The Role of Flagship Development Projects in Improving the Sense of Security in the Urban Regeneration Process; Case Study: Sangsiah Neighborhood in Shiraz, Qale Mahmoud Neighborhood in Kerman, Harouniyeh Neighborhood in Isfahan*

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ABSTRACT

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In the pre-industrial era, urban neighborhoods met the almost constant demands of their residents while keeping their social, natural, and physical values. But, the rapid growth of Iranian big cities after the industrial revolution has made old buildings, settlements, and neighborhoods threatened, leading to the need for old fabric reconstruction and urban restoration. The present study is mixed-method research where the descriptive, historical, documentary, and scientific studies are used to identify the problems of old fabrics and determine the research methodology, and the Delphi technique is used to confirm the required indices to reach the research goal. Next, the questionnaires are analyzed using the SWARA model. The old fabrics in Kerman, Shiraz, and Isfahan cities, especially Qale Mahmoud neighborhood in Kerman, Sangsiah neighborhood in Shiraz, and Harouniyeh neighborhood in Isfahan, in addition to reflecting the history of development and cultural changes over time, include outstanding works representing Iranian culture and civilization on national and global scales. These neighborhoods and cultural complexes have worn out and experienced demographic-structural changes over time due to various factors, so they need a comprehensive approach to renovate and rehabilitate themselves to preserve their identities. In all three neighborhoods studied, the results of the analysis indicate that in historical urban fabrics, flagship development projects strengthen the sense of security, and the shape and physical structure of the fabric is the most important factor for the lack of a sense of security in the worn-out texture. The results of analysis using the SWARA model show that among the indices of the urban catalyst dimension, the "equipment and development of public networks" index ranks first. Among the indices of the security dimension, the space scale index obtains the first rank, and among the indices of the regeneration dimensions, the attraction of high-income families, the attraction of domestic capital, and the improvement of the employment of residents are top priorities.

Keywords: Urban Catalyst, Security, Urban Regeneration, Worn-Out Fabric.

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1. INTRODUCTION

Since old neighborhoods represent the cultural and historical identity of the cities and their worn-out leads to the deterioration of the residents' identity, there is a need for the conservation and regeneration of these textures. Urban conservation and transformation are the main driving force for the formation of today's cities, and the key to their success is developing and preserving existing valuable functions, which equips our cities to accept new functions or provide new services (Lotfi 2014). Nowadays, urban sprawl and the rapid growth of urbanization have made old neighborhoods depopulated and caused the service, commercial, etc. centers to be moved to the outskirts of the cities, leading to the lack of infrastructures, the insufficient traffic capacity and the ineffectiveness of old buildings in providing and meeting the modern needs of citizens. All these have caused the old fabrics to be neglected more than before and considered problematic areas by many city managers and citizens. The issues related to the historical fabrics influence the future of the cities. So, recognizing the problems of these areas, as the heart of the city and one of the human cultural heritage complexes, and trying to solve them provide a brief and complete understanding of the city and important urban problems (Zangiabadi, Hosref, and Sahrayan 2019). This is considered a practicable solution for all cities facing problems such as urban transformation, underprivileged neighborhoods, neglected areas, and socially and architecturally deprived areas (UNEP 2003) and has been introduced and implemented as a reactive approach to problems related to urban degradation and decay in many developed countries. In short, an urban transformation approach is adopted to reverse the process of urban transformation and regression (Batey and Friedrich 2000).

2. PROBLEM STATEMENT

One of the new policies adopted in urban development in general and in blighted urban fabric regeneration in special is the use of developmental measures and projects to accelerate and facilitate the transformation process in these fabrics. It requires the participation and social power of the residents and uses local capacities. One can say that security is the main condition for flagship development projects so that a fabric can be regenerated. This security includes all psychological and non-psychological aspects that must take place and flagship development projects

must provide the necessary security in the first step to attract the population, and this is the first step of urban regeneration.

One can see the process of decay in the Qale Mahmoud Neighborhood in Kerman, the Sangsiah Neighborhood in Shiraz, and the Harouniyeh Neighborhood in Isfahan, as historical fabrics. Many existing buildings in these fabrics are decayed and the habitation of immigrants with different and sometimes conflicting cultures threatens the sense of belonging, the sense of trust, and the social capital in the neighborhoods. In these neighborhoods, the infrastructure and facilities are not as efficient as they should be, they are worn out, and there is a low capacity to transmit energy to the residents. Destroyed and abandoned places and lands, the lack of 24-hour services, and narrow passways have reduced security in the neighborhoods. Moreover, access to services by horse or walking is inconvenient. The very low added value of land and housing has reduced investment in neighborhoods. All the abovementioned factors at the neighborhood level lead to the increased migration of the domestic and local population to other areas of the city, which results in the continuation and acceleration of the evacuation process.

