

15th International scientific conference “Underground Urbanisation as a Prerequisite for Sustainable Development”

Providing the needed green spaces together with splendid architecture through development of public underground spaces for city of Tehran

Mohammad Mahdi Safaee ^{a,*}, Marjan Ghafoori ^a

^aIslamic Azad University (IAU), South Tehran Branch, Iran

Abstract

City of Tehran which was once small city surrounded by gardens and farms; now a days has changed into a huge mass of high rise and unsuitable structures in comparison with other buildings and has almost lost its green identity. More than 200 years have passed since city of Tehran has been the capital city of Iran with the rapid growth of population and irregular growth of automobiles, and construction projects which have changed the feature of city. This made Tehran face a lot of shortages Such as green spaces, quiet and splendid atmosphere which might have established social relationship among people. This city is now seriously facing with shortages of green spaces which results in lack of enough oxygen, air pollution and decrease in quality of living and lack of city livelihood which the unfavorable result of them can be seen on the soul, mind and also the body of its citizen. In this article emphasizes are made on the social factors, technical and structural condition for development of underground spaces. This case suggest development of green spaces in one of the old and densely populated region of Tehran. Therefore not only do we maintain many public spaces needed for the district such as commercial spaces, service spaces like halls, cinemas, parking, sidewalks; we can also have free on the ground spaces for children playground, sidewalks, aerobic exercises, and many landscape also are formed. Following this, many residential spaces can be formed around these open spaces with eye pleasing views and landscape. Consequently this will cause more social relation, dynamic, sustainable city life and together with splendid architecture. Development of these centers in different distances of the city can decrease negative aspects which we have already referred.

© 2016 Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license

(<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the scientific committee of the 15th International scientific conference “Underground Urbanisation as a Prerequisite for Sustainable Development”

* Corresponding author. Tel.: +0098 21 88679365-7.

E-mail address: safaee@cetd.com

Keywords: underground space, delicate architecture, splendid architecture, green spaces, air pollution, Freeland, city of Tehran.

1. Introduction

Tehran's comprehensive plan lacks a number of very important components and details in its design and regulations. According to Tehran Municipality's construction rules and regulations the Floor Area Ratio (FAR) of residential buildings is required to be about 60 percent-70 percent and any extension to north is permitted only in case neighbors' rights are recognized and reserved. This regulation has led to the emergence of linear parallel eastern-western building masses in neighboring blocks which neither have created a beautiful landscape nor are capable of addressing the psychological needs of the citizens or safeguarding their privacy. Houses built on the southern edge of street or, otherwise stated, northern edge of a neighboring block, face the street and the yard of the neighboring block northward and southward, respectively.

In addition, due to unrestrained growth in migration to Tehran, increased demand for housing units and high price of land in the city, buildings' FAR has increased uncontrolledly and the city is faced with a lack of neighborhood centers in coadunate blocks. Only a limited number of blocks have neighborhood centers, squares or open spaces, which are required to address people's needs for having social interactions. This is while, urban squares are places that bring people mental relaxation, by providing them with spaces for communication and interaction, recreation and relaxation, taking a stroll, eating and enjoying the environment as well as creating a delectable and desired space and atmosphere. Although, in Iran, great attention and emphasis have been paid and put, respectively, to and on increasing the number of open spaces and parks for years, little effective effort has been made to this end. Such spaces are hardly found across Iranian cities. Despite all efforts, squares in Iranian cities have mostly turned into places for cars to ply back and forth. Among the main obstacles to creating such spaces are the high price of land in Tehran as well as the willingness to avoid changes in the fabric of the neighborhoods to prevent from displacement of their residents. Using underground public spaces will provide ample and favorable opportunities for restructuring urban fabrics and finding sufficient room on the ground to create open spaces. This will help create secure and climatic spaces for business and trade under the ground and open, serene, green and pedestrian-friendly places in neighborhood centers for the residents.

2. Tehran's History

Although two centuries have elapsed since the designation of Tehran as the capital of Iran, the history of the city's immediate development does not exceed 80 years. On the whole, the growth of the city began in the third decade of the 19th century, which was accompanied by unrestrained development, destruction of farmlands and pieces of land surrounding the city and suburban areas as well as rapid growth of villages and townships and their speedy amalgamation with the urban fabric. During the past few decades, the city experienced a speedy growth and underwent rapid changes. The table below features information provided by the Statistical Center of Iran about changes of Tehran city during the past few decades:

Table 1. Changes of Tehran city.

Tehran's population	In 1986 = 8,108,000	In 2011 = 12,183,400
Buildings constructed by private sector	In 1986=10,215	In 2012 = 46,918
Number of parks	In 2006 = 1,476	In 2011 = 1,989
The area of forests	In 1991 = 959 hectares	In 2012 = 900 hectares

Download English Version:

<https://daneshyari.com/en/article/5029564>

Download Persian Version:

<https://daneshyari.com/article/5029564>

[Daneshyari.com](https://daneshyari.com)