

## The Analysis of the Ecosystem Capacity of Semirom County in the direction of Return Migration Planning

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### Abstract

**Purpose-** Return migration acts as a driving force of development and a key incentive of prosperity in rural areas by fulfilling their potentials. Rapid population displacement in developing countries including Iran, reveals the necessity of return migration planning. Semirom is a county in Isfahan province with the highest rate of emigration based on the 2011 Census enjoying sufficient potentials to change this trend. The overall purpose of this study is to analyze the ecosystem capacity of Semirom in order to develop a return migration planning.

**Design/methodology/approach-** The research method is descriptive-analytical. As such, this study can be categorized as an applied research. The environmental, social, economic, and managerial aspects are hereby considered. The questionnaire of Semirom situation assessment was analyzed using inferential statistics (t-test) by SPSS. Content analysis was conducted by interviewing officials using Atlas.ti software. Internal and external factors evaluation matrix and SOAR model were used to offer strategies. In the end, adaptive strategic alternatives are prioritized using the QSPM planning approach and policies for the realization of the return migration. Statistical population consists of the residents and authorities of Semirom county.

**Findings-** The findings indicate that the most important factors affecting return migration are reinforcement of gardening, related industries and tourism attractions, improving the quality of welfare services, fostering the sense of belonging, and the availability of fertile soil and sufficient irrigation water. Accordingly, the strategy of "appropriate management of tourism and environmental spaces for proper utilization of natural resources" should be given priority. It is also suggested that proper utilization of natural resources and tourism along with the potential of eco-tourism can offer a great opportunity for sustainable employment. This requires efficient management of new approaches and providing a secure environment for investment and entrepreneurship. In other words, considering the potentials of tourism will improve the quality of amenities, infrastructure services and employment, which in turn can boost their quality of local life, and their willingness to stay permanently in their rural residence, which ultimately encourages immigrants to return to their homeland.

**Key words-** Migration, Return migration, Ecosystem, Semirom County.

**Paper type-** Scientific & Research.

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## 1. Introduction

As a global phenomenon, migration describes international movements inside and outside of a country. In most developing countries, such movements are chiefly domestic, which involves an estimated number of 763 million people worldwide (World Economic Forum, 2017). In today's world, migration as a means of protecting livelihoods or diversifying resources has been on rise (Nzima, Duma & Moyo, 2016). In the meanwhile, rural poverty influences the rapid growth of urbanization and migration problems (Mukhtar, Zhong, Tian, Razzaq, Naseer & Hina, 2018). In the 1990s, a new trend of population displacement to non-urban areas emerged in the United States picking up an astonishing pace over time (Beale, 1997). In Iran, migration, which is generally unidirectional with emigrated ruralers having no intention of returning to their homelands, has changed over the past decade. For the first time in the history of Iran, according to 2011 Census, the population migrating from the city to the rural areas outnumbered those leaving rural areas for cities by 100,000 people, which is indicative of a return migration trend (Mirfallah Nasiri, Delazimi, F., & Sabaghi, 2016). In this regard, Semirom with a net migration of -3670 and -4003 people had the highest rate of immigration in Isfahan province in 2016 and 2011, respectively (Isfahan Management and Planning Organization, 2018).

Rural-urban migration is prompted by various social, economic, political, cultural, and environmental factors, with the prospect of finding a job serving as a key parameter (Lohnert, 2017). Informed by factors such as the low agricultural productivity, lack of knowledge and professional skills, structural change of economy, underdeveloped rural living standards, and absence of a safety network and rural livelihood support programs, local resident abandon their indigenous homelands in the hope of earning higher incomes in cities to tackle these problems. However, the rapid growth of the urban population is not compatible with infrastructure and utilities. In addition, the unsuccessful enforcement of labor laws and affordable health regulations have made migrants vulnerable in migration destinations (Mukhtar et al., 2018, p. 2). The city capacity depends on the strength and

responsiveness of their leadership and management, and the flexibility and coherence of immigration policies in place. Migration policy will have a major impact on economic growth (World Economic Forum, 2017). Sustainability is also a desirable goal and an ongoing process being rooted in the balance between environmental, economic, and social development (Shen et al., 2013). Therefore, special attention should be dedicated to rural development planning for migration control (Mukhtar et al., 2018). A key step of development in each country and region is identifying available resources and potentials while formulating systematic plans and programs to fulfill such potentials, which is a major requirement of sustainable development (Jafari, 2016). Therefore, it is necessary to address the issue of return migration as a solution to the problems of rural emigration. Considering the attractiveness and ecosystem potential of Semirom, continued emigration will depopulate one of the most wonderful cities of Isfahan and its inhabitants which may end up living in informal settlements and ghettos if they fail to assimilate into the cities.

By designing a return migration planning model in Semirom, this town can be transformed into a sustainable place that promotes the welfare of its local residents by identifying and exploiting its indigenous capabilities. Moreover, it can help alleviate some of Isfahan's urban population growth problems. Accordingly, this research is designed to achieve the following goals:

- 1- Identifying the ecosystem potential of Semirom
- 2- Investigating the factors affecting return migration in Semirom
- 3- Developing a desirable planning model for the fulfillment of return migration in Semirom

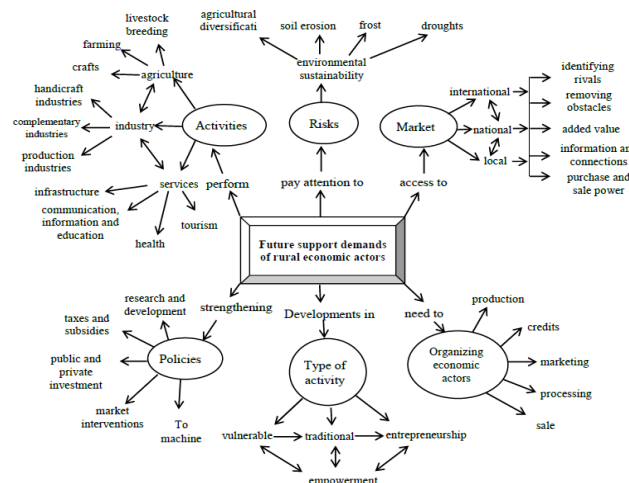
## 2. Research Theoretical Literature

### 2.1. Concepts

Return migration is defined as "a situation where migrants return to their country of origin after spending a long time abroad (destination)" (Kunuroglu, Van de Vijver & Yagmur, 2016). This phenomenon "is rooted in the growing appeal of the rural areas due to the development of income generating activities such as livestock breeding or agriculture, retirement, and sometimes the predicaments of urban life" (Okali, Okpara & Olawoye, 2001). It is a "reaction to economic, social, and family factors" (Wang, 2004). It also

offers deep insights into altered relationships between individuals, communities, and their environmental environments over time (Likens, 1992). Further, it describes a set of biological conditions related to human behavior that are characterized with the social context and climatic conditions of each region (Poursadeghi, 2014). Mayer also argues that capacity building prepares the ground for encouraging and empowering indigenous peoples so that vulnerable people can pick up new skills to promote sustainable development within the local community (Forouzani, Yazdan Panah & Farajam, 2014). In general, the concept of ecosystem capacity refers to the potentials of a certain ecosystem to create a set of sustainable ecosystem-based services for the future (Bordt, 2015). Generally, return migration strategies have been proposed in three approaches: inhibiting migration, shifting migration direction, and decreasing the trend of migration using the Rural Development Programs Policy as a strategy to curb migration (Shojaei, 2013). Rural development involves a goal-oriented process of improving rural life conditions in environmental, social, and economic dimensions while increasing their ability to optimally utilize their resources in

rural areas (Nouri & Norouzi, 2016). The main goals of rural development is to improve efficiency and production, equitable distribution of resources for poverty alleviation, fulfillment of basic human needs, employment and entrepreneurship, effective public participation in decision-making, increased confidence and capacity building along with the development of local institutions (Alikhani, Khodayari, Dehnavi & Verijkazemi, 2013). Also, numerous studies around the world have exhibited that the chief goals of rural development are generation of income and jobs. The main mechanism that can contribute to the achievement of this goal is entrepreneurship, which enhances income, rural participation and confidence. Entrepreneurship requires recognizing the demands of rural economic actors to support them in diverse areas including access to markets (national, international, local), protection against risks (drought, soil erosion, etc.), activities (agriculture, industry, services, tourism), policy strengthening (development, investment, etc.), adjusting the type of activity, and the need to organize economic actors (production, marketing, etc.) (Figure 1).