Therefore, the present study aims to examine these three neighborhoods and present a special plan/solution for each of them.

This research seeks to answer two main questions:

- 1. How do flagship development projects enhance the sense of security in historical urban fabrics?
- 2. What is the most important factor for the lack of sense of security in worn-out fabrics?

3. THEORETICAL FOUNDATIONS

The industrial revolution and technological advances have resulted in population growth. This population growth has been higher in city centers and caused social and environmental imbalances.

3.1. Regeneration

In the field of urban restoration and conservation, the term Regeneration is used as a new equivalent of Renewal, and it is not a new term itself. However, it gradually gained meaning when facing the coordinates and negative consequences of urban transformation. Renewal means the reproduction or natural regeneration of a part of a living whole that is about to disappear (Ghaffari and Saberi 2017).

Table 1. The Description of the Term "Regeneration" in Lexical Meaning, Conceptual Meaning, Goal, Principles, and Action Time

	Regeneration
Lexical Meaning (Equivalent)	Recreation, renewal, revival, revitalization, and renovation
Conceptual Meaning (Definition)	Proposing a distinct personality and identity, generating a modern urban space considering its past spatial (physical and activity) characteristics.

	Regeneration
Goal	To reconstruct and renovate the character of the space and to restore the space with the characteristics and values of the old place, to improve the space, to find an independent identity.
Principles	To generate a modern environment suiting today's demands, to conserve the valuable features of the old fabric (in the case of urban restoration in the historical fabric), to restore and redefine superior values to meet today's demands.
Action Time	Continuous, intermittent, and long-term

(Ghaffari and Saberi 2017)

3.2. Urban Regeneration

Urban regeneration can be considered a way to provide desirable results, including better and more use of areas with proper and available infrastructure, services, and jobs; avoiding speculative keeping of unused real estate; reducing social and spatial inequalities between different areas of the city; balanced distribution of costs and benefits in the process of urbanization; Socialization of achievements related to urban added values (Martins, Santos, and Pereira 2019).

3.3. Urban Catalyst

Urban catalyst is a new development strategy that is used as a tool within urban development strategies (urban redevelopment, urban revitalization, and urban transformation) (Francin 2015, 17). It is an instrument accelerating the achievement of goals such as investment, design, policy making, and so on. This is, in fact, a strategic accelerator that helps less use of investment, energy, construction, and processes as well as it utilizes collaborative and participatory approaches to achieve goals defined by the urban fabric (urban environments). Moreover, external factors influence its process and outcomes (Kongsombat 2010).

3.4. Urban Texture

It refers to the grading and integration of urban spaces and elements such as urban blocks and neighborhoods that have been densely or discretely placed in the urban area in a specific order, despite the presence of natural terrains and topography.

3.5. Worn-Out Fabric

Decay, which is one of the most important problems of urban fabrics, causes disorder, imbalance, disproportion, and disorganization. Per the definition approved on Jan 22, 2010, by Iran's Supreme Council of Urban Planning and Architecture, the worn-out urban fabric refers to the areas within the limits of cities that have become vulnerable due to physical decay and lack of urban services, and have a few spatial, economic, and environmental values. Due to the poverty of their residents and owners, these textures cannot self-regenerate. In other words, the worn-out urban fabric refers to areas within the

limits of cities that have one of the following three characteristics: 1. To have blocks where more than 50% of buildings are unhealthy and worn; 2. To have blocks where more than 50% of the passways have a width of smaller than 6 meters; 3. To have blocks where more than 50% of the buildings have an area of smaller than 200 m2 (Iran's Supreme Council of Urban Planning and Architecture 2018). The concept of urban decay can be defined as the deterioration of the social, economic, and physical conditions of the urban fabric. In general, reducing the effectiveness of any phenomenon leads to its depletion. When living stops in an urban area for any reason, the urban fabric of that area is decaying (Rosemary 2005, 9). Since the presence of various factors and elements decrease the qualitative values of the human environment (in physical, functional, environmental, economic, and social dimensions), the decrease in the value of housing leads to the reluctance to reconstruct and renovate the fabrics and enhances the residents' desire to migrate (Jahanshahi 2003). It should be noted that the difference between the worn-out fabric and the historical fabric is that the historical fabric is a valuable old fabric and is considered a very important part of the ancient and cultural heritage of that area and country, and requires to be conserved while the worn-out fabric lacks values, has materials with very low resistance, and is decaying.

