Evaluation of Entrepreneurial Situation in the Rural Districts of Iran: Case Study on Pain Jam District, Torbatejam City

Mahdi Jahani[1], Hadi Ghanbarzade[2], Maryam Salehi Kakhki[3]

Abstract   The main purpose of this study is evaluating the entrepreneurship status with respect to the effective factors on creation of the rural entrepreneurship opportunities. To achieve this objective, the impression of economic, cultural-social, infrastructural and individual factors on creating the entrepreneurial opportunities were considered and reviewed the questionnaire was designed and the status of the society under evaluation, was explained. The statistical society of the present study, includes the total population of Pain Jam rural district of Torbatejam city, dispersed in Gol Banu and Zam rural districts. According to the statistics taken from Department of Population and Housing Census 2016, its population is 19577 people. To determine the statistical community among the villages of the studied district, 8 villages were selected as the sample. The form and content validation in the questionnaire of the present research was examined and confirmed by specifying the questions with respect to the components extracted from the past reliable researches as well as through the judgments made by some of the Professors and experts engaging in the field of rural management. Instrumentation reliability of the second part was analyzed by Cronbach´s alpha based on the pretest. In the inferential statistics, generalizing the results obtained from the sample to the statistical community of the research, one sample t-test, Wilcoxon signed-rank test, Kruskal Wallis, Kolmogorov - Smirnov, Friedman, binomial-test were applied.

Keywords   Entrepreneurial Situation, Evaluation, Rural districts of Iran, Torbatejam city.

Introduction

Statement of problem

Accurate recognition of the problems concerning with the villages is of great importance, because the roots of all problems and issues of backwardness such as extensive poverty, growing in equality, rapid population growth and the increasing rate of unemployment, all, lie in the villages.

In a majority of countries, reducing the rate of unemployment and enhancing the rate of occupational activities is a macro-level goal in development. In the recent decades, rural development is one of the great concerns of the development in Iran and the most developing countries. In many countries, rural development is considered as an important procedure for supplying the basic needs and optimized distribution of the interests obtained from the national development ; therefore, they applied various models by different methods for rural development the most of which had not an optimal result and the rural communities of the third world have not yet benefitted from a significant rate of development and progress. Most of the poor people of these countries live in the

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rural areas or live in the cities as a slum-dweller with a rural origin. The World Bank has finally believed that the rural development may be considered as a strategic way and all-out effort for recovering the social and economic life of poor villagers and reducing the poverty which will be especially feasible through increasing the production and promoting the efficiency in the rural environments.

One of the strategies which, in the recent years, has been considered in a majority of countries and even has been implemented in some them with positive results, is rural entrepreneurship. According to the researches done by the experts and the events experienced by different countries, the entrepreneurship is one of the important solutions for increasing the economic capacity and reducing the rate of unemployment and poverty so that it may be known as an economic motor power ; it is considered as the main source of development in the fields of production, services, business, employment, the belonging sense of villagers and consequently, their staying in the rural areas, preventing the problems and obtaining the social reform. It may result in economic, social and cultural, development (Archibong 2004, Afrin et al. 2010, Urbano et al. 2010, Stel et al. 2004). Therefore, today, the rural development depends more and more on entrepreneurship. Rural entrepreneurship is a potential factor for creating jobs, a key strategy for preventing the rural unrest, a means of increasing peoples income and the rate of employment for women, consequently, increasing their income and independence ; it may act as an factor for social support and as a general, a means for promotion of the quality of life for individuals, families and societies in order to maintain a healthy economy and environment. The rural entrepreneurship has been recognized as an important component for assisting in development of the countrys economy (Chandra et al. 2013, Chowdhury 2007, Lordkipanidze et al. 2005). Therefore, paying attention to the rural entrepreneurship is necessary in order to achieve the sustainable rural development. In Iran, the problems created after land reform, such as uncontrolled immigration to the cities, reduced employment, poverty and have proved the necessity of paying attention to the sustainable rural development, therefore, the experts and planners have done several researches and published numerous articles in this field, but, considering the fact that this is a new subject, on one hand and the necessity of reviewing this discussion with respect to the region and its localization, on the other hand, shows that doing more researches and studies in the rural areas of our country are required. Of course, despite the importance of these areas, little researches have been done in the field of rural entrepreneurship in border areas. However, the borders as the final realm limitation of a country and government play an effective role on the stability of a country and its national power. A cursory examination on the border areas of Iran especially, border villages, indicates the important indexes such as geographical isolation of the border areas, being far from industrial and economic hubs, intense and unequal deprivation in different social, economic, political and cultural dimensions compared with the inner areas of the country. These areas, have special features due to contact with the outside environments ; the existence of certain contacts and exchanges in the borders, vulnerability and different threats in these regions, give special importance to the process of development plan and segmentation of the border areas ignoring of which results it creating major challenges including lack of demographic stability of the borderlands. Studying the rural entrepreneurship, consequently, reducing the difference of the enjoyments benefitted by the villages, towns, borderlands and inner areas, may result in preventing the rural immigration of the borderline villagers and increasing employment and stability of borderline population. Deprivation in rural areas, ignorance of the border areas and their needs, brings chaos, insecurity and instability for the country. Considering the importance of the rural entrepreneurship in border areas, in this research, the villages in Pain Jam rural district, Torbatejam city, were examined as the border areas. The first step for enforcing the rural entrepreneurship in these areas is identifying the effective factors and indexes of creating the entrepreneurial opportunities. Therefore, in this research, recognition of the effective components and their prioritization may assist in improvement of the rural situation. Afterward, the status of the villages under study are considered and classified in terms of entrepreneurial components to determine the planning priority in this part.

