

Research Paper: Analysis of the Role of Female Entrepreneurs in Rural Economic Development (Case Study: Sowme'eh Sara Rural Area in Northern Iran)

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ABSTRACT

Purpose: Rural entrepreneurship has been studied from several angles, and everyone agrees that it is required as an efficient technique for village economic growth. Women's entrepreneurship in the village is a multifaceted phenomenon driven by various circumstances. Women have played a significant and expanding role in the field of business in today's Iranian society. Establishing long-term job prospects is seen as promoting and constructing various enterprises in the village, which is considered a means of developing entrepreneurship. This study aims to analyze and explain the role of female entrepreneurs in the economic growth of the 'Sowme'eh Sara communities.

Methods: The current study employs and is based on library, documentary, and field research. SPSS software, integrated models (FARAS+FCOPRAS), and the WASTPAS fuzzy model were used to analyze the data.

Results: The research found a substantial and beneficial association between the economic development of the Sowme'eh Sara communities and female entrepreneurs. The results also revealed that the income development index, with a score of 71.66, employment with a score of 71.51; investment, with a score of 71/45; and facilities, with a score of 71/31, have the highest and lowest level of influence on the role of female entrepreneurs in the villages of Sowme'eh Sara city. The results revealed that the central sections, with a weight of 3.976, the Tolam section, with a weight of 3.743, and the Mirza Kochak section, with a weight of 3.667, have the highest and lowest levels of economic development, emphasizing the role of female entrepreneurs.

Conclusion: Entrepreneurship in the rural areas of Sowme'eh Sara's central region is an economic strategy in which the villages of this region are a product, and each house is a factory, and production is spatially vital in the competition for establishing entrepreneurial areas.

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1. Introduction

Nowadays, recognizing the importance of women's participation in the workforce is not just an essential concern and objective for economic advancement in all nations.

Still, it is also acknowledged as a powerful strategy for achieving sustainable development targets. As a result, one of the signs of a country's level of development is the level of involvement and role that women play in the country (Bashir Ahsan & Ghorbani-Najad, 2015). Studies conducted in the past few decades indicate that women face significant challenges in achieving empowerment and reducing poverty. These difficulties arise due to various obstacles and limitations that hinder the transformation and modification of women's economic foundations. As a result, eradicating poverty among women has become increasingly challenging (Namjuri Shirazi, 2013). Despite female entrepreneurs performing numerous economic roles within and outside their households, their contributions often go unrecognized. Community planners are currently discussing the potential of female entrepreneurs as a solution to a particular issue (Mansourabadi et al., 2016). Entrepreneurship is considered an essential tool for achieving sustainable development and has been recognized in development literature as a means of reorganizing and restructuring the economy of a village (Haidari Sareban, 2011).

Development programs have consistently focused on boosting women's labor-force participation and fostering an environment conducive to women's entrepreneurship and personal growth. This allows women to tackle challenges by establishing businesses and generating job opportunities for themselves and their communities (Kolling & Taylor, 2001; Faiz, 2018). On the other hand, expanding participation and developing equal possibilities, particularly for rural women, has been heavily emphasized in ideas of sustainable rural development (Karami, 2019). Entrepreneurship and employment opportunities for rural women can positively impact rural life and society. This can be achieved by reducing the gap between urban and rural households, reducing crop and livestock production costs, enhancing family literacy and health, supporting household expenses, and reducing migration to cities. Identifying entrepreneurial abilities in rural people, particularly rural women, and attempting to develop and strengthen entrepreneurship in rural development by providing primary conditions is therefore critical (Mirtorabi & Hejazi, 2018).

When examining women's entrepreneurship in Iran, it becomes evident that women make up 49.3% of the country's total population and 12.6% of the female population. Additionally, 48.2% of these women reside in rural areas. Women comprise a significant portion of a village but only contribute about 17% to the country's economy. It is suggested that women encounter various challenges and obstacles when becoming entrepreneurs. These hindrances may include economic, social, psychological, cultural, educational, and policy-related barriers, which create employment issues for women, particularly those living in rural areas. Rural women face unique social, cultural, and psychological circumstances contributing to these problems (Iran Statistical Center, 2015). Research into women's entrepreneurship in Iran shows that only 12.6% of all women and 48.2% of rural women are involved in the field. Despite making up a significant portion of the population in rural areas, women only contribute around 17% to the country's economic activities. It shows that women face various challenges to entrepreneurship, including financial, social, psychological, cultural, educational, and policy-related obstacles. These hurdles create issues in the employment system for women, especially those in rural areas, who encounter unique social, cultural, and psychological conditions.