3.6. Security

the term security is derived from Latin "Securus". It also includes topics such as "danger, threat, injury, stress, fear, worry despite tranquility, assurance, comfort, trust, judgment, and assurance" and it lexically means to not be afraid and worry (Mandal 2009; Salehi 2009, 86-92).

4. RESEARCH METHOD

The present study is applied mixed-method (quantitative-qualitative) research. To achieve the research goal and examine the problems of the neighborhoods to determine the research method and policy, the required indices were identified. Then, the questionnaires filled out by the experts were analyzed using the SWARA model. Moreover, due to the lack of certainty in the quantitative findings, a mixed (quantitative-qualitative) method was used using

observations and interviews with the residents of the neighborhoods.

4.1. Statistical Population

The statistical population included the residents of three old and worn-out neighborhoods in the cities of Kerman, Isfahan, and Shiraz.

4.2. Sampling Technique

In the present study, the samples were selected using a non-probability sampling technique which is based on human judgment rather than chance. Therefore, each population member's chance of participating in the study is uncertain and unknown.

4.3. Data Collection Tools

In the present research, the required data were collected using library studies. The main data collection methods and tools included documents, observations, interviews, and questionnaires. In the present research, observations, questionnaires, and interviews were used to collect data. One of the data collection tools in survey research is a questionnaire that collects data directly.

4.4. Validity of the Questionnaire

Validity refers to how accurately the questionnaire content or its items measure the research variables, meaning that the data collected by the questionnaire is not more than the research demands, and some of the required data about the measurement of the variables are not removed from the questionnaire content. The face validity of the questionnaire was approved by the

4.5. Reliability of the Questionnaire

One of the technical characteristics of a questionnaire is its reliability. It refers to the extent to which the tool provides the same results under the same conditions. In other words, this concept indicates the extent to which the questionnaire measures the fixed or variable characteristics of the subject. In this research, Cronbach's alpha coefficient was used to estimate the reliability of the questionnaire. The values above 0.7 are considered desirable and acceptable.

The formula of Cronbach's alpha is as follows:

$$\alpha = \frac{k}{k-1} \left(1 - \frac{\sum_{i=1}^{k} S_i^2}{\sigma^2} \right)$$

Where,

k: number of items,

 S_i^2 : variance of the ith item,

 σ^2 = variance of all items (total variance)

For this purpose, the reliability of the questionnaire was estimated according to the data obtained from the questionnaire using Cronbach's alpha formula in SPSS software.

Table 2. Cronbach's Alpha Value of the Measurement Tool

Dimension	Number of items	Cronbach's alpha	Result
Whole questionnaire	27	0.811	Confirmed

As seen in the above table, Cronbach's alpha of the questionnaire was estimated as 0.811 (>0.7), which is desirable and indicates that this measurement tool has acceptable reliability.

4.6. SWARA Method

The Step-wise Weight Assessment Ratio Analysis (SWARA) method is a multi-attribute decisionmaking method, the purpose of which is to calculate the weight of criteria and sub-criteria. This method was introduced by Cresolin, Zavadskas, and Torxis in 2010, in which criteria are ranked according to their values. In this method, the most important criterion is given the first rank and the least important criterion is given the last rank. Finally, the criteria are ranked according to their average comparative importance values. This is a completely judgmental technique based on the opinions of experts, in which experts (respondents) play a significant role in determining the weights of the criteria. The following flowchart shows how the SWARA technique is used.

4.7. The Steps of the SWARA Technique

The SWARA technique includes the following main steps for weighting criteria:

- 1. Sorting the criteria: The criteria intended by the experts are first selected and sorted as final criteria, according to their degrees of importance. Therefore, the criteria in the lower ranks are less important and the most important criteria will be placed in the higher
- 2. Determining the comparative importance of each criterion (S): In this step, the importance of each criterion must be determined by comparing it with the previous criterion. In this process, this value is denoted by S_i.
- 3. Calculating the coefficient K_i: this coefficient is a function of the relative importance of each criterion and is calculated using the following equation:

$$K_i = S_i + 1$$

4. Determining the recalculated weight of each criterion: The recalculated weight of the criterion is measured by the following equation. In this equation, it should be noted that the most important index is the weight of the first criterion, which is considered equal to one.

$$q_j = rac{q_{j-1}}{K_i}$$

 $q_j = \frac{q_{j-1}}{K_j}$ 5. Determining the normal final weight: The final weights of the indices, which are normalized weights, are calculated in the last step of the SWARA method

