

Assessment and prioritization of urban open spaces according to performance from the prospective of urban managers using the model of AHP

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Abstract:

Urban open spaces are impressing parts of urban environments that because of their importance on the social system of urban settlement, the decision about them is one of the main concern of urban planners. urban open and public spaces are places where belongs to all people and provides the innate needs of citizens to establish face to face relationship within community and the body of cities .so it is being increased to the importance of these spaces in arena of cities in mechanical world of 21st century. in this direction , the goal of present research is " Assessment and prioritization of urban open spaces according to performance from the prospective of urban managers using the model of AHP", the research method is analytic – descriptive based on librarian studies in the form of questionnaire surveys. The result of assessment and prioritization of urban open spaces according to performance from the prospective of urban managers using the model of AHP, shows that the designed index "A" of urban open spaces with the average 0.519, is in first place the "C" with the average of 0.310 is in second place, the index of "B" with weight average of 0.243 is third place.

Key words: operation, urban open spaces, urban managers, Zabol.

Introduction

Urban spaces are parts of city structure which are surrounded, readability, geometric characteristics and the pattern of their specific operation have caused that external spaces will be called urban space(carrier , 1993,1)

Urban open spaces as one basic part of physical structure of cities (physical and structural) have social and public concept in temporary cities. social and cultural relation in urban open public spaces (squares and streets) is a factor for turning public spaces into sustainability spaces. urban open public spaces have simple open and valuable function as a neutral territory. it means that people can be combined without having unsafe and embarrassment sense. he believes that urban public spaces is a place where the value of all people is equal and fortunately some people believe that the streets and city center are belonged to them(Tie ,1996,49).

So public arena where the most contact of human occurs is the most important part of our cities or town (hanifi Asl, 2009). urban open spaces is where private organizations doesn't control it and is open to all people. the possibility of allowing to different groups of people, apart from their social class, race, ethnic, and their age is the property of this space. it is important to attend urban open space because it has an important role in creating recreational

opportunity and environmental health and reaching the goal of aesthetics. It is also necessary to increase and develop urban open spaces because of all problems of metropolises especially about air pollution and accumulation of transportation means and lack of public spaces which is increasing with supremacy of cars and passages. urban open spaces involve large spectrum of all urban parks ,pond, farmlands, clear lands, pavements and other inbuilt lands .(woodlands, urban green belt, jungles , and safeguarded zones).

From the view of Hajer, urban open spaces are spaces in which individuals and groups participate in them .these places are the places of interchanging thought and information and are places for forming social networks. these spaces are not only spaces but also are experiences(Hajer, 2001,52).

Alexander (2008) by designing of seven stage or growth rule (gradual growth , growth of larger, providence, positive urban spaces, setting of designing of large buildings, reflecting aspects of construction in building façade ,forming basic and subordinate centers) pointes to physical dimensions and gradual growth and no geometric order of urban spaces.

Jacobs (1993) the prominent journalist and commentator of urban issues in the book of "Death and life of large American cities" focuses on the role of urban public spaces in creating interactions. he believes that what remains in mind from a city is public spaces especially it's streets and pavements. he also notes that the safety of association of traveling people in pavements appropriate to their gender has a reverse effect on separation and discrimination. so in order to attract more people , the public spaces of city should be lively. he also comments that for keeping streets alive , a certain extent of pedestrians on sidewalks should be present .of course , he believes that high density is not enough for living(Jacobs, 1993, 32).

Bayat and Mojtabazadeh (2012) have expressed the basic concept of urban natural open spaces and sustainable development according to the importance of urban natural open spaces in sustainable development. then have examined types of urban open spaces and their operation and their places in sustainable development and have codified some criteria for upgrading these spaces, and finally have mentioned some suggestions for improving urban open spaces in Iran according to sustainable development .

