

Greenway Pedestrian Design in order to Rejoin the divided Urban Zones through the Brownfield Regeneration

(Case Study: Tehran District 17- from Shahid Bradaran-e-Hosseini St. to Yaft Abad St.)

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ABSTRACT: The existence of brownfields in cities, and their common disadvantages, such as pollution and their detriment to natural habitats, have damaged local communities and their environment over time. Whereas the renovation and regeneration of these brownfields and transforming them into centers of activity could assist the economy and society to flourish. At the same time improving the quality of the environment could allow us to attain healthier, more attractive and safer communities. A neighborhood is a social network with a social and regional identity and a place where social interactions occurs. Focusing on enriching the neighborhood, nourishing social life and meeting the social and intellectual needs of the individual. The renovation of the defunct strip of land where the Tehran-Tabriz railway existed and its transformation into a linear park does not only have a positive effect on the local economy and environment but also connects the northern and southern sections of Yaftabad, by increasing safety and social interactions and enriches the local community. This research aimed to answer the following questions: 1- What are the guidelines of improving urban development and the quality of life of the people in regarding restoration and renovation of useless lands? 2- Is the construction of a 'Green' Pathways on the borders of brownfields could integrate neighborhoods? In order to address these questions, a descriptive-analytical method was used. In addition to library research and analysis of previously tested procedures in this field, by the help of a questionnaires, which was distributed through local population to specify their requested standards and quality requirements. The results showed that the people greatly desired this brownfield regeneration to a new improved environment and community. In the planning segment, with attention to standards set by the people, suggestions were presented.

Keywords: *Brownfield, Renovation, Community, Brownfield site, Brownfield regeneration, Linear park, Greenways*

INTRODUCTION

Urbanization is one of the most important phenomena of the present age, and today most countries in the world are facing the phenomenon of urbanization (Pourafkari et al., 2002). Urban development is an inevitable and continuous process. This phenomenon has a global character and is constantly

increasing. Iran also witnesses the rapid development of urban areas. One of the most important concerns in this development is determining the proper direction and physical expansion of the city to meet the present and future needs. In this regard, due to the limitations of land, one of the ways to cope with this problem is to turn dry, unused or free areas that were used in

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past into equipped areas, in order to minimize damage to the environment. It means paying attention to ecologically stable tissues that have lost their social and economic sustainability (Abedini et al., 2015). One of the basic ways to achieve sustainable urban development is to focus on unused land or burned land. In this research, we have tried to focus on the reuse of urban land that is deteriorating due to its lack of use, as the redevelopment of these lands has many advantages, including: the potential for standardizing various utilizations especially public utilities such as the green space, have the opportunity for better development around these lands and have tools for the transformation of neighborhoods due to changes in the economic, social and physical systems that create jobs, taxes and even more development around them. These factors have roles in spatial and physical development of cities, the satisfaction of citizens, and in fact, the potential to move towards a sustainable city and the ideal city.

MATERIALS AND METHODS

One of the basic solutions to arrive at long-lasting urban development is attention to unused spaces or brownfields. This paper aims to investigate the impacts of brownfield regeneration on cities. Brownfields can be used as acceptable solutions for development and growth of public services which might not exist in a particular neighborhood or are seen as not meeting the established standards per capita. For example, building and increasing open public spaces and parks or green areas are the most important benefits of developing brownfields. For reaching this goal, data was collected from different avenues such as libraries, Internet sources and field survey of some successful international brownfield regeneration projects which show that if from the viewpoint of site, spatial structure, size and so forth, there are differences, yet the results of their revival and renovation were almost uniform; renovation, reconstruction and appropriation of use of brownfields have positive social, economic and environmental results. The motive for upgrading the health of the neighborhood and increasing social interaction show that all of these factors will lead to a stable urban environment. Since public participation has an important role in urban regeneration projects, so the questionnaires were prepared to reach the public's opinion. These questionnaires hope to qualify the trends in the neighborhood that have been offered; a linear park where rail tracks used to be. Yes or no? Do you agree with the specified measures in place for building these parks? Each question has five possible answers; very little, a little, medium, much, very much. And they are given values of one through five. Ultimately using the Kolmogorov-Smirnov test, the variables in the research were deemed normal and a result was obtained that the majority of people in the neighborhood were for building the park and in their opinions, it would bring about a change in the appearance of the neighborhood and lead to a better, healthier quality of the environment and increase the quality of life, but its building will not bring about a safer area. In relations to the proposed standards, the people agreed with all of them except for a small percentage who did not agree with the usage of the colors red

and yellow. The bicycle path and gazebos were not mentioned in the questionnaire, but in the interviews with the residents while they were filling out the form, it was found that the people were interested in them, therefore they were added to the plans. At the end, based on the above results, the appropriate strategies for greenways design developed.

