

Urban Regeneration Process of Eskisehir/Turkey in the Context of Sustainable Development

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Abstract

The aim of the paper is to put stress on the importance and necessity of urban regeneration for sustainable development of cities. The concept of urban regeneration is undertaken as an integrated process for environmental, social and economic development of urban areas. For this aim, urban regeneration process in Eskisehir is explained via examples of implementations undertaken in different parts of the city. Eskisehir is one of the earliest and most industrialized cities in a developing country, Turkey. The urban regeneration examples explored in the scope of this paper are pioneer studies not only for conservation and revitalization of natural, industrial and historical heritage of the city, but also for the country. In spite of being parallel strands of urban policy of many countries, greater emphasis is given to achieving urban regeneration, especially in economical terms, rather than to sustainability. However, it should be considered that all urban regeneration examples contribute to sustainable development through the recycling of derelict land and buildings, reducing demand for peripheral development and facilitating the development of more compact cities (Urban Task Force, 2005). After examining the urban regeneration studies implemented in natural, industrial and historical heritage sites of the city in the context of environmental, social and economic sustainability; the paper discusses the achievements and the deficiencies of the studies in local and regional scales. The authors put stress on the leading role of the local government in providing integrated approaches to land management policies and sustainable urban development.

Keywords: *urban regeneration, sustainable development, Eskisehir, Turkey.*

1 Introduction

The United Nations denotes that, harmonious urbanization has never been more important than it is in the urban century, with more than half of the world's population now living in urban areas (Ban Ki-moon, 2008). The high concentration of activities, objects and people in urban areas, and the flows between rural and urban areas, connote that cities are major contributors to environmental change at local, regional and global scales. They are also platforms for social differentiation, segregation and exclusion. As a consequence, everyday living in our contemporary society involves a high level of spatio-temporal change that is reflected in the social, cultural, economic and political contexts, especially between the relations of the society and the city. There are no simple answers to current urban and global environmental and socio-cultural problems, however, it is necessary to reconsider housing, building and town and country planning in a holistic environmental, social and political context. In the other words, sustainable urban development, of which basic requirement is the integration of social, environmental and economic development in an equitable and everlasting way should be achieved (Detr, 1999). Taking into account the ongoing consumption of open space for housing, retailing and industry, it is indicated that a sustainable urban development cannot be achieved without re-integrating derelict land into the property markets and encouraging development back to central urban locations (Rescue, 2003).

Healey, et.,al. (1992), define urban regeneration as an idea involving both the perception of city decline and the hope of renewal, reversing trends in order to find a new basis for economic growth and social well-being (Parkinson, 1989). In the Report of Urban Task Force, 2005, it is stated that urban regeneration has a crucial role in achieving sustainable development that offers people a better quality of life without compromising the quality of life of future generations. As indicated in the Report of Department for Communities and Local Government: London (2009), successful regeneration strengthens communities by creating new economic opportunities. In this report, regeneration is defined as the process of creating sustainable places where people want to live, work, and raise a family. Concerning the UK is one of the pioneering countries of the world for urban regeneration, the results of the theoretical studies and the implementations experienced throughout the country are handled as the determinant factors for explaining and evaluating urban regeneration process discussed in this study. On the other hand, a successful urban regeneration includes a vision for not only the urban area but its relations within the regional and national scales. Thus, national regeneration policies of Turkey are discussed before explaining Eskişehir case.

2 National Urban Regeneration Policies

Serious internal migration from rural to urban areas started with industrialization caused the urbanization phenomenon to become one of the basic problems of the country in all its aspects. Thus, a lack of healthy accommodation problem, which is typical for underdeveloped or developing countries, had arisen. Beginning from 1950s, illegal housing and squatter developments increased rapidly around large cities and the dwelling shortage doubled every year (Tapan, 1996). Towards the end of 1970s, as a result of the increasing demographic pressures on the urban territory, the squatter settlements which had originally been set up on the peripheral areas started to be included within the boundaries of the cities (Senyapılı, 1996). As a consequence, by the 1980s, the term of urban regeneration began to take place in the government's urbanization policies regarded as an essential tool in the renewal of squatter housing areas, especially those in city centers.

