We are IntechOpen, the world's leading publisher of Open Access books Built by scientists, for scientists

4,800
Open access books available

123,000
International authors and editors

135M
Downloads

Our authors are among the

154
Countries delivered to

TOP 1%
most cited scientists

12.2%
Contributors from top 500 universities

CLARIVATE ANALYTICS BOOK CITATION INDEX INDEXED

WEB OF SCIENCE™

Selection of our books indexed in the Book Citation Index in Web of Science™ Core Collection (BKCI)

Interested in publishing with us?
Contact book.department@intechopen.com

Numbers displayed above are based on latest data collected.
For more information visit www.intechopen.com

Chapter 7

The Relationship Between Sustainable Urbanisation and Urban Renewal: An Evaluation of Trabzon City Sample

Aysel Yavuz

Additional information is available at the end of the chapter

http://dx.doi.org/10.5772/62951

Abstract

In recent years, the city is faced with new facts and problems that began to appear. These can be sorted as the issues of 'sustainability', 'urban renewal' and 'sustainable urbanisation'. Liveability of cities arises through the value given to the town and city dwellers. To make cities liveable and ensure their continuity is possible only in the situations where the relationship between the town and its dwellers is correctly founded and carried out. In the course of time, constant change–renewal is experienced in urban areas with a complex structure depending on the causes such as economic, social, physical, technological and political. Change and renewal in urban areas is usually carried out to increase the quality of space and of life, while some time it is, unfortunately, defeated by rent and cannot get rid of entering into a continuous cycle of renewal. Waiting almost for their expiration date, will the changing places be able to stand against the new rents to be created? Therefore, it is an urgent need to develop sustainable strategies for urban renewal. This research aims to evaluate seven urban renewal applications in order to establish a proposal model to be a useful guide for our cities and local authorities.

Keywords: Urban, Urban Renewal, Urban design, Sustainability, Ecological Model

1. Introduction

In recent years, cities are faced with new concepts and environmental problems that began to appear. Gaining a global dimension, these concepts and problems have made multilateral cooperation and international coordination necessary for a permanent solution to these issues. So, to prepare the necessary legal infrastructure, all countries of the world are unavoidably engaged in an intense agenda. Sustainability, urban renewal and sustainable urbanisation are

INTECH
open science | open minds

© 2016 The Author(s). Licensee InTech. This chapter is distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/3.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. CC BY

among the issues discussed. In 1972, 'United Nations Human Environment and Development Declaration', the first global assessment on the environment was adopted in Stockholm. Later in 1987, the sustainable development concept was defined for the first time in the Brundtland Report prepared by the World Commission on Environment and Development and has been widely used since then. In addition, 'sustainability principles' that were accepted at the Rio conference held in 1992 and the Habitat-2 City Summit in 1996 in order to create liveable environments have made sustainable urbanisation a prominent issue to be solved also in our Turkey as in other countries. Due to globalisation, change is inevitable, and today a 'planned change for sustainability' is still required.

Majority of the world's population now live in cities, and the number of people living in the countryside is steadily decreasing every day. Because of the population growth and unplanned settlements in urban centres, the available resources are running out and natural habitats are undergoing changes. In other words, failure to meet the growing need for housing in urban areas leads to unplanned settlements in a way that threatens both the identity and liveability of the city. In addition, this type of construction has brought with it the land zoning and infrastructure problems. This process has also accelerated the destruction of green areas, agricultural areas and coastal areas. And the places, where unhealthy, dilapidated and illegal buildings are intense, create visual pollution as well as become a potential threat to the health of the people living in them and the fabric of cities.

Especially, with the rapid restructuring and uncontrolled population growth that emerged after World War 2, natural systems have been ignored and an uncontrolled consumption-oriented development process has emerged. Adoption of a consumption-oriented lifestyle rather than production raises concerns for the future of cities and the life of their inhabitants. The capitalist, political, technological and industrial developments at the end of 1960s have significantly disturbed the ecological balance. And according to Özmehmet, this is the main reason for the inability to establish the correct link between development and the environment [1].

Urban spaces should not be considered only as a space consisting of buildings, but also as a social and cultural centre where social events take place. Therefore, due to the significant impacts of urban areas on the society and human behaviours, their design should also include the social and cultural aspects in addition to the physical dimension. As there is not a particular perception of space, it is considered as a concept of place that is constantly changing and renewed together with those living in it [2].

When looked at the urban transformation projects in the world, cities seem to have different regeneration processes from each other according to their own internal dynamics due to the impact of globalisation. Intervention strategies of the developed and developing countries include different contents from each other, and the cities that have completed their regeneration eventually force the other cities into this process. So, local governments attaching importance to the implementation of urban transformation want to create quality urban environments, renew the city's image and raise their status and position. For example, Canada, Norway, Switzerland, Sweden and Australia are among the countries that apply the ecosystem successfully in the urban transformation projects, the protection of natural resources and the

http://dx.doi.org/10.5772/62951

use of renewable energy sources. In this respect, today Sweden is a model country with its capital Stockholm, chosen as the ecological capital of Europe in 2010.

Because of the oil crisis that appeared in the 1970s and 1980s, Sweden has renewed its national energy policy. In this context, it has made a great effort to discover new energy sources find new methods for the isolation of the buildings and develop energy-saving systems. Consequently, today Sweden's dependence on oil is decreased by 90% for heating and electricity production. In this process, it has planned the things to be done for sustainable living, taken necessary measures and implemented an ecology-based transformation model. Stockholm's Hammarby Sjöstad district is now renewed with this approach. The project has established an infrastructure that enables the recycling of all waste underground. In addition, divisions have been formed, where organic waste, paper type materials and the garbage unsuitable for recycling are collected separately. At certain times of the day, garbage collected in waste collection points is pulled down. By solar energy, energy and sustainable use of water are supported, dirty water is treated and reused, and the surface water is collected in artificial ponds. In addition, high heat-insulated buildings are constructed, and renewable energy sources are used instead of fossil fuels. While the organic waste is taken to fertilizer production centres, the other garbage is burned to produce energy for central heating systems. Besides, biogas is obtained from waste liquid in the treatment plant, and used in stoves in homes and municipal busses. In short, 'Hammarby model' is proposed as a new model for urban transformation in some countries (China) [3].