Table 1. Literature review of rural entrepreneurship.

Row	Researcher	Title	Results
1	Harpa Elena, MoicaSorina, Dana Rus 2015	One model of forecasting innovation in rural entre-preneurship.	Providing one model of forecasting innovation in rural entrepreneurship.
2	Kalantaridis Christos 2010	About immigration, entre-preneurship and interdep-endences in the city and village, case study : East Cleveland in North East England	Immigration can change the terms of entrepreneurship services in the regions with the strong relation of opp-ortunity (for example the optimal conditions of the de-mand is weak, it means that the newcomers number and features are dominant), in cases in which the effect of developing the local opportunity structures is relatively small.
3	Korsgaard Steffen Mul-ler Sabine, Tanving Hanne Wittorf 2014	Rural entrepreneurship with entrepreneurship in the village, between pla-ce and space.	Two given ideas include firstly, entrepreneurship in the rural areas and secondly, rural entrepreneurship. The first idea indicates the entrepreneurial activities allocated to the rural spaces. The second one shows the entrepren-urial activities in which the lever and the power of influ-ence of the local sources have interaction with space and place. While, two ideas help local development, the second one has a potential to use optimally from the sources existed in the rural area and relocation of these investments is unlikely, even if the economic rationale justifies it.
4	Avranmenko Alex, Silver Jane A 2010	Rural entrepreneurship, parallel development.	Effective and proper encouragement and supportive poli-cies of entrepreneurship exist in rural areas. The results obtained by comparative analysis indicate the following tendencies. In the former economic and statistical data, there is a reduced interest and inclination to any border business activity and the most important data knowledge is related to my business/industry, negotiation skills, busi-ness ethics, holding the business meeting and business regulations.
5	De Rosa Marcello, McElwee Gerard 2015	Experimental researches about the role of rural developments policies in encouraging rural entrep-reneurship in Italian regi-on, Lazio.	The confirming results, there is a considerable difference in approving the rural policy on the basis of familys life cycle and composition of familys farm. Empirical analy-sis emphasizes the low correlation among the farms loca-ted in the rural areas.
6	Movahedi Reza, Yaghoubi-Farani Ahmad 2012	Analyzing the obstacles and limitations for deve-loping rural entrepren-urship for women.	The obtained results showed that the obstacles and cons-traints faced by the rural female entrepreneurs can be divided in nine parts: Population, characteristic and beha-vioral conditions of the rural women, familys traits, wo-mens knowledge and skills (training, experience and communications), social and cultural conditions (com-munity and village), access to facilities and services re-quired for the rural women (in the process of running, managing and developing business), legal, financial, eco-nomic, institutional and organizational factors, geogra-phical and environmental conditions.
7	Kroesen Otto, Darson Rudi 2013	Capacity building as a part of sustainable rural entrepreneurship.	Introducing and supplying technology, step by step, in a small scale accompanied with the process of learning and training for capacity building, help small farmers and technical staff to use it toward increase of produc-tion and this, gradually results in economic growth. This method has less dependence on foreign investment and small credits, instead, it relies on capacity power and growth and it results in creation of job and more attractive life in the village

Table 1. Continued.

Row	Researcher	Title	Results
8	Nasolahi Vosta Leila, Reza Jalilvand Moha-mmad 2014	Studying the effect of social capital on rural entrepreneurship for women.	The obtained results show that the social capital has a positive and significant effect on the rural entrepreneur-ship for women. Three factors of social capital (structu-ral, communicational and cognitive) with statistical signi-ficance may explain the changes of entrepreneurs mental traits including achievement, innovation, personal con-trol, self-confidence, being opportunistic, autonomy/inde-pendence and risk/unreliability.
9	Neguyer Cue, Frederick Howard, Nguyen Hong 2014	Exploratory study con-cerning with rural entr-epreneurship for women in Vietnam regions	The obtained results show that the governments entre-preneurship policies accompanied with the private sec-tors interventions are effective on Vietnam villages. How-ever, the women live in the rural areas of this country, are still encountered with limitations due to social prejudices, financial constraints and low rate of training opportuni-ties.
10	Rijkers Bob, Costa Rita 2012	Analysis of gender differences in non-farm entrepreneur-ship in rural districts.	Except Ethiopia, entrepreneurship for women in non-farm works is less likely than men. Entrepreneurship for women in non-farm works is not associated with family composition and educational advancement. Except Indo-nesia, in all countries the women have smaller share in co-operation and efficiency. The differences existed in the employee efficiency is known based on the size and sector and these differences are not associated with the capital rate, increase the returns to scale, human capital or the climatic features in domestic investment.

Literature review

Considering the importance of the studied subject, many researches have been done so far in the field of the rural entrepreneurship which have been provided in the following Table 1.

Theoretical foundations

Entrepreneurship is a multi-dimension phenomenon on which there is no consensus. Not only are there different attitudes on entrepreneurship in terms of physiology, ontology, economy and commercial

Table 2. Selecting population sample based on classification of villages. Source: Statistical yearbook, statistical center of Iran: 2016.