As Güzey (2009) states, the concept was carried to the local agenda via the Habitat II meeting held in Istanbul in 1996, and urban regeneration was introduced as a new local policy in the creation of safe cities, which will be sustained through national plans and reports. She determines the distinguishing characteristic of urban regeneration applications in Turkey, as their being regarded as a form of project-based housing supply, rather than a holistic restructuring process that should be evaluated at an urban scale. Both, academicians and professionals who are well-informed about the real objectives of urban regeneration define this process in Turkey as 'market-oriented through government assistance'. They claim that decentralization and market-oriented privatization policies give power to the local authorities as economic formations over political formations and strengthen them nationwide, as well as local, for the purpose of urban re-structuring. The argument of these authorities is clinched by the body of the documents of the 73rd. Article of the Municipality Law (numbered 5393) which is about urban regeneration and development areas and Law (numbered 5366) about "Preservation of Historical and Cultural Immovable Goods through Renovation and Regeneration". The contents of both of these two Laws are not clear enough to determine the characteristics of the regeneration areas. What's more, there are no specifications neither about the scale and nature of the regeneration implementations, nor about the responsible actors of the process. The 73rd. Article of the Municipality Law eliminates the chance of public participation by giving all of the rights about the decisions of the regeneration processes. This means that urban regeneration in Turkey is far away from being sustainable with its missing dimensions of social equity and economic and environmental integrity.

On the other hand, in the last decade, having been understood the re-use potential of old industrial heritage properties, more attention has been drawn on conversion of them and successful studies implemented especially in big industrial cities like Istanbul, İzmir, Bursa. By the implementation of these examples offering spaces for adaptive uses, the concept of brownfield

regeneration came into the national agenda. Some examples of the conversion of industrial buildings to cultural and commercial uses in these cities are as follows; conversion of the old Gunpowder Factory in Bakırköy, İstanbul to Yunus Emre Cultural Center, the old Tobacco Factory in Cibali, İstanbul to Kadir Has University, the Merinos textile factory in Bursa to Atatürk Cultural Center, the old fishhouse in İzmir to a shopping centre.

Although these examples of revitalization of old industrial sites involve both successful renewal of the physical fabric and the active economic use of the buildings together with their surroundings gained success in implementation, it is thought that an integrated sustainability approach was not included in any of the projects. The deficiency of the nationwide debates about sustainable development caused by lack of awareness of the concept could be designated as one of the most important reasons of this claim.

After summarizing the national urbanization policies in the context of urban regeneration process in a developing country, Turkey, urban regeneration process in Eskişehir- one of the earliest and most industrialized cities of the country- is explained via examples of implementations undertaken in different parts of the city. The urban regeneration examples explored in the scope of this paper are pioneer studies not only for conservation and revitalization of natural, industrial and historical heritage of the city, but also for the country.

3 Urban Transformation Process of Eskişehir

Being located in the Central Anatolia Region, on the west side of the capital city Ankara, Eskişehir is one of the fastest developing cities in Turkey (See Fig. 1). River Porsuk as a natural threshold; Ankara-İstanbul railway and Ankara-Bursa-Bilecik motorway as main transportation routes structure the linear urban form of the city along the east-west direction. Its facilities of transportation such as railroad system and motorway together with its fertile land suitable for agriculture, its rich mine resources and different kinds of energy resources give the city the opportunity to be effective in industrial development. Thus, Eskişehir is defined as the door of Central Anatolia opening to the West. On the other hand, two of the biggest universities in Turkey, Anadolu University and Osmangazi University, established in 1958 and 1970 respectively, redoubled the importance of the city as being an education centre. As a result of these affirmative conditions, the city has a continuous increase in population, from 706.009 inhabitants in 2000 to 723.000 in 2006 and 741.729 in 2008 (DIE Report). Today, principal industrial production of the city is mainly about, stone and soil products, cement and cement products, metal products, wood products, textile products, flour and floury products (EOSB Report).