On the other hand, there are many countries where people still ask the following or similar questions to each other: Why don't we take the example of ecological-based models of urban renewal throughout the country? Why do we usually perceive urban renewal only as the housing production policy or the work of providing functional changes? And how long will the new buildings constructed within the scope of urban transformation be able to preserve their sustainability?.

Urban renewal concept, which is not yet fully seated in Turkey, emerges with different names in world literature. Urban renewal in different countries is formed by the interaction of different variables and called by different names. These applications contain the meanings defined as urban clearance, urban renewal, urban renaissance, urban revitalisation, urban redevelopment, urban regeneration, urban conservation, urban rehabilitation and urban gentrification.

2. Definition of urban renewal

According to Zheng et al. urban generation, urban renewal, urban redevelopment and urban rehabilitation share same meanings in the town-planning field, but they are considerably different in term of scale. Urban renewal and urban regeneration express nearly the same meaning and both involve work of a relatively large scale. Urban renewal is defined as a process of slum clearance and physical redevelopment taking account of other elements such as heritage preservation; while urban regeneration is a comprehensive integration of vision

and action aimed at resolving the multi-faceted problems of deprived urban areas in order to improve their economic, physical, social as well as environmental conditions [4] There are also many other striking definitions, explanations and application forms of this concept.

In the dictionary of the Turkish Language Institution, the term 'renewal' is defined as transformation, reform, to enter into another form and to take another case. When called 'urban renewal' in Turkey in the 1970s and 1980s, the first thing that came to mind was the improvement of slum areas [5]. Actually, urban renewal is a general concept including the applications carried out for the renewal of the existing urban structure [6].

Generally, urban renewal has been regarded as a sound approach to promoting land values, improving environmental quality, rectifying the urban decay problem and meeting various socioeconomic objectives on the one hand, and enhancing the existing social networks, improving the inclusion of vulnerable groups and changing adverse impacts on the living environment on the other [4]. Urban renewal is also considered as a comprehensive work aiming at improving the physical, social, economic and ecological aspects of urban areas through various actions including redevelopment, rehabilitation and heritage preservation [7].

According to Ho et al. [8], urban renewal projects can profoundly improve urban competitiveness providing that they are designed and implemented properly. On the other hand, urban renewal is associated with other concepts such as sustainability and defined in a broader sense. For example, according to Czischke et al. [9], sustainable urban renewal is understood as renewal actions, policies and processes within a city, which addresses interrelated technical, spatial and socio-economic problems in order to reduce environmental impact, mitigate environmental risk, and improve environmental quality of urban systems, lifestyles and assets.

3. Historical development of urban renewal process

The renewal of the post-war era that began in the 1950s with rebuilding to repair the destruction, continued as revamping in the 1960s and 1970s. Then, a new process was launched in the in the 1980s and 1990s although they are different in every country, and especially the projects dominated by the private sector and corporate partnerships were implemented. Today, urban renewal activities including all of the concepts such as urban regeneration, urban conservation and urban gentrification are performed all over the world in order to ensure the sustainability of the city. Unfortunately, many urban renewal work carried out especially in developing countries is far from sustainable urbanisation and urban ecological understanding, for the reasons such as the lack or national policy and local policy, lack of infrastructure, urban rents fight and so on.

4. Sustainability, sustainable development and sustainable urbanism

Today there is a widespread belief that different dimensions of 'sustainable development', such as economic, social, environmental and institutional, are not given equal priority by many

http://dx.doi.org/10.5772/62951

policy makers [10]. But it is not considered as a rational or comprehensive application form. Bennet et al. [11] and Şahin [12], argue that sustainability is a concept including social economic and ecological aspects. In addition, UN Brundtland Commission dated 1987, suggests sustainability is a development that meets the needs of the present without compromising the ability of future generations [13]. And Atil et al. [14] define sustainability as a significant concept which not only aims at high productivity but also intends to continue the functions of any social, economic or ecological system requiring sustained continuity without damaging or depleting the sources used [14].

On the other hand, the term 'sustainable development' dates back to the 1970s and it is a relatively complex concept made even more complicated by the fact that there is still no commonly accepted definition of this term [4]. Sustainable development makes the world a better place to live in, for both the present and future generations. It also involves the preservation protection of the earth's wealth-creating sources by bringing about the social and economic conditions for a transformation in that direction [11]. Besides being the determinant of environmental policy in the world, sustainable development is also defined as a concept integrated with the concepts of economic and social development without getting limited to the domain of the environment [15].

According to Berke and Manta, sustainable development is a dynamic process connecting local and global concerns, in addition to linking local, social, economic and ecological issues in order to fairly meet the needs of current and future generations [16]. Corresponding to urban renewal in terms of social, economic and environmental sustainability, sustainable development has been recognized that urban renewal and sustainability should be combined [4].

Although sustainability and sustainable development are not the same, they are often used without attention as if they were. According to Barrow, sustainability is the ongoing function of an ecosystem or use of a resource, and implies steady demands. But sustainable development implies increasing demands for improving well-being and lifestyles and also in the foreseeable future, for a growing population [17].

As for sustainable urbanism, it is a widely used phrase, often with ecological and green connotations, constituting a rather complete framework for the interdisciplinary planning and urban design of contemporary cities, neighbourhoods and residential places [18]. In addition, Hall emphasized that 'Planning and renewal must not be separated; instead, renewal must be an integral part of planning' [19]. This approach explores sustainability and urban design in a holistic manner by focusing on the processes that shape the form and function of our built environment in its full complexity [18].