Classifica-tion of villages person(s)	Name of villages	Abun-dance of villages	Sample	Sample villages
1-100	Hassan Abad Ghasheh	1	0	–
100-499	Aliabad, Mikhak, AqaBeyk, Mellu-e Olya, Qandak-e Khurdeh Malkin, Hajji Aman, Seydabad, Hayanoo, Kalateh-ye Sanam, Qasemabad.	10	2	Aliabad, Kalateh-ye Sanam.
500-999	Yadegar-e Olya, Ismail Khan, Islamabad, Sahebdad, Mish Mast, Hossein Abad, Yadegar-e Sofla, Vakilabad	9	3	Sahebdad, Islamabad, Yadegar-e Sofla.
1000-2599	Rahmatabad, Mohammadabad, Samiabad, Shahrestanak, Shahdabad, Gak Castle	6	3	Mohammadabad, Gak Castle, Rahmatabad.
More than 2599	–	–	–	–
Total	26	26	8	

Table 3. Number of sample (family) in selected villages.

Row	Village		Sample family
1	Kalateh-ye Sanam	35	$\dfrac{35}{2615} * 255 = 5$
2	Aliabad	122	$\dfrac{122}{2615} * 255 = 13$
3	Sahebdad	182	$\dfrac{182}{2615} * 255 = 18$
4	Islamabad	212	$\dfrac{212}{2615} * 255 = 22$
5	Yadegar-e Sofla	152	$\dfrac{152}{2615} * 255 = 15$
6	Rahmatabad	583	$\dfrac{583}{2615} * 255 = 58$
7	Gak Castle	745	$\dfrac{745}{2615} * 255 = 72$
8	Mohammadabad	508	$\dfrac{508}{2615} * 255 = 51$
9	Total	2539	254

studies, but it seems that the dominant view varies from time to time. This results in providing different definitions of entrepreneurship with different key points in each definition the samples of which include: Establishment of new organizations, a combination of existing factors, exploring and exploiting the opportunity, tolerance of uncertainty, gathering the production elements.

Comprehensive and complete study of the background and literature review of the subject shows that the economic, social-cultural, infrastructural and individual factors are among the most inportant indexes on creating rural entrepreneurship opportunities. The existence of financial support in business creation and entrepreneurship is of great importance; having sufficient capital and individual financial independence or financial support by family and peers can be effective on accelerating the entrepreneurial process. Furthermore, the existence of financial and banking facilities, investors in the private and local sectors, can be effective on local entrepreneurship. The social, cultural factors are among the forgotton aspects of entrepreneurship due to one-dimensional view to entrepreneurship which has been existed until today. The first step in entrepreneurship development is recognizing the basic needs and training the entrepreneurial skills. There is a significant relation between people culture and their tendency for entrepreneurship. Entrepreneurship has socially beneficial interests and positive effects on rural community. It brings social benefits through the government to society indicating a kind of social–economic development of the society. The rural communities are interconnected with their perimeter environment, due to their existential, functional and structural nature, therefore, the environmental and infrastructural factors are so important. Entrepreneurial supports include guiding public and private activities, such as commercial services, concentration on entrepreneurs, creation of positive space and infrastructure, creation of networks and formation of the advisory groups in order to support entrepreneurs. For entrepreneurial infrastructures, the specific needs of entrepreneur ship, important for entrepreneurs should be supplied. The individual skills have significant effect on doing works optimally, creating satisfaction and promoting motivation for individuals which ultimately, they lead to the development of human resources and enhancement of efficiency. The individual skills are one of the basic infrastructures of entrepreneurship.

Materials and Methods

The present study has been done on the basis of research onion method (Saunders et al. 2009). It is an applied research in terms of orientation because its expected results can be applied toward providing the procedures for organizing the effective factors on entrepreneurship as well as promoting the decisions made by the rural managers in Pain Jam rural district, Torbatejam city. This research is a descriptive survey research. The research approach is deductive ; it is a quantitative research. The environment of this research with respect to its objective is library and fieldwork. The data is collected through questionnaire. Statistical community of this research includes all the population of Pain Jam district of Torbatejam city which is dispersed in the area of Gol Banu and Zam rural districts. According to the statistics received from The Population and Housing Census
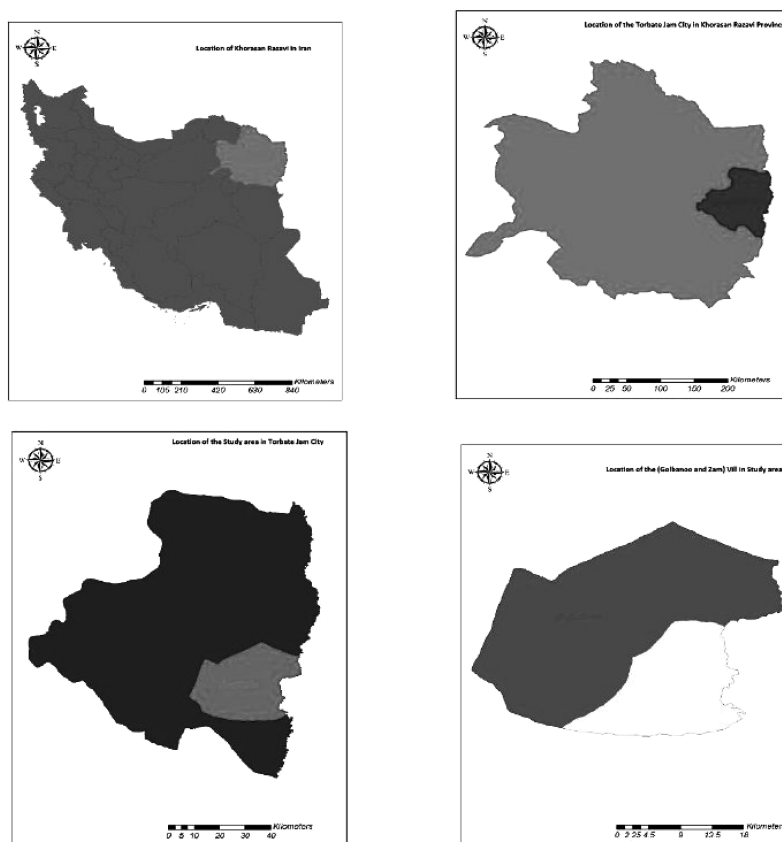
Fig. 1. Geographical location of Pain Jam district (Source: The writer).

