Identification and Prioritization of Factors Affecting the Creation of Rural Entrepreneurship Opportunities in Iran

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Abstract
Purpose- To identify and prioritize factors influencing the creation of rural entrepreneurship opportunities in Iran
Design/methodology/approach- A deductive approach was adopted. In this applied research, a mixed method was employed, which consisted of a descriptive-analytical method and a survey. The main data gathering tool was questionnaire. The research population comprised of university professors specialized in the field of rural entrepreneurship, rural entrepreneurs, rural managers and rural experts (n=30). In the first step, based on a review of literature, indicators influencing the creation of entrepreneurial opportunities were identified, and then the ANP-DEMATEL was used for evaluation and prioritization of the indicators.
Findings- Based on cause-effect chart, the economic and infrastructural factors were assigned to the category of causes and individual, socio-cultural and political factors to the category of effects. On the other hand, the economic and political factors had the highest and lowest interaction with other factors, respectively. The results of the integrated analytical network process (ANP) and DEMATEL method showed that the economic factor had the greatest effect followed by infrastructural, sociocultural and individual components (with slight weight difference). The political component with the value of 0.1253 not only had the lowest importance, but was significantly different from other factors in terms of weight values.
Research limitations/implications- Measuring the effects of factors influencing the creation of entrepreneurial opportunities along with their interrelation and mutual impact using a system approach or ISM technique.
Practical implications- Given the myriad of problems affecting rural areas, such as unemployment, migration of rural labor to urban areas and diminished sense of belonging, among other things, it is essential to pay greater attention to entrepreneurship and its implementation to achieve sustainable rural development. Besides, by identifying the root causes and factors influencing rural entrepreneurship, it is possible to offer solutions for organizing entrepreneurship. If policy makers, planners, and rural managers adopt these strategies, sustainable rural development could be reinforced.
Originality/value- Providing the most important indicators influencing the creation of rural entrepreneurship opportunities, prioritizing and measuring the impact of those factors on each other using ANP-DEMATEL method. In particular, the results of this research can benefit managers and decision makers in the field of rural entrepreneurship. The results can also be beneficial to universities, higher education institutions and students.
Key words- Rural entrepreneurship opportunities, Influencing factors, ANP-DEMATEL Method, Iran.
Paper type- Scientific & Research.

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1- Introduction

In the wake of the Industrial Revolution, the fallout of population growth brought on a myriad of problems. Issues such as poverty, employment, health, rising immigration, deteriorating rural agriculture, food security, dissatisfaction of rural residents, reduced quality of life, weakened sense of belonging and identity, and environmental sustainability are some of these adverse consequences. Failure to address these problems will compromise the sustainability of villages, which accommodate a large portion of the world population, and complicate their survival. This has led to the re-emergence of issues related to rural development in recent years, and theorists, planners and government executives are striving to come up with new strategies to address the problems and concerns that may arise (Roknoddin Eftekhar & Mahdavi, 2006). One of these strategies, which has recently been adopted by most countries, and even implemented in some parts of the world with factorable outcomes, is rural entrepreneurship (Toledano & Soriano, 2010). Based on the previous studies and the experience of different countries, entrepreneurship represents one of the main ways to bolster economic power and alleviate unemployment and poverty to the extent that it has been called as the main economic impetus (Archibong, 2004). It is the major source of developments in the realms of production, service, business, economy, employment creation, sense of belonging, and consequently the stay of rural residents, which can preclude a host of problems and beget drastic social reforms with broad implications in a wide range of economic, social and cultural areas, to mention a few (Van Stel, Caree & Thurik, 2004).

Accordingly, today rural development is increasingly reliant on entrepreneurship. Rural entrepreneurship is a potential source of employment, a key strategy for preventing rural unrest, a means of increasing people's income and raising the employment rate of women and their autonomy. It is also a factor of social protection, and as a whole, a vehicle for improving the quality of life for individuals, families and communities to establish a healthy and environment-friendly economy (Van Stel et al., 2004).

Rural entrepreneurship has been acknowledged as a key component for developing national economy (Paul, Azimi, Abu Samahc, Arif Ismail & Lawrence D'Silva, 2014). Rural entrepreneurship in the process of sustainable rural development facilitates the access of villagers to goods and services, promotes economic growth and employment and curbs immigration, promotes social security and welfare in villages, changr rural structures, and contribute to the systematic exploitation that in turn prolongs the stay of rural residents in villages (Vernet Khayesi, George, George & Bahaj, 2019).

Hence, it is necessary to take rural entrepreneurship into consideration to achieve sustainable rural development. In Iran, problems arising from land reforms, such as the unbridled immigration of people from rural areas to cities, unemployment, poverty, etc., have exhibited the importance of sustainable rural development. On this basis, specialists and planners have undertaken numerous projects and studies in relation to rural entrepreneurship. However, given that this concept is still in its nascent stage, and this subject should be addressed with regard to regional potentials and its localization, the necessity of further research in the rural areas of Iran is strongly felt.

Now, to pave the way for the rural development of entrepreneurship in villages, the existing capacities and limitations should be identified in different spheres, because the development of entrepreneurship in rural areas must be in keeping with temporal and spatial requirements governing villages in each country.

Nonetheless, the development or establishment of entrepreneurship in villages calls for the provision of requirements such as education, entrepreneurial culture, infrastructure, and so forth. In this regard, by identifying and explaining the influential factors, prioritizing and explaining the nature of relationship between the components, this research sets out to improve the situation of the villages.

2- Research Theoretical Literature

Education is a dynamic process of creating added value. This value is created by those who take great risks in terms of equality, time or work commitment to grant value to a product or service. The product or service may or may not be new or unique, but the value must be created by the entrepreneur in some way by securing and allocating necessary resources and skills (Hystrich & Michael, 2005). In another definition propose by Arthurtle, entrepreneurship is defined as: (1) a goal-oriented activity that includes a series of coherent individual or collective decisions...
to establish, develop, or maintain an economic entity. Feizbakhsh also contends that entrepreneurship is taking risk, pursuing opportunities, satisfying needs through innovation and establishing a business. According to him, entrepreneurship is the process of creating something valuable and distinctive through the allocation of time and effort, which is characterized with financial, psychological, and social risks along with the reception of financial rewards and personal satisfaction (Feizbakhsh, 2002). Entrepreneurship is the creation of a new business that involves high risk and uncertainty. Entrepreneurship is the generation of wealth, establishment of business, innovation, change, job creation, value creation and growth (Morris et al, 1994). Weijermars & Sergey (2011) also define entrepreneurship as the inclination for team work, risk-taking, value creation, establishment, leadership, execution, pursuit of innovation in order to maximize the value of opportunities, regardless of the limits of models, structure, or resources.

According to the above definitions, entrepreneurship is a multidimensional phenomenon and there is no general consensus on its definition. Not only are there multiple psychological, anthropological, economic and business approaches to this concept, it seems that the prevailing view of entrepreneurship definition varies at different times and places. This has given rise to different definitions of entrepreneurship, with distinctive key points underlining each definition such as establishing new organizations, combining existing factors, exploring and taking advantage of opportunities, tolerating uncertainty and integrating production factors, to mention a few.

All definitions of entrepreneurship concur that entrepreneurial behavior is characterized with: (1) innovation (2) reorganization (3) social and economic mechanisms (risk taking or failure), which are crucial to the success of an entrepreneur (Afrin, Islam & Ahmed, 2010).

2-1- Economic Factors
Considering the role of economic factors and conditions in the process of launching and developing entrepreneurial businesses, economic factors have received growing attention in research on determinants of entrepreneurship. This is especially important in rural entrepreneurship due to some constraints associated with the economic condition of rural areas. In this context, Rokn al-Din Eftekhar et al. (2008) in their study on rural environment concluded that for the development of entrepreneurship in rural areas, economic factors should be taken into consideration. In their research, they found that the major factors underpinning the development of rural entrepreneurship in the rural areas are economic factors, among which sufficient financial capital is vital to business start-ups.