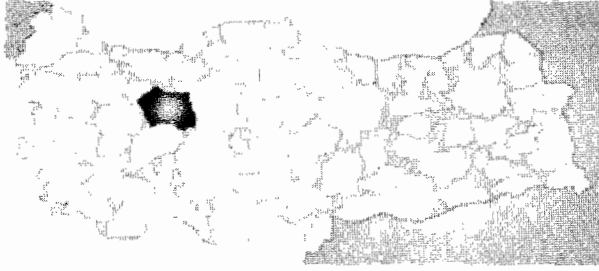


Figure 1. Location of Eskişehir in Turkey. (www.eskisehir-bld.gov.tr)

The change in the image of Eskişehir from a small agricultural town to a trade centre began at the beginning of the 18th century. Outer migrations caused by attractiveness of the productive Anatolian agriculture and developing meerschaum trade were the reasons of this change (Çakmak, 2008). With the establishment of the railway the development in agriculture, mining and industry of the city was accelerated, giving rise to a new city layout showing pre-industrial city characteristics. The most important development affecting the morphology of the city was the expansion of the residential areas to the north of the city where the railway station was located. At the beginning of the year 1923, the city was composed of three different districts which are; the residential area “Odunpazarı” in the south, on the mountain site as the main part of the city, two residential areas in the north, around the river Porsuk as secondary parts and another residential area having sparse population between these two parts of the city (Çakmak, 2008).

With the beginning of the Republican Period, an important transformation process experienced in the physical, political and economic structure of the city began with the rapid industrial development (Çelikkanat, 1973). Several factories located in two frontiers of the city, producing flour, tile, timber and furniture were established. The first group of factories including flour factory and tile factories were located around the railway station and its ateliers at the south-west of the city. At the south-east of the city, the sugar factory was established in the military region which includes the plane maintenance ateliers (Çakmak, 2008). Industrial buildings filled the empty places between the residential areas. In 1980, the buildings of Anadolu University were carried to another place called as Yunus Emre Campus and the boundaries of this campus were broaden rapidly. At the same time, the second university of the city, Osmangazi University was established in Meşelik Campus. Today, Eskişehir is an important industrial and education city with its great contribution to the industrial production of Turkey and facilities for university students.

As experienced in most of the industrial cities in the world, Eskişehir has been undergoing a rapid deterioration process. Character of the downtown residential area began to change from housing to the central business district including new urban functions. This was another reason for dispersion of residential areas to the periphery of the city occupying the greenfield areas. On

the other hand, expansion of the boundaries of the university campus to the North of the industrial area accelerated the dispersion of the residential areas towards this side of the city. This development process that the city had undergone caused the problem of locational obsolescence for the industrial buildings. Over time, urban pattern of the city around the industrial buildings changed to a residential form and in terms of the accessibility to infrastructure, the location became obsolete for the activities for which they were constructed. The functional obsolescence was also a matter of substance for these industrial buildings because of the attributes of their surrounding area. Difficulties of access as a result of narrow streets and traffic congestion and inadequate parking can be mentioned as the reason of functional obsolescence as well as unsuitable physical conditions of the buildings for contemporary production methods. Once being attraction places of the city, these industrial areas began to be abandoned and left to deteriorate as the result of economic obsolescence and a new industrial zone located in the south of the city. As a consequence, it can be said that, everyday living in our contemporary society involves a high level of spatio-temporal change that is reflected in the social, cultural, economic and political contexts, especially between the relations of the society and the city.

4 Urban Regeneration Implementations in Eskişehir

The actions of the city's mayors have been very effective in managing urban development of the city since 1984. The preparation of municipal plans controlling development and construction within the city's borders, the preparation of conservation plans for traditional housing areas, improvements in the city's infrastructure, including the sanitation system, the gas pipeline network, sewage treatment facilities, the transportation system and cleaning up the Porsuk River, were all undertaken during this period.

Today, mission of the municipality is to provide access for all the inhabitants of Eskişehir to the social, cultural, economic and urban development features of the city and to build up community consciousness. Thus, vision of the municipality is to develop plans and projects for sustainable urban development of the city. Authorities of the local government developed strategies in order to provide a vital and secure urban life, a successful transport network, sportive, recreational and entertainment opportunities for everybody, intense economic activities (webpage of the municipality). The principal aim of the local government is to achieve sustainability of the city in terms of urban, socio-cultural and economic development with a holistic approach.