of the year 2016, its residents are 19,577 people. In order to determine the statistical community from the studied district villages, 8 villages have been selected as sample. In order to select the sample villages, according to the classification of Statistical Center of Iran, Pain Jam district villages were first classified based on its population. Then the abundance of each class was determined and villages were selected from each class according to its villages number and abundance (in proportion of 30%). Thus, among 26 villages of Pain Jam district, 8 villages were selected as sample village of this study. The criteria for selecting villages in each class are geographical dispersion (selected villages from the whole area), population dispersion (in each class, highest, lowest and middle population) and village dispersion (suitable number of villages in each rural areas). Table 2 shows the

abundance of villages of the studied district in each class and sample villages.

After determining statistical community (number of villages), the number and volume of sample in each village shall be pinpointed for filling the questionnaire. Thus, the number of samples is determined for all the population using the stratified sampling method and based on Cochran formula and in each villages, the number of samples are determined in proportion of each villages population to the whole sample.

The research statistical community or the total families of sampling villages (Aliabad, Kalateh-ye Sanam, Mellu-e Olya, Sahebdad, Islamabad, Yadegar-e Sofla, Mohammadabad, Gak Castle, Rahmata-
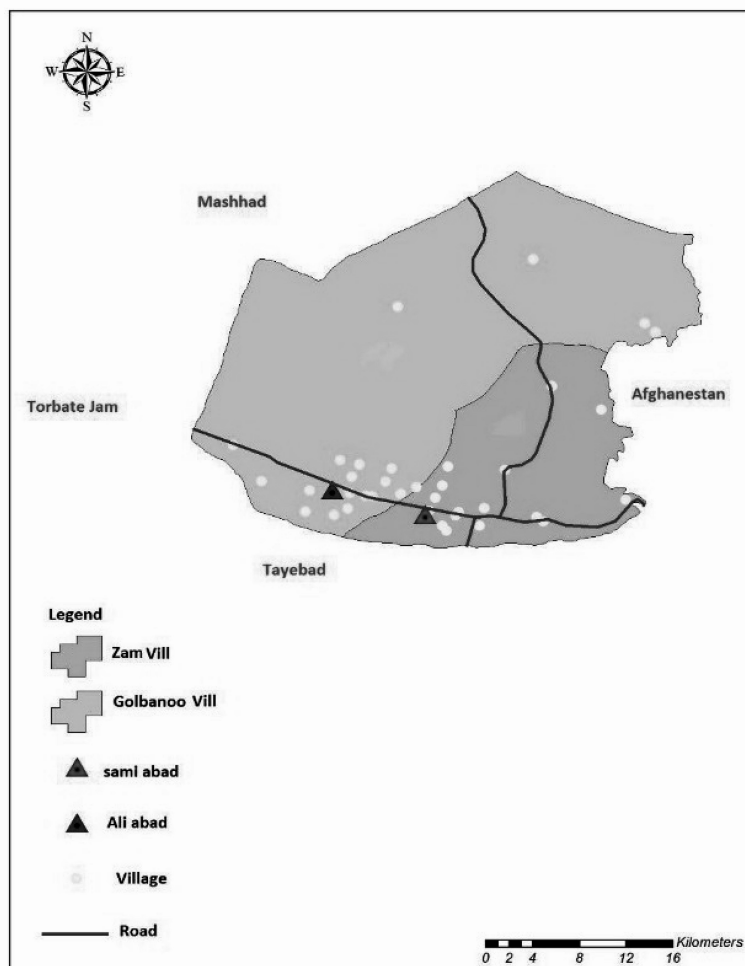
Fig. 2. Location of studied villages in Pain Jam district (Source: The writer).

bad) is 2615 families. According to Cochran formula, the sampling volume is determined as 255 families. Considering the proportion of Kalateh-ye Sanam village questionnaires, 5 samples were added and 259 questionnaires were organized in total, 258 numbers of which were analyzed (Table 3).

Cochran formula and sampling volume:

$$n = \frac{N}{e^2(N-n)}$$

$$n = \frac{2615 * 1.96^2 * 0.4307^2}{0.05^2(2615-1)+1.96^2 * 0.4307^2} = \frac{1863.518}{7.247} = 255$$

N : Population size, n: Sample size, δ : Pretest standard deviation[3] $= 0.4307$, $Z_{0.025} = Z^2_{\alpha/2}$: Normal standard random variable value at the level 1.96 = 0.95, e : coefficient of error = (0/05).