Jelodar Fallah, Farajollah Hosseini, Hosseini & Mirdamadi (2007) in their study in the northern provinces of Iran reported that financial support and government policies for provision of banking facilities are factors crucial to the success of women entrepreneurs in rural areas. Golestani, Sadatmand, Rajaian & Ehteshami (2010) posited that economic factors, along with educational and cultural parameters, are of utmost importance. Insufficient capital in rural areas, which is rooted in low income levels and consequently low savings of families, is considered as one of the challenges of entrepreneurship and rural development (Najafi Kani, Hesam & Ashor, 2015). In fact, economic support is vital to the establishment of business and entrepreneurship. Access to sufficient financial capital and financial independence or economic support of the family and friends can wield considerable influence on accelerating the entrepreneurial process. In addition, financial and banking facilities together with the participation of private and local investors can also have an effect on the level of entrepreneurship (Feyz, 2007).

2-2- Sociocultural factors
Socio-cultural factors act as a motivational and supportive mechanism. They demonstrate people’s desire for performing a certain activity, organizing material and social environment, overcoming barriers, stimulating competition through greater efforts to excel rivals. Therefore, one of the main factors that lay the ground for entrepreneurship is the sociocultural environment that affects decision-making. In principle, it is difficult to decide whether to change a way of life or doing a job. To this end, it is essential to dedicate enormous energy and to summon courage necessary for making change or doing something different. For the success of the people who decide to make a change, a supportive and nurturing environment is vital (Hezar Jaberi, 2005).

The sociocultural environment of a society influences on the development of entrepreneurial spirit among young people. It is because some individuals are brought up in an environment that provides the ground for spurring motivation and cultivating their attributes. Studies have shown that if these people start a business, they will often be
successful, but most people have not access to these environments; therefore, it is essential to offer incentives and promote attributes of these individuals. These features embrace a range of factors such as teaching creative thinking, encouraging risk-taking, building up tolerance, nurturing self-esteem, recognizing opportunities and providing educational information about psychological features such as an internal locus of control. Accordingly, one of the main factors influencing entrepreneurship in any society is the dominant culture of that society. A culture that values entrepreneurship encourages people to pursue entrepreneurship. With regard to entrepreneurial culture, societies can formulate policies that foster entrepreneurial behavior. It means that, in general, people of a community are more or less likely to become entrepreneurs. There is a strong correlation between the culture of people and the desire for entrepreneurship. Identifying and understanding the social or cultural foundations of a particular community or region (for example, a rural community) can provide a solid starting point for nurturing an entrepreneurial economy and society (Lordkipanidze, 2005).

The reviews of empirical studies show that entrepreneurship can be trained, or at least promoted through training. Research shows that entrepreneurship can be educated, reinforced and cultivated. The first countries that carried out programs for entrepreneurship education were Britain, the United States and Japan (Feyz, 2007). Entrepreneurship education refers to programs that increase entrepreneurial knowledge for career goals and provide skills that enable individuals to foster abilities required to start new business with confidence and recognition of opportunities (Hassan Moradi, 2006). Generally, entrepreneurship education is a systematic, conscious and goal-oriented process in which non-entrepreneurial people with potentials are educated in a creative manner (Saeidi Mehrabad & Mohtadi, 2009). This kind of training is in fact an activity used to transfer knowledge and information required to set up and operate a business. It can also lead to the improvement and expansion of attitudes, skills and abilities of non-entrepreneurs (Zabibi and Moghaddasi, 2006). It should be noted that the scope of entrepreneurship education varies relative to the cultural context and the characteristics of people attending these courses.

As such, entrepreneurship education, type of training and their importance will be different. Many scholars have highlighted the importance of training rural entrepreneurs as the most effective way to help raise awareness and develop small businesses (Heriot, 2002: 3).

Rural entrepreneurship education is a highly productive investment in the development process, especially in agriculture and rural development. The establishment of an active economic unit in the villages requires a broad range of knowledge and skills, while villagers often have a low skill levels in this field. Therefore, it is necessary to raise their awareness and knowledge through these educational courses. However, training courses would be effective if they are organized and implemented in order to meet certain needs and achieve a certain goal (Abbaszadegan, 2000). Although lack of training in entrepreneurship skills is the major reason for the failure of small businesses, the first step in developing entrepreneurship is to identify demands, and train entrepreneurship. There is a strong association between the culture of the people and the desire for entrepreneurship. To date, social and cultural dimensions of entrepreneurship have been disregarded due to the adoption of a unidimensional view of entrepreneurship. Individuals who come up with new ideas often has social backgrounds, such as family characteristics along with community traditions, the degree of participation and cooperation, friends, relatives and neighbors, who can support them on the path to success. Thus, entrepreneurship provides a host of social benefits for the rural society. It aids the society through state-sponsored programs, which is an indicator of the socio-economic development of society. When a community's participation in entrepreneurial activities is high, they are more likely to accomplish economic and social development (Najafi Kani et al., 2015).

2.3- Infrastructural Factors

In addition to the above factors, entrepreneurship development is linked to the entrepreneurial infrastructure and support. Rural communities, due to their existential, functional and structural nature, are closely interwoven into their peripheral environment; therefore, it is imperative to consider environmental and infrastructural factors in the development of entrepreneurship. (Rokn al-Din Eftekhari, Pourtaheri & Fazli, 2014). Maia and Mack, in their study of entrepreneurship with an emphasis on infrastructural and environmental factors, introduced
environmental factors as the most critical factor in entrepreneurship. Entrepreneurial infrastructure provides elements such as amenities and utilities (water and electricity), services, duties (taxes, and regulations), which are important to entrepreneurs. Entrepreneurial support involves directing public and private activities, such as business services, focusing on entrepreneurs, creating favorable environments and infrastructures, building networks and setting up counseling groups to support entrepreneurs. As far as entrepreneurial infrastructures are concerned, the specific entrepreneurial needs that are vital to entrepreneurs must be satisfied (Imani Qeshlagh & Hashemi, 2009).

Entrepreneurial infrastructures embrace components such as facilities and utilities (water, electricity, road, etc.) and regulations that are integral to the success of entrepreneurs (Dadvarkhani, Rezvani, Imani Qeshlagh & Bouzarjomehr, 2009).

2-4 Individual Factors

Individual factors also produce an effect on entrepreneurship. According to Sen, an entrepreneur is a person who individually embarks on developing and managing sources or a new activity by relying on his own understanding of the market (Avramenko & Silver, 2010). In general, in regard to individual factors, parameters such as innovation in production and attraction of investment, striking a balance between supply and demand, generating revenues, fostering money exchange in the economy, providing tools and supplying new products to the market, tolerating uncertainty, nurturing management skills, shifting economic resources based on the principles of productivity, and recognizing untapped and opportunities can be mentioned (Chowdhury, 2007). Littunen (2000) attributes characteristics to entrepreneurs including risk-taking ability, innovation, knowledge of work techniques, market and marketing, business management skills, team work skills, a general understanding of business principles, and the ability to seize opportunities. On the other hand, Markman & Baron (2003) argue that the main parameters of entrepreneurial success are tied to individual entrepreneurs' characteristics including self-reflection, opportunism, work autonomy, possessing human capital and social skills. Kiggundu (2002) Kiggundu divides the determinants of entrepreneurial success into two groups of personality traits of entrepreneur and characteristics of the company and environment. Wagner and Sternberg (2004) divide factors underlining entrepreneurial process into three groups of macro-criteria, micro-criteria and entrepreneurial personality traits. Russell, Atchison & Brooks (2008) posit that the entrepreneurial environment is shaped by factors such as macroeconomic, cultural, social and political factors that influence the willingness and ability of individuals to engage in entrepreneurial activities. Masoudnia (2002) in his assessment of personality approaches and their impact on entrepreneurship, puts forth a set of psychological variables such as autonomy, positive feelings toward others, leadership, accountability, perseverance, energy, risk-taking, independence, locus of control, self-esteem and motivation for advancement that distinguish entrepreneurs from non-entrepreneurs. Moradizadeh (2006) also found that the psychological characteristics of entrepreneurs, their access to resources, marketing skills and interest in agriculture exerts a positive impact on the development of entrepreneurship in manufacturing units.