Urban Redevelopment (Regeneration)

Redevelopment is a generic term that incorporates other concepts, including: refinement, tightening, and fluidity. Which means the resurrection, restoration, and renewal of the city, in other words, the city is reborn (Habibi & Maghsoudi, 2014). Urban regeneration is an approach to urban intrinsic development, and in fact includes the following: using actual and potential capacity in urban planning, trying to balance the quantitative and qualitative distribution of population, the coordination between the foundations of social life and escape from urban poverty and, ultimately, the use of social participation of people. In the introduction to the Urban Recreation Book, Roberts presents one of the most comprehensive attitudes in the definition of regeneration: Urban regeneration is a comprehensive vision and a set of actions that lead to the solution of urban problems, so that permanent improvement in economic conditions, Physical, social, and environmental in a tissue that has changed (Bahraini et al., 2014).

There are two important points in relation to urban regeneration, which is conditional on the participation of people and meaningfulness in a process that is done over time. The issue that has been addressed in this study is sustainable urban regeneration. Sustainable urban regeneration is a redevelopment that creates sustainable long-term impacts, while at the same time addressing social, economic, and environmental issues. This matter considers long-term perspective of three pillars of sustainability that are located at the core of discussion about it (Bahraini et al., 2014). The green and gray lands are described in the table. It is explained more precisely because this research is about brownfield lands.

Brownfield Land

A Brownfield site is an area of land that has been developed previously and is limited to reuse of them due to physical, environmental or legal issues. These lands are used for industrial purposes or some service functions and may have a high degree of pollution and waste. There is a potential to eliminate the contamination and reuse it. In general, brownfield is an industrial term developed for urban contaminated areas (Nofel & Kolbadi, 2014, 135).

Generally, brownfield land is referred to as land that can be redeveloped and reused, and there is currently a waste, contaminating material, or field of creation. The redevelopment of brownfield land will lead to the following: the life of neighborhoods, the mobility of the national economy, the acceleration of development in the adjacent areas of these lands, and the growth of job opportunities, the reduction of environmental risks, increased safety and health in open spaces and reducing dilemmas and social crimes. Also, the

Table 1: Types of Urban Land (Nofel & Kolbadi, 2014, 135)

Abroad		Iran	
Indicators	Group	Indicators	Group
that has a history of development, but abandoned	Land	Is used	lands Used
been expanded, but now abandoned and infected	Gray land	There has been a history of land use but has been abandoned	lands Barren
that is naturally formed and undeveloped	It has Brownfield land	used Not	lands Dead
	A land Green		

Table 2: Redevelopment of Brownfield land (Nofel & Kolbadi, 2014, 136).

Redevelopment of Brownfield lands		
Economic advantage	Social Advantage	Environmental advantage
Create a job	Quality of Life	Reduction, removal of safety hazards, healthcare
Income	Renovation of neighboring units	Change the quality of the environment
Tax	Choose a home	Reducing the expansion of cities
Business opportunities		Ecological health

development of burned land will revitalize and strengthen cities and communities. Clearing and redevelopment of these lands will lead to economic and social growth and promote the overall health and the environment in the cities. The most important benefits of redevelopment of these lands are the development of public green spaces (Nofel & Kolbadi, 2014, 136).

The Role, Importance and Function of Green Spaces in Urban Life

Today, the concept of cities cannot be conceived without effective green spaces in its various forms. The implications of urban development and the complexity of their environmental problems make it unavoidable for the environment to be green and expand (Tariveh, 2012, 46). In any situation, a person needs a few hours of silence and calm every day. This need is felt by the density of the population in the residential area and living in the apartment, and from this perspective, the urban green spaces in which it can be relaxed is considered a necessity for urban living. Scientists have discovered that green spaces can help calm down and reduce people's violence. Apart from social and physiological benefits, urban nature can provide economic benefits for urban managers and for citizens (MotieeLangroodi & Teimouri, 2010, 50). In fact, green spaces