In this research, the form and content validation of questionnaire is examined. The form and content validation of this research questionnaire was examined and verified considering the deducted criteria
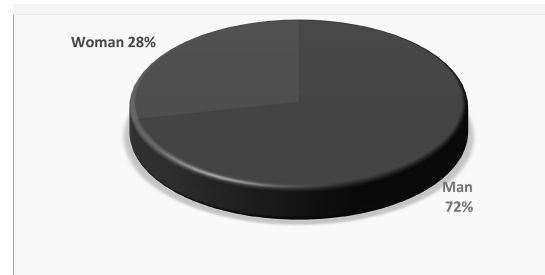
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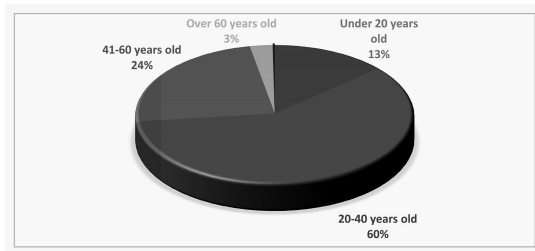
Fig. 3. Specification of respondents statistical community based on age.

Fig. 4. Specifications of respondents statistical community based on sex.

from past valid studies and also decision of some of professors, professionals and experts working in the field of rural management. The instrumentation reliability was analyzed by Cronbach's alpha based on pretest.

In this research, first the effective indexes on entrepreneurship opportunities were examined. In order to examine the effective indexes on entrepreneurship opportunities, first the effective indexes on entrepreneurship were detected by research background (library studies). While preparing the questionnaire, the condition of the studied population is defined. In this step, after collecting research data, the data was analyzed. In order to analyze research data, first the resulted information from the questionnaire is deducted and then by using SPSS 22 software in two sections of descriptive and inferential statistics, they were analyzed and confirmation or rejection of research hypothesis were investigated. In descriptive analysis of information, first the respondents demographical specifications such as sex, age, education and occupation were reviewed thoroughly. In inferential statistics section, in order to examine research hypothesis and generalizing the results obtained from sample to research statistical community, statistical tests such as one sample t-test, Wilcoxon signed-rank test, Kruskal-Wallis test, Kolmogorov–Smirnov test, Friedman, and binomial-test were used.

Studied geographical location
and scope

Geographical studied scope in this research is Pain Jam district villages of Torbatejam city. Having the 928 meters above sea level (MASL), Pain Jam district

is located between 60.15´ North latitude and 35.47´ East longitude. The center of district distance to the center of city is 29 km. Pain Jam district is located at the East side of Torbatejam. From South it leads to Jamrud, from East to Hari river and from West to Torbatejam city and has 35 km shared border with Afghanistan. About 90% of Pain Jam district residents are Sunni Hanafi and the rest are Shiite Muslims. The weather is mountainous and plain. Area of this district is 1010 sq.km. According to The Population and Housing Census of the year 2008, the population is 16555 people (consisting 8171 men and 8384 women) and in 2016 it reached to 21000 people (consisting of 9690 men and 11310 women). The major occupation of this district is in the field of agriculture and animal husbandry and 80% of people in this district work in these fields. This district is considered as the agricultural hub of this city.

Pain Jam district consists of 25 villages, 25 rural administrative offices and 2 rural districts, Zam and Gol Banu, which are described as following: Zam rural district, in the center of Samiabad, from Pain Jam district of Torbatejam city is located on 36 km of Torbatejam city, between 60.50´ to 61.07´ longitude and 35.05´ to 35.17´ latitude. Gol Banu rural district, in the center of Aliabad village, from Pain Jam district of Torbatejam city is located between 60.48´to 59.58´ longitude and 35.10´ to 30.08´ latitude. This rural district has 12 residential villages (Figs. 1 and 2).

This research has been done during 2016-2018. All the population and economic statistics in the research are based on statistics of the year 2016 (The Population and Housing Census of the year 2016 and villages identification documents of Pain Jam in
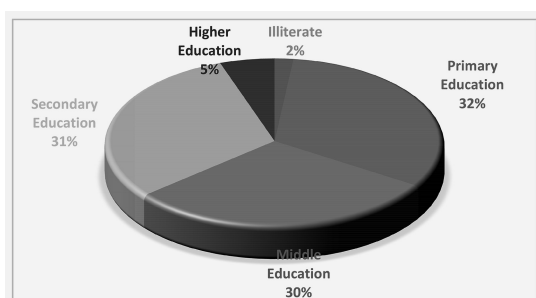
Fig. 5. Specifications of respondents statistical community based on education.
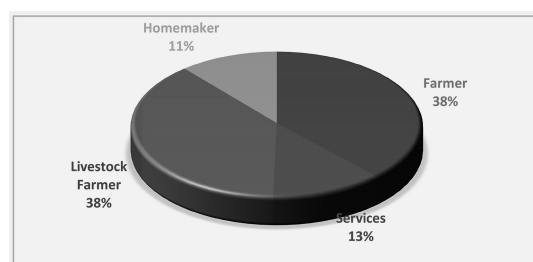

Fig. 6. Specifications of respondents statistical community based on occupation.

2016). Moreover, previous population statistics were used for examination and analysis.

Results and Discussion

The current research data in two sections of descriptive and inferential statistics were analyzed as following.