The contribution of entrepreneurial women in rural areas to the economic development of Sowme'eh Sara villages has not been thoroughly examined. Since agriculture and animal husbandry are the main activities in rural regions, rural women play an equal role as men. Thus, understanding how rural women can take part more significantly in production and assessing their influence on economic development could help tackle various economic challenges in the rural districts of the city. By taking into account the role of women in the production and economic spheres, favorable conditions for rural development will be provided to talented villagers, as well as a field for sustainable development. As a result of the difficulties stated, this research intends to address the following questions:

- To what degree do female entrepreneurs impact the economic growth of the villages of Sowme'eh Sara? Moreover, which economic variables have the most significant influence on female entrepreneurs?

- Which areas in Sowme'eh Sara have the most significant effect on the role of women's entrepreneurship in economic development?

2. Literature Review

Entrepreneurship effectively empowers and builds capacity in rural areas, aiming to change current life patterns, narrow the gap between urban and rural areas, and promote economic, social, environmental, and institutional equality. In rural development theories, entrepreneurship is crucial for achieving sustainable development (Yagoubi-Farani et al., 2013).

External and internal causes have influenced rural entrepreneurship, contributing to today's agricultural society issues. Resources and opportunities available in rural environments help the development goals, particularly economic development. Rural and entrepreneurship development goals are closely linked to internal and external environments. By combining these factors appropriately, entrepreneurial behaviors can be fostered in rural communities, leading to economic growth (Julian et al., 2000).

Rural entrepreneurship is not fundamentally different from urban entrepreneurship, except that it should be conceptualized in a rural setting. Rural entrepreneurs have the same characteristics as urban entrepreneurs, and they should be more risk-taking because of the high risk in rural enterprises and the absence of management facilities in rural environments. Rural entrepreneurship is mentioned as a feasible solution in contemporary theories of rural development, and entrepreneurship is regarded as a vital tool for achieving sustainable development. Sustainable development can be achieved by following these stages: empowering and building capacity in rural areas, transforming current ways of life, bridging the urban-rural gap, and attaining equality in economic, social, environmental, and institutional aspects. It is essential to acknowledge the potential for entrepreneurship in rural communities, which can be identified and cultivated for further development (Kumar, 2016). Entrepreneurship produces jobs and new enterprises in rural areas, improving villagers' quality of life.

Furthermore, it can contribute to the village's economic development and well-being (Taghibeygi et al., 2015). According to Dobson et al. (2003), four key factors can nurture entrepreneurial identity in rural areas. These include developing activities that address the specific needs of the local community, ensuring adequate production that is in line with available resources and local skills, and maintaining a focus on entrepreneurship.

In addition, individuals engage in entrepreneurial activities by constantly learning and adapting teachings from various social groups based on their abilities. One such group is the Women's Society, which comprises

half of our nation's population but only a tiny percentage of the labor force (Alidoost & Lashgarara, 2012). Supporting rural women's businesses is essential to promote sensibility, humanity, and environmental friendliness (Heydari Sarban, 2013).

In this context, empowerment is one of the theoretical concepts associated with rural women's entrepreneurship. To empower women, it is essential to recognize their lack of authority, which provides resources, gives them control over those resources, and ensures the benefits from them (Kabir, 2012). Empowerment means having the ability to make choices and gain influence (Liu et al., 2011). Women's empowerment is a journey from a state of gender inequality to one of gender equality, which happens through social, political, economic, and institutional changes at all levels, starting with the individual (Shakuri et al., 2016). Development literature examines the concept of empowering individuals for socioeconomic activity participation from two perspectives

The first is the motivational method which seeks to boost self-confidence.

The second is the psychological approach, which defines empowerment as internal motivation toward one's job. It involves feeling significant, competent, impactful, self-determined, and trusted. Competency means that people believe they can carry out their duties. Being significant refers to the value of the work of successful people. The impact indicates how much individuals can influence their surroundings significantly and choose. Trust refers to the feeling that one has to be treated justly and equally (Fernandez & Moldogaziev, 2015: 380). For empowerment, one should pay attention to variables like knowledge or skill training of organizations, proper procedures, membership in an organization, microcredits, education, access to resources, and political backing. Empowerment can be beneficial (active participation) or detrimental (passive participation) depending on the power structure, so it is vital to change the power structure to fully empower local communities and ensure their independence for local management (Giampiccoli & Mtapuri, 2012: 6), and in a prosperous rural community, it leads to rural developments (Monkman et al., 2007: 457). Therefore, adopting appropriate policies helps enable the local community to take part in the process of rural development projects (Liu et al., 2016: 4). In this regard, the emphasis is on empowerment to boost the rural community's willingness to take part in the sustainable development process (Waligo et al., 2013: 344).

