

# **Analysis and ranking physical development indicators in the city of Zabol according to the role of urban management**

## **(With emphasis on the Islamic Councils and Municipalities)**

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### **Abstract**

Desirable management means to investigate the problems of planning, monitoring coordination of the different parts and how to provide and implement the projects and the public needs that deal with it from prenatal until death. In other words, management must try in direction of all the executive ways that the residing people of the city are contacted with and it must implement the affairs correctly and dispose the problems and meet the needs. The purpose of the macro-management of urban is creating a livable environment for all with social justice, economic efficiency and environmental sustainability and urban management is integrated in the areas of urban land and housing, social services and economic development and environmental infrastructure. The Purpose of this paper is Analysis and ranking physical development indicators in the city of Zabol according to the role of urban management. The results show that the Index (B): The situation of the network of passages and communication network: with a standard weight of (0.277): in the first place and Index (D): The situation of urban green space: with a standard weight of (0.208) in the fourth place.

**Keywords:** urban management, sustainable development, physical development, Zabol

### **Introduction**

The rapid pace of population growth and migration to urban areas is a key feature of developing countries. In Iran, uncontrolled immigration from rural to urban has been followed by numerous problems for urban management and has transformed the physical face of urban space and Municipal performance can have an important role in organizing of affairs. Urban society with all its diversity issues is full of problems that its social roots seem being stronger than other dimensions. Many of the social damage are formed in the cities and because of the population density, Most of them are invisible (Sarfaei and Abdullahi, 2008: 217). The city is proposed as a source of developing and urban management position is very important and crucial in the development and improvement of urban settlements. From another perspective, we can consider urban management in the course of a lawful and sustainable development. This case will be more important when the way of managing the optimal flow of city life can have the most important role to improve human settlements and sustainable urban development because the factor of allow the donor and regulator of urban plans will stem from urban management efficiency (Shia, 2003:12).

Visual structure of each city, although it is the most superficial formed layer and the most common involved area of activity-spatial structure apparently but on the other hand, it is the most visible aspect of manifestation of economic, political, social and cultural relations ruling on community residing in the city that it will emanate the existing contractions or conflicts and organizing or chaos in society in a tangible form to the eyes of those involved in urban management. So the irregularities and anomalies reflected on the body of each city is an indication of the chaos in the city's development

process and management system failures and this physical abnormality, in turn, can sustain or alleviate the existing shortcomings in the activity system or it may create new activities anomalies. So, In order to explore the visual characteristics of the physical-spatial structure of the city and the effort to organize it, will be the most important aspects of monitoring of urban development (Abdulla Khan Gorji, 2003: 1). So the efficient functioning of urban management as a comprehensive management entity involved in the urban issues and high broad and diverse phenomena is essential and made it possible to achieve sustainable human development in the city eventually.

Evaluating the performance and efficiency as one of the most effective tools for understanding organizational capabilities and business process control can highlight the threats, strengths and opportunities for improvement on existing trends and provide individual and organizational excellence (Mohammadi et al, 2007: 124).

### **The history of the research**

Adams and Ferreira (2009) investigate the role of city managers in business administration and their impact on the management and performance of affairs and conclude that the presence of female managers in organizations reduces male's problems.

Cook (2009) knows private sector participation in urban governance as a successful part in partnership urban management.

Ewan (2003) by examining the city managers, local governance and participation in the South African believes that bringing government to the people is the result of existing of urban management in making decision.

Stewart (2006) has studied the design of good urban governance and participation and evaluation in Vancouver, Canada and believes that the development of this index will be faced with at least four major criteria including the definition of the concept, choosing of criterion and evaluating of index.

Jacka (2009) By studying of urban management activities in a case study in China, considers it as the development of participatory governance and presents non-governmental organizations as a factor in social empowerment and increasing of social participation of city managers.