5. The links between urban renewal and sustainability

Especially in the early developed cities, urban areas grow and deteriorate as time goes by, and adversely changing conditions of the environment make life miserable for the people living in them. So urban renewal projects to improve the built environment take place [20]. Emphasizing

the importance of sustainability in this context, Bai et al. [21] argue that 'the battle for sustainability will be won or lost'.

In general, urban land is both precious and scarce, like some other sources. Thus, the main objective of urban planning is providing reuse of the already scarce urban sources taking into account the public interest [12]. To do so, urban planning should be obliged to enable the public interest principle, and establish and apply necessary rules reconciling private interests with the public interest depending on the character of the economic structure and political regime of every country [5].

Nevertheless, decisions on the future of cities should be taken with the participation of the relevant stakeholders mainly consisting of the state sector, local government sector, private sector, civil society organisations, local residents as well as academics. In this context, a sustainable urban renewal strategy should take into consideration the entire life cycle of urban structures from design and construction to the operation and maintenance as well as life quality of the residents [8].

Finally, as a living organism, the city is a hybrid system consisting of structures with natural areas. But, rapid and unplanned urbanisation is the biggest threat in terms of the sustainability of the natural and cultural sites. According to Sancar, technical infrastructure and transportation are extremely important for sustainable organisation and also decisive in terms of the quality of urban life [22]. The adequacy or quality of the technical infrastructure is considered to be among the issues to be addressed first. In addition, transportation systems of the vehicles and pedestrian in the city need to be re-evaluated within the understanding of a holistic planning approach in order to achieve the goal of sustainable urbanisation.

6. Urban renewal in Turkey

In spite of its similarities with the West, urban renewal process in Turkey contains quite significant differences depending on the social and political dynamics. In Turkey, Urban renewal applications usually come on the agenda mainly for political and economic reasons. So, sustainability of these applications is relatively different than the ones explained in the above-mentioned Stockholm's Hammarby Sjöstad district model. The urban renewal projects implemented in Turkey have changed the physical structure of the place, but their results have not been evaluated yet [6]. Besides, being far from the ecological approach, these applications could raise serious concern for the future availability and sustainability of cities.

In addition, in Turkey urban regeneration is almost identical to the Mass Housing Administration (TOKİ), an organisation legally authorized to operate in urban transformation projects and connected to the Prime Ministry of Turkey. TOKİ is also one of the actors in urban renewal applications that provide habitat with local governments, and aims to improve the quality of life, stabilize the increasing economic imbalances, global pressures and social inequality as well as resolve the problems such as the housing shortage. And right now, there are more than two thousand urban renewal projects completed by TOKİ in Turkey, and this number is considered to increase continuously due to the growing need for urban renewal applications.

http://dx.doi.org/10.5772/62951

7. Area description

According to the results of Address Based Population Registration System, Turkey's population is 78 million 741 thousand 53 people as of December 31, 2015. In 2015, the population residing in Turkey increased by 1 million 45 thousand 149 people compared to the previous year, and so Turkey's annual population growth rate stood at 13.4 per thousand, whereas it was 13.3 per thousand in 2014. Proportion of the residents in the provinces and districts was 91.8% in 2014, which rose to 92.1% in 2015, and the proportion of the people living in districts and villages was set at 7.9% [23]. These data reveals how much the population has increased in urban centres because of the migrants coming from rural areas.

As for Trabzon, it is a city situated in the North eastern Black Sea region of Turkey with a population of about 768,417 and covers an area of approximately 4685 square kilometres [24]. And Trabzon's population growth rate has increased by 1635% over the previous year. Proportion of the residents in the city centre is 41.67%. In addition, located to the Southeast coast of the Black Sea, Trabzon is between the 38°30′–40°30′ east meridians and 40°30′–41°30′ northern latitudes, as well as surrounded by the cities of Rize in the East, Giresun in the West, and Gümüşhane in the South. Extending Northward from the South, the mountains reach the Black Sea coast as ridges split by valleys and are over 2000 m in places. The amount of active green areas of the province of Trabzon is 867, 673 m^2, and the passive green space is 437, 960 m^2 (**Figure 1**).



Figure 1. The geographic location of Trabzon [6].

In 1950s, squatting and illegal construction began in Trabzon just like in the other cities of Turkey especially with immigrations to urban areas, rent conflicts, as well as the reflections of amnesty laws that have extended until today. Hosting many physical, social and environmental problems in this process, the city of Trabzon has adopted urban transformation projects as an important method for the solution of these problems. While Trabzon is a city famous

with its natural and social richness, providing sufficient opportunities for people and having a magnificent history of 4000 years, now it is slowly losing its natural green texture, natural coast and the urban memory mainly because of the population growth, rapid and unplanned construction, expanding the coast towards the sea and the environmental pollution. So urban renewal work has been unavoidable for this city too, just like the other cities in the country.

Urban renewal and development projects are implemented in Trabzon by the cooperation of local governments and Mass Housing Administration (TOKİ). Out of a total of 62 projects being implemented, only seven urban renewal application areas will be evaluated in this article. These are the urban transformation projects of Zağnos Valley, Tabakhane Valley, Town Square, Pelitli, Hagia Sophia and Narlıbahçe (**Figure 2**). Of these projects, only Hagia Sophiaurban transformation project is already completed, and 3 of the 4 stages of Zağnos Valley project are completed. Demotion is continuing at the same time in the last stage of Zağnos Valley, Tabakhane Valley, Çömlekçi and Pelitli suburbs. Renovations and infrastructure work in the final stage of the Square Park are ongoing, while in the urban renewal area of Narlıbahçe, no application work has started yet. Continuation of the demolition in four separate places at the same time suggests that some unplanned or unseen social problems are likely to arise in the near future due to the slow progress of the work and rapidly growing housing problem.