To achieve sustainable development, it is essential to focus on developing new ideas in development theories that empower and build capacity in rural areas, which includes increasing the role of female entrepreneurs in economic development by recognizing the significance of entrepreneurship, the unique features of rural areas, the distinct capabilities of rural women entrepreneurs, and the importance of sustainable rural development. Women’s involvement in entrepreneurship in rural areas gives them more power in various economic sectors and increases their ability to make decisions. Rural female entrepreneurs participate in the micro-economy with their creativity and innovative ideas. While providing the proper context for reducing poverty, entrepreneurship allows rural people a big step toward sustainable rural development (Figure 1).

Many studies have been conducted on female entrepreneurship in rural areas. We mentioned some of them briefly.

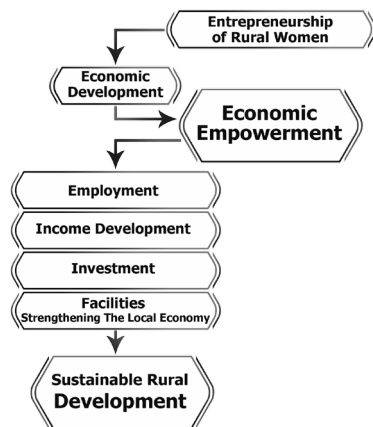


Figure 1. Research conceptual model. Source: research findings, 2022



In their research, Jamshidi and Mehdizadeh (2018) found 43 concepts in the open coding stage, seven core categories in the core coding phase, and one in the selective coding stage. They believe the new economic empowerment concept for women should modify and alter the traditional empowerment model. It is about completing the value chain and identifying the foundational links to reach the new model of organizing home businesses and family entrepreneurship, specifically for female heads of households. In their research on the factors that impact the growth of rural women’s entrepreneurship and the obstacles that prevent it, Ani et al. (2019) identified several key factors. These include taking the initiative, being proactive, identifying opportunities, staying persistent, and putting in effort. They also emphasized that entrepreneurship is an economic activity that requires constantly searching for new ideas and that

innovation and profitability potential are crucial. Socio-cultural, financial, and managerial constraints have all been identified as obstacles to rural women’s business.

According to a study by Hemmat et al. (2021) on alternative entrepreneurship among female entrepreneurs in Shiraz, several factors impact the number of female entrepreneurs. These include issues with family relationships, experiences of deprivation, a strong desire for entrepreneurship, and access to financial resources. Research conducted by Shamanian et al. (2022) shows a notable correlation between entrepreneurial ability and the degree of development in the studied villages. The study suggests that promoting entrepreneurial skills within local communities can reduce spatial disparities and encourage balanced growth in rural areas, particularly in Damghan County. According to Shahbazi’s (2022) research on strategic agricultural entrepreneurship in sustainable rural development, diversifying the rural economy requires more than just outside influence. Rural entrepreneurs must also know and utilize local resources and opportunities to create employment and economic growth. It can lead to new advantages and stronger rural communities. According to Intanon et al.’s (2019) study, small and medium businesses in an industrial city in Thailand are influenced by various factors contributing to their success and sustainable development. The most significant factors include capital, accounting systems, external interactions, and information networks.

On the other hand, there was a strong correlation between the level of production and marketing, indicating that these are two more elements that impact the business’s performance and success. According to Al-Tit et al.’s (2019) study on the factors contributing to small businesses’ success in Saudi Arabia, six main categories were identified through exploratory factor analysis. These categories include personal attributes, organizational traits, managerial traits, business support, financial access, and business environment. The study also revealed that the most crucial factor for the success of small and medium-sized businesses in Saudi Arabia is support, followed by individual factors, the availability of capital, and management factors. On the other hand, business characteristics and the business environment have the most negligible impact on this success.