### **Theories**

#### **City**

Although still in the Third World people live in rural areas, but city was the center of the many developments that have occurred in colonial period and especially after it (David Rakakiss, Smith, 2000). According to ecology, the existence of cities belongs to the second food production. In this period of time rich cities are growing in number in rich areas. Urban communities are growth and more facilitate. So production is increased in the cities. Transactions occur between the cities, life is more extensive and comfort coupled with the vast social network. Then the man went into the field of urban communities and creates new areas of a Word. Devices may be replaced by a machine instead of simple tools and period of machinery in production begins. Cities become a closed Center and habitats of community elders and social organizations are transmitted to the cities from the villages. City Especially big city is an unquiet community that large groups gathered in mass, and because of a variety of complex social organizations, especially official organizations they are cooperating together. City dwellers usually have an official or private relation with each other. Among city dwellers, there are

fundamental differences in terms of jobs and expertise. Despite cities have in common about qualities but they are not all of one type, many cities by the time spent, have been named in terms of certain specialties. So cities can be divided into different groups such as trade center city, industrial city, cultural city, realigned city, political city, cultural city, sportive city and so on (Ahmad Romory, 2008, p 9).

### **The concept of development and sustainable development**

The development is an idea and practice that emerged in the early of nineteenth century. This concept is different from the idea of progress. Following dissatisfaction with the progress in the age of Western thought of melancholy, positivism, idealism and critical, the theory of development accompanied by the first capitalist theory based on reasoned Mandate (Instead of another act) has created a strong force in forming of the theory of development and mandate is an intention that will be expressed with a source of empowerment for the development of other capacities (Cowen & Shenton, 1996: 1).

The concept of sustainable development centered on the axis of human- environment and considers the development of economic opportunity with environmental considerations and social justice. The Sustainable development was propounded after the created problem from purely economic development after world war two. A place where excessive development has caused the class differences and the numerous environmental problems and the path of development had valued the social-environmental dimensions less than economic. This concept has roots in an ecological principle, based on this principle if in any environment; the size of the natural power of environment processing is equal to Utilization or productivity, the main Capital (ecological resources) will remain stable and our use of the environment as it can be produced, will always be stable. The amount of the human use in the certain environment which is appropriate to the powers and capacities of environment has the maximum efficiency due to the fact that it is equal to the size of the entire production (Makhdom, 1999: 54).

Attention to the physical development of cities is one of the most important factors in the planned growth of cities. In our country as long as the pattern of urban growth was organic and endogenous and local factors were determinants of urban growth, urban lands was sufficient for urban traditional use and it organized the space of city organically according to the economic, social and security condition of the city. But today, due to exogenous forces and peoples' immigration to cities, the physical development has been propounded as one of the most important factors in program-planning of cities. On the other hand, although urban areas form 4 percent of the land surface of the earth however, they can cause abnormal development of extensive changes in the environmental conditions of other applications. Irregular urban development will have devastating effects on cities and their surroundings Such as heterogeneity of natural landscapes and the loss of farmland. Despite the fact that scientific findings have proven that this pattern is not an effective model for urban development but it is still the dominant pattern of urban development (Batisani & Yarnal, 2008: 2).

### **Urban management system**

Urban management is as a system. To understanding of urban management, it can be likened to a system. Urban management like all systems is included of departments and

affiliate agency or organizations, which have mutual relations together in form of unique structure. This relationship may be weak or strong.

Since there are large number of individuals, hierarchical and accurate division structure of labor; urban management system in the term of systems classification is in the social systems category. The important part of this system is financial sector which is the most important issues of urban management system.