are the foundation of a population and a healthy economy in every city (Hataminejad et al., 2014). It also prevents the dispersed development of cities. So green spaces have a lot to do with city's stability. Green spaces have socioeconomic and ecological roles, and their benefits are as follows: the treatment of mental illnesses, the favorable environment for the development of children, the creation of social integrity, comfort, etc., which is also an indicator for improving the quality of living space And community development (Nahibi & Hasandokht, 2014, 52). In general, parks form the basis of organized unwritten relationships that are shaped according to the needs of different social strata. These spaces, which have a direct impact on urban flourishing, have the following functions: 1. a local center; 2. equipped space for services; 3. livelihood for the neighborhood (Tariveh, 2012, 48). Urban green spaces have different implications for improving the quality of the various dimensions of citizen's lives. The major function of green space is its important role in sustainability of the city. Generally, green spaces' functions are: environmental functions of urban green space; green space performance in the construction of the city body; social, psychological and cultural performance of green spaces; and economic performance Walkways (Tariveh, 2012, 43). (Fig.1)

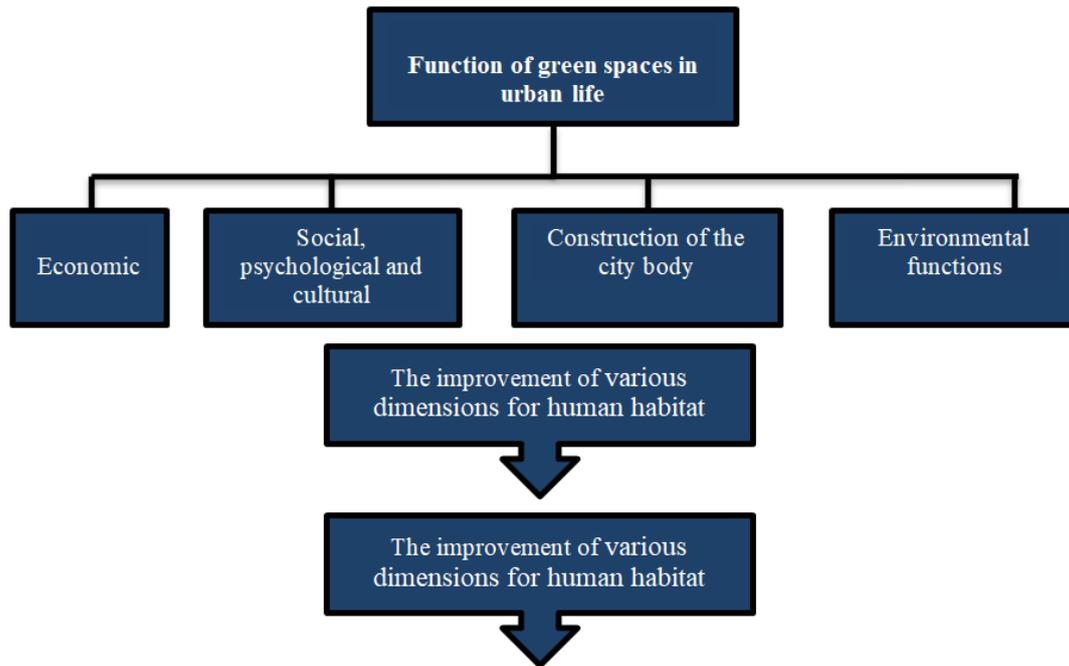


Fig. 1: Green Spaces' Functions (Tariveh, 2012, 57)

Pedestrian (Footpath)

Urban areas belong to mankind, not cars and large construction projects. In other words, an environment that is proportional to the human scale is an environment that is set with the scale and steps of the pedestrians rather than the rapid pace of movement of motor vehicles (Abbaszadeh & Tamri, 2012, 1). In this regard, the road map is called the "walking" movement, which is intended to pave the way for citizens to oppose the plight of modern urban planning. This movement not only changed the physical structure of urban centers, but also created new changes in the improvement of the quality of urban life and social behavior of the people (Ghorbani & Jamekasma, 2010, 55).

Greenways

The green field is used for paths that protect the integrity of the environment in the urban infrastructure, greenways are in turn linear, new or somewhat green urban infrastructures, which enhance the quality of the environment life, beautification, recreation, education, welfare and conservation of the habitats of the land. The greenery function is completely inherent, and the greenery of the roads will have different design based on the goals that the program plans (Hanachi & Ghaznavi, 2009, 60). One of the ways to expand the construction of green pedestrians is to turn unpolluted land into green lands. That is, using the internal development, it is possible to change the use of non-used land through revival.