In 2020, Vebisht Ayl and Bizayo Derse published an article discussing small and medium-sized enterprises’ sustainability challenges in the Eastern Region of Gogjam, Northern Ethiopia. The authors found that these businesses encounter several obstacles, such as inadequate infrastructure (including electricity, clean working

environments, and water), concerns about insufficient funds or resources for expanding their operations, limited access to markets and marketing materials, and inadequate knowledge or access to technologies. One way to address unjust tax demands and ineffective government assistance for small and medium-sized businesses is to provide practical training and support in critical areas such as financial reporting systems, marketing and sales promotion, and customer relations.

3. Methodology

This research is an applied and descriptive study. The data were collected through surveys and interviews in Sowme'eh Sara.

The data were analyzed using SPSS software, fuzzy models (FARAS+FCOPRAS), and the WASTPAS model. The findings, both descriptive and analytical-inferential, were presented in tables. ArcGIS 10.3 software was used to create the maps. For the initial phase of the study, 151 villages in Sowme'eh Sara County were included in the statistical population. Out of these, 27 villages with women entrepreneurs were selected and 51 participants who were women entrepreneurs from these villages were chosen. In the second phase of the research, 36 respondents (rural mayors and council members) were identified through available sampling.

Table 1. Indicators and items of economic development

Indicator	Item
Employment	Continuation and expansion of the activities of female entrepreneurs
	Employment of non-locals in profitable jobs created by women
	Job satisfaction in the sector created by women
	Creating job opportunities for rural women and youth
	Creation and development of entrepreneurship
	Employment in handicrafts
	Increasing employment in agricultural activities by earning an adequate income
Income improvement	Increasing employment in animal husbandry activities by earning money
	Generating income for local institutions
	Income stability
	Increasing local business income
	Reducing poverty among rural households
	Increasing the employment rate in the entrepreneurial sector created by women
	Ability to repay loans received
	Economic and financial independence and freedom
Increasing market awareness	
Investment	Increased access to multiple markets
	Investing in promotional and informational educational services
	Increasing investment in the infrastructure of households
	Increasing investment in entrepreneurial production activities
	Increasing risky household economic investment
Facilities	Creating new economic institutions related to the entrepreneurial sector
	Using business facilities to get loans for the household
	Using entrepreneurial facilities to create new financial resources
	Encouraging local investors to create job opportunities
Strengthening the local economy	Increasing goods and productions made from local sources
	Increasing local small and medium economic enterprises
	Increasing the local population involved in entrepreneurial business
	Measures have been taken to reduce capital scape from the destination and limit non-local ownership.
	Increasing small and large businesses

Source: Bashir Ahsan & Ghorbani-Najad, 2015, Bouzarjomehri & Javani, 2022

Sowme'eh Sara is a city located in the southwest province of Gilan. It can be accessed from Anzali Lagoon in the north, Fouman County in the south, Rasht County in the east, and Masal County in the west. Sowme'eh Sara County has a total area of 632.6 square kilometers and is divided into three districts - Central, Tolem, and Mirza Kochak-Jangli. There are 151 villages within these areas, according to the Gilan Province Statistical Yearbook in 2017 and the Sowme'eh Sara Governorate in 2014. Most of the county is located in a flat region, but the Mirza Kochak District has a height of up to 1200 meters and is mainly covered in forests. You can find the summer camps of Gandarji and Khunbarji within this area. (Figure 2).

4. Findings

Descriptive findings

During this research phase, we examined the various traits displayed by women entrepreneurs.

Table 2 was used to show these characteristics, utilizing a Likert scale ranging from very low (1) to very high (5). Respondents provided their opinions within this spectrum.

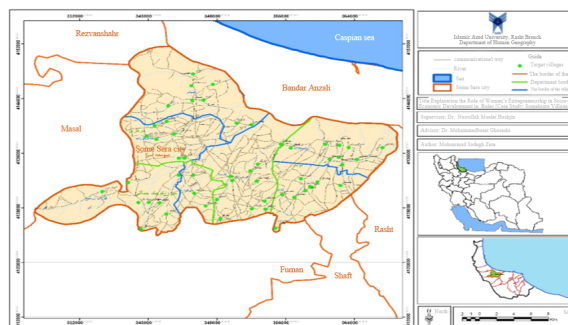


Figure 2. The locations of the target communities in the province and country, as well as 'Sowme'eh Sara