**Figure 1. A conceptual framework for the needs of rural entrepreneurs**  
 (Source: Rokneddin Eftekhari & Sojasi Ghidari, 2013, p. 101)

**2.2. Theories**

According to Everett S. Lee theory, factors related to the origin and destination of migration have a bearing on the willingness to migrate (Hagen-Zanker, 2008). Thus, in the new economy of labor migration (NELM), return is a logical outcome of a "calculated strategy", which

involves accumulating capital with the intention of making a successful investment in the place of origin (De Haas, Fokkema & Fassi, 2015). Social network theory also sees returned immigrants as people striving to foster a strong relationship with their origin. This increases the likelihood of migration as it diminishes related costs and risks and amplifies the expected returns

(Awumbila, Kofi Teye & Awetori Yaro, 2016). In this context, key elements are friends, family, and the media that ensure a safe migration process for them (Permata & Prasetyo, 2017).

The theory of local sustainable development is also concerned with meeting the daily needs of residents with the utmost reliance on their resources, capacities, values, and internal partnerships. Principles and criteria of local sustainability include identity and vitality, dynamism and adaptability, diversity, accessibility, and local tolerance capacity (Ahadnejad Rushti, Yari Gholi & Ojaklu, 2014).

### 2.3. Approaches

According to Lary Shastad's Human Capital Approach, migrants assess their performance in form of cost-benefit analysis to see whether the benefits of an action outweigh its cost and it yields economic returns (Afarakhteh, Monafi Azar & Velaei, 2016). On the other hand, the rural ecosystem approach integrates design, agriculture, and ecological building, green production, alternative energy, community, and stimulating the community members to place a premium on environmental, social, and physical conditions of their surroundings. It also nurtures robust collaboration at individual and community levels including organizations such as community, local agencies, government agencies, nonprofits organizations, and other stakeholders to achieve a sustainable socio-environmental system (Yulastuti, 2017).

The Sustainable Livelihood Approach (SLA) states that policies, institutions, markets, and processes can also influence the choice of livelihood strategies and poverty eradication. Participation also entails a bottom-up approach (Nzima et al., 2016).

### 2.4 background

The study of Shen, Kylo & Guo (2013) on environmental taxation and urban-rural migration return using Harris and Tadaros' model show that Chinese government, by increasing taxes on pollutions generated by urban industrial units, raised the cost of production and cut production and wages, which in turn accelerated migration urban-rural migration. On the other hand, Cromartie, Reichert & Arthun. (2015) in their research on factors influencing the return of former residents to rural communities using a semi-structured and open-ended interview concluded that migrants returning to the US put

into action the skills and experiences acquired to secure their business and leadership in rural communities. Reichert, Cromartie & Arthun (2014) explored the impact of return migration on US rural communities using the qualitative approach (interview). According to their results, entrepreneurial activities of many returning immigrants in the United States have improved the employment base and have expanded the existing services which has led to the growth of the rural economy, with decisions related to social relations creating a civic commitment for them. Moreover, the findings of Démurger & Hui Xu (2011) in their paper "Return of migrants: The rise of new entrepreneurs in China's village" using a questionnaire and interviews reveal that (1) return migration helps revive rural economic and poverty alleviation in less developed areas of China; and (2) capital and experience accumulated during migration are the main drivers of promotion in rural entrepreneurship. Hence, cutting the bureaucracy to spur immigrants into investing and supporting the creation and development of small businesses in the regions is an effective policy. Gomez (2011), in his analysis of the complexity of rural development theory in Europe, presents an effective approach for preventing rural migration to the city in keeping with the implementation of rural development projects by exploiting indigenous characteristics. ErdönmezI, Cihan, Özden, & Sezgin (2009) in their study titled, "The relationship between rural development and urban migration projects: The Quikent Project in Turkey" used interviews and Chi-square analysis to explore the effect of the project on decreasing rural residents' desire for city migration and boosting the motivation of urban migrants to return to their villages. The findings of Ebrahimi's research (2016) on explaining the status of return migration in the reconstruction of rural areas in the north of Ardebil province using library method and document analysis suggested that return migration propels economic activities in indigenous jobs with the adoption of new technology raising awareness of the ruralers and contributing to the thriving of rural and entrepreneurship. Jomepour and Alibabaei (2016) in their study "Process and pattern of return rural migration and its determinants (Case study: Hajilo District - Kabudarahang County) used descriptive and inferential statistics, with their results demonstrating that a higher level of development

in rural areas and participation of the ruralers coupled with locally-produced goods would accelerate human resource growth in the rural areas.

Accordingly, experiences can be divided into four categories: 1. An overview of the causes and effects of the return migration 2. A detailed analysis of the economic, social, and cultural dimensions of return migration; 3. Proposing a strategy and examining its impact on return migration, and 4. Evaluation of ecological and

local potentials of rural areas. The current research intends to draw on the attractions and ecosystem capacities of Semirom to plan for the return migration given the paucity of any research on this subject.

### 2.5 Operational experiences

The following is a list of operational experiences and examples of successful return migration worldwide:

**Table 1. Operational experiences and examples of successful return migration**

Project Title	Goals	Achievement	Researchers
SME Project in Romani	Improved access to money transfer in rural village and creation of new investment channel for immigrants	Highlighting an entrepreneurial approach and creating private and public partnerships	(Ferri and Rainero,2010 : 7-46)
Grand Shandu Eco-Village System (GSES) in China	Rural development to achieve local sustainability	Green construction, relations management and empowering local culture	(Yuliastuti, 2017: 3)
Erzincan- Sivas rural development project	Supporting small-sized family enterprises	Improving agricultural infrastructure and rural standards and increasing income level	(Kazemi Sani Atallah,2015 : 158-161)
Future Path of Malaysia: Malaysia's 1990-2020 vision document	Rural industrialization, agricultural and food development and integrated rural development	Export expansion, agricultural and human development, banking system development and tourism development	(Azami & Razvani, 2008: 76-81).
Industrial development policy (import of machinery for stone crushing factories and industrial greenhouses in rural areas)	Encouraging migrant to return to rural areas and create job opportunities in Iran	Creating more than 650 job opportunities in villages, diminishing the process of rural labor migration to major cities	(Naderi, 2011 : 11)

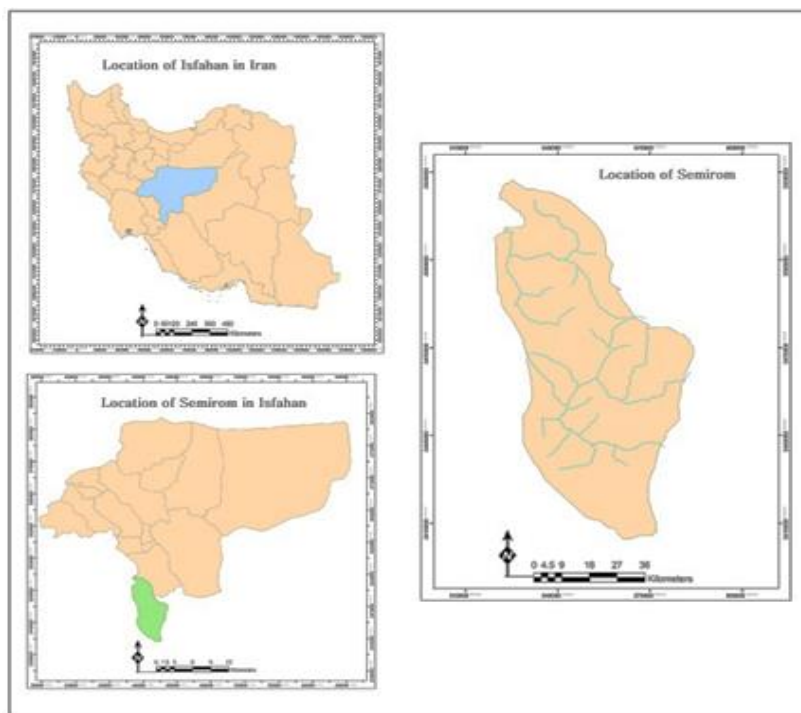
## 3. Research Methodology

### 3.1 Geographical Scope of the Research

Semirom county is located in southwest of Isfahan province with geographical coordinates of 51 degrees 16 minutes to 58 minutes east longitude and 30 degrees 43 minutes to 31 degrees 51 minutes north latitude with an average altitude of 2400 meters above sea level. It consists of 4 cities, 4 districts, and 6 villages covering an area of 5274

km<sup>2</sup>, which is surrounded by Shahre- Reza city in the northeast, Dehaghan in the north, Fars province in the southeast and south, Kohgiluyeh and Boyer Ahmad province in the west and northwest and Chaharmahal and Bakhtiari province in the west and northwest [Design and Development \(2015\)](#). The climate of Semirom is temperate and mountainous with pristine tourist attractions and natural resources





**Figure 2. Location of Semirom**

(Source: <https://gisman.ir/download-iran-shapefiles/>)

### 3.2. Methodology

An applied research with a descriptive-analytical method has been adopted. The study population consisted of people of Semirom (n=53672) and relevant authorities. Using the sample size formula for the finite population (confidence interval), a sample of 138 residents and 30 officials (municipally, governor, Agriculture Jihad, electricity, cultural heritage, environment) were randomly selected.