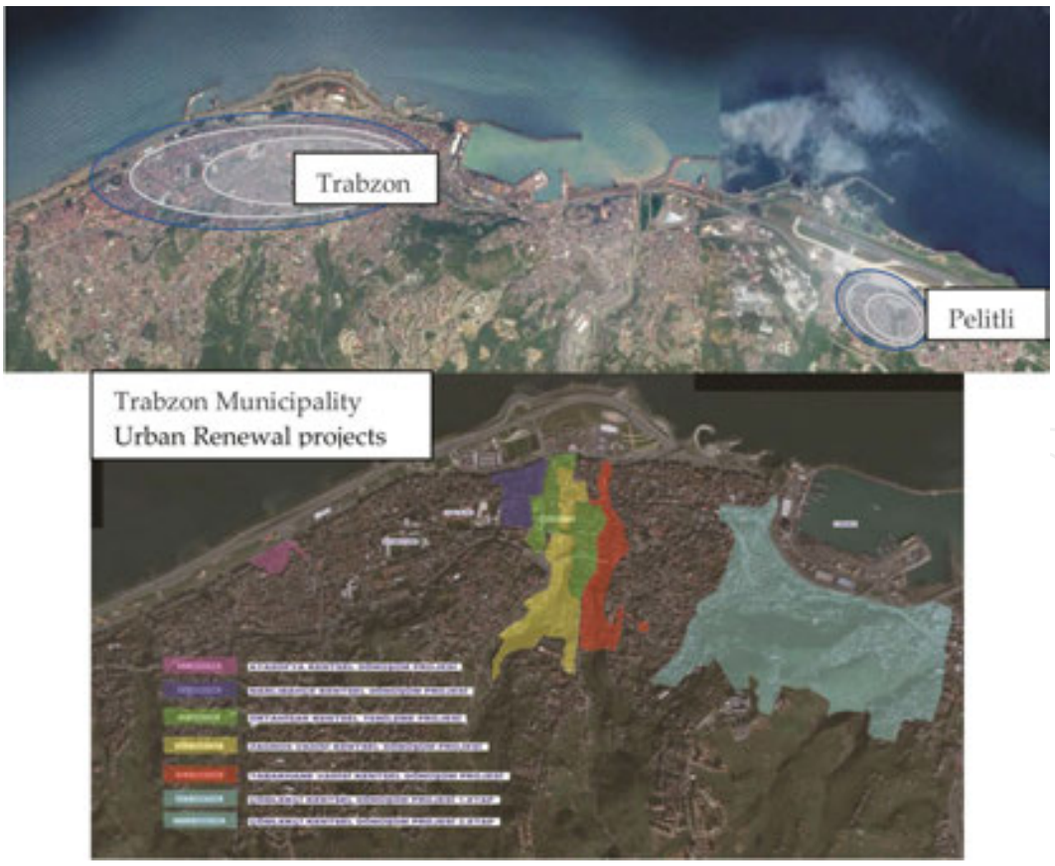


Figure 2. Urban renewal projects applied in Trabzon (Photos, Trabzon's municipal archive).

http://dx.doi.org/10.5772/62951

The first serious urban planning in Trabzon was conducted in 1938 by Jaquest Lambert, a French architect and urban planner in its history of 4000 years. According to Lambert plan which entered into force in 1938, Zağnos and Tabakhane valleys have been considered as air corridors to provide natural air flow and a planning approach has been adopted in this regard. These valleys are in the city centre and located in very close proximity to the housing, commercial and administrative centres. Located in valleys, Tabakhane and Zağnos bridges are the constructions well worth to preserve, because they have preserved their characteristics so far in the urban fabric and have an important place in the urban transportation. In addition, the limit of Zağnos valley is surrounded by Ortahisar castle in the Protected Area in Grade 1. Migration of the urban people to the city and the rapid increase in urbanisation has led to a distorted and unhealthy construction as well as degeneration of the natural structures of Zağnos and Tabakhane valleys (**Figure 3**). Urban renewal project work of Zağnos Valley was started with a protocol dated November 27, 2004, and signed between Trabzon Municipality and TOKİ, and the urban renewal project work of Tabakhane Valley was started in the same way with a similar protocol dated November 12, 2007 (**Table 1**).



Figure 3. (a) Zağnos valley, **(b)** Tabakhane valley (Photos, Trabzon's municipal archive).

Three stages of Zağnos Valley have been completed until 2016, and expropriation and demolition work continues for the 4th stage. Recreational landscaping and residential work has been made in the completed part of the project. In addition, three buildings of historical value have been restored for the present and future generations. Property owners of this valley, where mainly low-income people used to reside, have had to evaluate the proposals presented to them and move to new residential places after receiving their expropriation money. Their options include buying one of the houses built by TOKİ with long-term debt payment or another house they like or moving to any residential place they prefer. So, the residents of this valley have been obliged to separate from each other and live in different places because of this urban renewal project.

Consequently, due to the historical texture of the valley, this application form can be defined as an urban renewal or urban renovation on the one hand, but urban gentrification on the other.

Zağnos valley I,II, III, 4th stage urban renewal project			
Beginning/ending year	2004/—	Area	30 hectare
Number of destroyed buildings	583	The total number of buildings will be demolished	636





Table 1. The views from 1st, 2nd and 3rd stage, the urban renewal project of Zağnos valley (Photos, Yavuz A.).

As for Tabakhane Valley, the detection process in this area has been completed until 2016 and in addition to expropriation work, demolition process continues (**Table 2**). Under the project, recreational landscape work and 353 housing production will be carried out. Undergoing the same process applied to the people living in Zağnos Valley, also the residents of this valley have been obliged to be separated from each other and move into other residential places, which seem quite normal or fair for the central and local governments as the main stakeholders of urban renewal or urban renovation projects.

