650,261, of which 34% live in rural areas and 66% live in urban areas. Among the population of rural areas, half of them are women, who play a significant role in most production activities. According to the surveys, the rate of job creation and entrepreneurship among women is very low, and according to the government's policies in creating sustainable employment in rural areas, it is necessary to conduct research on the issue of entrepreneurial activities in villages, especially among rural women. It needs to be done.

Methods and Materials

This research is quantitative in nature (non-experimental) and applied in terms of objective, descriptive-correlation method and implemented with a survey approach. The statistical population of the research included 27,560 rural women of Kurdistan province, and based on Cochran's formula, the sample size was estimated to be 204. These respondents were selected by stratified-random method and the questionnaire was distributed among them. The data collection tool was a questionnaire whose validity was confirmed by obtaining the opinions of university professors and its reliability was also confirmed based on the value of Cronbach's alpha coefficient of 0.89. In this research, SPSS22 software and descriptive statistical methods such as calculation of mean, frequency, percentage, standard deviation and coefficient of variation and inferential statistics such as calculation of correlation coefficient and multiple regression coefficients were used for data analysis.

Results

The results showed that among the 204 respondents, 62.3% were girls, 33.3% were married women, and 4.4% were divorced. Also, the average age of the respondents was 25.5 years. The findings showed that 33.8% of the respondents are illiterate and 26.5% of the respondents have a primary education degree. Also, the results showed that 55.9% of the respondents declared that their family occupation is agriculture and only 8.8% declared that their family occupation is freelance and the findings



showed that the average land area of the respondents was equal to 3 hectares. (Table 1).

Table 1. describing the personal characteristics of the respondents

Variables	Sub sections	frequency	percent	Mean	St.d
Land amount (hectares)				7.33	4.9
age				25.47	6.2
marital status	Single	62.3	127		
	Married	33.3	68		
	Divorced	4.4	9		
	illiterate	68	33.8		
	elementary	54	26.5		
Education	Guidance School	41	20.1		
	High school	28	13.7		
	diploma	6	2.9		
	university	6	2.9		
Family Job	agriculture	114	55.9		
	Gardening	45	22.1		
	animal husbandry	27	13.2		
	Others Jobs	18	8.8		

Prioritization of structural items of the advantages of entrepreneurship development of rural women in Kurdistan province from the respondents' point of view

The findings of the research in the field of prioritizing the respondents' attitude items in the context of the advantages of rural women's entrepreneurship development by calculating the coefficient of variation (CV) showed that the items of job creation and entrepreneurship reduce the amount of

permanent and seasonal unemployment in rural areas with the amount of the coefficient of variation. 0.298 and the use of new methods for the first time to produce products with a coefficient of variation of 0.303 and the subject of development of marketing methods for rural women's sterile products with a coefficient of variation of 0.353 are respectively the most important subjects of the advantages of rural women's entrepreneurship development in the province Kurdistan (Table 2).

Table 2. Prioritization of the advantages of entrepreneurship development among rural women in Kurdistan province

Object	Mean	St.d	C.V	Rank
Increasing job creation and entrepreneurship and reducing permanent and seasonal unemployment in rural areas	3.48	1.04	0.298	1
Applying new methods for the first time to produce products	3.52	1.07	0.303	2
Development of marketing methods for rural women's maternity products	3.28	1.16	0.353	3
Improving the economic power of rural women	3.29	1.24	0.376	4
More efficient use of agricultural and food raw materials in rural areas	3	1.14	0.380	5
Boosting the development of rural areas	3.03	1.22	0.402	6

Reducing the migration of villagers to cities	3.02	1.23	0.407	7
Identification and advance in the supply of new products	2.76	1.28	0.463	8
Improving the power and productivity of the workforce in rural areas	2.65	1.29	0.486	9

The results showed that there is a positive and significant relationship between the psychological, economic, educational, infrastructural and marketing structure with the advantages of entrepreneurship development among rural women in Kurdistan province at the level of 5%. Also,

there is a positive and significant relationship between the socio-cultural structure and the managerial structure and the advantages of entrepreneurship development among the rural women of Kurdistan province at the level of 1%. The results are shown in Table 3.

Table 3. Correlation coefficient between research variables

Variables	r _s	P
Individual-psychological structure	0.577*	0.035
Economical Structure	0.668*	0.024
Socio-cultural Structure	0.547**	0.000
Management Structure	0.719**	0.000
Educational Structure	0.733*	0.04
Infrastructure structure	0.656*	0.019
Marketing Structure	0.427*	0.046

** = P<0.01 * = P<0.05

In this research, multiple regressions were used to predict dependent variables from independent variables. Multiple regression analysis (ENTER) was used to predict changes in the dependent variable (advantages of entrepreneurship development among rural women in Kurdistan province) by independent variables, i.e. managerial, social, cultural, educational, economic, infrastructural, individual, psychological and marketing structures. The multiple correlation coefficients (R) are 0.781. According to the amount of R² (coefficient of determination), the mentioned structures

were able to determine about 61% of the changes in the dependent variable.

