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Review Article

Urban Transformation Practices and Results Obtained in Turkey

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Abstract

Urban transformation, after as one of the century's greatest disaster for Turkey called 17 August 1999 Marmara and 12 November 1999 earthquake in Duzce occupies places of the country's agenda. These earthquakes have shown that the majority of structures are in danger. In this context; with the idea that it would be difficult to demolish and rebuild each building individually, some regulations were adopted from time to time in the country and field based transformation studies were encouraged. However, in one of the most important metropolises of the world such as Istanbul, to make a transformation process in accordance with international standards; due to the city's history, crowdedness, the bad urbanization made up to now for individual earnings, does not seem easy. In this study, information about the urban transformation studies have been performed until recently in Turkey are given. By evaluating the results, suggestions have been made on how to make a transformation planning.

Keywords: Urban transformation, metropolises, urbanization.

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INTRODUCTION

Urban transformation is the whole of the strategies and actions that are applied to improve the economic, social, physical and environmental conditions of urban space with collapse and deterioration with a comprehensive and integrated approach [1]. For the first time, in April 2000, this new urban concept was held in Rio de Janeiro under the name of "1st International Urban Transformation and Sustainability", replacing the concepts of urban rehabilitation or sanitization [2].

Until recently, the history of processes associated with urban transformation in Turkey were examined: A number of measures were taken in the 1970s to purify the slums. Social housing around the cities has been built and presented to poor people living in slums. While this situation is expected to contribute

positively to the planned structuring of the city, it is observed that more than half of the evacuated shanties are used as rented houses, and for many people it is considered to be an investment purpose rather than a shanty house.

In the 1980s, some slums were legalized and they were given the right to do their own licensed construction. Some investors, who have the opportunity to do so, have persuaded the owners of the unstable shanty houses to construct construction in return for the apartment to them and invited to the appearance of unplanned building. The most well-known example of them is the Fikirtepe neighborhood of Kadıköy, which started in 2015 with the acceptance of the supreme floor area ratio (FAR) demand (FAR = 4.00), which was expected at the end of the solution for many years in Figure-1 [3].



Fig-1: Fikirtepe, Kadıköy (A building that stands alone) [4]

In the center of Turkey's five largest city, about half of the population lives in slums or in illegal structures. The majority of the new population settles in the shanties and this increases the population of the slums. As a result of migration, unplanned and illegal construction continues to transform Istanbul into one of the largest squatter cities in the world. It has increased the number of people living in the buildings that remain unsafe on earthquake side and makes them more intensive settlement.

Recent Transformations Applications in Turkey

In Turkey, No. 5104 (2004) "North Ankara Entrance Urban Transformation Project" first conversion project was initiated by law. This law for a specific area, could not be used even in different parts of the capital city of Ankara.

Law No. 5366 (2005) "Law on the Renewal, Protection, Use and Sustain of Historical and Cultural Immovable Assets Worn" is based only on the renewal and protection of historical and cultural immovable assets that remain in the registered and announced areas as protected areas.

Article 73 of the Municipal Law No. 5393 provides municipalities with the capacity to declare

urban transformation and development areas and to implement transformation projects within this area. The fact that the provision of this Article is limited to municipal areas only and that the provisions to be regulated by law have not been included in order to ensure the implementation as soon as possible, point out the problems in the zoning law [5].

Between 2003 and 2010, TOKI has made 500.000 units of housing as a shantytown renovation project and many projects have been implemented not only in Istanbul, Ankara and Izmir but also in Bursa, Elazığ, Erzurum, Erzincan, Gaziantep, Samsun, Sanliurfa and Trabzon. These practices homogenized the structural environment with standardized arrangements and similar housing projects [6].

After the approval of the Law on the Renewal, Protection, Use and Sustain of Historical and Cultural Immovable Assets Worn, a significant number of transformation projects have been initiated in many different cities. With the gained expropriation powers, the state has the right to produce projects even in archaeological sites. Immediately after this law, Tarlabaşı, Sulukule, Süleymaniye, Yenikapı and Fener-Balat regions were declared as urban renewal areas in Istanbul [7].



Fig-2: Transformation areas in the historical peninsula- Istanbul

Fatih and Beyoğlu municipalities have initiated urban renewal projects in Tarlabaşı and Fener-Balat where mostly Greek, Jewish and Armenian citizens were living in the Ottoman period. Then, in these areas, many projects have been produced in the form of theme park style, some modernist, some imaginary Ottoman neighborhoods [8]. These projects involved in the transformation of Istanbul are pseudo-transformation projects (Figure-2) [9].

The Istanbul Golden Horn Urban Renewal Project, which has been on the agenda since the 1980s, is a renovation and rehabilitation project with many different interventions. Turkey's neo-liberal economic transition process in parallel to the Golden Horn was

discharged from a broad range of industrial infrastructure. Some factories were moved to more remote areas and some were closed; a large number of warehouses, workshops and smaller buildings were demolished and replaced with parks and playgrounds.

Fener-Balat Renovation Project the total area of the project is 279.345,91 m² and consists of 59 island and 909 parcels. The district consists mainly of two areas, the green areas on the coast and the residential area with residential + trade functions [10]. In 2008, 121 buildings were renovated and 2 social centers were renovated [11]. According to the results of the rehabilitation project, the number of 200 buildings targeted for restoration could not be reached due to

budget and time constraints. Solid waste management was only implemented for a short period of time. During the restoration, the aim of employment of those in need of employment in the neighborhood could not find any practice [12].