Ahmadi and sheikh Kazm (2012) have reviewed the rule of urban open spaces in temporary accommodation after earthquake from the view of passive defense and emphasized the importance of urban open spaces in times of crises and a number of strategies have been suggested.

Rafian and his colleagues (2010) have examined the qualitative of urban open spaces .the result shows that perspective to studied open space has a considerable positive effect on price of residential units around .so that after the surface infrastructure with impact factor of 21%, it was identified as the second effective parameter on the price of housing in the area. the presented model is developable for other similar areas for evaluating quality values of open spaces .

Adahm and Aziz zadeh (2010) have examined the principles of designing of urban open spaces in age of globalization (case study: the historic center of Tehran).

Research goals

1. Planning and designing of urban open spaces for creating prosperity, security and comfort
2. The use of public and open spaces in the city of Zabol
3. The importance of urban open spaces as the heart of city

Area of study

Sistan region with an area of 15,197 sq km in the geographic range between 30° C and 5 minutes to 31 degrees 28 minutes latitude and 60 degrees 15 minutes to 61 degrees 50 minutes longitude in southeastern Iran and the northern part of the province and Balochistan by about one eighth of the total area allocated to the province. Average annual rainfall in the region 6/59 mm, mean annual temperature of 22°C and the average annual relative humidity is 38 Drsdmy. According to the classification criteria land Domarten 9/1 is classified as Frakhshk areas. One of the hallmarks of the region, which winds 120 days in the mountains between Afghanistan and plain air pressure, occurs. The wind almost from early June starting at about 4 months of the year continues in Zabol plain and almost Dravst September (late August) is terminated.

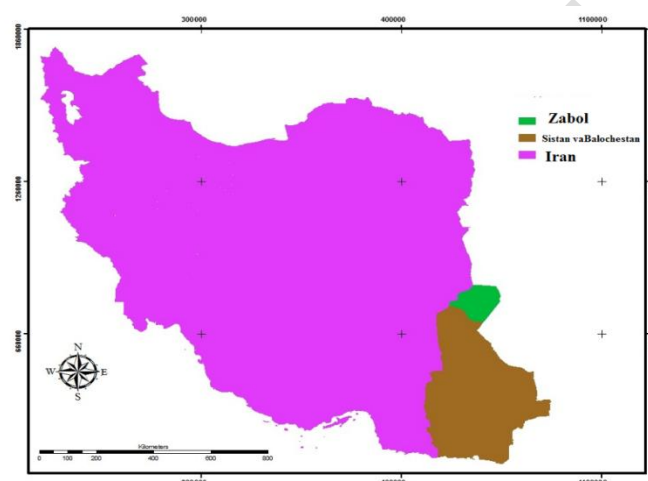


Figure (1): position in the region, Sistan-Baluchistan province, Source: research findings

Discussion and conclusion

Assessment and prioritization of urban open spaces according to performance from the perspective of urban managers using the model of AHP. First components of the study will be explained in detail.

Traditional and urban open spaces in old texture of town:

These urban open spaces are placed besides spaces such as mosques, bathrooms, daily shopping centers, and other urban public centers. Most of these centers have basic roles in daily life of people in the form of open neighborhood centers, regional centers and have a specific physical patterns. So as to by maintaining their function and nature have been had important roles in dynamism of urban places. But what we are witnessing today is destruction and changing of these urban open spaces because of implementing the city approved plans that actually have caused the loss and damage of traditional open spaces in cities and changing the identity transformation in our traditional architecture and urbanism. In these spaces, proximity to other activities and the use of these activities are not limited to a specific time, as well as the users of these spaces that are partially defined have caused attachment for meeting and daily interactions as well as children's games. Combination and proximity of these open spaces with other spaces and residential parts and their compatibility with the needs of people in past, have simplified using of them for today's users and have created a sense of belonging and communications to these spaces among people. So that as a behavioral base has an important role in creating social interactions, security sense and belonging of individuals especially in free times, in the other hands the study of operation of traditional open spaces in cities shows that some qualitative and quantitative characteristics of these

open spaces such as operation, extent, quality of designing and the lack of consistency in terms of physical and mental of different age groups, have caused that these spaces couldn't provide the new needs of people especially the needs of young and youth and these spaces have been used by old people for spending free times .so because of lack of consistency between activity and physical environment a homolog has not been created between place behavior and these spaces have not the ability of creating full satisfaction of space and development of appropriate social behavior in some age groups and couldn't appropriately be used by all citizens .