In order to evaluate the content validity of the questionnaire after developing the initial questionnaire, the feedbacks and suggestions of the professors and experts were taken into account. The calculated Cronbach's alpha was 0.765 for environmental, 0.842 for social, 0.840 for economic, and 0.958 for managerial indices, which reflects the reliability of the indices and high correlation of items. To achieve the goals of the study, given the theoretical framework and researchers' knowledge of Semirom county, data were collected by distributing questionnaires among people and conducting interviews with authorities. Data analysis was performed using both quantitative and qualitative methods. Inferential analysis was conducted using one-sample *t*-test in SPSS (quantitative section) and content analysis was carried out through interview

by the ATLAS.ti software (qualitative) section. (Figure 7)

Based on the analysis, internal (strengths and weaknesses) and external (opportunity and threat) factors were identified and hybrid strategies were formulated. Then, based on expert feedbacks and EI matrices, one of the hybrid strategies was selected. Moreover, strengths, opportunities, aspirations, and results were identified. The stakeholders were chosen by snowball sampling method to form SOAR matrix.

Finally, in order to adjust and prioritize strategies, the QSPM quantitative matrix was applied in keeping with the experts' opinions to determine the relative effectiveness of strategies. To do so, the hybrid strategy adopted in the previous steps was prioritized based on a positive approach derived from the SOAR matrix. The findings are extracted to shed light on the theoretical model.

Given the purpose of the research, indicators of sustainable rural development, return migration and ecosystem were used and summarized in three environmental, economic, and socio-cultural dimensions (Table 1).

### 4. Research Findings

A questionnaire was designed to measure the residents' satisfaction with the situation of

Semirom county using the SPSS. For each index, a score of 1 to 5 was considered and the mean value of indices were defined in confidence interval of 3. Thus, values below this range indicated the least satisfaction and values above

this range suggested the highest satisfaction. To generalize the results, we used one-sample *t*-test. If the significance of the test is less than 0.05, the sample results could be generalized to the population with a 95% probability.

**Table 2. Dimensions and indicators of research**  
(Source: Research findings, 2019)

Dimension	Indices	Variables	Researchers
Environmental	Environment	Climate and weather - soil, water - forest, pastures	(Nouri & Nowrouzi ,2016 :129) (Poursadeghi, 2014:7)
	Landscape	Natural attractions - artificial tissue and body	
	Risks	Managing the risks and security of the people Natural hazards (floods, earthquakes) Artificial hazards (war)	(Nouri & Nowrouzi ,2016 :129)
Economic	Income and Cost	Income Diversification Cost of Living Allocating part of your income for entertainment	(Abdollahi, 2016:4) (Afrakhteh et al, 2016:92) (Ghasemi et al, 2014:30) (Manafi Azar et al, 2017:187) (Paparusso & Ambrosetti, 2017:3) (Nouri & Nowrouzi ,2016 :129)
	Occupation	Agricultural activities - Gardening activities - Industries and mines	(Ghasemi et al, 2014:30) (Manafi Azar et al, 2017:187) (Afrakhteh et al, 2016:92) (Nouri & Nowrouzi ,2016 :129) (Poursadeghi, 2014:7) (Abdollahi, 2016:4) (Hirvonen & Bie Lilleør , 2014:3) (Fleischer , 2013:10 ) (Cromartie et al ,2015:13) (Filipi et al , 2014 :17)
	Economic Credits	Investment - Entrepreneurship and tourism centers - Loans	(Wang & Fan ,2006:949) (Paparusso & Ambrosetti , 2017:3) (Liang , 2013:6) (Rabbani et al ,2011:88) (Qasemi Ardahai & Nobakht, 2016:54)
	Housing	Low-cost housing - Quantity of housing - Quality of housing - Government-leased housing, relatives - Inherited land	(Abdollahi, 2016:4) (Ghasemi et al, 2014:30) (Manafi Azar et al, 2017:187) (Rabbani et al ,2011:88) (Afrakhteh et al, 2016:92) (Qasemi Ardahai & Nobakht, 2016:54) (Paparusso & Ambrosetti , 2017:3) (Nouri & Nowrouzi ,2016 :129)
Socio-cultural	Social characteristics	- Age - Sex - Retirement - Education	(Manafi Azar et al, 2017:187) (Afrakhteh et al, 2016:92) (Qasemi Ardahai & Nobakht, 2016:54) (Nouri & Nowrouzi ,2016 :129) (Ghasemi et al, 2014:30) (Rabbani et al ,2011:88) (Hirvonen & Bie Lilleør , 2014:3) (Fleischer , 2013:10 ) (Filipi et al , 2014 :17) (Wang & Fan ,2006:949) (Paparusso & Ambrosetti , 2017:3) (Liang , 2013:6)
	Services and Facilities	Health, education, technology, welfare infrastructure, quantity and manner of distribution	(Nouri & Nowrouzi ,2016 :129) (Poursadeghi, 2014:7)
	Spatial belonging	Birth place and family -Connection with relatives	(Filipi et al , 2014 :17) (Cromartie et al ,2015:13) (Wang & Fan ,2006:949) (Paparusso & Ambrosetti , 2017:3) (Liang , 2013:6)
	Social - Cultural structure of the society	-Marriage - Following family traditions -Performance of political institutions, laws, culture, individual and social perceptions, social status	(Hirvonen & Bie Lilleør , 2014:3) (Fleischer , 2013:10 ) (Paparusso & Ambrosetti , 2017:3) (Cromartie et al ,2015:13) (Filipi et al , 2014 :17) (Ghasemi et al, 2014:30) (Manafi Azar et al, 2017:187) (Rabbani et al , 2011: 88) (Afrakhteh et al, 2016:92) (Poursadeghi, 2014:7) (Nouri & Nowrouzi ,2016 :129) (Abdollahi, 2016:4) (Qasemi Ardahai & Nobakht, 2016:54)

sig	Mean sample	Criterion	index
0.000	2.07	Protection of forests and pastures	Enviornment
0.000	1.80	Sufficient irrigation water for agriculture and gardening	
0.000	3.01	Access to healthy drinking water	
0.000	3.10	Favorable climatic conditions for life	
0.000	2.83	Quality of surrounding environment	
0.000	4.1	Natural landscapes of the city	Landscape
0.003	2.74	Appropriateness of the tissue and physical structure of the city	
0.004	3.17	The quality and quantity of recreational attractions in the city	
0.000	2.86	The sense of security relative to the regional status against natural hazards	Hazards
0.000	2.22	The success of natural disasters management policies	
0.000	2.29	Suitability of health services	Services and facilities
0.000	2.33	Suitability of educational services	
0.000	2.04	Suitability of urban infrastructure	
0.000	1.87	Satisfaction with amenities	
0.035	2.80	Your social status compared to people you know	Sociocultural structure of the community
0.002	3.24	Sense of security in the community	
0.000	2.25	Equality and social justice	
0.000	2.07	Possibility of progress and growth in the city	
0.000	2.27	Affordable housing	Housing
0.003	2.75	Quality of housing	
0.000	2.93	Adequacy of housing to accommodate the population	
0.000	2.33	Reasonable living costs	Income and costs
0.000	2.19	Income status	
0.000	2.27	Possibility of allocating part of your income to family recreation	
0.000	2.22	Improvement of income status relative to costs in the future	
0.000	2.29	Desirable condition of agricultural activities in the region	Occupation
0.000	2.28	Suitability of gardening in the region	
0.000	2.20	Desirable condition of mines	
0.000	1.82	Satisfaction with the employment status in the city	

