



Islamic city and urbanism, an obvious example of sustainable architecture and city

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Abstract. Urbanism entered a new phase by the arrival of Islam so that the formed foundation of urban life changed in the Sassanid era. Urban communities experienced major developments in accordance with Islamic rules in social and economic dimensions. Also, establishment of mosques resulted in physical alteration of cities. By gradual dominance of Islam in Iran, the fields were ready concerning rapid growth of cities and creation of new cities with transformed form and modern culture. Following these changes and in accordance with comprehensive ideology of Islam and its philosophical principles, the concept of “Islamic city and urbanism” was raised as a new topic in urbanism worldwide and in particular in Islamic countries. This concept is tangibly apparent in the theory of “physical development of construction and designing new cities”. On the other hand, introduced in the late twentieth century and followed by sustainable cities, the relationship between human, sustainable environment and development has seriously started in architecture and urbanism in order to create balance between diverse biological levels and perception from the environment. The objective of this paper is to introduce and compare sustainable urban development indicators and urbanism. It tries to answer whether or not Islamic city is an obvious example of sustainable city. In this regard, general principles of sustainable development, theoretical framework of sustainable city, and principles of Islamic city are first studied. Research method is descriptive-analytical and it is based on library data and resources. The research results show that taking advantage of special Islamic principles and values, Islamic cities have been able to follow indicators which are taken into account in sustainable cities.

Keywords: Islamic city, sustainable development, sustainable city, sustainability indexes, sustainable Islamic city

1. INTRODUCTION

Islam, as a universal and complete religion responding all material and spiritual needs of human, had a close relationship with issue of city and urbanization from the very beginning. During the Islam emerging and development, Muslims founded new cities and large cities with mosques and buildings built on the spirit of Islamic thought were the headquarters and main bases of Muslims in the vast territory of that period. In addition, introduced in the twentieth century entitled as sustainable city, it tried to expand self reliant city-based urbanization fields through some rules and principles in order to promote economic, social, and environmental issues as well as health provision and resident satisfaction and it is preserved for future generations. What is highly regarded is some common points found between Islamic architecture, urbanization and paying attention to sustainability approaches and modern urbanization filed.

2. THE CONCEPT OF CITY AND URBANISM FROM ISLAMIC POINT OF VIEW

Although there are a wide range of definitions and interpretations for the term “Islamic city”, a complete and comprehensive definition has not been presented so far. The fact that what the Islamic city is and what its features are is the research fields which need vast contemplation in resources of

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such topics. Also, the fact that Islamic cities have existed has long been a controversial issue (Ghani Zadeh, p 1385). Some have rejected Islamic cities and others called whatever was founded in Muslim countries as Islamic cities. It may be better to consider Islamic city as city where designing and construction theoretical principles are rooted from Islamic values and principles. Responding methods to such principles and criteria are different in place, time, and accessible facilities and only Islamic principles and concepts will remain unchanged. (Naghi Zadeh, p 48, 49). Generally, Islamic city is real Islamic community city and city of real Muslims because it enjoys Islamic features along with general features and characteristics. It also agrees with identities of its residents. Quran is one of fundamental and main resources to explain Islam approach in features of desired city.

3. POSITION OF CITY AND URBANISM IN ISLAM

Living environment and space(city), as container of civilization and the manifestation of social values, plays important role for displaying society values so that communities and civilizations form their living places according to their beliefs. According to this, sizes and scales, forms and shapes, orientation and proportions of buildings, neighborhoods, communication, and performance available in a city and buildings, etc. are all rooted from the dominant thinking of city residents and principles. To this end, nowadays, the thoughts of their founders are inspired by observation of some samples and symbols. (Naghi Zadeh, p85)

According to its principles and values, Islam, as the last and the most important religion, has had considerable effects on cities and the importance of city was frequently emphasized in Quran as the most original and comprehensive Islamic resource in that the word Al-Madina [city] was repeated 14 times, Balad [city] was repeated 14 times in three forms, and Al-Balad [city] was repeated 5 times in Quran. Some verses referred to specific cities and some other verses are directly related to city features and population centers (Ghani Zadeh, 2006).

4. THE EFFECT OF ISLAM ON THE STRUCTURE OF CITIES AND URBANISM FEATURES OF ISLAMIC PERIOD

The influence of Islam in various countries in Asia, Africa, and Europe has left many inevitable impacts on the development of the city. Its religious rituals, beliefs, and values have focused on social gathering and they are opposed to nomadism and scattreness. Islam expanded in Northern Africa, entire African continent, and South Europe. Accordingly, some thriving cities emerged. The leading role of religion has gradually been weakened by a combination of political motivation and different parts of Islam might disconnect its traditional ties with main caliphate, leading to the process of urban decline or deterioration along with family members. The stability was not again restored until the arrival of the Ottomans in the sixteenth century. Ottomans, willing to revival of the ancient caliphate and defending the west coast of North Africa against Portugal and Spain, were able to control most of world of Islam except for Iran, the Arabian Peninsula, and Morocco. They brought peace, security, and welfare which are the main urban improvement and growth factors. Many new cities were formed again and other cities also expanded, accordingly, Ottomans business improved.