The Istanbul Earthquake Master Plan was first implemented in 2009 in the Sümer quarter of Zeytinburnu District which has a high earthquake risk and its structures are not earthquake resistant. The 63.300 m² area, which is considered as a transformation area, consists of 1038 houses and 212 shops. According to the findings, 536 independent units, which correspond to an important rate of 43% in this current formation, carry a high risk for earthquake. The Sümer Urban Transformation Project, which has been prepared by preserving the neighborhood texture of the region, has a planning area of 54.415 m². The total construction

area is 167.000 m^2 , $1550 \text{ houses } 292 \text{ units } (1 + 1), 790 \text{ units } (2 + 1), 432 (3 + 1), 22 \text{ units } (5 + 1); \text{ it includes interior gardens, children's playgrounds, indoor parking and a <math>100,000 \text{ m}^2$ shopping center [13].

Another transformation project in Istanbul is Gaziosmanpaşa which is the largest urban transformation area of the city. 392 hectares of transformation areas were identified in 11 different regions. The municipality and TOKI cooperated in urban renewal projects on 19.429 m2 of land consisting of 725 units consisting of 9 blocks in the areas of slum improvement [14].

İstanbul Ayazma-Tepeüstü Urban Transformation Project (Figure-3), carried out by Istanbul Metropolitan Municipality; is a study of 600 buildings and 1,100 rights holders of 127 hectares with squatter and undeveloped construction [15].



Fig-3: Istanbul Ayazma - Tepeüstü urban transformation project area [16]

Istanbul Kayabaşı Urban Transformation Project (Figure 4), carried out by Istanbul Metropolitan Municipality, Küçükçekmece Municipality and TOKİ; is an urban transformation project consisting of 1100 hectares, 3400 buildings and 3600 rights holders in the old industrial zone.



Fig-4: Istanbul Kayabaşı urban transformation project area [17]

Dikmen Valley Urban Transformation Project (Figure-5); It was executed by Ankara Metropolitan Municipality. The area is 150 hectares, including slums, fugitives, zoning amnesty and unlicensed construction.

It is a project consisting of 2000 buildings and 2000 rights owners (Figure-4). It was implemented by the method of consolidation of zoning rights [18].



Fig-5: Dikmen valley [19]

Northern Ankara Urban Transformation Implementation (Figure-6) is an urban transformation project implemented within the framework of a law aiming to improve the level of urban life with the development of the physical condition and the environment, enhancement of the physical condition and a better settlement.



Fig-6: North Ankara entrance and surroundings [20]

One of the most important examples of the partnerships of public, private sector and property owners on a project basis is the Portakal Çiçeği Vadisi Project in Ankara (Figure-7). The application of

Portakal Çiçeği Vadisi is a project that is important for the sharing of the value created in the project instead of the right of zoning for municipalities, entrepreneurs and owners to come together under a company [20].



Fig-7: Ankara- Portakal Çiçeği Vadisi urban transformation project area

In 2006, Bursa Osmangazi Doğanbey Urban Renewal Project Protocol was signed between TOKİ, Bursa Metropolitan Municipality and Osmangazi Municipality. Kiremitçi, Tayakadın, Doğanbey and Kırcaali Districts, which are located on the boundaries

of Osmangazi Municipality, have been identified as the Urban Regeneration Area [22]. As can be seen in Figure 8, the transformation was carried out with high-rise structures.



Fig-8: Bursa Doğanbey urban transformation project area [23]

Approximately 134 ha area of Kadikoy District of Istanbul Province; Fikirtepe, Dumlupınar, Eğitim and some parts of the Merdivenköy neighborhoods has been declared pursuant to Article 2 of Law No. 6306 on Transformation of Areas under Disaster Risk. There are 6,341 building stocks. 4.00 coefficient of FAR (floor area ratio) is applied in island

based parceling. The project is still in progress. The area is consistent with a construction site. The increase in the construction area will lead to an increase in the density of the region due to the increase in the population of the transformation area and will lead to a large change in the demographic structure (Figure-9).



Fig-9: Fikirtepe urban transformation project area [24]

CONCLUSION AND EVALUATION

The concept of urban transformation can be considered as an opportunity to undertake a new planning chance in the areas dominated by distorted, uncontrolled property, problematic physical and social environment and to revise the current plan and

construction conditions. Especially state-regional basis conversion work in urban transformation projects in Turkey has gained momentum in recent years and has performed widely-site conversion application. However, as a result of the migrations, unplanned and illegal construction continues to transform Istanbul into one of the largest squatter cities in the world and

continue to create more dense settlements by increasing the number of people living in the buildings that remain unsafe on the earthquake side. As a result of high floor area ratio (FAR) demands in new settlements or urban regeneration areas, it is seen that a kind of planning and construction behavior which ignores laws and regulations is allowed.

It has been experienced that some of the above mentioned urban transformation projects could not be completed and the projects carried out by TOKI have resulted in uniform and aesthetic designs in the context of planning and construction. It is understood that political and economic conditions have exceeded the planning criteria.

Due to the great promises given in the agreements made with the land owners, construction activity increases in residential areas and areas allocated to green areas are decreasing. The state and the citizens must sacrifice in order to see the urban transformation as a gate of making the city more livable and to live in safer buildings rather than to gain and to transform it into a renting object.

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