**Figure 3. Situation of Semirrom**  
(Source: Research findings, 2019)

Also, as noted in the residents' questionnaire, important factors influencing return migration were identified using *t*-test. Accordingly, in managerial dimension, passing laws related to supporting horticulture and granting concessions

and banking facilities to local residents; in economic dimension, tourism attraction and job opportunities, and entrepreneurship; in the social dimension, factors promoting the quality of welfare services, the sense of belonging to the city



and relationships with relatives and acquaintances, and in the environmental dimension, fertile soil

and adequate water sources had the greatest impact on the return of migrants.

sig	Mean sample	Criterion	Dimension	
0.000	2.86	Natural and recreational attractions	Environment	
0.000	3.25	Fertile soil and adequate water		
0.000	2.37	Retirement	Social	
0.018	2.79	Education		
0.009	3.06	Improvement of services and amenities		
0.010	3.007	Sense of belonging to the city		
0.002	3.07	Connection with relatives and acquaintances		
0.001	2.83	Marriage and compliance with family traditions		
0.000	2.33	Cultural difference and rejection in other cities		
0.000	2.86	Improved housing quality		Economic
0.001	2.69	Investment in housing		
0.014	2.75	Financial and economic investment		
0.019	2.74	Granting facilities and low-interest loans to returned migrants		
0.000	3.04	Using tourism attractions for the prosperity of the city		
0.000	3.12	Creating job opportunities		
0.000	3.05	Entrepreneurship		
0.001	2.93	Performance of political and local institutions in relation to city development	Managerial	
0.000	3.10	Passing laws to support horticulture and set up related industries		
0.000	3.03	State incentives such as granting concessions and banking facilities for migrant returning to the city		

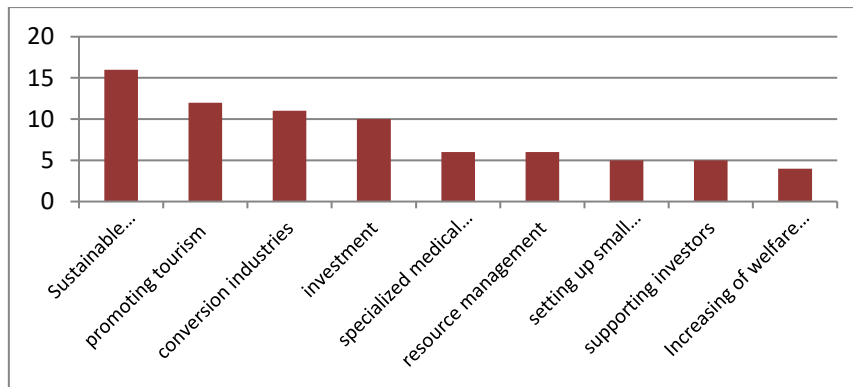
**Figure 4. Factors affecting return migration**  
(Source: Research findings, 2019)

Based on the results of interviews with local authorities, the most important factors affecting return migration are presented in Figure 5.

#### 4.1. Formation of the Semirom evaluation matrix

The matrix in the question is derived from a strategic review of internal and external factors that assess the strengths, weaknesses, opportunities, and threats of the county based on historical, geographical, climatic, physical, social, and cultural contexts of Semirom by exploring its development and construction plans as well as the data derived from questionnaires distributed among local residents and interviews with authorities. In the next step, experts assign a value ranging from zero to one to each factor so that the

sum of the coefficients will be equal to one. Also, the effect of each factor is assessed on the scale of 1 to 4 with 1 indicating a fundamental weakness, 2 an important or ordinary weakness, 3 a relative strength, and 4 a substantial strength. Then, to determine the final score of the coefficient (weight), each factor is multiplied by its score. The mean final score is 2.5 with any lower values indicating a weakness of both internal and external. However, values greater than 2.5 indicate the strength of factors meaning that the county has been able to exploit the existing strengths and opportunities to downgrade the effects of weaknesses and threats ( Table 2)

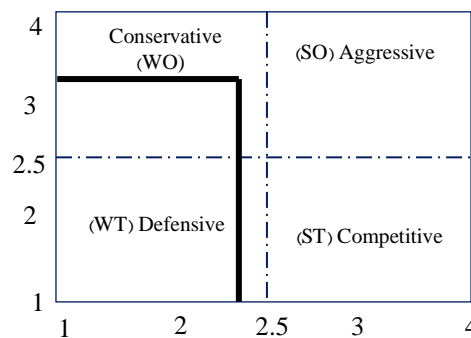


**Figure 5. Factors affecting return migration**  
(Source: Research findings, 2019)

**4.2. Matching the matrix of internal and external factors**

At this stage, using the IE matrix to determine the appropriate strategy relative to internal and external factors, we can determine the order of priority for SO, WO, ST, WT strategies. According

to the final score obtained from internal factor evaluation (IFE = 2.35) and external factor evaluation (EFE = 3.05) matrixes, the study area is within conservative strategies and the existing opportunities should be utilized to mitigate weaknesses in Semirom.



**Figure 6. Matrix of the current status of return migration planning**  
(Source: Research findings, 2019)

**4.3. Stage Three: Matching and Comparison**

At first, the SOAR matrix analyzes strengths, opportunities, aspirations, and outcomes from a positive perspective, and then the QSPM technique is used to prioritize conservative strategies.

**4.3.1. SOAR matrix**

Positive approach (AI) in strategic planning rather than focusing on problems concentrates on reinforcing lucrative opportunities to address problems by exploiting potentials. Therefore, at this stage, using the SOAR matrix, the main strengths and opportunities are identified through stakeholders and participants. Instead of focusing on the negative points, a premium on stakeholders' aspirations and outcomes is placed. Finally, incentive and revision programs are selected to attain the desired results. Of course, this does not

mean that weaknesses and threats are overlooked, but that they are re-shaped into positive and strong points. Hence, this technique will drive the county of Semirom forward by adopting a new approach, highlighting the strengths, opportunities, aspirations, and the participation of stakeholders.

**4.3.2. Identification of stakeholders**

Stakeholders identified in this study consist of residents of Semirom and relevant authorities. After the interview, each participant described his or her strengths, opportunities, and aspirations. During the meetings and discussions, stakeholders are asked to have a positive visualization of the desired future of the county and then present measurable and tangible results that could be obtained if the project is implemented.

**4.3.3. Landscape of Semirom County**

According to the SOAR matrix, the vision outlined for Semirom is as follows:

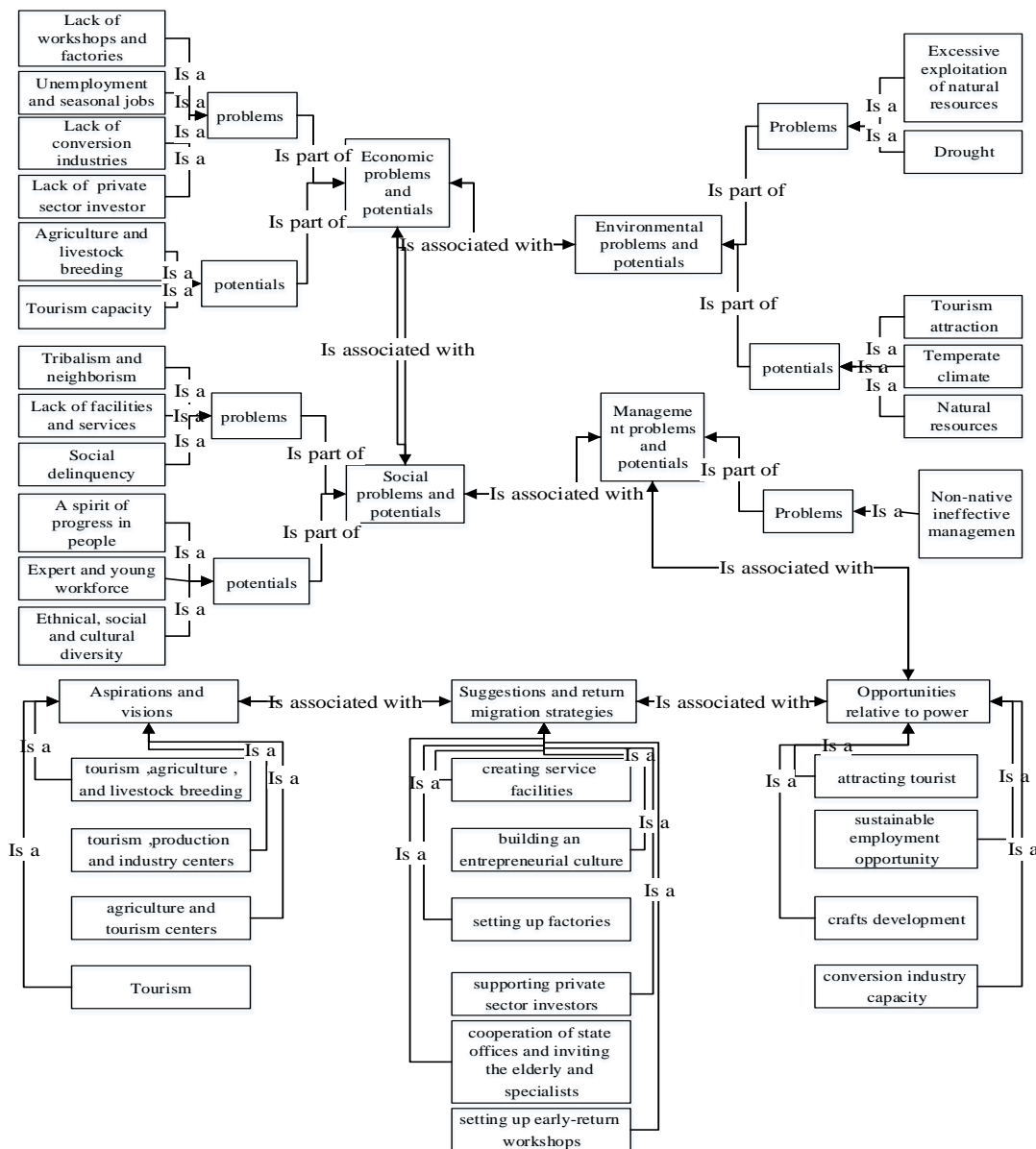
"In the next 10 years, the county of Semirom will be a lush, vibrant, and lively county that completely respects the rights of its citizens. It will be a major agricultural and tourism hub in the country due to its eco-system capacity. Equipped with all the necessary facilities and appropriate urban structure as well as beautiful street furniture, it will provide a secure and suitable substrate for sustainable employment to accelerate the economic prosperity for the return of migrants."