The designed urban open spaces : these urban open spaces are often used in parts of cities by citizens such as green , sport ,recreational and rest spaces for spending free times and are consistent with the principles and term of dominant culture and have capability to meet the needs and interests of the people physically and mentally. This type of urban spaces that involves different parts such as public space and semiprivate spaces have been designed for meeting and social interaction of people. Recreational and sportive spaces have been designed on the basis of needs of different age groups. These spaces have been capable for creating consistency and a homolog between individual and environment as a behavior base with appropriate operation and designing and social and cultural development.

So that this relationship and also attention to time of using urban spaces in designing makes sense of satisfaction of space especially from the young whom these complexes will attract them in free times and prevent them to roam the street.

Not designed urban open spaces: these types of spaces are usually seen in form of squares .green spaces of margin of streets and the main arteries of city and open spaces caused by widening the streets, the spaces have not been designed for spending free times but are used by people because of lack of proper spaces. since these spaces have not been designed for spending free times, terms of performance doesn't conform to people's need and functional coordination doesn't exist between individual and environment . this lack of coordination can lead to physical discomfort so that the non compliance of users with application and use of spaces and lack of environmental coordination with characteristics and the needs of people .these environments have no value in terms of identity and using of them cause users not be satisfied . for example in most cases placement of highways and arterial streets around the urban spaces as a factor bother people and disturb easement of people and therefore belonging of attachment to environment doesn't been created. in fact these types of urban places are not acceptable in harmony with the needs and interests and physical and mental characteristics and the relationship between individual and the environment isn't appropriate.

The analysis model:

First, the problems of converting a hierarchical structure that includes a three-level hierarchy of objectives, criteria, and be choices are

Table (1): factors of urban open spaces according to the performance of urban managers

Indexes	Indexes
the designed urban open spaces	A
not designed urban open spaces	B
Traditional and urban open spaces in old texture of town	C

Source: search results

Comparison matrix to determine the binary parameters (A =ahj) question are results and their importance and expertise of specialists in this field is used.

Table (2): Matrix A couple of indicators

E	C	A	Indexes
5	3	1	A
1.2	1	1.3	B
1	2	1.5	C
7.2	5	3.8	Σ

Source: search results

Matrix pair (two for binary) index is obtained as follows:

It is to fill this matrix; scale of 1 to 9 is used to determine the relative importance of each element relative to other elements.

Table (3): 9 Saaty scale quantitative comparison of binary options

Intensity of importance	1	3	5	7	9	2-4-6-8
Definitaion	Equal importance	Weak importance of one over another	Essential of strong importnace	Demonstrated importance	Absoloute importance	Intermediate values

Source: search results

After forming the matrix of paired comparisons and values should be the norm. For this purpose, the value of each column of the matrix corresponding to the sum will be divided.