Table 2. The characteristics of female entrepreneurs

Characteristics	The features of female entrepreneurs				
	very high (5)	high (4)	medium (3)	low (2)	very low (1)
Opportunism	33/82	29/95	24/52	9/8	1/97
Ability to make appropriate decisions	30/87	38/02	24	6/22	0
Optimist	20/95	35/3	35/3	8/07	1/00
Determination at work	24/05	29/92	32/33	9/8	3/90
Motivation to progress is high	30/87	30/70	31/32	6/6	0/5
Strong effort and perseverance	26/96	31/13	19/97	17/28	4/66
Independence	26/08	31/95	30/30	10/54	0/65
Self-love	13/73	41/86	25/63	8/13	10/66
Tolerance of failure	24/12	23/52	27/28	10/04	3/34
Having high emotional intelligence	23/05	21/07	37/75	14/2	13/99
Ability to take risks	21/01	25/34	26/13	24/11	3/41

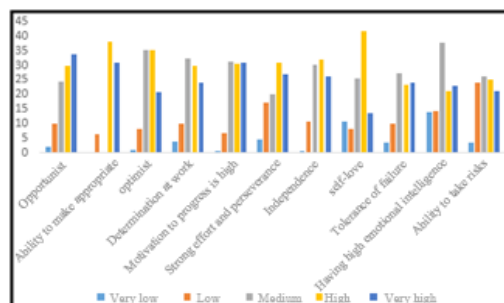


Figure 3. Characteristics of female entrepreneurs. Source: research findings, 2022



According to the data, the percentage of traits indicated among female entrepreneurs is relatively high.

- The economic activities of female entrepreneurs in the villages

Economic characteristics are a group of economic activities that have the potential to raise the standard of living and income of rural households without endangering the stability of other components of sustainable development. The participants were requested to assess the economic impact of women entrepreneurs' contribution to the development of villages.

According to Table 3, among the economic activities, calf fattening has the lowest average among female business owners in the villages of Sowme'eh Sara, and chicken and mushroom breeding has the most significant average with a value of 21.55.

Analytical findings

To assess the economic development of Sowme'eh Sara, a T-Test was conducted. Specifically, there was a value of 3.13 for the continuation and expansion of activities by female entrepreneurs, 3.00 for the employment of non-local individuals in profitable jobs, 3.10 for job satisfaction within the sector created by women, 3.05 for creating job opportunities for rural women and youth, and a value of 3.02 for job satisfaction in the sector. These values, all higher than the average of 3, indicate a generally favorable state of economic development regarding the employment indicator.

Table 5 displays the current state of income development in the villages of Sowme'eh Sara. The results indicate that the indicator in the villages of Sowme'eh Sara is excellent, with an average value higher than 3. Specifically, the items such as income generation for local institutions (average value of 3.15), income stability (value of 3.22), increase in local business income (value of 3.18), reduction in poverty among rural households (value of 3.13), and growth in the percentage of women employed in the entrepreneurial sector (value of 3.25) have contributed to this indicator.

Table 3. Prioritization of the economic activities for the participation of female entrepreneurs in the economic development of the village

Economic activities	Percentage
Carpets and rugs weaving, handicrafts	14/65
Production of rice seedlings, tea	20/13
Breeding chickens, mushrooms	21/55
Production of vermicompost	14/00
Production of vegetables and summer vegetables, home healthy food products	18/04
Calf fattening	11/63



Table 4. The status of economic development of the villages of Sowme'eh Sara in the employment indicator

Item	Average	T	Significance	Confidence interval with a significance level of 0.95	
				Max	Min
Continuation and expansion of the activities of female entrepreneurs	3/13	23/443	0/000	3/23	3/01
Employment of non-natives in profitable jobs created by women	3/00	23/413	0/000	3/11	2/89
Job satisfaction in the sector created by women	3/10	23/440	0/000	3/18	3/03
Creating job opportunities for rural women and youth	3/05	23/377	0/000	3/16	2/90
Creation and development of entrepreneurship	3/02	23/367	0/000	3/14	2/90
Increasing employment in agricultural activities by earning effective income	3/11	23/442	0/000	3/23	3/00
Increasing employment in animal husbandry activities by earning money	3/10	23/440	0/000	3/18	3/03
Employment of handicrafts	3/14	23/444	0/000	3/21	3/03



Table 5. The economic development status of the villages of Sowme’eh Sara in the income development indicator