Influential Components on the Quality of Greenways

By doing the necessary research in this study, we found that various factors affect the quality of the pedestrian space, the

most important of which are (Abbaszadeh & Tamri, 2012, 5): vitality; permeability; harmony; safety and security; flexibility; aesthetics, and finally; social interactions, which are talked about in detail. (Table 3)

Social Relations

According to Maslow's human needs pyramid (1954) the needs of people are divided into two groups: the first category is the material and physical needs that, if this group is satisfied, a range of needs are introduced which relate to the psychological dimension of human life. Accordingly, one of the innate human needs is the need to establish interactions and social relationships. In this way, interactions and social relations are also referred to as an innate need as well as a means to satisfy other needs. So that man cannot live without social relationships (Abbaszadeh & Tamri, 2012, 2). In fact, social reciprocity is a necessity for responding to the needs of a person with a sense of belonging to a place. Activities such as engaging with others, observing, and popular activities, by creating socialization environments, help human development of a person (Tariveh, 2012, 33).

The Benefits of Developing Social Relationships and Interactions

The development of social relations has a lot of positive effects, which according to the research carried out; two important and important effects are the creation of social life and the production of social capital.

Collective Life

Collective life is an opportunity to escape from the stresses of

Table 3: Factors influencing on Spatial Quality of Green Walkways

The proposed criteria	Strategies Provided	The proposed solutions
Vitality	Diversify the activity of spaces	<ul style="list-style-type: none"> Variety • Use urban symbols • Create diverse and convenient uses for each pedestrian • Establishing user services • Establishing leisure use • Variety of furniture • Coordination of the body paths • Emphasize lighting on the elements and monuments • Create different landscapes Activity • Design optional and recreational activities (hiking, cycling, meeting place, playgrounds, sports grounds) • Flexibility of activities
Permeability	Increasing access to and diversity of access to spaces	<ul style="list-style-type: none"> Access • Pedestrian axle as far as possible without disturbing the level and obstacle • Connecting users and activities • Appropriate routes • Foot Scale • Access for all age groups • communication
Harmony	Increase utility, It leads to attracting the audience and thus improves coordination	<ul style="list-style-type: none"> • Pay attention to the objective aspect of the route • Creating an appropriate and understandable space for pedestrians • Cleanliness and beauty • Order between components • Visual proportions
Security	The active presence of people from the factors of increasing safety and security	<ul style="list-style-type: none"> • Pay attention to the objective aspect of the route • Creating an appropriate and understandable space for pedestrians • Cleanliness and beauty • Order between components • Visual proportions
Social interactions	Development and prediction of the place of citizen presence and their participation in their collective life	<ul style="list-style-type: none"> • Create spaces suitable for people of different age groups • The diversity of space and the sense of place and sense of belonging will invite more people to these places • Creating identity in space, taking into account the needs and desires of people with different age groups
Aesthetics	The visual appeal of the environment creates a sense of inviting and more people to come	<ul style="list-style-type: none"> • Use different vegetation, appropriate planting design and natural elements such as water • Use different materials while unifying • Attention to form, geometry, order and coordination • Attractive natural scenery
Flexibility	Diversification of the possibility of accepting the expected events of citizens	<ul style="list-style-type: none"> • Ability to use space throughout the day • Use of appropriate equipment and facilities in urban space (vegetation furniture) • Attention to creating shadowy spaces

everyday life, spending leisure time, having social interactions, gathering of people and groups and freedom of expression. Social life in public spaces depends on promoting social interactions, attracting individuals and groups, social security, and thus encouraging greater tolerance of different groups in space, greater community and creating a vibrant atmosphere.

Socialization in public spaces is based on the need of people to sense social belongings and interact with each other, and this will be possible in a supportive social space, along with the provision of physiological comfort, territorial claims, sense of ownership, and justice in space. Social interaction and communication can be a physical issue, a look, a conversation,

and a relationship between individuals, which itself requires the definition of events and activities that are proportional to the result of the tension of people in space and their membership in the group and social networks (Daneshpour & Charkhchian, 2007, 22).

Social Capital

Social capital is the standard of social relations of individuals. Social capital is a multi-dimensional concept that the quantity and quality of social relations are two main dimensions. Social capital emanates from thousands of interactions of people every day and is not between a particular person or a specific social structure, but in the space between people and not belong to anyone and everyone can be engaged in its production. Social capital is created and strengthened by establishing and linking social networks based on the principles of mutual trust and action norms. This requires major investments, energy, material facilities, etc. in relations with others. In fact, we can count on the support of those around us with these investments when needed. These mutual acquaintances and acquaintances contribute to group activities and expand the agreement on social norms (Tariveh, 2012, 14). So social capital is rooted in social interactions, and when the level of social interactions in society increases, it increases the level of social capital. One of the factors that can increase the level of social interaction is the pedestrian movement in urban space (Shokouhi Dolatabadi & Masoud, 2011, 59)

The important features of social capital are that it is essentially the origin of that neighborhood and the result of social relations at the neighborhood level, and everyone in the area is capable of creating such a capital. This capital affects the social fabric of the neighborhood and facilitates collective and participatory action for social cooperation, social cohesion and, finally, the consolidation of social order at the neighborhood level (Tariveh, 2012, 15).