But the same thing cannot be said for the people who are compulsorily dispersed from their residential place, because of having been obliged to accept one of following three options: Buying a house or flat constructed by TOKİ, or by the private sector. As for the third or last option, it is renting a reasonable house or abandoning the project area before the demolishing work starts, especially for the poor, but a short-term solution lasting just until the money they have been paid has gone.

http://dx.doi.org/10.5772/62951

Tabakhane valley urban renewal project			
Beginning/ending year	2010/	Area	17.2 hectare
Number of destroyed buildings	433	The total number of buildings will be demolished	688



Table 2. The views from Tabakhane valley urban renewal project (Photos, Yavuz A.).

The first phase of the urban renewal process in Meydan Park (park square) was completed in 2012, and the second phase work is still ongoing (**Table 3**). Under the project, historical buildings have been restored and the square has been renovated and rid of traffic jams. This project can be defined as renewal application–renovation.

Meydan park urban renewal project			
Beginning/ending year	2011	Area	1.6 hectare
Number of destroyed buildings	0	The total number of buildings will be demolished	0





Table 3. The views from Meydan Park urban renewal project (Photos, Yavuz A.).

Çömlekçi neighbourhood urban renewal project work was launched in May 17, 2011, with the agreements signed between TOKİ and Trabzon Municipality (**Table 4**). The detection work of this project has been completed, but the expropriation studies are still ongoing. In the project area, a new centre of attraction is aimed to create in addition to the housing and communal ling areas for the city. This application can be defined as urban clearance.

http://dx.doi.org/10.5772/62951

Çömlekçi urban renewal project



Beginning/ending year	2015/—	Area	138 hectare
Number of destroyed buildings	84	The total number of buildings will be demolished	134



Table 4. The views from Çömlekçi urban renewal project (Photos, Yavuz A.).

Pelitli urban regeneration work began on April 4, 2007, as decided in a protocol signed between TOKİ and Trabzon Municipality (**Table 5**). Detection, expropriation and project work were completed until 2016. Demolishing work was almost over. The project aims to create a new attraction centre in the project area as well as the commercial and common living area. This project also aims to construct TOKİ houses at a 1.5 km. to the seaside for the house owners in the project area in order to extend the suburb toward the south. Besides, 12 pieces of land will be produced and half of them will be given to the landowners and the others sold to the public. So this is a typical urban clearance.

Pelitli urban renewal project			
			
Beginning/ending year	2008/	Area	7.8 hectare
Number of destroyed buildings	154	The total number of buildings will be demolished	159
			

Table 5. The views from Pelitli urban renewal project area (Photos, Yavuz A.).

Ayasofya (St. Sophia) urban renewal project work stared on May 27, 2009, with the protocols signed between TOKİ and Trabzon Municipality, and in 2014 it was completed (**Table 6**). Position of St. Sophia museum in the city silhouette has been emphasized in the project scope besides the recreational landscaping work. Now St. Sophia has been one of the most interesting places of the city for the local and foreign tourists who come to Trabzon. Application of the project has made Ayasofya neighbourhood more liveable and legible, and contributed to its socio-economic development.

http://dx.doi.org/10.5772/62951

Ayasofya(St. Sophia)urban renewal project



Beginning/ending year	2011/2014	Area	2.2 hectare
Number of destroyed buildings	46	The total number of buildings will be demolished	46



Table 6. The views from Ayasofya (St. Sophia) urban renewal project (Photos, Yavuz A.).

On June 06, 2011, a protocol was signed between TOKİ and Trabzon Municipality for Narlıbahçe urban renewal project work (**Table 7**). This area, local government buildings, is the second largest centre of the city. Actually, there would be a kind of renewal or renovation application here due to the existence of some historical buildings. But the project is still in the decision process due to some disagreements between the stakeholders. Actually, expropriation price is considered to be relatively high because of the high land values in this area. So, TOKİ

does not want to get involved in this project unless the expropriation is lowered to a more affordable level. In this case, when the parties will reach an agreement is not known yet, but the absence of a fast and effective decision mechanism to resolve this sort of disagreements or conflicts legally, rationally and fairly is obvious.

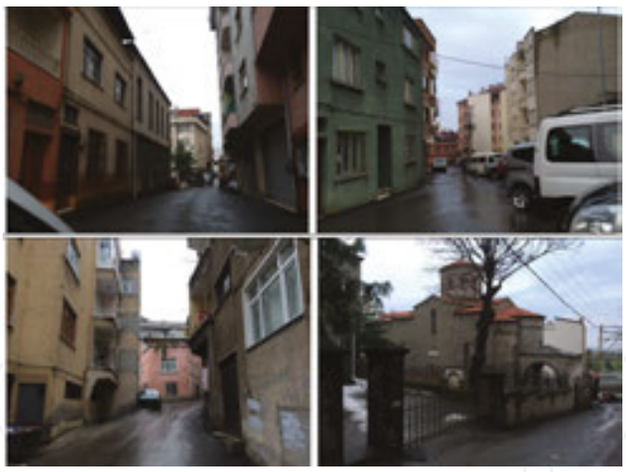
Narlibahçe urban renewal project			
			
Beginning/ending year	—/—	Area	16 hectare
Number of destroyed buildings		The total number of buildings will be demolished	
			

Table 7. The views from Narlıbahçe urban renewal project (Photos, Yavuz A.).