Item	Average	T	Significance	confidence interval with a significance level of 0.95	
				Max	Min
Generating income for local institutions	3/15	23/446	0/000	3/25	3/07
Income stability	3/22	23/451	0/000	3/33	3/13
Increasing local business income	3/18	23/448	0/000	3/31	3/04
Reducing poverty among rural households	3/13	23/443	0/000	3/20	3/04
Increasing the employment rate in the entrepreneurial sector created by women	3/25	23/456	0/000	3/34	3/11
Ability to repay loans received	3/10	23/440	0/000	3/19	3/00
Economic and financial independence and freedom	3/14	23/445	0/000	3/34	3/08
Increasing market awareness	3/20	23/451	0/000	3/36	3/13
Increased access to multiple markets	3/27	23/466	0/000	3/34	3/15



Table 6. The state of economic development of the villages of Sowme’eh Sara in the investment indicator

Item	Average	T	Significance	confidence interval with a significance level of 0.95	
				Max	Min
Investing in promotional and informational educational services	3/11	23/441	0/000	3/19	3/00
Increasing investment in the infrastructure of households	3/23	23/453	0/000	3/34	3/08
Increasing investment in the field of entrepreneurial production activities	3/26	23/457	0/000	3/36	3/13
Increasing the household economic risky investment	3/21	23/450	0/000	3/34	3/15
Creating new economic institutions related to the entrepreneurial sector	3/19	23/449	0/000	3/25	3/05



According to [Table 6](#), the villages in Sowme’eh Sara are doing well in terms of investment. Specifically, they have a rating value of 3.11 for educational extension and information services, 3.23 for household infrastructure, 3.26 for increased investment in entrepreneur-related productive activities, 3.21 for increased household economic risky investment, and 3.19 for development of new entrepreneur-related economic institutions.

Based on the data in [Table 7](#), the villages of Sowme’eh Sara have a positive economic outlook. This is indicated by a score of 3.15 for utilizing entrepreneurship loans for household purposes, 3.18 for utilizing entrepreneurship facilities to generate new financial resources, and 3.21 for promoting local investors to create job opportunities.

Table 7. The status of economic development of the villages of ‘Sowme’eh Sara in the facilities

Items	Average	T	Significance	confidence interval with a significance level of 0.95	
				max	min
Using business facilities to get loans for the household	3/15	23/443	0/000	3/21	3/04
Using entrepreneurial facilities to create new financial resources	3/18	23/450	0/000	3/26	3/04
Encouraging local investors to create job opportunities	3/21	23/463	0/000	3/34	3/15



Table 8. The state of economic development of the villages of ‘Sowme’eh Sara in strengthening the local economy

Items	Average	T	Significance	confidence interval with a significance level of 0.95	
				Max	Min
Increasing goods and productions made from local sources	3/34	23/461	0/000	3/45	3/24
Increasing local small and medium economic enterprises related to entrepreneurship	3/25	23/451	0/000	3/36	3/14
Increasing the local population involved in entrepreneurial business	3/31	23/458	0/000	3/45	3/25
Measures have been taken to reduce capital scape from the destination and limit non-local ownership.	3/13	23/445	0/000	3/25	3/02
Increasing small and large businesses	3/24	23/456	0/000	3/34	3/13



As shown in Table 8, the status of strengthening the local economy indicator in the villages of Sowme’eh Sara shows a good situation. This status is evident in the items like increasing goods and productions made from local sources with a value of 3.34, increasing small economic enterprises related to entrepreneurship with a value of 3.25, an increase in the local population involved in entrepreneurial business with a value of 3.31, measures taken to reduce leakage from the destination as well as limiting non-local ownership with a value of 3.13, an increase in small and large businesses with a value of 3.24 indicates a favorable situation.

A chi-square test was used to study the connection between female entrepreneurs and economic development. The test results showed a strong and positive relationship between the independent variables (female entrepreneurs) and the dependent variable (economic growth) at a 99% confidence level. This finding suggests that fe-

male entrepreneurs play a significant role in promoting economic development.

Based on the obtained sig value being less than 0.05, a significant relationship exists between female entrepreneurs and the villages’ economic development. However, this test does not provide information on the strength of the relationship. Therefore, additional research is necessary to determine the intensity of the relationship between female entrepreneurs and the villages’ economic development.

Table 10 displays the results of the Cramers V test. The numerical value of this statistic, which is 0.578, is significant at 0.05. Based on these statistics, there is a robust correlation between the economic development of the Sowme’eh Sara villages and the participation of female entrepreneurs.