Neighborhood as one of the most Important Areas for the Formation of Social Relations

The research shows that "collective life" and "social capital", which are the main elements of social life, are the product of the creation and development of social relations and interactions among individuals, and one of the most important factors in development. Social relationships are the foundation and the ground for the formation of interaction. The conditions for such relationships are established more often in neighborhoods and adjoining residential areas. The "neighborhood" is known as the first social entity that puts the individual within the family after the family, and is considered one of the most important areas for the formation of social relations. In the meantime, local public spaces such as neighborhood centers, as communal spaces and focal points, play a major role in the development of community-based social relations on the scale of the neighborhood. Neighborhoods constitute the main texture of cities. In terms of size and population, the neighborhood is the smallest unit for city segmentation in terms of urban services and management, and is known as a physical unit with a well-

defined social identity, the use of common patterns of life, and most planning decisions. And urban design is happening on the scale of the neighborhood (Tariveh, 2012, 15).

The existence of a vast green space in the focal point and center of the neighborhood can play a major role in creating and enhancing social communication. Locals come to this place every day, creating friendships and establishing social relationships that have a great impact on the mental health of the locals. Neighborhood Functions could have concluded in three parts: 1. as a local club 2. As Equipped space for offering services 3. Creating Liveliness for neighborhood

RESULTS AND DISCUSSION

Case Studies

In this research, the samples selected were parks on the scale of the neighborhood that had been burned in the past and were recovered and recovered due to the development of the inland, and turned into a park or green way, in fact to the park which have brought about the evolution of the neighborhood and the increase of social interactions among the neighborhoods and are recognized as successful regeneration prototypes, have been introduced by introducing them as superior and successful examples. By analyzing and explaining the reasons for their success in attracting people to urban green spaces, increasing interaction between citizens of neighborhood security, the association of different parts of the neighborhood as a procession will be provided for the rehabilitation and rehabilitation of unused land.

High Line Park

A linear city park, designed as a green airplane, is 33.2 kilometers in Manhattan, New York, and was built in 1934. This rail line was moving through blocks and buildings, so it did not have much space and was used to carry goods into the Manhattan area. 1980 was the last time the train was used, and then remained unused, and remained abandoned until 1999, which was chosen as the perfect place to become open space. The idea of building the park was taken from the Promenade plantee in Paris. Cities like Paris, with their boulevards and cafes and Rome with their fountains and fields, invite people to sit and engage in social interactions, but Manhattan is the place where only people can move to the front. Slowly The most important positive effects of the restoration and retrieval of the remaining railways are: 1. increasing and promoting social interactions; 2. reducing people's quality of life in the Chelsea neighborhood; 3. reducing insecurity; crime; 4. changing The physical characteristics of the neighborhood have led to an increase in housing prices and visual attractiveness, increasing people's presence, attracting tourists and, as a result, increasing the revenue of local restaurants and shops; 5. the willingness of investors to build construction projects in the Chelsea neighborhood.

Promenade Plantee Park

The Vincennes Abandoned Railway (8-4 km long) in Paris became the world's first aerial aerodrome in 1993, and has

become a successful model for burning land restoration and recovery projects for other countries such as the United States (High Line project In New York). The Promenade plantee means a tree path or indeed the same green walkway. The park's length is 7.4 km.

The park connects parts of the city like a green belt, and has a variety of restaurants, cafes, art galleries and shopping malls below it. With a variety of cherry and cherry trees and rose trees, it has created a good location for the city.

Goods Line Park

The Goods Line Park is a linear park and a green walking path with an approximate length of 500 meters, located in Sydney and the Altamiy neighborhood. This railroad was known in 1879 and used to be used to transport goods from the city to the shipping port in the Darling Gulf and vice versa. The idea is to build a park inspired by High Line in New York City. The purpose of the park's design was not only to create a beautiful place, but also connecting the old part of the site (railroad) and the modern world and turning it into a place to stay and create a center of activity and gathering of people.