**4.3.4. Deriving goals from the vision**

The following goals can be pursued in light of the outlined vision of the county.

- Promoting tourism
- Creating sustainable employment
- Developing facilities and amenities
- Boosting economic prosperity
- Advancing agriculture and horticulture
- Utilizing the gardening and horticulture capacity
- Organizing urban and rural texture

Table 3 summarizes the strengths, opportunities, aspirations, and outcomes of the Semirom county expressed by the research stakeholders.



**Figure 7. Qualitative analysis of the interviews with officials**  
(Source: Research findings, 2019)

**Table 3. Internal Factor Evaluation (IFE) and External Factor Evaluation (EFE) Matrices of Semirrom County**  
(Source: Research findings, 2019)

Strengths (A) and Weaknesses (W)	Weight	Score	Final score	Strengths (A) and Weaknesses (W)	Weight	Score	Final score
S <sub>1</sub> : Rich and valuable soils and pastures	0/018	3/7	0/067	S <sub>2</sub> : 1st rank of horticulture in the province	0/046	3/8	0/175
S <sub>3</sub> : High percentage of literate people	0/009	3/2	0/029	S <sub>4</sub> : Pristine natural landscapes	0/037	3/9	0/144
S <sub>5</sub> : 1st rank of fish production in the province	0/009	3/3	0/030	S <sub>6</sub> : Wad handicrafts and hand-woven rugs recognized by the UNESCO	0/018	3/2	0/058
S <sub>7</sub> : Creating environmental protection zones	0/009	3/7	0/033	S <sub>8</sub> : Availability of surface water, springs and rivers	0/056	3/6	0/202
S <sub>9</sub> : A temperate climate with four seasons	0/028	3/2	0/090	S <sub>10</sub> : Tourism and ecotourism attractions	0/065	3/9	0/253
S <sub>11</sub> : A spirit of cooperation and empathy among people and passion for progress	0/009	3/5	0/031	S <sub>12</sub> : A skilled, educated and young workforce	0/037	3/5	0/130
S <sub>13</sub> : Cultural, social and ethnic diversity	0/009	3/3	0/030	S <sub>14</sub> : Major source of drinking water for agricultural purposes	0/009	3/6	0/032
S <sub>15</sub> : Existence of rich mineral resources and mines	0/018	3/5	0/063	S <sub>16</sub> : Third rank of rainfall in province	0/009	3/3	0/030
S <sub>17</sub> : Favorable status of wheat production	0/009	3	0/027	W <sub>1</sub> : Indiscriminate exploitation of natural resources	0/030	1/3	0/039
W <sub>2</sub> : Drilling of unauthorized wells and destruction of underground resources	0/027	1/4	0/038	W <sub>3</sub> : Over-grazing of livestock in agricultural pasture	0/010	1/8	0/018
W <sub>4</sub> : Wastewater infrastructure problems	0/018	2	0/036	W <sub>5</sub> : Lack of training facilities and welfare centers	0/066	1/5	0/099
W <sub>6</sub> : Lack of specialists in health care centers	0/071	1/6	0/114	W <sub>7</sub> : Long distance from the capital of province with poor services	0/047	1/7	0/080
W <sub>8</sub> : Non-recycling and separation of waste	0/010	2	0/02	W <sub>9</sub> : Lack of cultural and sports facilities	0/029	1/7	0/049
W <sub>10</sub> : Urban texture problems and disregard for city beautification	0/020	1/9	0/038	W <sub>11</sub> : Low income and subsistence lifestyle of people	0/028	1/4	0/039
W <sub>12</sub> : Social harms	0/017	1/8	0/031	W <sub>13</sub> : Lack of factories and workshops to recruit young workers	0/042	1/4	0/059
W <sub>14</sub> : Absence of recreational facilities such as parks	0/032	1/6	0/051	W <sub>15</sub> : High unemployment rate and seasonal nature of agriculture jobs	0/049	1/2	0/059
W <sub>16</sub> : Absence of conversion industries	0/034	1/3	0/044	W <sub>17</sub> : Ethnicity and neighborhoodism	0/018	1/9	0/034
W <sub>18</sub> : Inefficient and non-indigenous management	0/057	1/4	0/080	IFE	1		2/35
Opportunities (O) and Threats (T)	Weight	Score	Final score	Opportunities (O) and Threats (T)	Weight	Score	Final score
O <sub>1</sub> : Possibility of using rangelands to increase livestock breeding	0/043	3/5	0/151	O <sub>2</sub> : Gardener's willingness to form a cooperative and to promote horticulture and apple export	0/052	3/6	0/187
O <sub>3</sub> : Possibility of using indigenous specialist in tourism and conversion industry	0/032	3/8	0/122	O <sub>4</sub> : Investors' willingness to invest in industry and mining according to the regional	0/010	3/3	0/033

Strengths (A) and Weaknesses (W)	Weight	Score	Final score	Strengths (A) and Weaknesses (W)	Weight	Score	Final score
				capability			
O <sub>5</sub> :Possibility of developing greenhouse	0/026	3/8	0/099	O <sub>6</sub> : Possibility of using apple trees for development of conversion industries	0/050	3/9	0/195
O <sub>7</sub> :Possibility of natural tourism development	0/069	3/7	0/255	O <sub>8</sub> :Authorities' willingness to grant credit for cultural development	0/027	3/1	0/084
O <sub>9</sub> :Possibility of transferring water from surrounding rivers to agriculture	0/022	3/4	0/075	O <sub>10</sub> :Tendency of gardeners and organizations to industrialize agriculture, horticulture and irrigation	0/032	3/8	0/122
O <sub>11</sub> :Urban management willingness to support investors to develop industry	0/008	3/6	0/029	O <sub>12</sub> :Support of relevant organizations to improve the quality of urban, rural pathways and renovation of worn-out passages by allocating budget	0/027	3/3	0/089
O <sub>13</sub> :Youth participation in the development of cultural affairs	0/016	3/3	0/053	O <sub>14</sub> : Possibility of using waste land to provide educational, health services	0/103	3/6	0/371
O <sub>15</sub> :Possibility of creating sustainable tourism employment due to natural attractions	0/078	3/8	0/296	O <sub>16</sub> : Possibility of using medicinal herbs and handicrafts for tourism development	0/031	3/7	0/115
O <sub>17</sub> :Urban management's willingness to allocate funds to establish an enterprise	0/045	3/6	0/162	O <sub>18</sub> : Possibility of using young workforce in stone-cutting, tile and ceramic workshops	0/038	3/5	0/133
O <sub>19</sub> :Possibility of attracting tourism by promoting attractions and culture	0/030	3/4	0/102	O <sub>20</sub> :Possibility of rain-fed cultivation of wheat, barley and saffron	0/010	3	0/03
T <sub>1</sub> :Situating in the most active earthquake zone	0/033	1/4	0/046	T <sub>2</sub> :Destruction of natural, fauna and flora resources	0/032	1/3	0/042
T <sub>3</sub> :Highest expatriate, evacuation with continued migration	0/090	1/3	0/117	T <sub>4</sub> :Reduced income and migration of farmers due to lack of conversion industries	0/018	1/4	0/025
T <sub>5</sub> :Heavy dependence on market with continued single-product	0/025	1/5	0/038	T <sub>6</sub> :Drought and rainfall	0/053	1/4	0/074
				EFE	1		3.05