Table 9. The results of the correlation analysis between the role of female entrepreneurs and economic development

Economic development indicators	Independent variable	Value	Asymp. sig.(2-sided)
employment	Female entrepreneurs	10/567	0/032
Income development		10/432	0/031
Investment		10/431	0/021
Facilities		10/421	0/033
Strengthening the local economy		10/432	0/032



Table 10. The intensity of the relationship between the role of female entrepreneurs and the economic development of the Villages of Sowme’eh Sara

Dependent variable	Independent variable	Value	Approx. sig
Economic Development	The role of female entrepreneurs	0/578	0/003



According to the research, female entrepreneurs in Sowme'eh Sara's villages contribute to economic growth and employment in the villages. In a developing and dynamic economy, there cannot be any restrictions on economic development, regardless of factors like employment, income, and investment, as well as facilities and the strengthening of the local economy. Women's business ownership accounts for a sizable portion of this county's rural growth. Without paying attention to its components, the economy of the villages in the districts (Kazakhari, Tolam, and Mirza Kochak) cannot grow or develop. The distribution of jobs among the major economic activities depends on the long-term parameters of the indicators (employment, investment, facilities), which are covered in the explanation of each indicator.

Women in the villages of Sowme'eh Sara are seen as key players in improving their families' economic well-being and contributing to the growth of their communities. Female entrepreneurs in rural areas have the potential to bring about positive social, cultural, and economic changes. The availability of job opportunities in a given economic sector is a critical factor in determining the role of rural women in that sector. Planning for the long-term growth of rural women's entrepreneurial activities in different sectors is essential. In the future, one of the most significant issues that villages in this city will face is a decrease in employment due to the increase in rural population and the mechanization of agriculture. However, the participation of female entrepreneurs in the growth of Sowme'eh Sara's rural economy has a positive effect on employment opportunities for non-locals. Women create lucrative and important positions that expand job options for the youth in the village.

This research focuses on the importance of investment in economic growth. One of the biggest obstacles faced by settlements is the lack of capital. It is due to the absence of an investment culture, which results in minimal money being spent on non-economic activities. The findings suggest that female entrepreneurs who invest in educational services, promotion, information, and infra-

structure facilities in villages have a significant and positive impact.

Three items were used to assess the facilities sector's investigation into the contribution of female entrepreneurs to the creation of facilities. Based on this, the use of facilities by female entrepreneurs and the distribution of their products has been beneficial.

The presence of female entrepreneurs has had a positive effect on the local economy and income growth. Research indicates that when women business owners are included in the labor market in villages near Sowme'eh Sara, fertility rates decrease, productivity increases, per capita income rises, and social welfare and income distribution in society improve. A model combining FSO-RA and FCOPRAS was used to evaluate the influence of each economic development indicator on the role of female entrepreneurs.

An assessment method for measuring the contribution of female entrepreneurs to the economic growth of Sowme'eh Sara's villages has been proposed. Table 11 provides the results of this qualitative measure. The economic development quality level is low if the value falls between (0.00-0.30) and the relevant dimension is red. If the value falls between (0.30-0.40), the quality level is relatively low, and the dimension is yellow. If the value falls between (0.40-0.60), the quality level is average, and the dimension is yellow. If the value falls between (0.60-0.70), the quality level is relatively good, and the dimension is yellow. If the value falls between (0.70-0.80), the quality level is good, and the dimension is green. The dimension is green if the value falls between (0.80-0.90). Finally, if the value falls between (0.90-1.00), the dimension is green, and the quality level is outstanding.

According to the results, the role of female entrepreneurs in the villages of Sowme'eh Sara has been influenced most and least by economic indicators, with scores of 71.66 for income development, 71.51 for employment, 71.45 for investment, and 71.31 for facilities.

Table 11. Scores obtained in economic development indicators

Economic indicators	Achieved score (QL)	Maximum score (QMAX)	Minimum score (QMIN)	Difference between QMIN and QMAX	Score
employment	13/145	14/241	12/113	2/128	71/51
Income development	13/565	14/345	12/245	2/100	71/66
Investment	13/110	14/132	12/221	1/911	71/45
Facilities	13/090	14/108	12/113	1/995	71/31