In another study, Gholerdi (2005) identified individual characteristics as one of four important factors in the development of women's entrepreneurship, along with parameters related to the organization, network and environment. He also asserts that the motives and goals of entrepreneurial women are crucial to the development of entrepreneurship.

Accordingly, individual skills wield considerable influence on optimal performance of activities, satisfaction and motivation of individuals, which ultimately leads to human resource development and productivity growth, constituting one of the pillars of entrepreneurship. Jusoh, Ziyae, Asimiran & Kadir (2011) state that entrepreneurs must equip themselves with a variety of skills and attempts to upgrade these skills over time. They need to advance their skills and knowledge through training and be prepared to deal with global challenges and rivalry. In fact, entrepreneurs must possess special features and attributes. In general, the characteristics of an entrepreneur can be described as follows:

A) Creativity and innovation (Nasrolahi Vosta & Jalilvand, 2014; Saberian & Sabourian, 2014; Faraji Sabokbar, Badri, Sojasi Qeidari, Sadeghloo & Shahdadi Khajeh Asgar, 2010; Najafi Kani et al., 2015): Entrepreneurs and successful people usually have special habits that distinguish them from ordinary people. One of the characteristic attributes of successful entrepreneurs is creativity. Creativity
and innovation are two qualities for which various definitions and achievement mechanism have been proposed. An entrepreneur, apart from awareness of ongoing affairs, should be able to deal with new issues by integrating new solutions with those already in practice. Most entrepreneurs are small business owners, but not all owners of small businesses are entrepreneurs. Entrepreneurs are creative and innovative, aspiring to find a means of generating revenues that largely matches their enthusiasm. Schumpeter (1934) introduced entrepreneurship as an economic development engine. In his opinion, entrepreneurship is a set of innovations that breathe fresh air into economy and contribute to its growth and success. He believes that the role of entrepreneurs is to reallocate resources by disturbing current equilibrium. Baumol (1996), much like Schumpeter, examines entrepreneurship from the perspective of innovation. According to him, an entrepreneur employs innovative ways of finding solutions that will build up assets, power and credibility.

(B) Risk-taking, up to datedness (Rezvani, Najarzadeh, 2008; Karimzadeh, Nikjou, Sadr Mosavi & Kouhestani, 2014; Hosseini & Lashgarara, 2014).

Any activity may face accidents and risks in its implementation phase, which can hamper the achievement of desired expectations. Therefore, the probability that precludes the accomplishment of desired returns is called risk. It refers to an unpleasant situation that may affect a person or organization and wreak havocs on their performance. This new situation can be a harmful event, a deterring factor or risk, chaos or instability in the course of activities. One of the qualities of the entrepreneurs is risk taking. Many people assume that risk taking is tantamount to unreasonable exposure to risk, while entrepreneurs tend to take moderate and accountable risks. Most people have a tendency to exaggerate when it comes to taking risk and facing dangers. Conservative people usually take minor risks with slight but reliable returns, perhaps because it is less likely that they face any problem that bring on people’s criticism. Entrepreneurs, however, take the middle ground, meaning that they prefer a moderate risk as they believe their efforts and abilities will have a bearing on the outcomes of the work. Unlike what many people may think, entrepreneurs tend to take moderate and calculated risks rather than extreme risks (Karimzade et al., 2012). In general, not all types of risk are welcomed by entrepreneurs, and they tend to assume reasonable, and calculated risks. That is, entrepreneurs not only follow ideas as occupational opportunities, but also assess the risks associated with these ideas. Risks manifest in form of chances or uncertainties. When there is a high risk, it means that the possibility of returns is uncertain. In other words, the chance of failure is equal to that of success. When entrepreneurs calculate the risks of a job, they consider the probability of success or failure, which allow them to decide whether to proceed or to abandon that line of activity. When they decide to continue without considering the possibility of failure, they are taking risks (Hosseini & Lashgarara, 2014).

Because of the unpredictable risks of entrepreneurship, only daring people who are prepared to endure struggles can become entrepreneurs. Most people are afraid of confronting risks and dangers, so they refuse to put themselves at the mercy of any risk. They are less likely to participate in activities that are not destined for success. Unlike them, entrepreneurs accept dangers and focus their attention on the chance of success. They are taking risks. Unlike them, entrepreneurs accept dangers and focus their attention on the chance of success. They are prepared to endure struggles can become entrepreneurs. Most people are afraid of confronting risks and dangers, so they refuse to put themselves at the mercy of any risk. They are less likely to participate in activities that are not destined for success. Unlike them, entrepreneurs accept dangers and focus their attention on the chance of success.

C) Foresight:
One of the major factors that determine the life of a business and its possibility of success is foresight. It refers to broadening horizons and seeing behind the scenes. It implies looking at the future in the present time, often in a bid to prepare for tackling possible future problems. When everyone was busy upgrading their laptops and personal computers, Steve Jobs contemplated the idea of making tablets that were much lighter and portable. This future-oriented outlook and foresight were a major drive behind Apple's success. He was able to understand the users and anticipate their needs. While others dwelled in the present day, he was striving to fathom how markets and social trends affect the world around them.
Resourcefulness and far-sightedness are characteristics of entrepreneurs. These attributes not only eliminate the ambiguities of the future but also assist decision makings in the future. You may have heard the story of ant and grasshopper. Nobody wants to be in the grasshopper’s shoe when winter comes. Visionary people have a clearer picture of issues, behaviors, reactions and events. An important point to be noted with respect to vision is practicing moderation. Oftentimes, hesitations originating from the fear of the future will be costly for you. Instead of portraying the future, most people prefer to live in their dreams. Surely, being a visionary is completely different from being a dreamer. A successful entrepreneur knows how to look at the future of his business. Hence, try to remain vigilant and practice farsightedness in moderation. Such a vision of future makes people active in the sense that they can determine the path of their life. A visionary person leads a goal-oriented and sensible. Rather than merely responding to the events of life, they make decisions in compliance with their goals and wishes. (Rhisiart & Jones, 2016).

D) Dignity: The social status of a person can facilitate the process of entrepreneurship (especially collective entrepreneurship). One’s ability to persuade people into following you and taking advantage of their assistance is mainly determined by your position (Toosi, Jamshidi & Taghdisi, 2014).

E) Motivation and diligence (Faraji Sabokbar et al., 2010, Saberian & Sabourian, 2014).

All actions in life are performed to satisfy a demand or need. Such needs can be primary (food) or secondary (respect). However, every need and desire gives rise to a tendency to address that need. This propensity or perseverance to achieve the desired outcomes is called motivation (Najafi, 1999). The importance of motivation becomes more evident when we learn that rural entrepreneurs have managed to dismantle barriers and pave the way for their entrepreneurship, in spite of the limitations facing rural entrepreneurship.