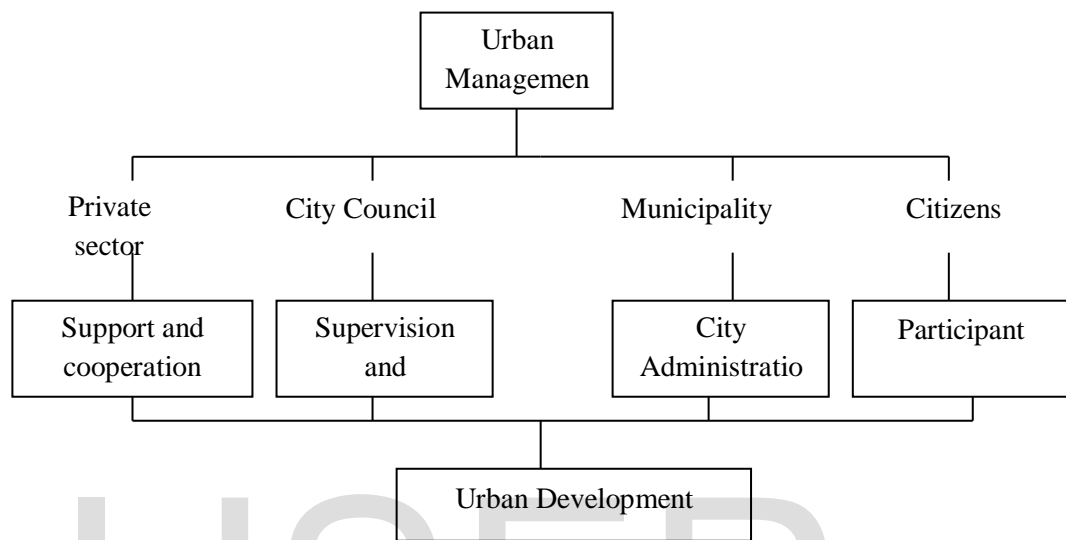


Figure (1): The Role of Urban Management

### Urban management tasks

The main tasks of urban management can be noted as urban managing and land ownership. In the next few years, most developing countries are going to face land shortages, runaway inflation, market problems and economic and environmental problems; urban management task in this area is solving these problems. Another task of urban management can be made economic and social development balance. In Iran, in accordance with Chapter 11 of the Municipal Act four general tasks which are assigned for municipals are construction, services, regulatory and social welfare. Developmental tasks are such as street construction and landscaping, service tasks are such as clean streets and waste disposal, regulatory functions are such as licensing and supervision of building and trade unions, social welfare are such established hospice and construction of affordable housing (Ahmadnia, 2004: 32).

### Area of study

Zabol is located the geographical coordinates 31 degrees north latitude and 61 degrees and 2 minutes and 39 minutes east. The extent of Zabol is 2084 hectares, which is equal to 0.13 percent of the area encompasses the city. Zabol in term of land distance is 210 km from Zahedan city in southeastern, 1538 km north of Tehran, 366 km North West of Birjand and 834 km from Mashhad and thus be associated with the centers of neighboring provinces and other parts.

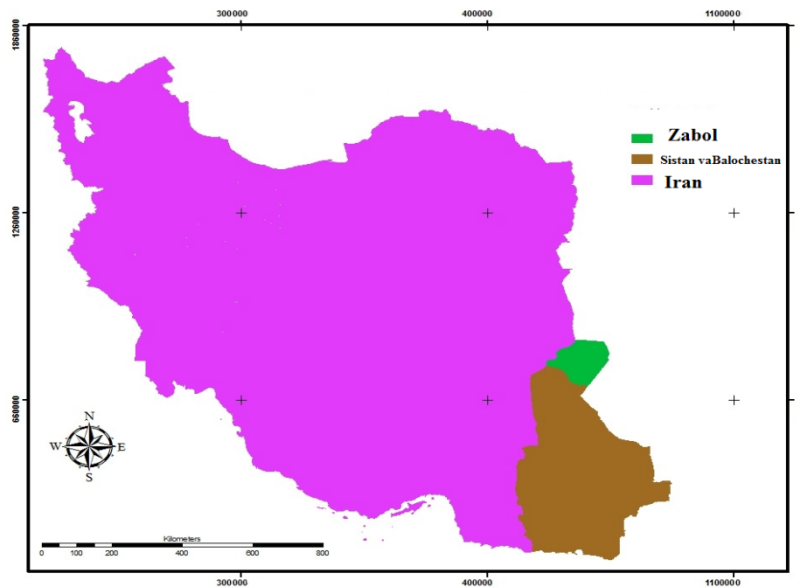


Figure (2); position in the region, Sistan-Baluchistan province

### The Land use pattern in the city of Zabol

As you can see in Figure 3, the most application is related to residential application in the city of Zabol that has occupied 28.87% of the city. After the residential application, the education and trading application will be placed in the following ranks.