Descriptive statistics

As it is represented in Fig. 3, the respondents were in four age ranges, the most of which was related to range 20–40 years old, 59.7% of respondents were in this age range. According to the research results, 71.7% of respondents are men and 28.3% of respondents are women. This shows that the majority of subjects are men Fig. 4. As represented in Fig. 5, 13.6% of respondents are illiterare, 28.3% have primary education, 26.4% have middle education, 27.1% have secondary education and 4.7% of respondents have higher education. According to the following Fig. 6, 38% of respondents are farmer, 38.4% are livestock farmer, 12.4% works in services and 11.2% of respondents are homemaker.

Inferential statistics

Research data are examined employing inferential statistics, with the help of proper statistical tests. Villages are examined in each criteria and finally research objectives and questions are explained.

Examining research aspects

In this part, the four effective factors and the degree in which they effect on creating entrepreneurship opportunities are explained. In this sense, first these factors in all selected villages are examined generally, then the desired factors are examined in each studied villages. Finally, villages are compared with each other.

Examining research aspects
in general

Sinceeach aspects includes more than one factor and definition have small scale and since the data are more than 30 (258 data), pursuant to central unit theorem, data average has normal distribution and for evaluating aspect (dimension) status in creating

Table 4. Results of average comparison of research aspects.

Aspect	Average	Standard deviation	t-statistic	Significance level	Confidence interval Low rate	High rate	Result
Economic	4.2093	.61656	31.504	0.000	1.1337	1.2849	More than average
Cultural-social	4.2086	.57835	33.566	0.000	1.1377	1.2795	More than average
Infrastructural	4.2529	.64576	31.164	0.000	1.1737	1.3321	More than average
Individual	4.1113	.62707	28.466	0.000	1.0344	1.7882	More than average

Table 5. Friedman test result.

Chi-square	45.657
Number	258
Error level	0.035
Degree of freedom	3
p-value	0.000

Aspect	Ranks average
Economic	2.54
Cultural-social	2.50
Infrastructural	2.85
Individual	2%

Table 6. Average of aspects in each studied village.

Village	Economic aspect	Cultural-social aspect	Infrastructural aspect	Individual aspect
Gak Castle	4.3171	4.3169	4.1817	4.1963
Rahmatabad	4.7615	4.7610	4.7313	4.6213
Mohammadabad	3.6324	3.6217	3.8513	3.7199
Kalateh-ye Sanam	4.3519	4.1775	4.5093	3.9796
Aliabad	3.7692	3.6912	3.7436	3.5897
Yadegar-e Sofla	3.9722	4.2380	4.3667	3.9800
Sahebdad	4.0972	4.1682	4.2917	3.8935
Islamabad	4.1932	4.0896	4.2424	4.0258

entrepreneurship opportunities, one sample t-test can be used. The results of this test are as following.

According to the results found in Table 4, considering the significance level of less than 0.05, all aspects were more than average in average, this shows that all aspects are effective on creating entrepreneurship. In addition, infrastructural aspect is placed in a higher level compared to other aspects ; whereas, individual aspect is in the lowest level.

Priority of aspects in creating entrepreneurship opportunities

With the help of Friedman test, research aspects, including economic aspect (with financial, supporting facilities, investment factors) cultural-social aspect (social, educational, cultural aspect, consultation and experiences factors), infrastructural aspect (access and distribution factor) and individual aspect (creativity and innovation, risk taking, perspective, dignity and update information) can be ranked (Table 5) (Rhisiart and Jones-Evans 2016).

Software output consists of two Tables. In the first data, statistical specifications and δ^2 statistic is presented and in the next data, average ranks of each aspect is specified. According to Partial Index Value (p-Value) which is 0.000 and is in lower significance level (0.05), it can be concluded that hypothesis in confidence interval is verified as 0.95. Therefore, it can be said that effective factors on creating entrepreneurship opportunities have different ranks and priorities. The following results show that the infrastructural aspect has the highest rank and after that

the economic, cultural-social and individual aspects respectively.

Examining research aspects in each village

In order to examine average of aspects in each studied village, the following Table 6 shows these factors in each villages.

The data show that Rahmatabad has the highest average of economic, social-cultural, infrastructural and individual aspect. The overall conclusion is that from the respondents (village residents) point of view, among the effective factors on creating entrepreneurship opportunities, economic, cultural-social, infrastructural and individual aspects are the most important aspects in Rahmatabad village, also, cultural-social and economic aspects are selected as the least important aspects in Mohammadabad village and infrastructural and individual aspects are selected as the least significant aspects in Aliabad village.

According to the above data, it is evident that all aspects in Rahmatabad village are selected as the most important aspects.

According to the data, it can be said that cultural-social aspect is considered as the most important aspect in Rahmatabad village and is recognized as the least important aspect in creating entrepreneurship

Table 7. Results of examining effective factors on creating entrepreneurship opportunities.