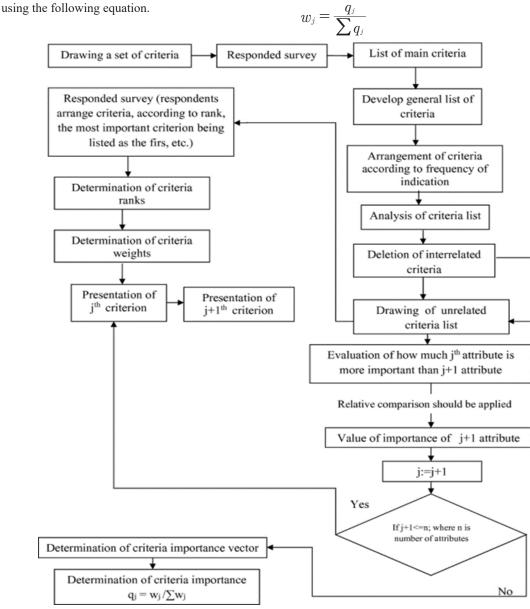


Fig. 1. SWARA Algorithm

5. CASE STUDIES

According to the research topic, three neighborhoods, including Sangsiah neighborhood in Shiraz, Qale Mahmoud neighborhood in Kerman, and Harouniyeh neighborhood in Isfahan, were investigated.

5.1. Sangsiah Neighborhood, Shiraz

One of the neighborhoods located on the edge of the old fabric is the Sangsiah neighborhood. In this neighborhood, the intra-neighborhood connection and second-level roads are more obvious. The dominant use is residential. The Sangsiah neighborhood is a large neighborhood with an area of approximately 80 hectares and a population of 4.694 people in the southwest of the historical fabric. It is one of the main structural areas in the historical fabric of this city.

Currently, this neighborhood is under the authority of the municipality of the historical and cultural District 8 (website of the municipality of District 8). During the reign of Karim Khan Zand, a new fence with several gates was built around the city. The number of gates was reduced to six and some areas were integrated. This neighborhood was formed by integrating two other neighborhoods, Bahelia and Darb-e Kazeroon. The Bahelia neighborhood was one of the peripheral neighborhoods where there was a large cemetery. The establishment of the Darb-e Kazeroon neighborhood dates back to the reign of Al Injo, which was ruined later. The Sangsiah neighborhood was limited to the Sarbagh neighborhood and Shah Square from the north, the Sardouzak neighborhood from the east, and the city fence from the south and west. On the

western side of this neighborhood, near the city wall, there was a moat that was converted into a garden known as Khandaq Garden and Moshir Garden by Abolhasan Khan Moshir al-Mulk turned into. There is also a garden between the Sardozak neighborhood and the Sangsiah neighborhood, which was established by Atabak Abu Bakr ibn Sa'ad, one of the

Iranian Atabaks, in the 7th century, and this garden is known as the Atabak Garden (Firouzeh Garden). The Sardozak Sarbagh neighborhood known as Sahib Diwan Garden (Bahjat Garden) was a garden established by Fath Ali Khan Sahib Diwan during the Qajar era (Pardaraz Consulting Engineers 2011).



Fig. 2. Location of Sangsiah neighborhood, Shiraz (Scale: 1:500)

5.2. Qale Mahmoud Neighborhood, Kerman

Qale Mahmoud neighborhood is a 115.356-hectare neighborhood located in the most southwestern point of Kerman. The Qale Mahmoud neighborhood is currently surrounded by Imam Street from the north, Pirouzi Street from the east, Taleghani Street from the west, and Motahari Street from the south. Also, in the past, it was located near the old neighborhoods of Qale Mahmoud, Rig Abad, Meydan Qale, and Godal Khesht. About the history of the Qale Mahmoud neighborhood in some history books, it was stated: (The Mahmoud Castle was established by the ruler of Kerman Mahmud Afghan in 1134). But in some other books, it has been determined that this is not true because there was no opportunity to build such a castle during the short reign of Mahmoud Afghan. On the other hand, the ruins of the fort and the moats around it indicate a much older building (Ahmadi 2008). According to the book History of the Iranian Cities, the history of this castle dates back to the period from 5 to 6 A.H. This castle was built during the Seljuk era in the 17th century and it was called Dasht Castle. Mahmoud Afghan used this castle to defend the city when necessary. For this reason, it is also known as Mahmoud Castle. Therefore, if Waziri's theory is considered, the history of the Qale Mahmoud neighborhood dates back to about 300 years ago, and if professor Parisian's theory (which seems to be correct) is considered, the history of this neighborhood dates back to. Until 900 years ago, the Qale Mahmoud neighborhood was one of the old and main neighborhoods of Kerman. Over time and in recent years, the towers and walls around this castle have been destroyed for the development of roads or the construction of new urban facilities, and moats have been formed around it. They were also destroyed and leveled to build new buildings.