It is indicated by the researchers that local governments are particularly relevant to people's daily lives as they manage the infrastructure and services that directly influence quality of life (Satterthwaite, 2009). Satterthwaite (2009) supports this statement and thinks that, mayors who have influence in urban centres, also influence the form of the city's current and future development, including its success in attracting new investment. He adds that these mayors are also likely to influence the form and extent of the urban centre's physical

expansion by the extent of their commitment to managing land use. The mayor of Eskişehir, Prof. Dr. Büyükerşen has been the mayor of the city since 1999. Having a common sense and high level of awareness about sustainability, he has been influencing the development of the city in a positive way. In spite of the limited income of the municipality many successful regeneration studies implemented under his leadership. The selected flagship projects are presented briefly in this section.

Rehabilitation and Sanization of the River Porsuk: After 1960s urban and industrial waste caused pollution of the river so that it was declared as one of the dirtiest rivers of Europe in 2002. What's more it was a great threat for its near environment for water flood. The Metropolitan Municipality of Eskişehir undertook the rehabilitation and sanization studies of the river together with the studies to strengthen the bridges over the river against natural disasters. On the other hand, 24 new bridges were built and arrangements about waterborne traffic were made in order to improve the transportation possibilities of the city (See Fig. 2)



Figure.2. The River Porsuk before and after the rehabilitation studies
(www.eskisehir-bld.gov.tr)

Rehabilitation of Dip Bazaar(Çukur Çarşısı): A small natural island in the middle of the river Porsuk which had been used as a fish market for lots of years was converted to an urban park with playgrounds for children, cycle and walking paths and a big amount of green space (See Fig. 3)



Figure.3. The Dip Bazaar before and after the rehabilitation studies
(www.eskisehir-bld.gov.tr)

Conservation and Redevelopment of Odunpazarı Traditional Area: The traditional houses in the “Odunpazarı”, the first settlement area of Eskişehir were renovated and restored. These houses were converted to either cultural buildings like museum, library, children theatre, or touristic buildings like guest houses and restaurants. This project is the Pioneer one for cultural heritage conservation studies in the city (See Fig. 4). Restoration of the building which served as a headquarter during the Turkish War of Independence, and its new usage as a museum has a special value for conservation and transmission of historical heritage (See Fig. 5).



Figure. 4 Traditional Houses in Odunpazarı after restoration studies
(www.eskisehir-bld.gov.tr)



Figure. 5. The Headquarter Building before and after its restoration
(www.eskisehir-bld.gov.tr)

Conversion of the old Slaughterhouse to a Complex for Restaurants: The old slaughterhouse had been vacant for about three years and the Municipality decided to convert it to a complex for restaurants serving different kinds of meals after the rehabilitation studies. This complex is an alternative entertainment place for the inhabitants of the city with wide green areas surrounding.

Conversion of the Market Hall Building to Cultural Centre: The market hall of the city moved from the city centre to a more accessible location on a suburban industrial area and the old building of the market hall left to deteriorate. The physical structure of the old building was conserved and rehabilitated so as to give spatial opportunity for new uses. With the dynamic leadership of the municipality, the building and its surroundings were converted to a cultural centre named “The Market Hall Youth Centre” (Haller Gençlik Merkezi). This cultural centre includes, a public theatre, a theatre for children, an ice rink and many commercial and entertainment units and restaurants. The case of “The Market Hall Youth Centre” can be represented as a flagship Project acting as a magnet for further developments. Locating on the transport axis of the university and the city centre, it provides a suitable physical and social environment attracting the young people and the residents (See Fig. 6).



Figure.6. The Market Hall Building before and after its restoration
(www.eskisehir-bld.gov.tr)

The common specific objectives of these urban regeneration cases in Eskişehir can be listed as follows;

- raising the quality of urban life is the main objective in all of the cases,
- providing new businesses for the local community,
- providing a variety of spaces for social activities, especially for the young population of the city,
- promoting the cultural and touristic potential of the city,
- contributing to the development of new residential areas in healthy conditions around their surroundings,
- achieving easement of access, acquiring a good public transport supported by tramlines of the city,
- emphasizing the importance of re-use of traditional materials which were used especially in the old industrial buildings, in order to conserve and promote the heritage value of these sites.