According to mentioned features which are necessary for implementation of healthy and successful city, it seems that these cities have faced identity dualism and contrast by exogenous development of cities started from the early twentieth century as well as advent of their western culture and impressibility from social and cultural features of western community. Thus, any efforts made to retain original Islamic identity need to pay attention to mentioned features and characteristics. (Same).

5. FEATURES OF ISLAMIC CITY(ISLAMIC URBANIZATION INDICATORS) IN DIFFERENT DIMENSIONS

Islamic city indicators form these cities comprehensively and they are common features of these cities. These factors which create identity and spirit of Islamic cities should not disappear. Although innovation and technology can be effective on their construction form and technique(Shahryari, p62), Islamic cities are influenced by various environmental, regional, economic, and cultural factors in different countries. Nevertheless, the unifying factors include mosques, schools, and markets showing off in these cities. Although mosques, schools, markets, etc. cannot be considered as the only common features of Islamic cities because they are found in many Islamic cities, what is important is physical connection and correlation among these factors and hierarchy governing such factors as unifying factor.(Sharyari, p62) in that, in addition to economic centers, markets were considered religious, gathering, political, and even entertaining centers. Also, in addition to physical elements of Islamic cities, climate, culture, and time have considerable effect on formation method of these elements in the cities. (Foroughmand Arabi, P 74).



Figure 1. Behbahan central mosque in the market and economic center of the city.

5.1 Social- cultural dimension

The dominant culture in each society reflects thoughts and values of human beings and it is the main part of human identity and personality of each of society members, playing important role to form living environment; in that, spiritual and even material life will not continue without human identity. Thus, cultural orientation is highly regarded in Islamic issues. Cultural beliefs, as separation of public and private lives, have regulated place system between usages and regions.(Ghani Zadeh, p 200). For instance, urban planning included narrow dead-end streets, separating public and private territories. Land usage focused on sex segregation. Eventually, any economic activities involved with social presence was separated from residential applications and most of these activities were focused in main public streets.(Same)

In Islamic beliefs, human beings are highly regarded. Therefore, invasion of family and privacy is banned and reviled. According to this point of view, providing shared human needs and equal opportunities to access human needs is the main bases of Islamic cities in that residents feel satisfactory toward the city. (Rahimi, p 92, 93).

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5.2 Economic dimension

Islam in economic orientation has paid attention to economic ability of city to provide economic needs of citizens. The main objective of economic planning of the city is to increase income and accordingly, quality of life of citizens in order to reach welfare. In addition, employment and easy access to job and income have been focused for all citizens.(Same).

5.3 Physical dimensions

The most important issue in Islamic city, being focused in Islamic issues, is paying attention to physical dimension on the city. This issue includes the following topics:

- a- Homogeneous neighborhoods and taking advantage of harmonic facilities and being away from physical categorization
- b- Focusing on human scales while constructing spaces and buildings in material and psychological dimensions: In Islamic city, harmonic spaces are formed with human capabilities and features. (Naghi Zadeh, p 51).
- c- Providing facilities and equipment necessary for residents: first, Muslims can access appropriate opportunities easily and second, the possibility to violate rules and regulation is removed. (Naghi Zadeh, p 58)
- d- Respecting neighbors` rights: one of the most important issues referred in Quran is respecting neighbors` rights. This way, it will prevent harassment of neighbors. (Naghi Zadeh, p 57, 58)
- e- Communication and accessibility network: In terms of transportation and communication, residents need to be able to access to desired location in minimum duration of time.

6. THEORY OF SUSTAINABLE DEVELOPMENT AND SUSTAINABLE CITY

Sustainable development, as a global challenge, was highly regarded in the late twentieth century following the serious environmental problems and degradation of natural resources. The most common sustainable development concept is definition provided by Brundtland Commission, stating that sustainable development is comprehensive development. According to this definition, needs of future generation are met without threatening the world. (UNESCO, 1997:13).

In such development, three goals must be taken into account at the same time: promotion of collective life, improving environment, and economic progress in order to increase quality of life and respond present and future generation needs. In other words, according to this theory, achieving continuous development is to prevent environment destruction, reduce resource consumption, establish justice and human excellence in fair distribution of facilities.

Peter Hall defines the concept of urban sustainable development as “ form of today development guaranteeing development continuation of cities and urban communities for future generations.” (Hall, 1993:22)

In terms of physical aspect, urban sustainable development means changes that happen for land usage and density levels in order to accommodate needs of citizens concerning housing, transportation, free time, food, etc. This will lead to change the city into habitable place in terms of environmental issues, durable in terms of economy, and cohesive in terms of social affairs in that these technological changes will result in appropriate employment, housing, and environmental conditions. (Mukomo:1996:226).