**Table 4. SOAR matrix**  
(Source: Research findings, 2019)

Strengths (S)	Opportunities (O)
S1: Rich and valuable soils and pastures	O1 :Possibility of using rangelands to increase livestock breeding
S2: 1st rank of horticulture in the province	O2 :Gardener's willingness to form a cooperative and to promote horticulture and apple export
S3: High percentage of literate people	O3 :Possibility of using indigenous specialist in tourism and conversion industry
S4: Pristine natural landscapes	O4 :Investors' willingness to invest in industry and mining according to the regional capability
S5 :1st rank of fish production in the province	O5 :Possibility of developing greenhouse
S6 :Wad handicrafts and hand-woven rugs recognized by the UNESCO	O6: Possibility of using apple trees for development of conversion industries
S7 :Creating environmental protection zones	O7 :Possibility of natural tourism development
S8: Availability of surface water, springs and rivers	O8 :Authorities' willingness to grant credit for cultural development
S9 : A temperate climate with four seasons	
S10 :Tourism and ecotourism attractions	
S11 : A spirit of cooperation and empathy among people and passion for progress	



Strengths (S)	Opportunities (O)
<p>S12: A skilled, educated and young workforce            S13 :Cultural, social and ethnic diversity            S14: Major source of drinking water for agricultural purposes            S15 :Existence of rich mineral resources and mines            S16 :Third rank of rainfall in province            S17 :Favorable status of wheat production</p>	<p>O9 :Possibility of transferring water from surrounding rivers to agriculture            O10 :Tendency of gardeners and organizations to industrialize agriculture, horticulture and irrigation            O11 :Urban management willingness to support investors to develop industry            O12 :Support of relevant organizations to improve the quality of urban, rural pathways and renovation of worn-out passages by allocating budget            O13 :Youth participation in the development of cultural affairs            O14: Possibility of using waste land to provide educational, health services            O15 :Possibility of creating sustainable tourism employment due to natural attractions            O16: Possibility of using medicinal herbs and handicrafts for tourism development            O17 :Urban management's willingness to allocate funds to establish an enterprise            O18: Possibility of using young workforce in stone-cutting, tile and ceramic workshops            O19 :Possibility of attracting tourism by promoting attractions and culture            O20 :Possibility of rain-fed cultivation of wheat, barley and saffron</p>
Aspirations (A)	Outcomes (R)
<p>A<sub>1</sub>: A tourism, industrial and manufacturing center            A<sub>2</sub>: A major hub of agriculture and tourism            A<sub>3</sub>: Tourism, agriculture and livestock breeding            A<sub>4</sub>: A thriving county that attracts tourists            A<sub>5</sub>: Tourism village            A<sub>6</sub>: Creating a safe environment with proper employment            A<sub>7</sub>: Economic boom of the county as a tourism destination            A<sub>8</sub>: Access to all necessary amenities and facilities            A<sub>9</sub>: An appropriate urban structure with beautiful street furniture            A<sub>10</sub>: A green, vibrant, and dynamic county that respect citizenship rights</p>	<p>R<sub>1</sub>: Establishing factories for converting apples into dried fruit, vinegar, concentrate, fruit juice, compote, etc.            R<sub>2</sub>: Establishment of processing and packaging facilities for apple, wheat and barley            R<sub>3</sub>: Establishing cold store for apple farmers            R<sub>4</sub>: Construction of stone-cutting, tile and ceramic factories according to supply power of the region            R<sub>5</sub>: Modernizing horticulture using mechanical tools (increasing quantity and product quality)            R<sub>6</sub>: Increasing job efficiency from seasonal to permanent work by diversifying non-farm employment            R<sub>7</sub>: Creation and thriving of tourism sites in rural areas            R<sub>8</sub>: Supporting and providing a safe environment for investors            R<sub>9</sub>: Changing and modernizing irrigation methods used in farms and gardens            R<sub>10</sub>: Improving the status of streets and the texture of rurales            R<sub>11</sub>: Providing services such as parks, nursing homes, airports and railways            R<sub>12</sub>: Improvement of educational facilities for academic studies and establishing state universities            R<sub>13</sub>: Equipping medical centers, hospitals and recruiting specialists            R<sub>14</sub>: Supervising the resources, natural pastures and other attractions            R<sub>15</sub>: Promoting an entrepreneurial culture            R<sub>16</sub>: Proper distribution of educational, health and green space services in the county            R<sub>17</sub>: Agricultural water and Human Resources Management by fostering knowledge-based agriculture and striking a balance between semi-arid lands and product type along with the recruitment of specialists            R<sub>18</sub>: Creating more cultural and artistic opportunities to raise public awareness and cultural knowledge of people</p>

#### **4.4. Strategic planning quantitative matrix**

The Quantitative Strategic Planning Matrix (QSPM) is formulated to prioritize conservative strategies in order to plan the study area with respect to return migration indices. Selected strategies (at the top of the matrix) with respect to strengths, opportunities, aspirations, and outcomes (right column) derived from the SOAR model were analyzed based on the significance coefficient (second column) and the attractiveness score (next column) by the experts. Thus, each factor is measured by the desired strategy. Experts will assign a score of 1 to 4 (1 very low and 4 very high) based on the impact of each strategy, and if the selected factor does not influence the formulation or selection of the strategy, a score of zero will be assigned. Strategies are prioritized by multiplying the weight of each factor based on the attractiveness score and summing up the column numbers. The results of strategies evaluation reveal that "efficient management of tourism and environmental sites for proper utilization of natural resources" is the most important adaptive strategy for planning return migration to the county of Semirum. Sustainable employment strategies are also ranked second to sixth by creating conversion industries, providing amenities, setting up early return enterprises, agricultural industrialization, gardening and tackling road, and urban texture problems.

#### **5. Discussion and conclusion**

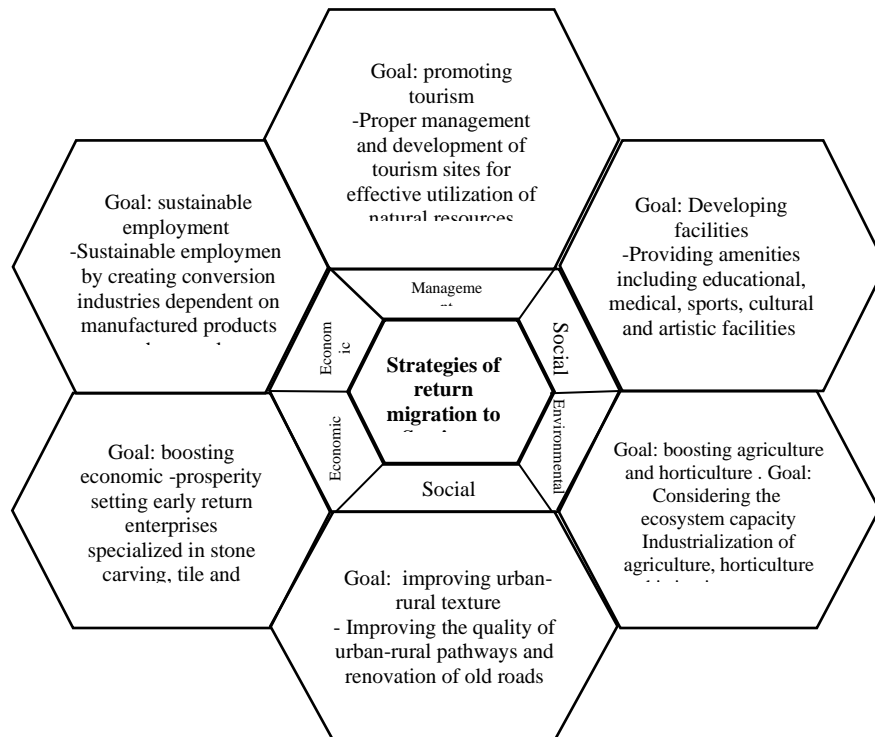
Return migration is a new and effective phenomenon. Given that migration from rural areas is driven by multiple factors such as job insecurity, unemployment, and poor quality of amenities supplied to local residents, a comprehensive planning along with effective strategies can influence the stay of local residents and motivate migrant to return to their homeland. Semirum county is one of the rural areas of Isfahan province the main economic structure of which is the production of apple as a single crop. However, the dwellers of this county have emigrated to larger cities due to problems such as low return derived from orchards, water scarcity, natural disasters, seasonal unemployment, lack of

diverse job opportunities for young people, and poor quality of amenities to the extent that Semirum faces an imminent threat of evacuation.