Fig. 3. Location of Qale Mahmoud Neighborhood, Kerman (Left: Historical Neighborhoods of Kerman City, No. 30: Qale Mahmoud Neighborhood; Right: the Current Limits of Qale Mahmoud Neighborhood) (Scale: 1:100)

5.3. Harouniyeh Neighborhood, Isfahan

The Harouniyeh neighborhood is located in the southeast corner of Atiq Square, Isfahan. It has an area of 174276 m2 and a population of 640 people.

The population density is 37 people per hectare. In the past, the Harouniyeh Portal was referred to as the first street in Isfahan used by the courtiers according to the former inhabitants, and the first municipality

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of Isfahan is located on this street. In this area, residential buildings have low structural quality. In the social dimension, the majority of the residents are

low-income, non-natives, and immigrants (Afghans and immigrants from Chaharmahal and Bakhtiari Province) (Qalani 2017).





Fig. 4. Location of Harouniyeh Neighborhood, Isfahan

(www.google.com/intl/fa/earth/)

6. FINDINGS AND DISCUSSION

Data analysis is one of the most important parts of any research. Any error or inaccuracy in this part may lead to incorrect results. Choosing the right research method helps the researcher to avoid errors in the research. Collected data are raw resources that need to be analyzed with appropriate tools to implement their results. For this reason, the data were analyzed to achieve the research goals and answer the research questions.

6.1. Analysis Method

In this part, the results of data analysis are discussed and the present study aims to explain the conceptual model of flagship development projects with an emphasis on the development of a sense of security in the urban transformation process. All calculations were done in Excel software.

6.2. Descriptive Statistics of the Participants

This section describes the demographic characteristics of the respondents, including gender, age, work experience, and education to find the number of participants who responded to the pairwise comparison survey.

6.2.1. Gender

According to Table 3, 80% of the respondents were male and 20% were female.

Table 3. Frequency Distribution related to Gender

Gender	Frequency	Percent Frequency
Male	16	80
Female	4	20

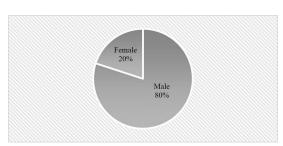


Fig. 5. Gender of Respondents

6.2.2. Age

According to Table 4, the highest and lowest

frequency is related to the 30-40 (50%) and 40-50 (20%) age groups, respectively.

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Table 4. Frequency Distribution related to Age

Age	Frequency	Percent Frequency
30-40	10	50
40-50	4	20
Above 50	6	30

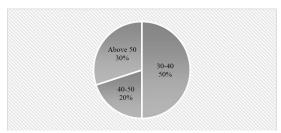


Fig. 6. Age of Respondents

6.2.3. Work Experience

As seen in Table 5, most respondents had work

experience between 10 and 15 years, and the lowest frequency is related to the above-15-year work experience (20%).

Table 5. Frequency Distribution related to Work Experience

Work Experience	Frequency	Percent Frequency
5-10 Years	6	30
10-15 Years	10	50
Above 15 Years	4	20

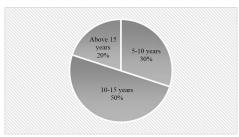


Fig. 7. Work Experience of Respondents

6.2.4. Education

According to Table 6, most of the respondents had

a bachelor's degree (50%) and the lowest frequency (10%) is related to the respondents with a Ph.D. degree.

Table 6. Frequency Distribution related to Education

Education	Frequency	Percent Frequency
Bachelor	10	50
Master	8	40
Ph.D.	2	10



Fig. 8. Education of the Respondents

6.3. Introduction of Research Factors

In this section, first, 31 indices of flagship development projects in the process of urban regeneration with an emphasis on improving the sense of security were identified and extracted in 3 dimensions according to the literature review and research background. Next, to localize the factors, 20 experts were asked to score each index based on a 5-point Likert scale using a questionnaire. Then, the average score of each index was calculated, as listed in the table below.