Figure (3): land uses the city of Zabol

### The divisions Pattern of the city of Zabol

According to the detailed design proposal, the city of Zabol has been divided into 5 regions and 38 districts. The region 1 has 7 districts, the region 2, 12 districts, each of the regions 3 and 4 has 7 districts and the region 5 has 7 districts. The figure 3 has presented the division of the city of Zabol according to region and district.

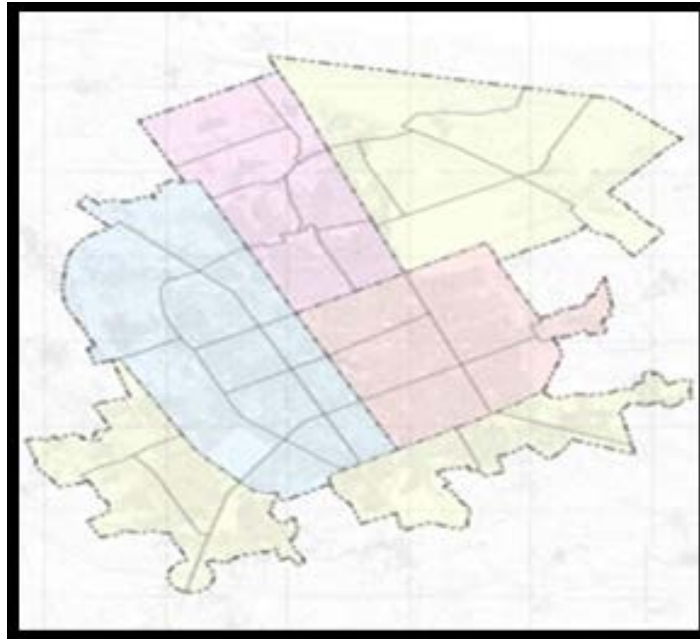


Figure (4): distribution based on region and district of Zabol

**Research method**

The research method is descriptive – analytic and is based on documentary librarian and field studies. Model AHP are used for analyzing the findings.

**Discussion and conclusion**

**The use of AHP model to Analysis and ranking physical development indicators in the city of Zabol according to the role of urban management (With emphasis on the Islamic Councils and Municipalities)**

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

Table (1): Criteria considered in the model

Criterion	Indicators
The situation of urban density and per capita	A
The situation of the network of passages and communication network	B
The situation of the residential units (in terms of physical characteristics, such as the facade, materials and etc)	C
The situation of urban green space	D

Source: search results

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

Table (2): Matrix A couple of indicators

D	C	B	A	Criterion
2	1.2	3	1	A
1.2	3	1	2	B
2	1	2	1.3	C



1	2	1.3	1.2	D
6.2	7.2	7.3	5.5	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 scale quantitative comparison of binary options

Intensity of importance	1	3	5	7	9	2-4-6-8
Definition	Equal importance	Weak importance of one over another	Essential of strong importance	Demonstrated importance	Absolute 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

	D	C	B	A	Criterion
	0.322	0.166	0.410	0.181	A
	0.193	0.416	0.136	0.363	B
	0.322	0.138	0.273	0.236	C
	0.161	0.277	0.178	0.218	D

Source: search results

The logical consistency of judgments

Now the same steps for all choices of (a, b, c,) we do. This step must be calculated to determine whether the inconsistency rate between paired comparisons we are compatible or not. Here are just a couple of inconsistency rate for comparisons of account we choices of similar operations to be performed on every indicator. Inconsistency rate can be obtained from the following relationship be:

$$I..R. = \frac{I..I.}{I..I..R.}$$

Inconsistency rate (IR): the table below is extracted:

N	1	2	3	4	5	6	7	8	9	10
I..I..R	0	0	0/58	0/9	1/12	1/24	1/32	1.41	1.45	1.45

Source: search results

So the inconsistency rate calculations in the present study, 0.047. Since IR= 0.047 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: 0.269) B (L: 0.277) C (L: 0.242) D (L: 0.208)

**Results and Findings**

The final results show that the AHP model: B>A>C >D

Index (B): The situation of the network of passages and communication network: with a standard weight of (0.277): in the first place.

Index (A): The situation of urban density and per capita: with a standard weight of (0.269) in second place.

Index (C): The situation of the residential units (in terms of physical characteristics, such as the facade, materials and etc.) with a standard weight of (0.242) in third place.

Index (D): The situation of urban green space: with a standard weight of (0.208) in the fourth place.

Table (6): Final prioritization indicators

Rank	Weight	Criterion	Indicators
2	0.269	The situation of urban density and per capita	A
1	0.277	The situation of the network of passages and communication network	B
3	0.242	The situation of the residential units (in terms of physical characteristics, such as the facade, materials and etc.)	C
4	0.208	The situation of urban green space	D

Source: search results

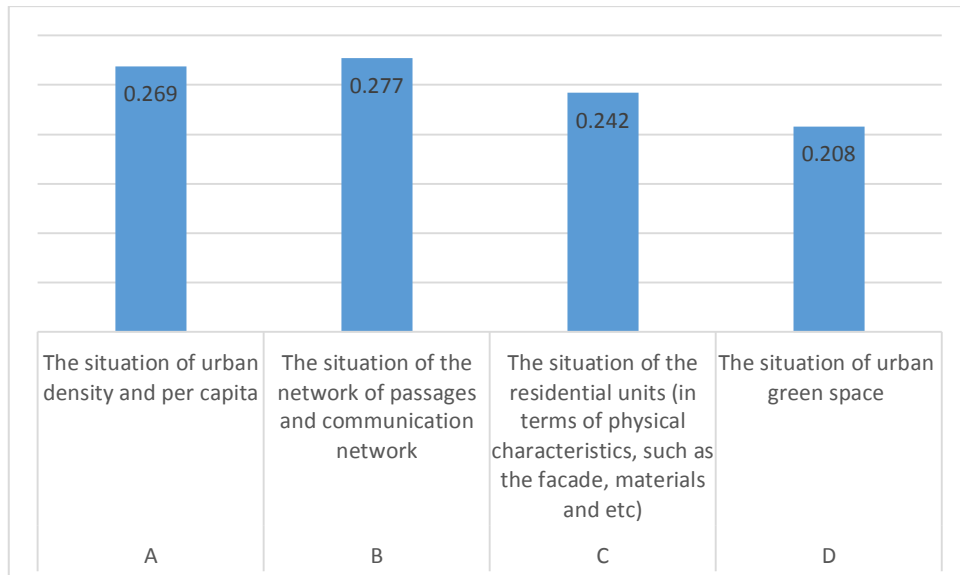


Figure (5): Final prioritization indicators, Source: search results

**Conclusion**



Cities have different body and functions as residential centers. The formation of the physical elements in cities and their multiple roles will be done by social and political players of the cities. But the administration of the city and deal with the demands and expectations of the citizens requires a context that under its light, it can be the responded to such demands reasonably. City and urban management are concepts that have a very close relation to each other. The rule of law is needed to establish the field of the interaction between the elements of urban management which includes citizens, institutions and the city administration, the Islamic Consultative and private sector. The Purpose of this paper is Analysis and ranking physical development indicators in the city of Zabol according to the role of urban management. The results show that the Index (B): The situation of the network of passages and communication network: with a standard weight of (0.277): in the first place and Index (D): The situation of urban green space: with a standard weight of (0.208) in the fourth place.

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