5 Evaluation of Urban Regeneration Cases in Terms of Sustainable Development

The urban regeneration examples explored in the scope of this paper are pioneer studies for conservation and revitalization of industrial and historical heritage of Eskişehir. As stated before, in spite of being parallel strands of urban policy of many countries, greater emphasis is given to achieving urban regeneration, especially in economical terms, rather than to sustainability. However, all urban regeneration examples contribute to sustainable development through the recycling of derelict land and buildings, reducing demand for peripheral development and facilitating the development of more compact cities (Urban Task Force, 2005).

As stated before, without a comprehensive urban regeneration framework that will define a vision for not only the urban area but its relations within the regional and national scales, the scope of an urban development procedure is limited (Roberts and Sykes, 2004). Thus, a holistic approach including socio-cultural, economic and environmental components of urban regeneration process is inevitable. The following principles determined by the researchers should be considered when evaluating the urban regeneration studies (Turok, 2004; Roberts and Sykes, 2004; Hall, 1997 qtd in Carter, 2004):

Economic transformation: increasing job opportunities, improving the distribution of wealth, developing abilities, increasing local property taxes, linking local to city and regional development, attracting inward investment.

Social transformation: improving the quality of life and social relations, improving the access to housing through developing health, education and other public services, decreasing the crime rates, overcoming stigmatization and social exclusion.

Governance: re-organizing decision-making mechanisms within a democratic understanding, increasing the number of participation spaces, considering different expectations; emphasis on region-wide partnerships, emphasis on horizontal and vertical linkages within and between institutions.

Physical transformation: solving the problem of physical deterioration with new land and property requirements.

Environmental quality and sustainable development: urban regeneration should promote the balanced development and management of the economy, society and the environment.

Nonetheless, it would be better to monitor the urban regeneration process throughout its life cycle, in order to develop more practical strategies to achieve sustainable development. At this point, it will be explanatory to evaluate the studies in terms of economic, social and environmental sustainability objectives.

When considered in the context of economic sustainability, adapting new uses to old buildings without demolishing them and the reuse of the original

structural elements could be regarded as minimising waste production. Secondly, keeping the operational costs low by providing developments with renewable energy power sources and minimum source consumption is necessary. However, because of the deficiency of sustainability agenda during the construction years of the cases, it can be estimated that sufficient importance hadn't been given to reduce energy or minimise waste consciously during the construction phase. There are no passive or active ecological systems to generate energy in these regeneration cases. The heat isolation systems used in the construction, reconstruction or restoration of the buildings are the only contributory factors for minimising heating and conditioning costs of the new enterprises. The third supporter of efficient and competitive businesses is high quality of urban and architectural design. When compared with the former conditions of the sites, it can be stated that after having been adapted to new uses, all of them provide urban spaces having much better environmental quality. Appropriate transport infrastructure providing connectivity of the new businesses to the city is another necessity for economic sustainability. The railway and the tramline provide good public transport links between the sites and the city centre and also to the university campus.

When considered in the context of social sustainability; the urban regeneration studies in Eskişehir provide community buildings and open space for social interaction besides offering a mix of retail spaces. What's more, including two multifunctional halls, two theatres and a cinema hall, The Market Hall Youth Centre provide suitable spaces for educational seminars and community training in any subject. Provision of these kinds of services helps the local community to develop social capital and also avoid social exclusion in the city. A variety of public transport alternatives provide good access for the users of these sites including children, teenagers, people with disabilities and older people. However there are some difficulties for the disabled people to use the inside of the buildings.

Environmental sustainability requires the prudent use of natural resources together with the protection of ecosystems and biodiversity (Williams and Dair, 2007). In fact, traditional Turkish building construction systems and building materials meet the environmental sustainability objectives. Traditional building materials, timber and brick have the properties of renewable materials and low energy inputs. However they are not being used as much as they had been in the past. The use of these traditional building materials during the rehabilitation, reconstruction or restoration processes of the old industrial buildings was the only attempt in favour of environmental sustainability. Infrastructure for an effective public transport is also provided for all of the cases, and it is an important necessity to meet the objectives of minimising the use of resources and pollution.