This study aimed to develop a planning model for return migration. According to the research findings, the main ecosystem potentials in the county of Semirum, based on scores given by experts in the questionnaire, were tourist attractions (score= 0.253), availability of surface water, springs and rivers (score =0.220, first rank of horticulture in the province (score=175), pristine natural areas (score=0.144), and specialist and young labor force (score=0.30) in descending order of importance, respectively.

Also, the analysis of the questionnaire suggested that laws intended to promote horticulture and related industries as well as state incentive such as concessions and facilities from a managerial dimension; factors of working on tourism attractions to bring prosperity to the county, creating job opportunities, and entrepreneurship from an economic dimension; factors that improve the quality of amenities, sense of belonging to the county, contacts with relatives and acquaintances from a social dimension, and availability of sufficient water and soil from an environmental dimension had the greatest impact on the return of migrants. Therefore, it appears that proper exploitation of natural resources and tourism and the ecosystem capacity of the county can create an apt opportunity for sustainable employment. It requires efficient management to adopt novel approaches and a secure environment for the protection of investors entrepreneurs. In other words, paying higher attention to the potential of tourism can improve the quality of welfare facilities, infrastructure services and employment, which in turn can offer huge potentials for enhancing local residents' quality of life, their permanent stay, and ultimately the return of migrants.

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**Figure 8. Return migration strategies**  
(Source: Research findings, 2019)

**Table 5. Prioritization of WO strategies for Semirom**  
(Source: Research findings, 2019)

Priority	Conservative Strategies	Sum of strategy attractiveness scores
1	W <sub>1</sub> O <sub>7</sub> :Proper management and development of tourism sites for effective utilization of natural resources	3/407
2	W <sub>15</sub> O <sub>6</sub> :Sustainable employment by creating conversion industries dependent on manufactured products such as apples	3/338
3	W <sub>7</sub> O <sub>14</sub> :Providing amenities including educational, medical, sports, cultural and artistic facilities to meet the needs of inhabitants	2/951
4	W <sub>13</sub> O <sub>18</sub> :Setting up early return enterprises specialized in stone carving, tile and ceramics to draw labor forces	2/867
5	W <sub>2</sub> O <sub>10</sub> :Industrialization of agriculture, horticulture and irrigation to prevent drilling of unauthorized wells and replenishment of groundwater	2/107
6	W <sub>1</sub> O <sub>12</sub> :Improving the quality of urban-rural pathways and renovation of old roads	1/587

**Table 6. Policy formulation from strategies**

(Source: Research findings, 2019)

Goals	Strategies	Policies
Promotion of tourism	Proper management and development of tourism sites for appropriate utilization of natural resources	<ol style="list-style-type: none"> <li>1. Holding orientation conferences and strategies for improving tourism and attracting tourists by urban authorities</li> <li>2. Setting up meetings to raise residents' awareness of the benefits of tourism and to strengthen their participation</li> <li>3. Education and building a culture that protects the environment and takes advantage of the tourism potentials</li> <li>4. Distributing brochures to acquaint people with the historical sites and attractions in the area</li> <li>5. Allocating incentives such as granting special concessions to capitalists to invest in tourism.</li> <li>6. Recruiting experts to determine the capacity of the environment to alleviate possible damages</li> <li>7. Formulating laws and regulations to hamper the destruction of natural pastures</li> <li>8. Developing tourism infrastructure such as hotels, restaurants, tourism camps, etc.</li> <li>9. Restoration and renovation of historical monuments</li> <li>10. Use of historic houses as a tourist houses, restaurants or other tourist areas</li> <li>11. Use of rural houses as camping sites</li> </ol>
Creating Sustainable Employment	Providing sustainable employment by setting up conversion industries depending on produced goods, such as apples	<ol style="list-style-type: none"> <li>1. Establishing a variety of economic activities such as mining, animal husbandry, poultry and aquaculture, natural and cultural tourism to create generate employment and income for residents</li> <li>2- Setting up plants for conversion of dried fruit, vinegar, concentrate, fruit juice and compote.</li> <li>3. Increasing farmers' technical skills by offering training at technical-vocational organizations</li> <li>4- Creating a cold store to preserve crop farmers and prevent them from rotting</li> <li>5- Providing processing and packaging facilities for agricultural products</li> </ol>
Improvement of Amenities	Providing educational, therapeutic, sport, cultural and artistic facilities to meet the needs of residents	<ol style="list-style-type: none"> <li>1- Balanced distribution of amenities and welfare services in the county</li> <li>2. Equipping medical centers and hospitals with specialist facilities and physicians</li> <li>3. Improvement of educational services in rurales for academic achievement and setting up state university</li> <li>4. Appropriate distribution of green space and creation of local parks</li> <li>5. Creating more cultural and artistic opportunities to raise public awareness and build a new culture</li> <li>6. Establishing a nursing home, building an airport and a railway</li> </ol>
Fostering Economic Prosperity	Setting up early-return stone-cutting, tiling and ceramics workshop by recruiting laborers	<ol style="list-style-type: none"> <li>1- Supporting investors by offering incentive policies like granting low-interest loans</li> <li>2- Holding training classes to raise the level of expertise</li> <li>3. Construction of stone-cutting, tile and ceramic factories relative to the supply power of the region</li> </ol>
<ol style="list-style-type: none"> <li>1. Promotion of agriculture and horticulture</li> <li>2. Considering the ecosystem capacity</li> </ol>	Industrialization of agriculture, horticulture and irrigation to prevent drilling of unauthorized wells and replenishment of underground aquifers.	<ol style="list-style-type: none"> <li>1- Changing and modernization of garden irrigation methods</li> <li>2. Mechanization of horticulture and agriculture</li> <li>3- Management of agricultural water resources, especially drinking water, through knowledge-based agriculture and striking a balance between semi-arid lands and crop type along with the recruitment of experts</li> <li>4- Establishing controlling and supervisory bodies by relevant authorities to protect natural resources</li> <li>5. Training of new agricultural methods in order to improve the quality and quantity of agricultural products</li> <li>6- Holding training classes to engage ruralers in tackling and preventing drought.</li> </ol>

Goals	Strategies	Policies
		7. Optimizing wheat production by expanding cultivation area 8- Creating suitable water transfer routes by constructing isolated canals, pipelines, etc. 9- Supporting agricultural product insurance fund
Organizing Urban and Rural Textures	Improving the quality of urban-rural roads and renovating worn-out textures	1- Improving road infrastructure and pavement 2. Increasing the width of sidewalks and improving their quality in the central part of the city Expanding the width of the passages in the northern part of the city 4. Prevention and management of disasters and timely relief services using new technologies 5. Granting loans to inspire homeowners to renovate buildings for consolidation 6- Granting incentives to people who intend to rebuild buildings with worn-out texture

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## تحلیل ظرفیت زیست بوم شهرستان سمیرم در راستای برنامه ریزی مهاجرت معکوس

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### چکیده مبسوط

#### ۱. مقدمه

مهاجرت پدیده ای جهانی است که جنبش های بین المللی در داخل و خارج از هر کشور را شامل می شود که در کشورهای در حال توسعه بیشتر این مهاجرت ها، داخلی است. مهاجرت از روستا به شهر به وسیله عوامل مختلف اجتماعی، اقتصادی، سیاسی، فرهنگی و محیطی ایجاد می شود که چشم انداز یافتن کار مهمترین دلیل می باشد و باعث مشکلات بسیاری از جمله در ایران شده است. شهرستان سمیرم یکی از شهرستان های مهاجر فرست استان اصفهان برای نخستین بار بیانگر مهاجرت معکوس است. لذا از گام های اساسی توسعه در هر کشور و ناحیه، شناسایی و استفاده بهینه از منابع و ظرفیت های طبیعی موجود است که تدوین برنامه ریزی های اصولی برای بالفعل کردن توانمندی ها، ضرورت اصلی برای نیل به توسعه پایدار می باشد. بنابراین پرداختن به مبحث مهاجرت معکوس به عنوان راهگشای مشکلات مهاجرت از روستاها ضروری است. هدف اصلی این پژوهش، تدوین الگوی برنامه ریزی مطلوب در راستای تحقق مهاجرت معکوس در شهرستان سمیرم است که می توان با شناسایی و تقویت توان های زیست بومی آن، مکانی پایدار در جهت رفاه ساکنان بومی شود.