7. SUSTAINABLE URBAN DEVELOPMENT INDICATORS

One of important and main sustainable development indicators is recognition of local development elements to reach national development. No unique solution and international model are proposed for the world while discussing sustainable development. Each country must look for consistent development within its culture, environment, and other native features. (Brohmen,1996:308- 9). Important and effective factors on sustainable development in the cities are explained in four general sections: social, cultural, economic, and environmental and physical by 21 United Nations sustainable city indicators agenda, sustainable development indicators of International Agency for Urban Environment of Europe, indicators to select 20 sustainable cities in 2009 worldwide, sustainable development indicators in England, and various resources and researches.(Same).

7.1 Cultural-social sustainability indicators

Huge problems in urban communities and activities taken place around the world show that changes in environmental, social, economic, political and physical aspects should be based on principles of sustainable development and should ensure the organization and quality continuity. The topic shows importance and role of sustainability in development. According to this, two concepts of sustainability and citizen orientation (social dimension) are woven to each other.(Partovi, 2009, p 19).

Some effective indicators on urban sustainability in social dimension are:

- Relying on civil society and creating conditions for a comprehensive and effective arrangement for increased participation of citizens in decision-making process and management of local affairs;
- Development of education and promotion of environmental culture among the public;
- Increasing the literacy rate and access to different levels of education in all urban areas;
- Promoting health (physical and mental) levels and the health of the people;
- Reducing the rate of population growth and uncontrolled migration to prevent the population explosion in cities;
- Increasing security in city spaces and reducing crime in urban areas;
- Providing equal opportunities for access to resources and benefits of development among various urban groups;
- Provision of social services for different social groups and increasing the welfare and quality of life of urban residents;
- Promoting the culture of savings while using resources;
- Protecting historical heritage, cultural characteristics of native and local identity. (Same)

7.2 Economic sustainability indicators

Endless growth-based economy is impossible while sustainable economy is raised based on qualitative growth and not quantitative one. Preferred method to reach this sustainable condition is to reduce resource usage through government controls on right of using main resources. This reduction must be considered through presenting mechanisms in the market (through higher prices, better technology, replacement, etc.) Some of important and effective indicators of urban sustainability in economic dimension are as following:

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- Replacement of production-based ones with human-based goals;
- Planning to reduce urban poverty and class divisions in society;
- Efforts to achieve the capable local economy;
- Creating a wide range of jobs and reduction of unemployment level;
- Creating equal employment opportunities for all; (Gerard, 2004).

7.3 Physical sustainability indicators

Another sustainability indicator in city development is physical sustainability provided in case of other mentioned factors in sustainability field. In physical discussion, determining appropriate urban applications in development plans are studied as a part of city planning; however, lands need special planning due to importance. Some of important and effective indicators of urban sustainability in physical dimension are as following:

- Directing the physical development of city in dense form (increased building and population density) in public transportation routes in order to save energy and prevent uncontrolled development;
- Integrating land use planning with transport planning;
- Creating mixed applications in order to reduce distance and urban travel between home, work, recreation and shopping;
- Reducing reliance on automobiles (especially personal ones) and development of public transport systems in urban areas;
- Developing suitable paths for walking and cycling in urban areas;
- Providing affordable and various housings for all;
- Provision of environmental services, facilities, and infrastructure, resources (such as water network, sewage disposal, etc.) in urban areas and access to green open spaces;
- Fair and balanced distribution of facilities between urban regions in proportion to their population;
- Space recycling and reusing unused spaces as well as being-destroyed spaces;
- Paying attention to the volume of buildings and their shadings using sun and type of climate in different regions; (Sadr, 1990).
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CONCLUSION

In Islamic teachings, the roots of “Islamic city” and “city” are the topic of researches which need vast contemplation and study in the related resources. It is realized from verses in Quran that Islamic city enjoys great holiness and efforts need to be made to expand excellence of city and citizens. The desired Islamic city is the one that attracts citizens to religious beliefs, providing the excellence of human beings for all religions.

Islamic city with above mentioned features in physical dimensions, design, and uses follows economic, political, social, and cultural logic which can be considered as learning experiences for modern planning methods. Islamic city can be easily generalized in order to adapt with life standards and modern functional capabilities with high compatibility with the environment, social, cultural, religious and natural environments.

What is important to mention is that, in addition to natural and local situations as well as physical characteristics, Islamic city reflects economic, political, cultural, and social structures of modern societies. For example, the first principle stating the nature of Islamic city is plan compatibility and building form of the city with natural conditions including natural location and weather conditions.

This is the topic raised as sustainable city in the twentieth century. It is the city which accommodates biological- physiological needs as well as economic, social, and cultural needs of urban citizens and it can provide psychological relief to residents. What can be concluded from sustainable city and Islamic city principles is that necessities of achieving sustainable city is principles of Islamic cities. In other words, to get rid of tensions being experienced by cities these days, deep researches on religious principles of Islam are valuable and necessary. Undoubtedly, the civilization which has efficient solution for all fields of human excellence will provide an appropriate approach for the most important environmental and spiritual fields which is urbanization principles. In addition to technical and artistic aspects, urbanization principles exist in our Islamic culture and civilization will determine many science and civilization fields.

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