2-5- Political Factors

Entrepreneurship is impossible without considering the role of various organizations and institutions, because any form of activity needs arrangement and organization at various national and local levels. The government, organizations and the related bodies are among these institutions. On the other hand, local non-governmental organizations that are formed spontaneously have an enormous influence on the growth and expansion of entrepreneurial activities (Lordkipanidze, 2005)

Political-legal environment, concentration on motivated people, capital and skills necessary to set up a business, and the involvement of governments in spurring and developing an appropriate entrepreneurial milieu is of utmost importance of this group. One of the prerequisites for self-employment and entrepreneurship in the country is the formulation of a specific political framework and government support in this area. The lack of a definite and transparent policy of entrepreneurship and self-employment has posed challenges to the development of this sector. Moreover, it has deteriorated the productivity of self-employed businesses and small and medium-sized enterprises. For instance, a significant proportion of entrepreneurs struggle with income insecurity, which affects the extent of their access to public and private social services.

Major policies are divided into three categories of tax, monetary, and regulatory policies (regulatory laws). Tax policies are concerned with the taxing mechanism. If the tax received from entrepreneurs is lower than the standard tax rate, it can act as an incentive for them. The monetary policies are related to the provision of capital and interest rates. With the growth of entrepreneurship, there has been an increasing need for capital, which is in turn influenced by interest rate. In small-sized enterprises that require a relatively lower capital, the effect of interest rate is not as significant. The regulatory policies are also the same as administrative costs, formalities and regulations related to the start of a business (Lordkipanidze, 2005).

Second, the aspects of entrepreneurship development that discusses and analyzes the development of legal policies and procedures in areas with ecotourism potential embrace all inhuman factors such as structure, policies, laws, and the like that lay the ground for the development of entrepreneurship. In this respect, the two major factors of government policies supporting entrepreneurship and legal arrangements for entrepreneurship can be mentioned. They can be divided into four categories.

Third, the entrepreneurship development facet that explores the individual and social characteristics of entrepreneurs.
### Table 2. Factors Involved in the Creation of Rural Entrepreneurship Opportunities

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Index</th>
<th>Item</th>
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<tbody>
<tr>
<td><strong>Financial</strong></td>
<td>Sufficient capital, the <strong>Financial</strong> financial ability to set up a business, financial independence, income satisfaction, job security and stability, family financial support. Satisfaction with housing, and satisfaction with the business environment. (Mac &amp; Markley, 2006; Rijkers &amp; Costa, 2012; Nasrullahi Vastai and Jalilvand, 2014; Taghdisi, A., Hashemi, S., &amp; Hashemi, 2015)</td>
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<tr>
<td>**Economic support and **</td>
<td>Financial support of government agencies and bodies, granting business loans, special facilities and ex gratia loans to deprived areas, awareness of market rates, government support for the expansion of NGOs in the field of entrepreneurship, support of the Islamic Councils and governor of a rural district from investors, access to financial support services, alleviation of barriers to banking facilities, granting subsidies to entrepreneurship investors (Mac and Markley, 2006; Movahedi &amp; Yaghoubi Farani, 2012; Taghdisi et al., 2015)</td>
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<td><strong>access to</strong></td>
<td>Encouraging local investors to create employment opportunities, aiding young people to create new businesses, the extent of access to capital and credits, motivating and enabling local investors to provide employment opportunities, the private investment for creating different businesses in the village, the private sector cooperation for investment in new businesses (Movahedi &amp; Yaghoubi Farani, 2012; Taghdisi et al., 2015)</td>
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<tr>
<td><strong>Investment</strong></td>
<td>Familiarity with business laws, recognition of appropriate conditions for setting up businesses, access to the production factors in the village, job diversification in the village, the possibility of creating new businesses, encouraging and using young people to create new businesses, increasing investment in production units, access to modern machinery and equipment, the availability of marketable and economic data and statistics, the development of process activities, the level of satisfaction with income, housing, business environment and telecommunication services (Statopoulos et al., 2004, Movahedi &amp; Yaghoubi Farani, Soleimani &amp; Movahedi, 2014; Taghdisi et al., 2015)</td>
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<tr>
<td><strong>Others</strong></td>
<td>A sense of belonging to the place and interest in hometowns and local people, activity of NGOs, local community readiness for new activities, communication and widespread social network with villagers, positive group work, the provision of a peaceful environment, establishment of various networks of rural cooperatives, the establishment of local production networks at the rural level, traditional community assumptions, incentives and motivations, positive attitudes, a dynamic and an active environment, the position and value of entrepreneurs, relationships and the scale of social networks with villagers, membership in secondary groups, the role of promoters in marketing new businesses (Kamizadeh et al., 2014; Taghdisi et al., 2015; Movahedi &amp; Yaghoubi Farani, 2012; Faraji Sabokbar et al., 2010; Yaghoubi Farani et al., 2014).</td>
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<td><strong>Social</strong></td>
<td>Participation in the identification of creative and innovative people, the desire to take part in investment, the extent of members’ participation in decision making of cooperatives, willingness to participate in cooperative and group activities, encouraging villagers to apply new ideas, participation of the board of trustees and local rural organizations, participation in conducting a survey of demands for the sale of products, the role of village council and Islamic Counsel of villages in promoting entrepreneurship (Taghdisi et al., 2015; Hosseini &amp; Lashgarara, 2014; Movahedi &amp; Yaghoubi Farani et al., 2014).</td>
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<td><strong>Participation</strong></td>
<td>Promoting the culture of entrepreneurship in the village through the traditional media of the village, the level of general literacy in the region, the male-dominated culture of villages, strengthening rural women’s connections with organizations in charge of entrepreneurship, the status of relationship with different individuals and organizations, men’s belief in women’s ability, the values and beliefs of the society, people's beliefs towards out-of-home activities, the positive attitude towards entrepreneurship, the rules and regulations of cooperatives, customs and traditions of families, awareness of goals, philosophy and the nature of cooperatives, a suitable cultural context for promoting the spirit of cooperation, passion for undertaking projects and the participation of women and girls in social and economic activities (Heydari Sareban, 2012, Toosi et al., 2014, Rijkers &amp; Costa, 2012, Hosseini &amp; Lashgarara, 2014; Taghdisi et al., 2015).</td>
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<td><strong>Cultural</strong></td>
<td>Holding training classes, training entrepreneurship skills, training employees and board of directors in cooperatives, training the nature of goals, function and characteristics of cooperative, the suitability of the setting and educational facilities, access to schools at various levels, an entrepreneurship-based education system to promote knowledge, awareness, attitudes, etc., the formulation of a curriculum tailored to the labor market, an educational program to strengthen the culture of entrepreneurship (Movahedi and...</td>
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Table 1. Identification and prioritization of factors associated with entrepreneurship promotional activities