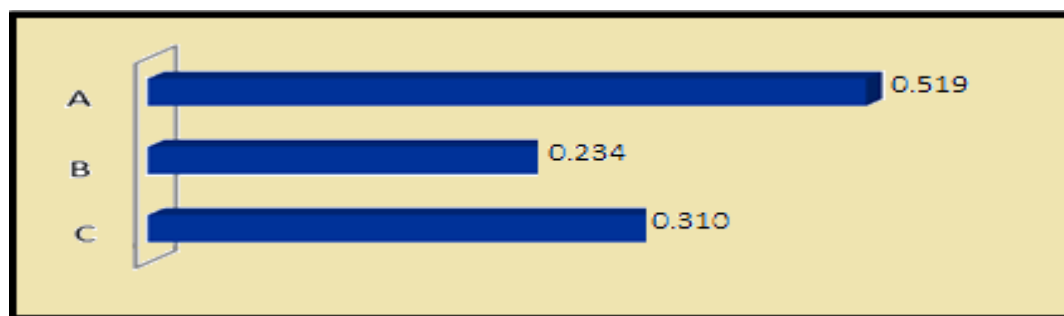
Table (4): Paired comparison matrix normalized relative indicators and weights

Average	C	B	A	Indexes
0.519	0.694	0.6	0.263	A
0.234	0.16	0.2	0.234	B
0.310	0.138	0.4	0.394	C

Source: search results

So the inconsistency rate calculations in the present study, 0.060 is .Since $IR = 0.060$ smaller than 0/1, then the paired comparisons, there is a remarkable consistency All calculations of the eigenvector (eigenvector) is carried out .In the questionnaire, and explain briefly introduce the measure compiled and presented in Table values for comparison of paired preference, paired- comparison was requested to be completed. The sample questionnaire, and program managers are urban planners. After collection, analysis and verification questionnaire, the following results were obtained:

A (L: 0.519) C (L: 0.234) E (L: 0.310)



Inconsistency = 0.060

With 0 missing judgment

Figure (3): Results of hierarchical analysis using expert choice software, Source: research findings

The results obtained of the AHP, $A > C > B$.

Table (6): Final ranking parameters in AHP model

rank	Criterion weight	criterion	Criteria
1	0.519	the designed urban open spaces	A
3	0.234	Not designed urban open spaces	B
2	0.310	Traditional and urban open spaces in old texture of town	C

Source: search results

index "A" of urban open spaces with the average 0.519, is in first place the "C" index of traditional urban spaces in old texture of city with the average of 0.310 is in second place, the index of "B" with weight average of 0.243 is third place .

Conclusion

The process of development and growth of cities of Iran indicates that unbalanced and uncoordinated development because of various reasons such as increasing rural to urban migration and lack of urban planning and designing leads to heterogeneity in cities. This unbalanced and uncoordinated growth which have followed by lack of attention to various aspects of personal and social issues have caused some social problems such as the lack of quantitative and qualitative of social centers and lack of urban open spaces. urban open spaces are like a physical structure for social interactions which is accessible for members of civil society. urban public open spaces turns unfamiliar to familiar everyday and provides a place for social and group relation. squares, streets and as urban public open spaces are spaces where their importance have been obvious after the industrial revolution .these spaces are the physical symbol of the political and social ideas of social actors. Open spaces as a public arena can be spaces for creating social and cultural relations for people living in society. Obviously, in the absence or weakness of public spaces, many of the activities and efforts of the public arena will not be manifested. urban open spaces can also be a form of urban expression separating from their leisure operations.

In contemporary cities, urban public spaces have basic and social concept and are important as a fundamental components of physical construction (physical and structural element).

The result of assessment and prioritization of urban open spaces according to performance from the prospective of urban managers using the model of AHP, shows that the designed index "A" of urban open spaces with the average 0.519, is in first place the "C" index of

traditional urban spaces in old texture of city with the average of 0.310 is in second place, the index of "B" with weight average of 0.243 is third place.

Suggestions

- ✓ Planning, designing and creating urban open spaces appropriate to the number, size and location according to population in different region.
- ✓ Qualitative upgrading of urban open spaces based on design criteria of physical and psychological needs especially the young and also attention to the time of using of these spaces that are usually used in summer and leisure days.
- ✓ Attention to creating appropriate urban open spaces with identity, appropriate form, texture and matters and appropriate furniture
- ✓ Planning for sustainable development on the areas of city
- ✓ Long term experiment in areas of Zabol.

Resources

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