Diagonal Park

Park Diagonal is one of Barcelona's most spectacular attractions and is considered to be a manifestation of the new Barcelona city. Some believe the park is not like any other park. In fact, this contemporary ambitious effect reflects the new demands of the city of Barcelona to become a genuine city with a sustainable architecture. The park was built on the demolished industrial buildings on the one side to the Mediterranean coast and located in front of the railway. This design is in fact the culmination of creativity and sustainable design. The most important positive effects of the recovery and recovery of burned land are: 1. The accessibility of the visitors to the Mediterranean Sea; 2. The attraction of different traditional groups by designing the playgrounds for the creative, exciting and constructive Embellished sculptures and fountains; 3. Tourists' attraction.

Zhongshan Shipyard Park

The Zhongshan Shipyard Park was a shipyard in the past, which went bankrupt in 1999, and then remained unused for years to come. The site is located next to the Qijiang River, and the goal is to build a combination of the human soul and nature, and is actually the bridge between nature and human spaces. One of the most important positive effects of changing the land use of the remaining plant from the old plant is to: 1. prevent the longitudinal growth of the city by building green space; 2. the possibility of using the park in fashion during the construction of a network of bridges; 3. People's access to the Qijiang River by building different routes and bridges.

Superkilen Park

It is very difficult to visualize the public space where signs from 60 different countries are gathered, but this has been done in Superkilen Park. The park is a city park with an

artistic approach that brings together the different cultures of Copenhagen. The park's length is 750 meters and its area is 30000 square meters and is located in the north of Copenhagen and is one of the neighborhoods in which immigrants live in many different countries. It was very difficult to construct a public space that responds to the tastes of the people in the neighborhood. With the participation of the public in the neighborhood, the designers involved in the National Signs Project brought together national symbols, which are now the heart of the neighborhood. The idea behind the design of the park is to represent the neighborhood through the construction of a public space in which all people feel relaxed and feel in their own country of origin.

Bagh Moozeh Qasr (Garden Museum Palace)

Fath Ali Shah Qajar in 1177 Hijri Shamsi in the second year of his reign ordered to build a palace outside Tehran. The place of the palace was chosen where it was known as Khoram Abad. This palace gradually fell from the Nasir al-Din Shah period with little attention to the early prosperity. Nasir al-Din Shah ordered the Kazakh army to establish its annual camp in the area, which was the start of military action in the area. During the period of Mozaffaroddin Shah, the garden fell into the hands of the gendarmerie, the garden gradually lost its usefulness and the palace was abandoned and destroyed. About 130 years after the construction of the Qajar palace, the foundations of the first Iranian new prison in Iran were built on the foundations of ruins of the palace, and from November 1929 called Qasr Prison. Until November 2012, its use changed and became the Garden Museum Palace (Qasr, 2013). One of the most important positive effects of resuscitating and changing the site's use is to: change the physical characteristics of the neighborhood; and create a neighborhood center and the possibility of holding religious and traditional rituals.

In the research samples, the characteristics of each park have been investigated in order to sum up the positive effects of regeneration of burned and unused land in cities and turning them into green walkways and constructing linear parks to determine the local scale according to the in-house development. Finally, using effective measures on the quality of the greenways, strategies have been proposed that have a positive effect on the greenways pedestrians. For each of the strategies, different strategies have been defined. Then, from each of the solutions, we selected a number of them based on the conditions of the site and a questionnaire was prepared based on them. (Table 4)

Location of the Studied Site

The 17th district of Tehran's municipality is located in the southwest of Tehran and is restricted to: from north and northwest: between them, Qazvin Avenue, from the intersection of Safavid to Azeri's three roads and Azeri Street, from southern and southeast: Ghaleh Morghi Garrison, between them, Zamzam Street, from the east: between them are the streets of Navab Safavi and Abdollahi, from the west: the distance between them is Saveh Road and Yaft Abad (Fig. 2). This area,

Table 4: Matrix Comparing Solutions Provided for Recovering Neighborhoods by Building a Park. Strong • - weak °