6 Concluding Remarks

In the context of this study, examples of urban regeneration studies including natural, historical and industrial heritage sites from Eskişehir are described and their contribution to the sustainable development of the city is discussed. First of all, urban development process of Eskişehir together with its socio-cultural, economic and industrial dimensions is explained. Then the selected urban regeneration cases are presented and this presentation is supported by the evaluation of them in terms of economic, social and environmental sustainability objectives. It is found out that the presented urban regeneration studies in Eskişehir partially meet the objectives of the sustainable development components, however in an unconscious way. It can be concluded that, urban regeneration studies in favour of community are important and effective tools for urban sustainability. However, it is clear that, more benefits can be gained, if a holistic and participative approach is used and sustainability criteria are considered in deciding, planning and implementation stages of the projects.

References

- Ban Ki-moon, (2008), "Harmonious Cities" , foreword in State of World's Cities 2008/2009 .
- Cakmak,S., (2008), "Sehrin Bicimlenisinde ve Kimlik Kazanmasinda Belirleyici Rolu olan Artifaktlar: Eskisehir Kenti Uzerinde bir Inceleme", Unpublished M.Arch. Thesis, Osmangazi University, Institute of Science, Eskisehir (In Turkish).
- Çelikkanat,(1973)"50.yılda Eskişehir", Eskişehir, Özgür yayınları
- Detr, (1999). Quality of Life Counts: Indicators for a Strategy for Sustainable Development for the United Kingdom: A Baseline Assessment".
- Erkut, G., (2000). "Urbanization Trends and Housing Policy in Turkey: the Case of İstanbul" , in Maritano, N., C., et. al. (eds.), Housing and Urban Policies for Low-Income People in the Central Areas of İstanbul and Sao Paulo, Agat Editrice, Italy, pages 27-44.
- Guzey, O.,(2009), "Urban Regeneration and increased competitive power: Ankara in era of globalization", Cities, Vol 26, Elsevier Science Ltd., pages 27-37.
- Healey, et.,al.,(1992), "Rebuilding the City", Introduction, in (eds.) Healey, et.,al., Rebuilding the City E&FN SPOON, London, pages 3-12.
- Parkinson,M.,(1989), "The Thatcher Governments Urban Policy", 1979-1989. Town Planning Review, 69(4), 421-440, from Healey, et.,al.,1992, "Rebuilding the City", Introduction, eds. Healey, et.,al., Rebuilding the City E&FN SPOON, London.

- Rescue, (2003), Analytical Sustainability Framework in the Context of Brownfield Regeneration in France, Germany, Poland and the UK: Final Report of Work Package 1, from www.rescueeurope.com,
- Report , (2009), Department for Communities and Local Government: London,
- Roberts, P. and Sykes, H., (2004), Editors, Urban Regeneration A Handbook, Sage Publications, London .
- Satterthwaite, D., (2009), “What Role of Mayors in Good City Governance?”, *Environment and Urbanization*, 21(3), Sage Publ.,UK, pages 3-17.
- Senyapılı, T., (1996), “ New Problems-Old Solutions, A Look at Gecekondu in Urban Space, in *Housing and Settlement in Anatolia, A Historical Perspective* , editor, Sey, Y., Tarih Vakfı Yayınları, İstanbul , pages 345-354.
- Tapan, M., (1996), “Mass Housing and Its Development in Turkey”, in *Housing and Settlement in Anatolia, A Historical Perspective* , editor, Sey, Y., Tarih Vakfı Yayınları, İstanbul.
- Urban Task Force, (2005), “Towards a Strong Urban Renaissance”, Report by Urban Task Force from www.urbantaskforce.org/UTF_final_report.pdf
- Williams, K. and Dair, C.,(2007), “A framework for Assessing the Sustainability of Brownfield Development”, *Journal of Environmental Planning and Management*, Vol. 50(1), Routledge, London, pages 23-40 .