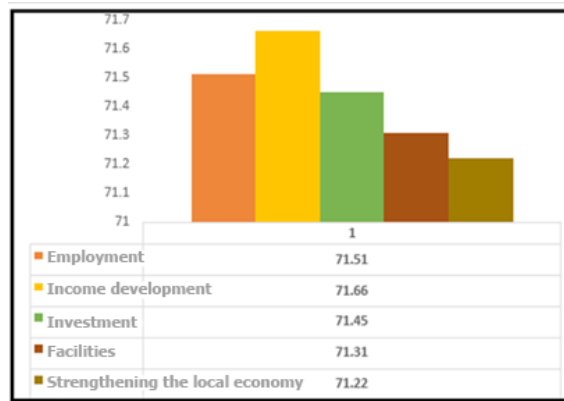


Figure 4. The effectiveness of each of the economic development indicators from the role of female entrepreneurs. JSRD
Source: research findings, 2022

Entrepreneurship success depends on evaluating the local economy and industry and assessing the local environment, according to optimal location research conducted by social specialists Quartko and Hodgetts in 2004. Demographic studies in spatial analysis can help determine rural areas' efficacy in entrepreneurship development. The WASTPAS model evaluates a region's capacity for spatial reconstruction and economic development through increased entrepreneurial activity.

After the spatial matrix of the objects under study was created, the objects were normalized. These are the outcomes.

The central district, with a weight value of 3.976, the Tolam district, with a weight value of 3.743, and the Mirza Kochak district, with a weight value of 3.667, have allocated the highest and lowest amounts of economic development, with emphasis on the role of female entrepreneurs, according to the results shown in Table 14.

Table 12. Spatial matrix of economic indicators in parts of 'Sowme'eh Sara

District	Employment	Income development	Investment	Facilities
Central	3/37	3/29	3/33	3/54
Mirza Kochak	3/13	3/09	3/24	3/11
Tolam	3/04	3/11	3/02	3/09



Table 13. Normalization of economic indicators in parts of 'Sowme'eh Sara

District	Employment	Income development	Investment	Facilities
Central	0/90	0/87	0/87	0/92
Mirza Kochak	0/76	0/84	0/85	0/84
Tolam	0/73	0/84	0/79	0/84



Table 14. Calculating the value of ((λ and Qi)) for ranking the departments of Soumesara based on their impact on the role of female entrepreneurs in economic dimensions

option	Economic		Ranking of sections
	λ	Qi	
Central District	0/989	3/976	1
Mirza Kochak District	0/989	3/667	3
Tolam District	0/989	3/743	2



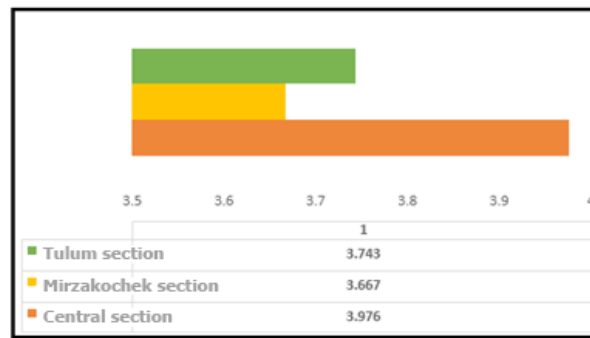


Figure 5. Ranking of the departments of the monastery in the economic dimension with an emphasis on the role of female entrepreneurs, source: research findings, 2022



5. Discussion

It has been found that the involvement of female entrepreneurs in Sowme'eh Sara's rural areas varies depending on the type of business they run, whether it be related to agriculture or handicrafts. These women contribute to the economy through their intellectual, physical, or manufacturing capabilities in various ways. Their contribution is significant to the economy of this county. Rural female entrepreneurs have helped to improve the economic and social well-being of villages and rural areas in Sowme'eh Sara by introducing creativity, innovation, and forward-thinking into their industry. Women's participation in business has resulted in job creation, increased income, investments, facilities, and a more robust local economy. As such, the local economy's success in the villages in Sowme'eh Sara depends on women's economic participation. Planners must therefore focus on endogenous and exogenous development models to promote sustainable growth and improve conditions in the rural community.

After analyzing the data, it was discovered that the villages in Sowme'eh Sara have unique effects on the involvement of female entrepreneurs in the economy. The study also focused on local competitiveness, where villages strive to attract businesses and investments, create products that meet customer needs, and stay up-to-date with market trends. As a result, entrepreneurship is a crucial economic strategy in the rural areas of central Sowme'eh Sara, where every household serves as a factory, the villages are the product, and spatial production is crucial in the competition to create entrepreneurial zones.

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Conflict of Interest

The authors declared no conflicts of interest.

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