Important Indicators	High Line Park	Promenade Plantee Park	Goods Line Park	Diagonal Park	Zhongshan Shipyard Park	Superkilen Park	Bagh Moozeh Qasr (Garden Museum Palace)
Easy accessibility	•	•	•	•	•	°	•
Increasing social relations	•	•	•	•	•	•	•
Availability of various activities	°	°	•	•	°	•	•
Attention to visual and beauty elements	•	•	•	•	•	•	•
Create a natural landscape	°	°	°	°	•	°	°
The right place to sit	•	•	°	°	°	•	•
Spatial diversity	•	•	•	•	•	•	•
Spatial separation	•	•	•	•	•	•	•
Creating a sense of belonging	•	•	•	•	•	•	•
Harmony	•	•	•	•	•	•	•
Security	•	°	°	°	°	°	•
Planting and selecting native plants	•	•	°	•	•	°	°
Internal movement paths	•	•	•	•	•	•	•
Relate different parts of the neighborhood	•	•	•	•	•	•	°
Use natural elements like water	°	°	°	•	•	°	•



Fig. 2: Position of district 17

with an area of 8-22 million acres, accounts for about 15-1% of Tehran's total area. The neighboring regions: from north and northwest: regions 9 and 10, from the south: from the 19th, from the east: from the 16th and 17th, from the west: the 18th district, the districts and the neighborhoods; the area 1: the Yaft Abad, the western Abuzar, Azari, Imamzadeh Hasan; District 2: Zayebi, Wassafnard, Jalili, Golchin, Sajjad, Zamzam; District 3: Moghadam, East Aboozar, Khazaneh Garden, Boloor Sazi (Tehran Tourist Guide- Tehran Municipality- District 17).

A total of 320 hectares of this area has a worn texture, equivalent to 10% of Tehran's worn out texture. The lack of service

and tourism uses, the plurality of unnecessary workshops and production units have made the region less attractive to tourism. The texture of the area is very compact in the old residential area, including the market for furniture, industrial and storage utilization along the Saveh road. Site users include residential, commercial, office, higher education, religious and park utilities. Coarse-grained residential and commercial users are counted on the 2 sides of the north and south of the site from beginning to end, but commercial use is more in the western part of the site. Other uses of higher education, religious, park and office are scattered along the way.

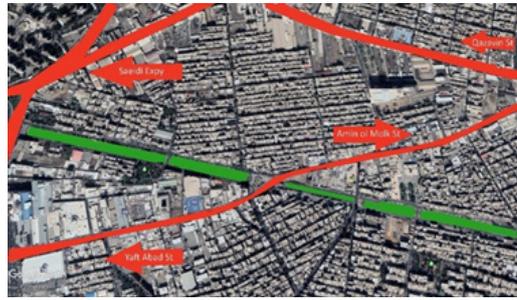


Fig.3: Tehran-Tabriz railway in green

The project aims to redeem the brownfields of the Tehran-Tabriz railway line and improve the neighborhood situation, connect the north and south sides of the street, ease the flow of people and increase social communication through building a linear park or green pedestrian has been defined (Fig. 3).

Field Studies

Research method in this research, survey method and data collection tool is a questionnaire. The statistical population of the study consisted of all residents between the ages of 18-70 and the neighborhood. The questionnaire is based on the willingness of individuals to have green space in the neighborhood and whether they agree with the construction of a linear park on the land on the railway line, and whether or not they meet the criteria set in the park. Sampling method was done by simple random access method. In order to achieve the views and demands of the people of the neighborhood, a questionnaire with 24 questions and five degrees (very low, low, moderate, high and very high) was placed. For quantification of responses from 1 to 5, points were scored. SPSS software

is used to analyze and process information. The method of testing and examining the research hypothesis is using the Kolmogorov-Smirnov test, binomial test, Friedman test.

By using Kolmogorov-Smirnov test, the normal variables were studied. Given that the P-value of most components is less than 0.05, we consider the distribution of data as abnormal, and therefore nonparametric tests are used to test the statistical assumptions. The results of the binary test on the interest of people in converting unpolluted land into the park show that people are interested in turning unpolluted land into parks and showing the impact of park creation on surrounding areas. Creating a park will have an impact on surrounding uses and will increase their revenue. Also, the results of the bimonthly test on the impact of park creation on the quality of life of people in the neighborhood, such as vitality, development of mental health and health, improvement of social relationships, etc., have been shown to improve the living conditions of individuals. In relation to the benchmarks, the binomial test shows that the people of the neighborhood agreed with the cases considered. The questionnaire for cycling and alabaster



Fig. 4: Photos of the five studied zones

was not considered, but with an interview with the local people while filling out the questionnaire, it was concluded that people are interested in having these items and in the design of these cases it was considered. By Friedman's test, the research variables ranked their highest average ranking, respectively. According to the average rankings, people have been careful about the following: the proportion of park criteria with the age group (3/14), the impact of park creation on the neighborhood (vitality, improvement of social relations, etc.) (2/68), People's interest in park construction criteria (2/35), and the impact of park creation on surrounding uses (1/83).