#### ۲. مبانی نظری تحقیق

مهاجرت معکوس به عنوان "وضعیتی است که مهاجران پس از مدت زمان قابل توجهی در خارج از کشور (مقصد)، بر اساس اراده خود به کشور (مبدأ) خود باز می گردند". در واقع این پدیده "نتیجه ایجاد جذابیت در روستاها می باشد که از طریق ایجاد درآمد در فعالیت

هایی مانند دامداری یا کشاورزی، بازنشستگی و گاهی اوقات ناشی از مشکلات زندگی شهری پدید می آید". از طرفی زیست بوم با توجه به زمینه های اجتماعی و شرایط اقلیمی هر منطقه قابل شناسایی است لذا سیاست برنامه های توسعه روستایی به عنوان راهبرد کاهش مهاجرت معرفی شده است که افزایش فرصت های شغلی و درآمدی می تواند مهاجرت از مناطق روستایی را کاهش دهد و مهاجران بالقوه را حفظ کند. توسعه روستایی فرایند هدفمند بهبود شرایط زندگی مردم روستایی در مجموعه ای ابعاد محیطی، اجتماعی و اقتصادی و افزایش توانمندی آنان در بهره گیری بهینه از منابع خود در قلمرو روستا است و راهبرد توسعه یکپارچه و همه جانبه روستایی یکی از راهبردهای آن می باشد.

#### ۳. روش شناسی تحقیق

روش پژوهش توصیفی-تحلیلی و از نوع کاربردی است. جامعه آماری ساکنان شهرستان سمیرم (۵۳۶۷۲ نفر) و مسئولین مرتبط است که با استفاده از فرمول حجم نمونه برای میانگین جامعه متناهی به روش دقت (فاصله اطمینان)، تعداد نمونه ۱۳۸ نفر از ساکنان و ۳۰ نفر از مسئولین (ادارات شهرداری، فرمانداری، جهاد کشاورزی، برق، میراث فرهنگی، محیط زیست) به طور تصادفی به صورت هدفمند انتخاب شدند. به منظور سنجش روایی محتوایی پرسشنامه پس از تدوین پرسشنامه ابتدایی، نظرات و پیشنهادهای اساتید و کارشناسان اعمال گردیده است. همچنین مقدار آلفای کرونباخ برای شاخص های زیست محیطی ۰/۷۶۵، اجتماعی ۰/۸۴۲، اقتصادی ۰/۸۴۰ و مدیریتی ۰/۹۵۸ به دست آمد که گویای پایایی شاخص ها و همبستگی بسیار پرسش ها می باشد.

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ریزی در راستای مهاجرت معکوس به شهرستان سمیرم در اولویت می‌باشد. راهبردهای تأمین اشتغال پایدار با ایجاد صنایع تبدیلی، ایجاد امکانات رفاهی، ایجاد کارگاه‌های زودبازده، صنعتی شدن کشاورزی، باغداری و رسیدگی به مشکلات جاده‌ها و بافت‌های روستا در اولویت دوم تا ششم قرار گرفته است.

#### ۵. بحث و نتیجه‌گیری

شهرستان سمیرم یکی از فضاهای روستایی استان اصفهان است که عمده‌ترین ساختار اقتصادی آن، تولید سیب درختی به عنوان تک محصول می‌باشد. اما ساکنان شهرستان به دلیل وجود مشکلاتی از جمله عدم بازدهی مناسب باغ‌ها، کمبود آب، حوادث طبیعی، بیکاری فصلی، عدم وجود فرصت‌های شغلی متنوع برای جوانان و کمبود کیفیت پایین خدمات رفاهی به شهرهای بزرگتر مهاجرت کرده‌اند به طوری که شهرستان با خطر خالی شدن جمعیت روبرو است. این مطالعه با هدف تدوین الگوی برنامه‌ریزی در راستای تحقق مهاجرت معکوس انجام شده است. پیشنهاد می‌شود با استفاده صحیح از منابع طبیعی و گردشگری و با توجه به ظرفیت زیست‌بوم، فرصتی برای اشتغال پایدار فراهم شود که لازم است مدیریت باکیفیت روش‌های نوین را به کار گیرد و بستری امن برای حمایت از سرمایه‌گذاران و ایجاد فرصت کارآفرینی فراهم نماید. به عبارتی دیگر توجه به پتانسیل گردشگری خود زمینه‌ساز ارتقای کیفیت خدمات رفاهی و زیرساختی و ایجاد اشتغال می‌باشد که در صورت موفقیت باعث ارتقای کیفیت زندگی ساکنان محلی و ماندگاری آن‌ها و نهایتاً بازگشت مهاجرین خواهد شد.

**کلیدواژه‌ها:** مهاجرت، مهاجرت معکوس، زیست‌بوم، شهرستان سمیرم.

#### تشکر و قدردانی

پژوهش حاضر برگرفته از پایان‌نامه کارشناسی ارشد نویسنده اول (زهراسادات فیاض)، گروه شهرسازی، دانشکده معماری و شهرسازی، دانشگاه هنر اصفهان، اصفهان، ایران است.

برای دستیابی به اهداف پژوهش با توجه به چارچوب نظری و شناخت شهرستان سمیرم از طریق پرسشنامه مردم و مصاحبه با مسئولین اطلاعات جمع‌آوری و داده‌ها به دو روش کمی و کیفی تحلیل شد. تحلیل آمار استنباطی با آزمون T تک‌نمونه‌ای به کمک نرم‌افزار SPSS به صورت کمی و تحلیل محتوا مصاحبه به کمک نرم‌افزار ATLAS.ti به صورت کیفی صورت گرفته است. با توجه به این تحلیل‌ها عوامل داخلی (قوت و ضعف) و خارجی (فرصت، تهدید) تعیین و راهبردهای ترکیبی تدوین شد که با توجه به نظرات کارشناسان و ماتریس EI یکی از راهبردهای ترکیبی انتخاب شد. همچنین برای تشکیل ماتریس SOAR؛ دینفعان با روش گلوله‌برفی، چشم‌انداز، نقاط قوت، فرصت، آرمان و نتایج شناسایی شدند.

#### ۴. یافته‌های تحقیق

یافته‌های پژوهش با توجه به پرسشنامه حاکی از آن است که مهمترین پتانسیل‌های شهرستان سمیرم بر اساس امتیازنهایی داده شده توسط کارشناسان؛ وجود جاذبه‌های گردشگری با امتیاز نهایی ۰/۲۵۳ در رتبه اول قرار دارد. همچنین با توجه به تحلیل پرسشنامه در بعد مدیریتی؛ عوامل قوانین مصوب مرتبط با تقویت باغداری و ایجاد صنایع مرتبط و سیاست‌های تشویقی دولت مانند اعطای امتیاز و تسهیلات، در بعد اقتصادی؛ عوامل استفاده از جاذبه گردشگری و ایجاد فرصت‌های شغلی و کارآفرینی، در بعد اجتماعی؛ عوامل ارتقای کیفیت خدمات رفاهی، در بعد زیست‌محیطی؛ عامل وجود آب و خاک مناسب و کافی بیشترین تأثیرگذاری را در بازگشت مهاجرین دارند. بر اساس نمره نهایی ماتریس ارزیابی عوامل داخلی (IFE= ۲/۳۵) و خارجی (EFE= ۳/۰۵)، محدوده در موقعیت استراتژی‌های محافظه‌کارانه قرار دارد. نتایج ارزیابی راهبردها در مدل SOAR بیانگر آن است که "مدیریت صحیح فضاهای گردشگری و زیست‌محیطی جهت بهره‌برداری مناسب از منابع طبیعی" به عنوان مهم‌ترین راهبرد انطباقی به منظور برنامه

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