<table>
<thead>
<tr>
<th>Dimension</th>
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<th>Item</th>
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<tr>
<td>Counseling</td>
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<td>Offering technical and specialized consultations to the cooperative members in relation to entrepreneurship, establishing entrepreneurship promotion centers for counseling members, using various counseling and support services (Carter, 1998; Movahedi and Yaghoubi Farani, 2014; Hosseini &amp; Lashgarara, 2014; Sojasi Qeidari et al., 2014; Faraji Sabokbar et al., 2010; Karimzadeh et al., 2014; Kurd &amp; Abtin, 2013).</td>
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<tr>
<td>Experiences</td>
<td></td>
<td>Contact with successful and entrepreneurial individuals, holding meetings with entrepreneurs to discuss problems, using elite entrepreneurs to teach entrepreneurship skills, using media and publications to promote entrepreneurial experiences, visiting prominent cooperatives, fostering the relationship with successful entrepreneurs, using personal experiences and experiences of others along with other incentive models, stressing family encouragement, using technical recommendations of experts and promoters, learning about new markets (Faraji Sabokbar et al., 2010; Najafi Kani et al., 2015; Stathopoulou et al., 2004; Avramenko and Silver, 2010; Goldoost et al., 2014; Hosseini &amp; Lashgarara, 2014).</td>
</tr>
<tr>
<td>Access</td>
<td></td>
<td>An environment that helps develop and commercialize entrepreneurial ideas, expansion of transportation, providing suitable infrastructure and facilities, providing appropriate telecommunication, access to proper transportation for transferring goods to the markets and sales outlets, preparing the ground for development of industrial-related activities, the existence of local markets in the villages, the availability of technology for the village (e.g., IT and ICT in the villages), the existence of banks and credit institutions that offer loans and financial credits in the village, the presence of government agencies and organizations in the village, the activity of local organizations in the village, the availability of infrastructure related to the business environment, the implementation of basic and infrastructural projects in the vicinity of tourism attractions, market access, the extent of using e-business (Goldoost et al., 2014; Rezvani and Najarzadeh, 2008; Karimzadeh et al., 2014; Najafi Kani et al., 2015; Faraji Sabokbar et al., 2010; Movahedi and Yaghoubi Farani, 2012; Yaghoubi Farani, 2014; Hosseini &amp; Lashgarara, 2014; Taghdisi et al., 2015).</td>
</tr>
<tr>
<td>Distribution</td>
<td></td>
<td>The optimal distribution of resources in the rural districts, optimal distribution of public services at the villages level.</td>
</tr>
<tr>
<td>Individual</td>
<td></td>
<td>The use of new inputs in agriculture, application of modern agricultural principles, strong incentives to modernize production tools, facilitate activities and diversify products, extensive diversification of rural activities, losing patience in situations where there is no clear answer, contemplating things that no one has tried before, enjoying the discussion of diverse ideas, diversification of rural activities, brainstorming new ideas without exploiting the benefits, doing research and satisfying needs by putting a lot of efforts, offering good ideas, planning to improve activity, offering new products or services, providing new services, creating new structures and infrastructure, presenting novel methods, improving job prospects for children, using new opportunities (Faraji Sabokbar et al., 2010; Najafi Kani et al., 2015; Saberian and Sabourian, 2014; Nasrallah and Jalilvand, 2014; Sojasi Qidari et al., 2014).</td>
</tr>
<tr>
<td>Creativity and Innovation</td>
<td></td>
<td>Taking risk to obtain exciting results, enjoying risk, taking risks to promote the situation, knowing that setting up a new business is worth the risk, taking risk to obtain greater profits, taking risks despite the failure probability, taking reasonable risks, huge investment, trying untested methods, situation analysis (Saberi and Sabourian, 2014; Heidari Sareban, 2012; Nasrullahi Vastai and Jalilvand, 2014; Toosi et al., 2014).</td>
</tr>
<tr>
<td>Risk-Taking</td>
<td></td>
<td>Motivation for changing the quality of life, monitoring changes in the surrounding villages and the urban areas, caring about the future of children and families, paying attention to resource use constraints, appropriate funding for activities, perseverance and persistence (Faraji Sabokbar et al., 2010; Najafi Kani et al., 2015; Saberian and Sabourian, 2014; Nasrallah and Jalilvand, 2014; Sojasi Qidari et al., 2014).</td>
</tr>
<tr>
<td>Foresight</td>
<td></td>
<td>Reaching success through hard work not luck, making changes via hard work, knowing that a good job is the one with specific location, type of work and defined procedure, knowing that one can achieve anything through hard work, continuing work despite numerous obstacles, knowing the importance of working late hours, leadership, consultation, respect, welcoming of comments (Sabirian &amp; Sabourian, 2014).</td>
</tr>
<tr>
<td>Diligence</td>
<td></td>
<td>Leadership, consultation, respect, acceptance of comments (Toosi et al., 2014).</td>
</tr>
<tr>
<td>Dignity</td>
<td></td>
<td>Watching TV, reading the newspapers, following latest news, familiarity with the Internet and how to tap into its potentials (Rezvani, &amp; Najarzadeh, 2008; Karimzadeh et al., 2014; Hosseini &amp; Lashgarara, 2014).</td>
</tr>
</tbody>
</table>
The issue of entrepreneurship development and parameters influencing the creation of entrepreneurial opportunities in diverse fields of study have been the subject of extensive research. Different experts have attempted to explain factors influencing entrepreneurship development in keeping with their attitudes and ideological backgrounds. Despite the considerable overlap between indicators and factors of rural entrepreneurship from the viewpoint of experts, there are major differences in the manner of integrating and organizing these indicators in the process of entrepreneurship along with the comprehensiveness of the proposed models. However, to provide appropriate indicators in rural areas, extensive studies should be undertaken to identify such criteria. Then, common indicators can be selected and presented in fitting with the conditions of the studied areas. Therefore, in this research, following a review of articles, theses and researches in Iran and other countries, the factors related to the subject matter are presented as follows.

Deller, Kures & Conroy (2019), using data derived from rural areas of the United States, examined the effect of immigrant age on rural entrepreneurship. Based on their results, young and old immigrants had the greatest influence on the booming of rural commerce.

According to López, Cazorla & Panta (2019), entrepreneurial initiatives influencing rural areas are a function of agricultural development or structural policies at the European Union. However, there is a lack of rural approaches focused on entrepreneurship, especially in sparsely populated rural areas in the European Union. The purpose of this article was to expand the empirical literature by providing a real experience.

This article discussed the design and implementation of a rural entrepreneurship strategy in a sparsely populated area with the participation of civil society. According to the results, rural entrepreneurship can be strengthened by strategies designed and evaluated by stakeholders from the basic organizational levels.

De Rosa & McElwee (2015) addressed this issue in their analysis of rural development policies (RDPs) rooted in entrepreneurial behaviors undertaken by family farms in the Lazio, Italia, presenting political factors as a determinant of rural entrepreneurship. Korsgaard, Müller & Tanvig (2014) in their article titled "Rural entrepreneurship or entrepreneurship in the rural–between place and space" argue that there are two types of ideas presented in the field of rural entrepreneurship: entrepreneurship in rural areas and rural entrepreneurship. While both ideas contribute to local development, the latter has potential for the optimal use of resources in the rural area, though the relocation of these investments is unlikely, even if is driven by an economic rationale. In a 2014 study entitled "Female entrepreneurship in rural Vietnam: an exploratory study", Nguyen et al. explored the impact of government supporting policies and social and cultural effects on women's entrepreneurship in these areas. The results of this study suggest that government-backed entrepreneurship policies, coupled with private sector interventions, have influenced the villages in Vietnam. However, women in distant rural areas of Vietnam are still held back by social bias, financial constraints and restricted entrepreneurial education opportunities.

Nasrollahi Vosta & Jalilvand (2014) paper examined the impact of social capital on rural women's entrepreneurship. The results of their research revealed the positive and the significant role of social capital on rural women's entrepreneurship. In this context, three factors of social capital (structural, communicative, and cognitive) explain variations in the psychological characteristics of entrepreneurs, including achievement, innovation, self-control, self-confidence, opportunism, autonomy/independence, and risk/uncertainty.

- Kroesen & Darson (2013) elaborated on the concept of capacity using a number of examples.

### Dimension | Index | Item
--- | --- | ---
| | Supportive policies of the government (granting loans, providing infrastructure, education, etc., regional security and politics, policy-making and planning in line with regional potentials, the support of government and organizations, government support for the development of entrepreneurship by non-governmental organizations, existence of entrepreneurship supportive initiatives, governmental insurance and advisory support for entrepreneurship (Movahedi & Yaghoubi Farani et al., 2014; De Rosa et al., 2015; Avramenko & Silver, 2010; Sojasi Qeidari et al., 2014; Karimzadeh et al., 2014).) | Political

(Source: Research Findings, 2018)
They proposed a strategy for promoting rural entrepreneurship among small farmers and professional practitioners through capacity building, reporting that education is the most important factor in rural entrepreneurship. According to their research, the introduction and step-by-step supply of technology at a small scale combined with the learning process and capacity building training, allow small farmers and technical practitioners to raise production, and progressively trigger an economic growth. This step-by-step approach is less dependent on foreign investment or microfinance. Instead, it relies on building capacity, boosting job creation and increasing the lure of life in rural areas.