On the other hand, the rapid growth and development movements occurring in large cities since the 1950s have led to changes in the physical structure of the city Trabzon, and Beşirli and Pelitli regions are united due to this process. In addition, housing demand and the consequent increase in land prices have excessively disrupted the reconstruction in the city and caused the expansion of landfills in coastal areas. Although completed 5 years ago, the coastal landfills are now ongoing again with an additional project and the coast is subject to

http://dx.doi.org/10.5772/62951

constant change. The city has been affected by the movements of migration from the neighbouring provinces due to urbanisation movement. In addition, a new restructuring process has been started in the city, which includes Havaalanı district, the ports, universities, business areas and public buildings. So the people residing in these reconstruction areas have been forced to find new settlements, choosing one of the several proposals presented to them. The report by Trabzon Provincial Environmental Status Report dated 2010 says the city cannot benefit from the air currents and wind corridors as in the past, and especially the intensity of winter air pollution in the city has reached disturbing levels [25]. Besides, Trabzon cement factory, located outside of the city once, increases the air and visual pollution of the district. Also the other small- and medium-scale industries still existing near this factory relatively worsen the present situation.

Zağnos valley is known to be the oldest residential place in Trabzon. Unplanned construction began in this valley especially with the migrations from the neighbouring provinces Gümüşhane and Bayburt, and continued for years. When looked over the historical Zağnos Bridge, twisted and ugly buildings stand out instead of the historical and cultural values. So, renovation in this valley was really significant due to the various problems accumulated for years or centuries. The project implemented here has taken the historical and cultural values of this residential place into consideration. There are few restored housed and some trees the in the valley converted almost into its original form, so it looks like a very large place for recreational activities. All the residents are gone.

Trabzon Meydan'ı (town square), was the departure and destination point of the public transportation as well as one of the main reasons of the traffic problem in the city. But now, the square has thoroughly changed and the traffic is no more a serious problem in the district due to the rationally made and implemented renewal project. It is now important place providing important activities such as meeting, sitting, rest and relaxation without disturbance from traffic noise.

Çömlekçi regions, one of the city's oldest commercial and residential neighbourhoods, as a typical residential place, have to deal with not only their own socio-economic and cultural problems, but also the problems arising from their commercial section. These problems began to increase, especially in the 1990s when the Russian and Georgian retailers, customers as well as tourists chose this neighbourhood most convenient for their needs. And this situation significantly accelerated the economic development of the district on the one hand, but increased the architectural, environmental as well as socio-cultural problems in an intolerable way on the other. Therefore, this neighbourhood desperately requires a sustainable regeneration.

In the 1980s, Beşirli and Pelitli zones were among the favourite places of interest in terms of urbanisation. But the sustainable urbanisation strategy specifically established for these districts could not be implemented in Pelitli zone because of various reasons. Unlike Beşirli suburb, Pelitli suburb sped up the urbanisation process in an uncontrollable way in order to meet the rapidly growing need for housing of the people such as university students and industrial workers. As a result, this suburb is going to have a new process of regeneration before the still ongoing urbanisation one is completed, and this is not only an ordinary failure

or ridiculous mistake, but also an extraordinary experience for all the stakeholders who involve in 'sustainable' urban renewal processes.

Unlike the Pelitli suburb example, the regeneration process implemented in Ayasofya (St. Sophia) neighbourhood is an architectural wonder with the church dating back to Trabzon Pontus Greek Empire period, and the neighbourhood, a small-scale commercial as well as residential place. Due to the implemented renewal project, this neighbourhood and the church, now functioning as a historical museum, are relatively more legible. The project has also contributed to the socio-economic and cultural development of the neighbourhood. Especially, the church area is also used for social and recreational activities (**Figure 4**). When looked from the highway passing through the seaside, you cannot stop admiring the natural beauty and architectural structure and success of the urban renewal application in this neighbourhood. In fact, a specific attention must have been paid to this project due to the historical value, natural beauty and location of the neighbourhood.



Figure 4. The examples of different activities: open space photography, TV interview (Photos, Yavuz A.).

So, when slum areas and illegal structures are converted by the urban renewal projects, new housing is being built especially for the low-income citizens and sold to them through long-term and low-interest loans. As a result, prices of housing constructed by the private sector have fallen to a reasonable level due to the competition created for the benefit of people. This urban renewal process increases people's living standards, environmental awareness as well as socio-economic power in a positive way and significantly encourages both urbanisation and modernisation despite relatively harming the existing ecosystem of the urban areas due to some unexpected or unavoidable reasons. But whether or not the urban renewal work done in Trabzon is truly sustainable is not so obvious; and it is hoped that the rubbish policies followed in the past in terms of creating unhealthy and unsustainable urbanisation will remain in the past and never reoccur in the future as repeatedly recurring cancer cases. So, the following are considered highly recommendable:

8. Conclusion

It is obviously clear that cities, especially Trabzon needs urban renewal or revitalisation due to the increasing problems arising from population growth as well as unplanned and dense construction. Urban renewal should be not only a spatial transformation, but also a process in

http://dx.doi.org/10.5772/62951

which all the actors are active with a comprehensive, coherent and area-specific approach for the purpose. Urban renewal applications are considered to be more successful when they are made with a more informed, participatory and collaborating planning approach, respecting the people's sensitivity to the city where they live.

The city has been described as a living organism. Therefore, urban renewal projects as in Trabzon should get rid of the disease firstly starting in an area and ongoing in the nearby areas, leaping into the. In other words, it is pointless to expect the patient's recovery by making permanent organ transplantation. After the first transplant, you need to wait, observe and assess the situation. In this context, a consistent and rent anxiety-free framework that considers protecting the public with the understanding of social state must be created, if the goal is really urban improvement, upgrading the quality of people's lives, ensuring equal rights to the city dwellers or renew the urban identity. Feedback should be done in the areas of urban renewal, and where and under what conditions the former owners of the area live, should be investigated. The new data should be assessed and new appropriate strategies be established.