Table 7. Assessment of Indices

		Table 7. Assessment of Indices	
No	Dimension	Index	Average Score
1	Flagship	The equipment and development of public networks	4.5
2	Development	Revitalization of cultural heritage in the neighborhood	3.85
3		Development and provision of urban services	4.3
4		Revival of landscapes and urban spaces	4.15
5		Resident governance (bottom-up planning)	3.8
6		The empowerment of residents	3.7
7		Culturalization	4
8		Internalization of residents' employment	4.35
9	Security	Space scale	4
10		Urban furniture	2.8
11		Space form	4.15
12		Permeability of realms	4.35
13		Light and darkness	4.6
14		The familiarity of the space	3.9
15		A sense of belonging to the environment	3.9
16		Population density	3.4
17		Social surveillance	4.8
18	Regeneration	Improvement of the employment of residents	4.45
19		The attraction of domestic capital	4.65
20		The attraction of high-income families	3.35
21		The attraction of foreign tourists	3.55
22		The improvement of residents' quality of life	4.15
23		The stratification of space	3.15
24		Preservation and revival of neighborhood identity	4.1
25		Creation of new activity spaces	4.15

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No	Dimension	Index	Average score
26		Variety of forms and sizes	3.65
27		Enclosing barren lands and constructing structures in them	3.3
28	D	Movement of incompatible uses	3.9
29	Regeneration	The achievement of a sustainable economy	4.65
30		The formation of a sustainable city form	4.65
31		Sustainable transportation	4

6.4. Results of the SWARA Method

In this section, the weight and importance of indices are determined using the Swara method. In this method, the first step is to arrange the indicators in descending order (high to low) based on their importance. This process can be done using the average scores presented in the "assessment of

indices" table.

- Calculating the weights of the indices of the "flagship development" dimension: first, in the assessment table, the indices of the flagship development dimension are listed in descending order according to their average scores and then, the weights of the indices are calculated based on the SWARA algorithm.

Table 8. The Weights of the Indices of the "Flagship Development" Dimension

		, r			
Criterion	Score	\mathbf{S}_{j}	K_{j}	q_j	$\mathbf{W}_{_{\mathrm{j}}}$
The Equipment and Development of Public Networks	4.500	-	1	1	0.1793
Revitalization of Cultural Heritage in the Neighborhood	4.350	0.150	1.150	0.870	0.1559
Development and Provision of Urban Services	4.300	0.050	1.050	0.828	0.1485
Revival of Landscapes and Urban Spaces	4.150	0.150	1.150	0.720	0.1291
Resident Governance (Bottom-Up Planning)	4.000	0.150	1.150	0.626	0.1123
The Empowerment of Residents	3.850	0.150	1.150	0.545	0.0976
Culturalization	3.800	0.050	1.050	0.519	0.0930
Internalization of Residents' Employment	3.700	0.100	1.100	0.471	0.0845

For example, the weight of the second index, i.e. "revitalization of cultural heritage in the neighborhood", is calculated as follows:

The average score of the "revitalization of cultural heritage in the neighborhood" index is equal to 4.35. To calculate its Sj, it should be compared with the criterion above it. Therefore, it is stated how much the average score of the "revitalization of cultural heritage in the neighborhood" index is lower than the score of the index above it, i.e. the "equipment and development of public networks" index. The answer is 0.15. Mathematically, we have,

$$S_1 = 4.5 - 4.35 = 0.15$$

In the second step, it is necessary to calculate the value of K_i, to calculate this, S_i must be summed with

1, in other words, we have:

$$K_i = S_i + 1 = 0.15 + 1 = 1.15$$

The recalculated weight (q_j) is calculated in the third step, which is obtained by the following equation:

$$q_j = \frac{q_{j-1}}{K_j} = \frac{1}{1.15} = 0.87$$

After normalizing the recalculated weight values in the fourth step, the weight of each criterion is obtained. For normalization, each recalculated weight must be divided by the sum of recalculated weights. According to the results of the weighting of indices of the "flagship development" dimension, the "equipment and development of public networks" criterion ranked first with a weight of 0.1793, as shown in Figure 9.

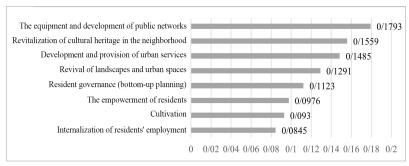


Fig. 9. The Weights of the Indices of the "Flagship Development" Dimension

6.4.1. Calculating the Weights of the Indices of the "Security" Dimension

First, the indices of the security dimension are arranged in the index assessment table in descending

order according to their average scores, and then, the weights of the criteria are calculated in the same way abovementioned using the SWARA algorithm, as listed in the table below. Accordingly, the space scale with a weight of 0.2044 obtained the first rank.