- **Rijkers and Costa (2012)** in an article entitled “Gender and rural non-farm entrepreneurship” explored the role of gender in entrepreneurship. Based on the results of this paper, women's non-agricultural entrepreneurship is neither correlated with household composition nor academic achievement. With the exception of Indonesia, women's businesses tend to be smaller and less productive. The different productivity level of each worker was determined based on the sector and size. These disparities are not due to differences in capital intensity, improved returns to scale, human capital, or climatic features of domestic investment.

- **Movahedi & Yaghoubi Farani (2012)** introduce the barriers and limitations of women entrepreneurship in rural areas as follows:
  - Population;
  - Rural women's character and behavioral conditions;
  - Family attributes;
  - Skills and knowledge of rural women (education, experience and communication);
  - Cultural and social conditions (community and village);
  - Access to facilities and services for rural women (in the process of setting up, managing and developing business);
  - Legal factors along with financial and economic parameters;
  - Institutional and organizational factors;
  - Geographical and environmental conditions (rural environment).

- **Kalantaridis (2010)** in a paper entitled “In-migration, entrepreneurship and rural–urban interdependencies: The case of East Cleveland, North East England”, argues that immigration can change the conditions of entrepreneurship in areas with strong relationships and ample +impact of developing local opportunity structures is relatively small. In 2010, Avramenko and Silver, in a research entitled " Rural entrepreneurship: expanding the horizons,” proposed entrepreneurial incentive and supportive policies as a factor influencing entrepreneurship.

- **Torimiroa & Dionco-Adetayo (2005)** in an article entitled "Children's participation in entrepreneurship in rural communities” demonstrated that both children and their parents held favorable attitudes toward the participation of children in entrepreneurial activities. The age, level of education, attachment and attitude of children’s parents toward entrepreneurship participation were major factors contributing to the involvement of children along with parents' age, monthly income, and the number of children, among other things.

- **Sara Carter (1998)**, in a paper entitled " Portfolio entrepreneurship in the farm sector: indigenous growth in rural areas?”, contended that personal characteristics and education and were main determinants of entrepreneurship. According to the results of this paper, successful entrepreneurs were distinguished by a set of occupational interests in terms of personal characteristics. They were also likely to be younger and have a degree in agriculture, management, marketing, and finance compared to their peers.

Sojasi Qeidari, Rokn al-Din Eftekhari & Pourtaheri (2014) embarked on developing and validating indicators of ecotourism entrepreneurship development in rural areas. Based on their findings, they asserted that green infrastructure, green technology, biodiversity, geographical diversity, ecotourism demand, competitiveness in ecotourism, proximity to markets, access to bank credits, high-risk investments, encouraging entrepreneurial culture, tax support and entrepreneurial insurance, ecotourism support of entrepreneurship, legal basis for ecotourism entrepreneurship, transparency of ecotourism entrepreneurship laws, expertise in ecotourism entrepreneurship, teaching ecotourism entrepreneurship skills, experience, intention and motivation for promoting ecotourism entrepreneurship, feasibility of ecotourism entrepreneurship, awareness and entrepreneurial creativity, sense of belonging, risk-taking, cooperation and participation and recognition of ecotourism opportunities were among the factors influencing rural entrepreneurship.

According to the results of this research, in which all entrepreneurship development indicators were above average, and among different dimensions, those related to legal policies and procedures were more important than other dimensions of
ecotourism entrepreneurship. Accordingly, the highest weight belonged to the indicators of ecotourism opportunity recognition and the lowest weight to green infrastructure indicator.

Haydari Sareban (2011) prioritized the barriers to women entrepreneurship in Ardebil province. According to the results of his research, the major obstacles to rural women’s entrepreneurship were socio-cultural, individual, economic and psychological barriers.  

- Kurd & Abtin (2013) studied the key factors of rural entrepreneurship development in Sistan and Baluchestan province. According to their results, variables of empowering women and girls in rural areas and developing information technologies in villages were not significantly correlated with the development of rural entrepreneurship, but the variable of setting up growth centers in rural areas was significantly related to the development of rural entrepreneurship.

- Based on the study of Faraji Sabokbar et al. (2010), explanatory indicators for the assessment of rural entrepreneurship development includes access to education, counseling and experiences, skills and knowledge, access to capital, access to industry, access to physical infrastructure, social environment, innovation and creativity, self-esteem, future planning, production, sales and marketing of products. According to their results, Nazargholi, Aqcheh Ghia and Lachwan villages were ranked first to third, respectively.

Yaghoubi Farani et al. (2014) reported that personality traits, economic status and socio-cultural status of women were significantly correlated with their entrepreneurial level. However, they did not find any significant relationship between family status and entrepreneurial level. Also, based on the results of path analysis, economic status variables, personality traits and socio-cultural status of women had the highest impact on their entrepreneurial level, respectively, accounting for 40% of variations in the level of entrepreneurship.

-Namjouyan Shirazi (2014) stressed the integral role of funds in financing the development of small businesses and the realization of entrepreneurship in rural communities, asserting that establishing rural women’s microfinance funds reinforced rural women’s access to credit resources and enhanced social partnership, confidence and decision-making. Papzan & Gravendi (2014) introduced rural marketing companies as a strategy for entrepreneurship and development of agricultural exploitation systems. The results of this article exhibited strategies that could be used to overcome barriers under the existing conditions and establish rural marketing companies in rural areas of Iran. Given their capacities, these companies can help solve employment problems of agricultural graduates and rural producers to a large extent.

Saberian & Sabouri (2014) analyzed the determinants of rural women entrepreneurship development as a member of Semnan welfare funds. Based on the results, the characteristics of entrepreneurs were assigned to nine categories. Diligence, as the primary factor, explained 14% of the total variance, which indicates the importance of this factor. Other factors in the order of importance were the internal locus of control, risk-taking, financial risk-taking, innovation, ambiguity tolerance, creativity, perseverance, opportunism.

- Yadollahi Farsi & Razavi (2011) reported that human capital and social capital of entrepreneurs were significantly correlated with identified opportunities, the number of exploited opportunities and the sustainability of the business. Also, the results indicated that social network size was significantly correlated with success in entrepreneurship. Entrepreneurial skills and experience have a positive and significant relationship with entrepreneurship success.

The findings of Fazel Beigi & Yavari (2009) showed that policies designed to strengthen the culture of co-operation and cooperative system of a society (including skills and incentives for exploiting opportunities) have a significant effect on improving the level of entrepreneurial activities. In this regard, governments must provide the necessary support from various economic aspects - which are conducive to the advancement of cooperative and entrepreneurial activities. Ultimately, policies should be aimed at promoting investment in rural industries and stimulating people's incentives to invest in the early stages of investment and entrepreneurship.

Rokn al-Din Eftekhari et al. (2014) also explored this issue. The results of the analysis exhibited that from the viewpoint of both study groups (officials and business owners), all four factors (economic, social, institutional and environmental) influenced entrepreneurship development at a significance level of less than 0.05. As far as the effect of each factor on explaining the development of entrepreneurship is concerned, Tukey’s test showed
that in the view of officials and business owners, the economic factor had the largest mean. According to Rokn al-Din Eftekhari et al. (2014), based on the potentials and capacities of the region, the threshold of innovation and creativity in the agricultural sector of rural areas should be revisited to put forth appropriate policies aimed at overcoming constraints and using existing rural and agriculture facilities. The barriers to the development of agricultural entrepreneurship include severe rural poverty and absence of social and economic space, which contribute to the development of agricultural entrepreneurship. The strong points including "sufficient financial capital, familiarity with new domestic markets and understanding the importance of product insurance" are some of the domestic reasons that influence the development of agricultural entrepreneurship in the region. As far as opportunities are concerned, "the establishment of educational, promotional and counseling centers in the domain of agriculture is one of the main external factors to promote agricultural entrepreneurship; On the other hand, the inappropriate spatial distribution of resources, services and industry", which is rooted in the attitudes, policies and laws of urbanization, is one of the external factors that undermine entrepreneurship.