The Five Studied Zones

Due to the vast expanse of the studied area, from eight zones only five zones were selected from west (Ayatollah Saeedi highway to Kamali St.). (Fig.4)

Regeneration and restoration projects are an appropriate urban development strategy that prevents urban over-growth, increases the per capita of green space in the neighborhoods,

improves the economic, social and environmental conditions, and improves safety and security. In general, it changes the face and body of the neighborhood and encourages people to engage in social interactions, all of which helps improve the quality of life of the locals. The importance of recovering burned land is due to the fact that the failure to address these lands causes damage to communities because these lands, according to their previous uses, contain pollution and environmental damage, and the health of communities' risk of danger. While controlling and redeveloping these lands greatly reduces contamination and environmental problems. According to the article, the significance of the neighborhood and the need of humans for having stable neighborhoods have been considered, and that the neighborhood as one of the areas of urban spaces has the potential to produce a suitable platform for the formation of social interactions. In fact, we can say that the greenery with its special characteristics increases the quality of the environment, beautification, recreation, education, welfare and conservation of the habitats of the land. (Table 5)

Table 5: The five studied zones

Zones	Area	Nearby applications right now	Environmental situation	Selected uses
Zone 1	516 meters long and 36 meters wide along the Saeedi Highway to Sadoughi Street	1. Traffic police 2. Firefighters 3. Teen park and fire station 4. Neighborhood	The environment is better off than other zones, and many small restaurants, cozy shops, a reception hall are located around it	1. Public gathering spaces 2. Amphitheater sports ground (ping pong and chess and sports equipment) 3. Children's playground 4. Kiosks of supply of goods
Zone 2	286 meters long and 36 meters wide between Sadoughi Street and Amin-ol-Molk Street	1. Residential homes 2. Parking 3. Small restaurants		Bike ground
Zone 3	235 meters long and 12 meters wide between the streets of Amin-ol-Molk to Sajjadi Street	1. Houses 2. Unused land	The narrowest zone, and part of it is turned into a street by the municipality, so it cannot have a specific use due to its low width	Spaces for sitting on the edge of the road and the knots in which the statue is designed
Zone 4	175 meters long and 36 cm-wide	1. Imam Zadeh 2. Bags and shoes market The building is under construction, which will become a passage in the future		Public spaces for sitting and places to create social interactions
Zone 5	331 meters long and 36 meters wide	Residential Houses		1. Public spaces 2. Children's playground 3. Local market

CONCLUSIONS

The compilation of theoretical foundations and the study of implemented prototypes and proper performance of rebuilding projects carried out in Iran and other countries, as well as field studies based on a questionnaire on the views of the people, showed that with the design of the park (green roadway). The remains of the Tehran-Tabriz railway line can be found as a model for building a green walkway in the area. The site analysis also shows that the site can be built in this area.

By changing the status of the land without using it and turning it into a public green space, the desire of people to use this place will be increased, and finally the northern and southern parts of the street, which for years due to the passing of the train and these days due to the lack of security is unusable, I'll finally get connected.

In designing the park, it has been tried to pay attention to the social conditions and identity of the 17th district of Yafth Abad. Plant selection has also been made according to these conditions. For example, the construction of screwed and screwed paths, which gives better opportunity for saboteurs in the region, has been neglected. Design proposals in five areas: cultural, activities and uses, access and services, climatic conditions for sports activities such as walking, cycling, ping pong, providing suitable access for people from the north to South of the site and vice versa, improving the microclimate of the climate axis through vegetation, architecture, water use, the use of diverse materials that fit the climatic conditions of the area and materials that represent the past site of the site, such as concrete, pebbles, timber, etc.

The subject of the project can be studied in several directions in the future. The first case is due to the large size of the site of three zones of the eight zones, so in the future by designing these three sites, the project could be continued in the second phase. From the social dimension, with the design of public and cumulative spaces, we will increase the attractiveness of the park to provide a good place to establish healthy social communication between people. It should also be noted that private spaces should be taken into account as much as public spaces. Secured private spaces are a good place to attain comfort and study. In economic terms, as most people in the locale are from the downstream middle class, they have been designing more spaces such as daily markets and kiosks to sell products to household economies. In the entertainment field, more sports grounds such as football grounds, basketball, etc., were considered more fun for younger age groups. Also, with the design of wide open green spaces such as extensive lawns, it provided a place for children to relax and leisure.

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