Village		Economic aspect	Cultural social aspect	Infrastructural aspect	Individual aspect
Gak Castle	Average	4.3171	4.3169	4.1817	4.1963
	test	t-test	t-test	Wilcoxon signed-rank test	t-test
	p-value	0.000	0.000	0.000	0.000
	rerult	More than average	More than average	More than average	More than average
Rahmatabad	Average	4.7615	4.7610	4.7313	4.6213
	test	t-test	t-test	Wilcoxon signed-rank test	t-test
	p-value	0.000	0.000	0.000	0.000
	result	More than average	More than average	More than average	More than average
Mohammadabad	Average	3.6324	3.6217	3.8513	3.7199
	test	t-test	t-test	Wilcoxon signed-rank test	t-test
	p-value	0.000	0.000	0.000	0.000
	result	More than average	More than average	More than average	More than average
Kalateh-ye Sanam	Average	4.3519	4.1775	4.5093	3.9796
	test	t-test	t-test	t-test	t-test
	p-value	0.000	0.000	0.000	0.000
	result	More than average	More than average	More than average	More than average
Aliabad	Average	3.7692	3.6912	3.7436	3.5897
	test	t-test	t-test	t-test	t-test
	p-value	0.000	0.000	0.000	0.000
	result	More than average	More than average	More than average	More than average
Yadegar-e Sofla	Average	3.9722	4.2380	4.3667	3.9800
	test	t-test	t-test	t-test	Wilcoxon signed-rank test
	p-value	0.000	0.000	0.000	0.001
	result	More than average	More than average	More than average	More than average
Sahebdad	Average	4.0972	4.1682	4.2917	3.8935
	test	t-test	t-test	t-test	t-test
	p-value	0.000	0.000	0.000	0.000
	result	More than average	More than average	More than average	More than average
Islamabad	Average	4.1932	4.0896	4.2424	4.0258
	test	t-test	t-test	Wilcoxon signed-rank test	t-test
	p-value	0.000	0.000	0.000	0.000
	result	More than average	More than average	More than average	More than average

opportunities from Mohammadabad village residents point of view (Ruud et al. 2010).

According to the average data, it can be stated that infrastructural aspect is recognized as the most important aspect in Rahmatabad village and is recognized as the least important aspect in creating entrepreneurship opportunities from Aliabad village residents point of view.

According to the data, the individual aspect is recognized as the most important aspect in Rahma-tabad village and is recognized as the least important aspect in creating entrepreneurship opportunities from Aliabad village residents point of view.

Examining effective factorson creating entrepreneurship opportunities in each village and aspect

In order to examine effective factors on creating entrepreneurship opportunities in each village, considering the quantitative scale of aspects, if the aspect in question in village is normal, one sample t-test is

Table 8. Results of the first hypothesis.

Hypothesis	Average	Standard deviation	t-statistic	Significance level	Result
Economic effect on creating entrepreneurship opportunities	4.2093	.61656	31.504	0.000	Confirmed
Cultural-social effect on creating entrepreneurship opportunities	4.2086	.57835	33.566	0.000	Confirmed
Infrastructural effect on creating entrepreneurship opportunities	4.2529	.64576	31.164	0.000	Confirmed
Individual effect on creating entrepreneurship opportunities	4.1113	.62707	28.466	0.000	Confirmed

used and if not, Wilcoxon signed-rank test is used. The results of one sample t-test and Wilcoxon signed-rank test is as following (Table 7).

Examining research hypothesis

This section discusses the hypothesis employing results from statistical test.

In order to compared the respondents comments (residents of selected villages) regarding the effect of economic, cultural-social, infrastructural and individual factors on creating rural entrepreneurship opportunities, one sample t-test was employed, the results of which is as following.

According to the obtained significance level and positive t-statistic, it can be said that economic, cultural-social, infrastructural and individual factors is effective on creating rural entrepreneurship opportunities, it means that the all hypothesis is confirmed with 95% of confidence (Table 8).

Conclusion

Considering the fact that all factors are very effective on developing entrepreneurship in this district, according to the results more attention shall be given to these aspects by the authorities. In this sense, the following solutions are suggested for improving the infrastructural, economic, social and individual conditions of villagers:

Since the saving level and financial capital in studied villages is low and there are economic, social and infrastructural factors in villages, governmental organizations help, giving interest-free or low interest loans by banks and reducing administrative bureaucracies for doing small jobs would be useful. Considering the little financial support of villagers of the studied district, establishing financial and spiritual support insurance fund by the rural entrepreneurs are suggested for decreasing their worries. Developing employment in the villages of the country by regulating the co-operation and entrepreneurship space and creating entrepreneurship parks in suitable centers and   districts as well as supporting the graduated students in the field of rural districts for running a business. Compiling the agricultural employment and entrepreneurship development document ; Detecting and introducing the world new agricultural jobs, especially service occupation. Increasing the regular bases to loan and bank services accessible for all farmers ; Founding direct organizations related to entrepreneurship of the district agriculture ; Reducing administrative formalities through establishing communications among different levels of regions agricultural development. Agriculture sectors co-operation with local organizations (co-operatives, firms) in region ; Designing a suitable organizational system and entrepreneur companies in agricultural NGOs (Non-Governmental Organization) of the region ; Due to the lack of water in the village, modification of the cultivation pattern and moving from the livestock farming to industrial and economic agriculture is proposed. The expansion of greenhouse cultivation, the expansion of poultry and livestock with government support. Development of small and