The process of determination and application of local governments for urban renewal areas	
Physical aspect	**Purpose**: To propose solutions for property owners will be more comfortable and re qualified owner of the property **Decision making:** Physical aspects of the city, damaged, identification of regions with aging infrastructure issues, elaboration of the problem and determine the properties of the existing structure **Planning:** Questioning the users physically criticism and make decisions to meet their demands, proposing public transport and environmentally friendly option for transportation **Design:** The design of the project is to ensure the physical relationships and integrating the area of the close regions **Application:** Transferring users to temporary housing and made of qualified applications **Checking:** To check the success of urban renewal projects and other projects to make an assessment after physically to take account of this data
Functional aspect	**Purpose:** To provide the right functionality to allow the user to be fit, healthy and peaceful local area **Decision-making:** The city's functional point of view, which is insufficient, the end of life of the region and identify where changes need to function in today's conditions are hosting **Planning:** From a functional point of criticism for questioning the Local Users and requests to take decisions, the necessity of a change in the planning of the function, the value of the whole of the city within the functional area of certain groups of interests—not rant **Design:** Open green areas are increasing the protection of the water resources and natural ecosystems will be appropriate for the continuity of the designs **Application:** Loyal to make applications for planning and design decisions

The process of determination and application of local governments for urban renewal areas	
	Checking: To check the success of renewal transformation projects and other projects to make an assessment in terms of functional perspective after to take account of this data
Economic aspect	**Purpose:** Before go charging property owners the path in the long term, provide for the transfer of funds from different sources **Decision making:** The economic demands of the local users, expectations of criticism and questioning **Planning:** After the application of the field value which accounted for in the calculation of the project to identify the options in the calculation of the costs for the waste recycling technologies to create the source **Design:** Gain economic benefits by design to meet the needs of the future **Application:** To ensure support of applications for qualified experts **Checking:** To check the success of renewal transformation projects and other projects to make an assessment in terms of economic perspective after to take account of this data
	Purpose: The current values that contribute to the city's skyline and give to ensure the identity of the city **Decision making:** The questioning and criticism from the cultural aspects of local users of demand, to determine the structures of historical value, determination of conservation status, making the restoration project and the evaluation of the functional aspects **Planning:** Original in the field, making planning decisions that protects cultural values **Design:** The creation of urban-culture identity projecting design options **Application:** Migrate to the city should be prevented, people should be informed to ecologically based cities **Checking:** To check the success of renewal transformation projects and other projects to make an assessment in terms of culture perspective after to take account of this data
Purpose: The concept of ecological planning with the integration of the sustainability of the urban transformation of cities	
EVALUATION OF SOCIAL ASPECT WITH ALL SCOPE: STRONG MANAGEMENT, EQUAL OPPORTUNITIES, SOCIALIZING	

Table 8. The proposal of location-specific, ecologically based urban renewal model.

In this context, Zağnos valley is the first large-scale project implemented in Trabzon. Therefore, a feedback should have been done by the local government to determine if the renewal application has met the expectations. And the application work in the other areas should have been continued in the light of this feedback results. A holistic approach requiring the renewal application work to be done within the scope of a whole urban planning should be adopted, instead of trying to create an urban integrity with separately implemented renewal projects. In addition, suitability of replaced components to the integrity of the existing structure should be analysed in terms of physical, functional, economic, cultural and social dimensions.

http://dx.doi.org/10.5772/62951

Economic policies exterminating the anxiety of rent, and containing the physical, social and economic arrangements aiming to increase the life quality of the urban dwellers in economic prosperity should be created without excluding the low-income groups from their environment or making the rest of their life miserable especially in economic terms. In addition, Keleş emphasizes that there is a direct correlation between the amount of land owned by the public administration and the success of the urban planning effort. He also points out that the states or local governments that have the best planned cities; qualified, open and green spaces; large and smooth roads, but no difficulty in finding appropriate land to meet the necessities such as housing and education also have plenty of land and authority to establish strict control policies on land Keleş [5]. In this context, when creating urban plans, accurate predictions of the future should be emphasized. Besides, it is deemed necessary that substances that define policies of local governments should be added to the Local Government act proposal on the parliament agenda in order to ensure the participation of all actors of urban renewal project applications, the renewal application projects be started in this scope and after application assessments in physical, functional, economic, cultural and social aspects be made.

In the most general sense, urban renewal is a comprehensive vision and overall actions securing the public interest principles at the forefront, and trying for the present and future to ensure a stable and accurate solution to the economic, physical, functional, cultural, social and environmental problems of the regions undergone transformation. Urban renewal must comply with the defined strategy starting from the upper-scale plans and continuing gradually to the lower-scale plans within the integrity of the plan. Besides, ecologically sensitive plans that keep pace with the time and meets the needs of the future should be produced, and urban renewal work be done in accordance with the strategies of these plans. Urban regeneration should be designed and implemented as many constitutions. In addition, urban transformation process should be implemented in five phases including decision making, planning, design, implementing and monitoring. A method of transferring external resources to the renewal projects should be developed, and land acquisition conditions should be arranged according to the solvency ratio of the people living in the area and with different options. Regulations should not be unfair in charging. It should be ensured that social segregation be avoided, people with low-income supported and not allowed to be segregated or liquidated from the area. Location specific application models and policies should be created so that the existing users can be provided to sustain their lives in the same area. Historic and cultural values as well as natural areas must be protected in urban renewal projects. The project model should be transparent and free from political concerns, models be created for participation in the process including the application from the beginning to the end and public opinion be taken into consideration.