-Goloonost, Allahyari & Abedi (2014) undertook a fuzzy screening review of inhibitors of rural development entrepreneurship training in Guilan province. The results of their study showed that unfamiliarity of provincial authorities with the concept of entrepreneurship, absence of an entrepreneurial education system and the unfamiliarity of rural people with the principles of designing and setting up a new and entrepreneurial businesses have played a major role in the development of rural entrepreneurship in Guilan province. By analyzing the educational factors inhibiting the development of rural entrepreneurship in Guilan province, it will be possible to draw a roadmap for entrepreneurship and to capitalize on entrepreneurial opportunities.

Rezvani & Najzarzadeh (2008) explored this issue in their research. According to their results, 33 percent of villagers were completely familiar, 18 percent familiar, 23 percent slightly familiar and 35 percent unfamiliar with entrepreneurial areas and skills. This situation is more or less the same for all indicators and study variables. In this regard, entrepreneurship training and preparation of the social and economic dimensions of villages to draw young, skilled and trained human resources to rural areas and engagement in agricultural activities can be considered as the main strategy for developing and strengthening entrepreneurship in these areas, which consequently leads to sustainable development.

3. Research Methodology

The research method was based on the research onion diagram (Sunders, 2009). Thus, it falls in the category of applied research. For this purpose, a deductive research approach was adopted. We used a mixed research method including descriptive-analytical methods and surveys. The data collection tool was a questionnaire. Also, we used library research and field studies for data collection. According to the above, a summary of research design elements in this study has been shown in accordance with Sunders’ research onions diagram in Fig. 1.

![Figure 1. Research Onion](Source: Sunders et al. 2009)
The statistical population of the study consisted of university experts in the field of rural entrepreneurship, rural entrepreneurs, rural managers and experts. The inclusion criteria were as follows:
1. A minimum bachelor’s degree or its equivalent;
2. At least 10-year experience in rural entrepreneurship;
3. At least 5-years management experience in an organization, foundation, or rural institution (in the case of supervisory elites, at least 5-year experience as the faculty member of universities or research centers).

The face and content validity of the research questionnaire was evaluated based on the comments of professors and experts working in the field of rural management and the components extracted from previous research.

In this research, we examined the factors influencing the establishment of entrepreneurial opportunities, their internal relationships and priorities. To investigate the role of factors involved in the creation of entrepreneurial opportunities, we first identified underlying factors contributing to the creation of entrepreneurial opportunities by a review of previous studies (library research). Then, to evaluate and prioritize the proposed indicators and components, an integrated approach (ANP-DEMATEL) was used. Using DIMATEL method, the internal relationships between dimensions were analyzed with respect to the effect of these dimensions on each other. The output of this process has been shown in the relation-impact diagram. After determining the internal relationships between the factors, they should be weighed according to the objectives. This is conducted through paired comparisons and designing a relevant questionnaire. In the next step, to determine the priorities of the indicators, we used the network analysis method (given the relationship between factors and the structure of the matrix network), by constructing a super matrix derived from combining paired comparison and DIMATEL method, which specified the final weight of dimensions and their prioritization.

Hence, the questionnaire distributed among the experts was made up of two sections. The first part comprised paired comparisons to determine the degree of importance of model components relative to each other, and the second part evaluated the impact of existing dimensions that were interacting with each other. Data were obtained directly from 30 specialists and experts. The reliability of the paired comparison questionnaire was confirmed through the inconsistency index and reliability of the DIMATEL questionnaire was endorsed by the experts. For calculating and analyzing data at different stages, Super Decision and Excel software were used.

4. **Research Findings**

After identifying the most important factors in creating rural entrepreneurship opportunities, in the first step the relative weights of factors were computed. This was conducted through paired comparisons of the factors based on the objective of the problem. The relative weights of the factors were determined based on the results obtained from the Super Decision software output. In the next step, using the DIMATEL method, the internal relationships between factors were determined based on the effect of these factors on each other. Considering the main objective of this research, the direct, indirect and overall impact coefficients for all factors influencing the creation of rural entrepreneurship opportunities are calculated based on the opinion of the selected experts. The strength of relations matrix based on the experts' opinions is shown in Table 3. It was obtained from determining the mean scores of experts. In this matrix, the input of each intersection indicates the influence of element in a row over other elements in that column (for example, the effect of individual dimension on the social-cultural dimension). A value of zero at each intersection indicates the lack of any interaction between dimensions.

Table 3. Average views of experts (matrix of the strength of system relationships based on experts’ opinions)

<table>
<thead>
<tr>
<th></th>
<th>Economic</th>
<th>Sociocultural</th>
<th>Infrastructure</th>
<th>Individual</th>
<th>Political</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic</td>
<td>0</td>
<td>3</td>
<td>3.4</td>
<td>2.4</td>
<td>2.2</td>
</tr>
<tr>
<td>Sociocultural</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>3</td>
<td>1.2</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>2.8</td>
<td>2</td>
<td>0</td>
<td>1.6</td>
<td>0.4</td>
</tr>
<tr>
<td>Individual</td>
<td>1.8</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Political</td>
<td>1.8</td>
<td>1</td>
<td>1</td>
<td>0.2</td>
<td>0</td>
</tr>
</tbody>
</table>
After performing the calculations, the matrix of general relations was plotted. Based on experts’ views, average score was considered as the threshold level. In this way, values below 4.430 were removed. Finally, in Table (4) and (5), the matrix of relative strength for the direct relations, the sum of the row (R) and column (C), and the relation-impact diagrams of dimensions based on the results are shown.

**Table 4. Matrix of relative strength for direct relations of dimensions**
(Source: Research findings, 2018)

<table>
<thead>
<tr>
<th></th>
<th>Economic</th>
<th>Sociocultural</th>
<th>Infrastructure</th>
<th>Individual</th>
<th>Political</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic</td>
<td>5.055</td>
<td>7.885</td>
<td>6.738</td>
<td>6.723</td>
<td>4.927</td>
</tr>
<tr>
<td>Socio-cultural</td>
<td>5.202</td>
<td>0</td>
<td>0</td>
<td>5.843</td>
<td>0</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>5.883</td>
<td>5.758</td>
<td>0</td>
<td>4.947</td>
<td>0</td>
</tr>
<tr>
<td>Individual</td>
<td>4.919</td>
<td>6.206</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Political</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Table 5- Calculating the sum of the row (R) and column (C), Determining the strength of relations and the effect of dimensions**
(Source: Research findings, 2018)

<table>
<thead>
<tr>
<th></th>
<th>Political</th>
<th>Individual</th>
<th>Sociocultural</th>
<th>Economic</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>0</td>
<td>11.125</td>
<td>16.589</td>
<td>11.045</td>
</tr>
<tr>
<td>R+C (relations)</td>
<td>4.927</td>
<td>28.639</td>
<td>23.328</td>
<td>30.895</td>
</tr>
<tr>
<td>R-C (impact)</td>
<td>-4.927</td>
<td>-6.387</td>
<td>9.850</td>
<td>-8.805</td>
</tr>
</tbody>
</table>

The impact-relation map (IRM) of DEMATEL is depicted in Fig. 2. This chart offers a graphical representation of the relationships between the factors influencing the creation of rural entrepreneurship opportunities. Based on the values of (R-C) in the vertical axis of the graph, it can be contended that the economic and infrastructural factors fall in the group of causes (with a positive R-C) and individual, sociocultural, and political factors in the group of effects (with a negative R-C). On the other hand, the economic factor (with the highest R+C value in the horizontal axis of the graph) has the highest interaction or relation, while the political factor reveals the least interaction with other factors.