accelerated efficiency industries as well as converting industries. Governmental support for development of handicrafts such as carpeting that the studied villagers have enough skill in this industry. Given the fact that most workers are in the agricultural area, the development of converting and packaging industries is recommended. Since the investment opportunities in many villages are unknown, especially in the tourism or crafts sector, it is required that the investment in villages through advertisements is promoted in order to identify the potential and opportunities existing in the village for investors in and out of the village. In this way, capital and investors will be attracted to rural areas, in which financial incentives and discounts will be very effective. Entrepreneurship training, especially entrepreneurship in the field of tourism, particularly in tourist destination villages. Establishing entrepreneurship education system for promoting knowledge, awareness, attitude, expertise, counseling and skills required for entrepreneurship in different classes of rural society. Identifying and preparing entrepreneurs member of microcredits funds to start or develop knowledge and technology in small businesses. The unfamiliarity of villagers with the principles of designing and launching new and entrepreneurial businesses is one of the obstacles to entrepreneurship, and holding a classroom in this field can provide entrepreneurship. Not believing in small businesses as an instrument for the development of entrepreneurship in the studied villages is an obstacle to entrepreneurship development ; in this way, training courses are needed to make people believe and change their perspective. Attracting womens participation in educational and social activities through culture, as well as eliminating some of the vulgar definitions of dignity and the replacement of correct and logical beliefs, thoughts and dissatis factory views. Organizing technical knowledge workshops and promoting such professions can be useful for development of the villages of the region according to the level of education and youth interest. Tendency to innovation by holding training classes that encourages villagers to new innovations in entrepreneurship. By holding this type of training classes, it can be expected in the future that villagers will make new innovations and entrepreneurship themselves. Introducing and holding a meeting by the successful entrepreneurs of the province to promote individual factors.

This research is recommended in other villages of the country and other developed countries. A collection of studies conducted related to the purpose of this research is a useful guide for authorities, specialists, planners and managers in the rural area. In future projects, the impact of other factors influencing entrepreneurship, such as political factors, can be examined and tested. It is also possible to examine the simultaneous effects of entrepreneurial factors and their relationship and impact on each other using ISM techniques.

References

Afrin Sharmina, Nazrul Islam, Shahid Uddin Ahmed (2010) Microcredit and rural women entrepreneurship development in Bangladesh: A multivariate model. J Business and Manag 16 (1) : 9—37.

Archibong CA (2004) Technology, infrastructure and entrepreneurship : Role of the government in building a sustainable economy. School of Business and Economics North Caroliana & T State University.

Avramenko A, Silver JA (2009) Rural entrepreneurship: Expanding the horizons. Int J Entrepreneurship and Innov Manag 11 (2) : 140—155.

Chandra Paula K, Azimi H, Abu Samahc B, Arif Ismail I, Lawrence D'Silva J (2013) Value of social network for development of rural Malay Herbal entrepreneurship in Malaysia. Procedia-Social and Behavioral Sci 130 (2014) : 59—64.

Chowdhury MS (2007) Overcoming Entrepreneurship Development Constraints: The Case of Bangladesh, J of Enterp Commu : People and Places in the Global Econ 1 (3) : 240—251.

De Rosa M, McElwee G (2015) An empirical investigation of the role of rural development policies in stimulating rural entrepreneurship in the Lazio region of Italy. Soc and Business Rev 10 (1) : 4—22.

Kalantaridis C (2010) In-migration, entrepreneurship and rural–urban interdependencies: The case of East Cleveland, North East England. J Rural Studies 26 (4) : 418—427.

Korsgaard S, Müller S, Tanvig HW (2015) Rural entrepreneurship or entrepreneurship in the rural–between place and space. Int J Entrepreneurial Behavior & Res 21 (1) : 5—26.

Kroesen O, Darson R (2013) Capacity building as part of sustainable rural entrepreneurship. In : Engineering, Technology and Innovation (ICE) & IEEE. Int Technol Manag Conf, 2013 Int Conf, pp 1—8.

Lordkipanidze M, Brezet H, Backman M (2005) The Entrepreneurship factor in sustainable tourism development. J Cleaner Prod 13 : 787—798.

Movahedi R, Yaghoubi-Farani A (2012) Analysis of the barriers and limitations for the development of rural womens entrepreneurship. Int J Entrepreneurship and Small Business 15 (4) : 469—487.

Nasolahi Vosta L, Reza Jalilvand M (2014) Examining the influence of social capital on rural women entrepreneurship: An empirical study in Iran. World J Entrepreneurship, Manag and Sustain Develop 10 (3) : 209—227.

Neguyen C, Frederick H, Nguyen H (2014) Female entrepreneurship in rural Vietnam: An exploratory study. Int J Gender and Entrepreneurship 6 (1) : 50—67.

Rhisiart M, Jones - Evans D (2016) The impact of foresight on entrepreneurship: The Wales 2010 case stusy. Technol Forecasting and Soc Change 102 : 112.

Rijkers B, Costa R (2012) Gender and rural non-farm entrepreneurship. World Develop 40 (12) : 2411—2426.

Ruud Weijermars (2010) Value chain analysis of the natural gas industry : Lessons from the US regulatory success and opportunities for Europe. J Nat Gas Sci and Engg 2-3 (2) : 86—104.

Saunders N, Lewis P, Thornhill A (2009) Reasearch Method for Business Student. 5th (edn). Harlow. Pearson Education.

Stel A, Caree M, Thurik R (2004) The effect of entrepreneurship on national economic growth : An analysis using the GEM database. The First GEM Research Conference, Entrepreneurship, Government Policies and Economic Growth.

Urbano D, Toledano N, Soriano D (2010) Analyzing social entrepreneurship from an institutional perspective: Evidence from Spain. J Soc Entrepreneurship 1 (1) : 54—69.