Finally, provided that the urban renewal applications ongoing in Turkey are carried out in accordance with their purpose just like in the developing countries, the result will definitely be very successful in terms of creating healthy cities and high quality environments. In case, the state and local governments involve in urban renewal application works in order to provide economic or financial benefits to a certain group of people rather than the whole public, they inevitably lead to strong reaction of both the land owners and the city dwellers and also

increase social unrest and discrimination. So instead of continuing this approach, a sustainable development of the city should be ensured with urban plans prepared by a holistic approach, not with piecemeal plans that would lead to unplanned urbanisation Yavuz et al. [6]. In this context, what the local governments should do, can be listed as following (**Table 8**). The whole of the current problems should be considered under five headings, and adopt the urban renewal applications including the processes of decision making, planning, design, implementation and supervision in the light of the present applications.

Author details

Aysel Yavuz

Address all correspondence to: ayavuz75@hotmail.com

Department of Landscape Architecture, Faculty of Forestry, Karadeniz Technical University, Trabzon, Turkey

References

[1] Özmehmet E. Sustainable development approaches in the world and Turkey. Journal Yasar University. 2008;3(12):1853–1876.

[2] Özparlak F, Meşhur MÇ. Semi-Public spaces turned from street into site: On the neighborhood relationships. Mimarlık. 2012; 3: 365.

[3] Yıldız D. Stockholm's ecological urban transformation. USİAD Bildiren Dergisi. 2012;56:20–22.

[4] Zheng HW, Shen GQ, Wang H. A review of recent studies on sustainable urban renewal. Habitat International. 2014;41:272–279. doi:10.1016/j.habitatint.2013.08.006

[5] Keleş R. Urbanization , Housing and Slum in Turkey through 100 questions . Gecekondu. İstanbul: Cem Yayınevi.

[6] Yavuz A, Acar H, Türk YA. Renewed "city" and "urban" identity: The example of Trabzon city. 23. Kentsel Tasarım ve Uygulamalar Sempozyumu. Mimar Sinan Güzel Sanatlar Üniversitesi, İstanbul, Türkiye. 2013. pp. 142–157.

[7] Gullì L, Zazzi M. Renewal strategies for the environmental conversion of crafts districts in Italy. Procedia Engineering. 2011;21:771–779. doi:10.1016/j.proeng.2011.11.2077

[8] Ho DCW, Yau Y, Poon SW, Liusman E. Achieving sustainable urban renewal in Hong Kong: strategy for dilapidation assessment of high rises. Journal

of Urban Planning and Development. 2012;138:153–165. doi:10.1061/(ASCE)UP.1943-5444.0000104

[9] Czischke D, Moloney C, Turcu C. Setting the scene: raising the game in environmentally sustainable urban regeneration. In: Houk M, Koutsomarkou J, Moulin E, Scantamburlo M, Tosics I, editors. Sustainable regeneration in urban areas. URBACT II capitalisation, URBACT. 2015. pp. 6–15.

[10] Colantonio A, Dixon T. Measuring socially sustainable urban regeneration in Europe, creating sustainable environments. Oxford Institute for Sustainable Development (OISD), EIBURS (European Investment Bank University Research Sponsorship) Programme. 2009.

[11] Bennett MD, Bouma JJ, Wolters TJ. Environmental management accounting: informational and institutional developments. Kluwer Academic Publishers. 2002.

[12] Şahin Y. The urbanization policy. Trabzon: Murathan Yayınevi; 2010. 292 p.

[13] Report of the World Commission on Environment and Development. Our common future: Towards Sustainable Development. Chapter 2: [Internet]. 2016. Available from: http://www.un-documents.net/ocf-02.htm. Accessed on 25-01-2016.

[14] Atıl A, Gülgün B, Yörük İ. Sustainable urban cities and landscape architecture. Dergisi. 2005;42(2):215–226.

[15] Özcan A. Ecology based sustainable urban development: An evaluation through the example of Malatya city. 38. ICANAS (Uluslararası Asya ve Kuzey Afrika çalışmaları kongresi bildiriler kitabı. Atatürk Kültür, Dil ve Tarih Yüksek Kurumu, Ankara. 2007. pp. 689–710.

[16] Hassan AM, Lee H. Toward the sustainable development of urban areas: an overview of global trends in trials and policies. Land Use Policy. 2015;48:199–212. doi:10.1016/j.landusepol.2015.04.029

[17] Barrow CJ. Environmental management for sustainable development. London and New York: Routledge. 1999.

[18] Metzger J, Olsson AR. Sustainable Stockholm, exploring urban sustainability in Europe's. Greenest City, New York, London: Routledge. 2013. p. 218.

[19] Hall ET. The hidden dimension. Garden City, NY: Doubleday. 1966.

[20] Lee G, Chan E. Effective approach to achieve sustainable urban renewal in densely populated cities. In: Proceedings of the 1st international CIB student chapters post-graduate conference: built environment and information technologies. CIB Students Chapters, Ankara. 2006.

[21] Bai X, Roberts B, Chen J. Urban sustainability experiments in Asia: patterns and path ways. Environmental Science and Policy. 2010;13:312–325. doi:10.1016/j.envsci.2010.03.010

[22] Technical Infrastructure Planning in Metropolises. [Internet]. 2014. Available from: http://www.ayop.info/AYOP14/AYOP14/sunular/C.SANCAR.pdf2014. Accessed on 20-01-2016.

[23] Turkish Statistical Institute, TÜİK 21507, 2016;.Available from: http://www.tuik.gov.tr/PreHaberBultenleri.do?id=21507[Accessed: 01.01.2016]

[24] Anonymous. The report of he city's health profile of Trabzon Municipality. Survey-Project Management-Healthy Cities Project Coordinator. 2011.

[25] Environmental Status Report of Trabzon Province. Trabzon Governor's Office. Trabzon's ministry of environment and forests. 2010. Available from: http://trabzon.ormansu.gov.tr/Trabzon/Files/CED/2010%20Yılı%20Trabzon%20İl%20Çevre%20Durum%20Raporu.pdf. Accessed on 06-01-2016.

IntechOpen