Table 9. The Weights of the Indices of the "Security" Din	mension
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Criterion	Score	S_{j}	K_{j}	q_j	$\mathbf{W}_{_{\mathrm{j}}}$
Space Scale	4.800	-	1	1	0.2044
Urban Furniture	4.600	0.200	1.200	0.833	0.1703
Space Form	4.350	0.250	1.250	0.667	0.1363
Permeability of Realms	4.150	0.200	1.200	0.556	0.1135
Light and Darkness	4.000	0.150	1.150	0.483	0.0987
The Familiarity of the Space	3.900	0.100	1.100	0.439	0.0898
A Sense of belonging to the Environment	3.900	0.000	1.000	0.439	0.0898
Population Density	3.400	0.500	1.500	0.293	0.0598
Social Surveillance	2.800	0.600	1.600	0.183	0.0374

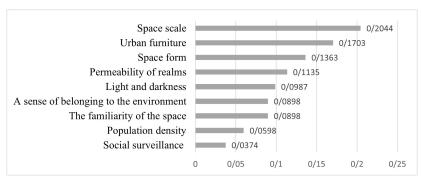


Fig. 10. The Weight of the Indices of the "Security" Dimension

6.4.2. Calculating the Weights of the Indices of the "Regeneration" Dimension

First, the indices of the regeneration dimension are arranged in the assessment table in descending order according to their average scores, and then, the weights of the criteria are calculated in the same way abovementioned using the SWARA algorithm,

as listed in the table below. Accordingly, the three indices of the attraction of high-income families, the attraction of capital income, and the improvement of the employment of residents obtained the first rank with a weight of 0.119.

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Table 10. The Weights of the Indices of the "Regeneration" Dimension

Tuble 10. The Weights of the Indies	os or the	regeneration	Dimension		
Criterion	Score	S_{j}	K_{j}	q_{j}	$\mathbf{W}_{_{\mathrm{j}}}$
The Attraction of High-Income Families	4.650	-	1	1	0.1190
The Attraction of Domestic Capital	4.650	0.000	1.000	1.000	0.1190
Improvement of the Employment of Residents	4.650	0.000	1.000	1.000	0.1190
The Attraction of Foreign Tourists	4.450	0.200	1.200	0.833	0.0991
The Improvement of Residents' Quality of Life	4.150	0.300	1.300	0.641	0.0763
The Stratification of Space	4.150	0.000	1.000	0.641	0.0763
Preservation and revival of Neighborhood Identity	4.100	0.050	1.050	0.611	0.0726
Creation of New Activity Spaces	4.000	0.100	1.100	0.555	0.0660
Variety of Forms and Sizes	3.900	0.100	1.100	0.505	0.0600
Enclosing Barren Lands and Constructing Structures in Them	3.650	0.250	1.250	0.404	0.0480
Movement of Incompatible Uses	3.550	0.100	1.100	0.367	0.0437
The Achievement of a Sustainable Economy	3.350	0.200	1.200	0.306	0.0364
The Formation of a Sustainable City Form	3.300	0.050	1.050	0.291	0.0346
Sustainable Transportation	3.150	0.150	1.150	0.253	0.0301

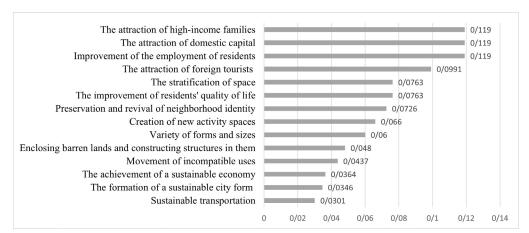


Fig. 11. The Weights of Indices of the "Regeneration" Dimension

6.4.3. Calculating the Weights of the Main Criteria

First, the Likert scores of the sub-criteria of each criterion are averaged to determine the score of the main criterion. Then, the criteria are arranged in descending order according to their average scores in the index assessment table. Next, the weights

of the criteria are calculated in the same way abovementioned using the SWARA algorithm, as listed in the table below. Accordingly, the flagship development (with a weight of 0.3544) obtained the first rank, followed by security (0.3244) and regeneration (0.3211), respectively.

Table 11. Weights of the Main Criteria

Criterion	Average Score	S_{j}	\mathbf{K}_{j}	q_j	$\mathbf{W}_{_{\mathrm{j}}}$
Flagship Development	4.081	-	1	1	0.3544
Security	3.989	0.092	1.092	0.915	0.3244
Regeneration	3.979	0.010	1.010	0.906	0.3211

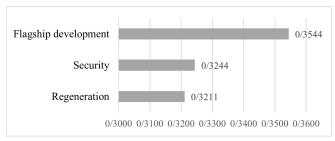


Fig. 12. Weights of the Main Criteria

7. CONCLUSION

criteria and their most important sub-criteria.