![Figure 2- Impact-relation map of factors influencing the creation of rural entrepreneurship opportunities](Image)

(Source: Research findings, 2018)

After normalization, the matrix of general relations obtained from the DEMATEL method were used in the super matrix of the problem structure. Finally, the weighted super matrix is multiplied by itself.
until its permanent distribution becomes convergent. This is done by the Super Decision software. According to the final matrix, we can extract the weight of the dimensions. As shown in Table 6, the economic and political factors have the highest and lowest priorities, respectively.

### Table 6. Prioritization of the factors influencing the creation of rural entrepreneurship opportunities
(Source: Research findings, 2018)

<table>
<thead>
<tr>
<th>Indices</th>
<th>Normalized weight</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic</td>
<td>0.2787</td>
<td>1</td>
</tr>
<tr>
<td>Socio-cultural</td>
<td>0.2019</td>
<td>3</td>
</tr>
<tr>
<td>Infrastructural</td>
<td>0.2028</td>
<td>2</td>
</tr>
<tr>
<td>Individual</td>
<td>0.1912</td>
<td>4</td>
</tr>
<tr>
<td>Political</td>
<td>0.1253</td>
<td>5</td>
</tr>
</tbody>
</table>

As can be seen, the factors obtained from a review of literature were prioritized using an integrated analytic network process (ANP) and DEMATEL in terms of importance. According to the results, the economic factor has the highest importance followed by infrastructural, socio-cultural and individual factors (with a slight weight difference). The political component with a value of 0.1253 not only has the lowest importance, but also is drastically different from other factors in terms of weight.

### 5. Discussion and Conclusion

The main goal of this research was to identify and prioritize the factors influencing the creation of rural entrepreneurship opportunities. In order to achieve this goal, given the relationship between these factors, an integrated analytic network process (ANP) and DEMATEL (DEMATEL - ANP) was adopted. The calculations and analyses of data at different stages were performed using Super Decision and Excel software. Based on the final super matrix, the economic factor (weight =0.2787) and the political factor (weight= 1.0253) had the highest and lowest priority, respectively. Hence, based on the results, the most important factor in bolstering entrepreneurial opportunities is the economic factor. However, since the economic conditions of villages in Iran is not favorable, the following strategies are recommended to improve the economic situation in rural areas:

- Given the low level of savings and capital in rural areas, the support of state institutions, the provision of interest-free or low-interest loans by banks and removing unnecessary bureaucracies could be helpful to small businesses.
- Considering the small financial support of villagers, the establishment of a fiscal support and insurance fund to reinforce rural entrepreneurs can help alleviate their concerns.

As can be seen, the factors obtained from a review of literature were prioritized using an integrated analytic network process (ANP) and DEMATEL in terms of importance. According to the results, the economic factor has the highest importance followed by infrastructural, socio-cultural and individual factors (with a slight weight difference). The political component with a value of 0.1253 not only has the lowest importance, but also is drastically different from other factors in terms of weight.

- Development of employment in villages through nurturing a cooperative and entrepreneurship environment and creation of entrepreneurship parks in cities and other regions along with the support of local graduates for setting up rural businesses.

Reinforcing entrepreneurship in the agricultural sector will not be attainable without increasing the profits of investment in agriculture. This growth of profits also requires reforming the pricing system, fostering price support and allocating agricultural subsidies.

- Drafting the employment development and agricultural entrepreneurship document;
- Identifying and introducing new agricultural businesses in the world, especially in service industries
- Facilitating access to loans and banking services for all farmers;
- Establishing institutions that are directly related to agricultural entrepreneurship in the region;
- Eliminating unnecessary official bureaucracies by establishing links between different levels of agricultural development in the region;
- Supporting the cooperation of the agricultural sector and local organizations (cooperatives and enterprises, etc.) in the region;
- Designing an appropriate institutional system and supporting entrepreneurial companies in the agricultural NGOs in the region;
- Implementing and introducing successful entrepreneurial farmers.
- Developing strategic plans for the adoption of technology and new methods of production in agriculture.
- Given the shortage of water in the villages, modification of the cultivation models and
movement from the agricultural livelihood to industrial and economic agriculture is proposed.

- Expanding the cultivation of greenhouse crops, poultry farms and livestock breeding using the government support
- Developing small and early-yielding industries as well as processing industries
- Governmental support for the development of handicrafts such as rug weaving considering that many villagers are skilled in this industry.
- The development of processing and packaging industries of agricultural products is recommended.
- The obscurity of many investment opportunities in many villages, especially in the tourism or crafts sector, requires investors to identify the potentials and opportunities in the village. Attempts should be made to invite and encourage investors bring their investment to villages through advertising, so that essential capitals and investments are flown to rural areas through. In this regard, financial incentives and tax cuts can be a highly motivating factor.
- Entrepreneurship training, especially entrepreneurship in the field of tourism, especially in tourist destination villages.

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شناسایی و اولویت‌بندی شاخص‌های مؤثر بر ایجاد فرصت‌های کارآفرینی روستایی در ایران

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چکیده می‌سوت

امروزه توجه روستایی به ایجاد و ایجاد روستایی به ایجاد فرصت‌های کارآفرینی روستایی کم از کمتر است. کارآفرینی روستایی یک عملکرد نیاز به ایجاد فرصت‌های کارآفرینی روستایی انتخاب می‌گردد. برای ایجاد کسب و کار روستایی، باید از برنامه‌آمیزی اقتصادی، سیاست‌های جغرافیایی و انرژی برای ایجاد فرصت‌های کارآفرینی روستایی شناسایی و تبیین مولفه‌های تاثیرگذار و اولویت‌بندی و ارائه نوع محیط‌های روستایی کمک به بهبود وضعیت روستاها می‌کند. این امر در حوزه‌های مختلف اجتماعی و اقتصادی و...
مهمات های فردی باعث تأثیر بسزایی در انجام مطالب و بهبود کارها، ایجاد رضایتمندی و افزایش انگیزه در افراد می‌گردد که در نتیجه سیاست‌های میان و شفافیت کارآفرینی و خودپردازشی، تغییراتی ایجاد خواهند رفت. این مطالعه ارائه یک روش جدید برای اجرای آنها را با متشکل نظر و برخی ویژگی‌های در کمپ بکار رفته خودپردازشی و بگردان نیازهای به ارقامی کمک‌های می‌دهد.

روش تحقیق

همان‌طور که پیش‌تر اشاره گردید که در روزگار اقتصادی، با توجه به وضعیت فعلی کشور و به‌واسطه اطمینان فردی، کارآفرینان می‌پتیشن کنند. این ضرورت به‌طور کلی در روزگار فعلی، هر چه بزرگتر و پایدارتر باشد، باید با وجود این ضرورت های اقتصادی، از این کمک‌های به‌پردازشی و به‌همان‌طور که پیش‌تر در جوامع انجام شده است، تحقیقات مناسب انجام شود. از این رو، برای پژوهش‌های این کار، مضامینی وجود دارد.

کلمات کلیدی: فرصت‌های کارآفرینی، فرصت‌های روستایی، عوامل موثر، روش تکنیکی تحلیل شبکه‌ای-ای-وی-سی-آ-ام-آ

بحث و نتیجه‌گیری

نتایج بانگ‌انست که با توجه به نحوه نمودار رابطه‌تایی، عوامل اقتصادی و رژیم‌سنجی‌های این کار، زیرساخت‌های روستایی و ایجاد اجتماعی، تفاوت‌های فرهنگی و سیاسی در گروه‌های فارغ‌الفرهنگی بسیاری از طرف عوامل اقتصادی بیشترین تأثیر را بر رابطه و عامل سیاسی کمک‌های موثر باعث فرآیند کارآفرینی روستایی می‌گردد.

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