Beta values were used to determine the importance of independent variables in the regression equation. Based on these values, it can be stated that managerial and socio-cultural structures have a greater role in predicting the changes of the research dependent variable compared to other variables. The results of the analysis are shown in Table (4).

$$Y=3.813+0.053x_1+0.756x_2+0.0512x_3+0.388x_4+0.196x_5+0.353x_6+0.142x_7$$



Table 4. Coefficients of the Regression Equation between the Independent and Dependent Variables

Variables	B	Standard Error	Beta	T	p-value
(Constant)constant number	3.813	1.396	-	2.71	0.000
Individual-psychological structure (x ₁)	0.053	0.030	0.114	1.76	0.047
Economic Structure(x ₂)	0.756	0.241	0.133	3.13	0.000
Socio-cultural Structure(x ₃)	0.512	0.169	0.278	4.16	0.000
Management Structure(x ₄)	0.388	0.150	0.297	2.56	0.000
Educational Structure(x ₅)	0.196	0.084	0.145	2.33	0.000
Infrastructure structure(x ₆)	0.353	0.163	0.237	2.16	0.000
Marketing Structure(x ₇)	0.142	0.072	0.115	1.97	0.04
F=35.921 Sig.=0.000 R=0.781 R ² =0.61 R ² _{Adj} =0.56					

Discussion

The findings of the research in the field of prioritizing the respondents' attitudes regarding the advantages of rural women's entrepreneurship development by calculating the coefficient of variation showed that the items of job creation and entrepreneurship reduce the amount of permanent and seasonal unemployment in rural areas with the use of new methods. For the first time, for the production of products and the development of marketing methods for rural women's products, rural women are respectively the most important aspects of the development of rural women's entrepreneurship in Kurdistan province.

As the findings showed, rural women have a suitable attitude and perspective on the advantages of developing entrepreneurial actions in rural areas, especially among rural women and girls. This reveals that there is the initial power and awareness to start and have appropriate information on the benefits of taking action to start an entrepreneurial business among rural women. Rural girls and women are well aware of the advantages and achievements of these companies that create employment

for them. Therefore, the government should provide the field of entrepreneurship among rural women and girls by strengthening other platforms, which will lead to the reduction of unemployment and the use of hidden opportunities in rural areas and rural women.

The results are consistent with the studies of Hashemi et al. (2018); Valizadeh et al., (2022); Naseri (2011); Naser (2012); Kolai and Taheri (2011) and Lakhanya (2018).

Also, the results showed that there is a positive and significant relationship between individual-psychological, economic, socio-cultural, educational, infrastructural and marketing structures with the advantages of entrepreneurship development among rural women in Kurdistan province. As it became clear, it is necessary and essential that the planners of rural development issues, especially the experts in the field of planning rural women's issues, pay due attention to the male factors and structures in the entrepreneurship of rural women and girls. Undoubtedly, the slightest neglect of the above items causes failure in the implementation and development of

entrepreneurial projects among rural women in Kurdistan province.

The results with the findings of Shanga et al., (2021); Fathi (2018); Raisi et al., (2015); Vermoziari and Hosseini (2008); Valizadeh et al., (2022) and Mazhari et al., (2016) and Raisi et al., Okeke and Nwankwo(2017); Mardanshahi and Nezamzadeh(2018); Lekhanya(2018) and Xie et al., (2022) are consistent.

According to the value of R², the aforementioned structures were able to determine 61% of the changes in the dependent variable. Therefore, it is necessary and necessary to pay attention to the sub-components of each factor in the development plans of entrepreneurial activities. However, in this research, the mentioned structures were able to determine only 61% of the dependent variable changes. Therefore, it is necessary to carry out other researches and studies, especially in a qualitative manner, to identify other components and structures that affect the development of entrepreneurship among rural women in Kurdistan province.

In this research, beta values were used to determine the importance of independent variables in the regression equation. Based on these values, it can be stated that the managerial factor and the socio-cultural factor have a greater contribution and role compared to other variables in predicting changes in the dependent variable of the research. Therefore, in the implementation of entrepreneurship projects and programs among rural women, it is necessary to pay attention to management issues that lead to correct and accurate planning for the implementation, continuity and evaluation

of entrepreneurial actions among rural women.

Also, paying attention to the socio-cultural background of rural environments and identifying all the mechanisms that exist in rural environments in the form of culture, subculture and social issues provides the basis for pathology and continuity of rural development programs among rural women. The results with the findings of Shanga et al., (2021); Fathi (2018); Raisi et al., (2015); Vermoziari and Hosseini (2008); Valizadeh et al., (2022), Tahmasbi et al., (2016), Mazhari et al., (2016), Raisi et al., (2016); Okeke and Nwankwo(2017); Gopu (2007); Mardanshahi and Nezamzadeh (2018); Lekhanya(2018) and Xie et al., 2022 are consistent.

Conclusion

1. It is necessary for the government to provide necessary support to active private sectors that want to invest in rural areas and especially activities related to rural women.
2. It is suggested that the planners and supporting organizations introduce entrepreneurial plans and ideas that are suitable for rural environments, especially in the field of rural women's activities.
3. Strengthening and laying the groundwork for improving the level of individual skills of rural women in the fields of obtaining job readiness in income-generating and employment-generating economic activities by relevant organizations.
4. Attention and emphasis on management skills among rural women and improving the aforementioned skills through appropriate training for rural women.



5. It is necessary to pay attention to the social and cultural aspects of the environment in the programs that are carried out for the development of entrepreneurship in rural areas.
6. It is necessary that the Kurdistan Province Radio and Television and the provincial network introduce the productions of rural women and provide the necessary facilities to provide and broadcast free television advertisements for active rural women.
7. in training courses for rural women in the field of entrepreneurial and employment activities, to strengthen information skills, emphasize and pay attention to the digital and virtual world and use the Internet platform for sales and more success.
8. Development of telecommunication infrastructure and development of telecommunication and mobile phone network coverage in rural areas of Kurdistan province, considering the mountainous nature of the region.

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