Tables 12 and 13 represent the rankings of the main

Table 12. Rankings of the Main Criteria

Criterion	Rank
Flagship Development	First
Security	Second
Regeneration	Third

Table13. The Most Important Sub-Criterion in the Criterion

Criterion	The Most Important Sub-Criterion	
Flagship Development	The Equipment and Development of Public Networks	
Security	Space Scale	
Regeneration	The Attraction of High-Income Families	

It is easily feasible to return to the old organization of urban neighborhoods. However, regenerating neighborhoods considering the needs requirements of the time and the cultural and historical positions of the old neighborhoods can preserve the socioeconomic system of historical neighborhoods and their physical structures. Historical fabrics are a part of the structure of the city and are considered one of the pillars of the city's identity due to their physical, functional, economic, and cultural values. The structure and context of these fabrics represent the past cultural-historical connections in the city. Historical fabrics are located in the center of the city and the city has been expanded from this point to its surroundings, so they are known as the physicalidentity identification of the city. The old fabric of the city acts as a mirror displaying the governing systems and ideologies, the culture and relations of the citizens, and the characteristics of the natural environment which can be seen in the architecture, the type of materials, the road network, the type of urban defense, and the type of construction. The old fabrics of the cities of Kerman, Shiraz, and Isfahan, especially Qale Mahmoud Neighborhood (Kerman), Sangiah Neighborhood (Shiraz), and Harouniyeh

Neighborhood (Isfahan), in addition to reflecting the history of development and cultural changes over time, include outstanding works representing Iranian culture and civilization on national and global scales. These neighborhoods and cultural complexes have worn out and experienced demographic-structural changes over time due to various factors such as decay, changes in the living conditions of citizens, authorities' inattention to them, and population mobility, so they need a comprehensive approach to renovate and rehabilitate themselves to preserve their identities. Recently, the land reform and the Iranian revolution have caused immigrants and lowincome people to reside in these places, and the high-income people, who were the original residents of these neighborhoods, move to new and modern places and neighborhoods, resulting in minimized economic power and financial means for renovation and improvement. If these changes did not occur, the financial means of these classes would make it possible to renovate and improve physical spaces and preserve the fabric's identity. But, nowadays, due to the long transition period, the relevant bodies require to adopt various programs to preserve the identity of the neighborhoods and renovate and improve the

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points where the former residents' big houses have become the settlements of immigrants or turned into warehouses of goods.

Table 14. Comparison of Three Neighborhoods (Characteristics and Potentials - Problems and Issues)

Neighborhood	Characteristics and Potentials	Problems and Issues
Sangsiah Neighborhood (Shiraz)	Historical buildings and symbols, the centrality of commercial activities in the past, religious potentials, ethnic-cultural eclecticism, diversity of functions, Pirouzi-Siboye road.	Improper lighting, migration of native residents, form and body problems, citizens' incorrect mental image of the fabric, lack of tourist attraction, and lack of road hierarchy.
Qale Mahmoud Neighborhood (Kerman)	Proximity to the main market, spatial identity, the existence of collective memories, the supply of Kerman handicrafts, the existence of commercial-economic spaces, proximity to Imam Street, and residents' sense of belonging.	Improper lighting and non-organic streets and alleys, worn-out physical texture, lack of unique function, migration of residents, and separation of the fabric from the main market due to the construction of the street.
Harouniyeh Neighborhood (Isfahan)	The existence of urban systems with organic order, commercial-tourist structure, the existence of cultural centers, the existence of a connecting center between Shah Square and Imam Ali Square, proximity to the center, and preservation of spatial identity.	Lack of coordination between various programs, the weakened economic power of residents, socio-cultural decline, spatial disconnections, becoming a warehouse place.

In the present research, which aimed to explain the role of flagship development projects in the improvement of security, three neighborhoods including Harouniyeh Neighborhood (Isfahan), Sangsiah Neighborhood (Shiraz), and Qale Mahmoud Neighborhood (Kerman) were selected as case studies. The results of data analysis using the SWARA model showed that flagship development projects can play a more significant role in the revitalization of neighborhoods than security and regeneration and among its indices, the "equipment and development of public networks" index was identified as its most significant index, followed by the revitalization of cultural heritage, the development and provision of urban services, the revival of landscapes, the empowerment of residents, and the internalization of employment, respectively, and highly influence

the level of mental security of residents. So, it is necessary to explain flagship development projects to improve the identity of neighborhoods and renovate and improve their structures. Also in the three neighborhoods of Sangsiah, Qale Mahmoud, and Harouniyeh, the results show that flagship development projects in the historical urban fabric strengthen the sense of security because the most important factor for the lack of the sense of security in the worn-out fabric is its unfavorable physical form and structure. In general, it can be stated that in the process of urban regeneration, which aims to create good neighborhoods in all dimensions, flagship development projects should be carried out with a collaborative approach, and an emphasis on the sense of security and crime reduction.

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