ABSTRACT

Districts within the borders of the Municipality of Gaziosmanpasa, Istanbul, have been experiencing a fast population growth as a result of immigration. Unskilled labour and low income groups settled down in these regions increased the density, and as a result, a general decline in building quality and health conditions and an increase in crime rates are observed. Increasing urban obsolescence and new use demands in these regions necessitate immediate urban regeneration and renewal projects. The project being carried out for the area of concern, includes the preparation of local action plan and restructuring, rehabilitation and strengthening projects in order to create a reliable, sustainable and habitable urban settlement pattern. Project activities and steps include; analysis of existing conditions, public survey, database formation and synthesis, development of scenarios, construction projects design, and implementation. Paper focuses on the preparation and data collection phases of the project.

Keywords: Urban Regeneration, Renewal, Settlement, Sustainability

1. INTRODUCTION

Gaziosmanpasa (GOP) is one of the largest counties of Istanbul with regard to area. The empty lots in the centre of the county were developed as residences for the Balkan immigrants after the 1950s. Since the 1960s and accelerated by the developing industry in its vicinity, GOP was significantly affected due to migration for employment from the eastern parts of Turkey to the west, and from villages to cities. GOP acquired the
county status in 1983, and today is quite a large county home to over 950,000 people. As a result of rapid population growth, GOP has been recognized as one of the largest counties in Istanbul and even in Turkey. Economic and social problems associated with immigration were reflected in the built environment; and following the first squatters, construction without planning, insufficient field inspections, and reconstruction amnesties encouraged the new illegal settlements. Over the last 50 years, “storey ownership law” which started the urban demolition and “demolish-build-sell” method; “improvement construction plans law” which turned the low-rise squatter houses into the apartment blocks; “construction law” which changed the building arrangements through construction plan revisions, collectively resulted in low-standard housing development.

Natural disasters, particularly earthquakes and floods, experienced over the last decade, showed once again that settlements are unsafe and unhealthy. The Marmara Earthquake of 1999, in fact, manifested the dangers of illegal and uncontrolled built environment. Istanbul being located in the first earthquake zone and expecting strong seismic activities, brought forth the importance of urban generation.

The dual urban form of Istanbul reflects a distinctive characteristic as a result of the substandard and poor physical conditions of the squatter culture and the immigrants on the one hand, and the values and the traditions of the mainstream urban culture on the other. While there is rapid change in our social, cultural, economic and physical lifestyle, our cities are also rapidly changing. Rehabilitation of the areas, which could not adapt to these changes because of social and economic differences, gains a great importance. In this case, urban regeneration should not only be understood as physical, but also as solutions to the social, economic and cultural problems of high priority. Briefly, urban regeneration should encompass a process of upgrading living standards and the quality of slums, increasing social capital in local communities, mitigating urban poverty, encouraging communal life and social transformation, finally ensuring people’s access to the services the city offers them.

Within this scope, a regeneration project began in the GOP municipality, the target of which is to create a healthy and modern urban space to its residents by clearing the slums and illegal settlement, and subsequently developing commercial, cultural and social attraction centres serving the entire county. As part of this project, the relevant literature was reviewed and local and international examples were analyzed (Göksu 1989-1994, Ozdemir et.al. 2004), and the existing data were gathered. The existing conditions of the study area were determined by the building inspections. In this introductory paper, the works done so far and the preliminary results are briefly presented and discussed.
2. BACKGROUND

As the pioneer urban regeneration works in the country, “Portakal cicegi valley” and “Dikmen valley” projects were studied. In these projects, more than 5,000 squatter houses were demolished and replaced by good quality houses and sufficient green space. The objectives of the model were to maintain a high quality modern built environment to Ankara, to realize a self-financing project without making the municipality reserve sizeable amounts of financial resources, to share the value created by the project equivalent to the construction right held by the previous property owners.

London Docklands and South Korea New City applications illustrate additional examples from other countries. Within the preparatory work, workshops were carried out together with expert groups invited from London and South Korea. Technical visits to the project study area were arranged and information and experiences were exchanged during the meetings held.

London Docklands project is one of the biggest regeneration projects started during 1980s initiated by the local and central government, and the private sector. The project includes industry and commerce, housing and social facilities implemented in different phases and funded by public and private investments. The Docklands regeneration project aimed to transform the city centre into a vibrant international trade centre, and thus revitalize the local economy and generate new employments. The project was implemented by rearranging the parcels by delegating the planning, allocation of lots, expropriation and marketing responsibilities to one public authority. Overall, the project was found to be successful, however it was also criticized as serving to transfer public resources to the private sector.

The applications in the examples examined were mostly implemented by the private sector under central and/or local authority control. Economic resources, provided by the private sector investors through the companies established with specific goals and objectives by the public sector, were canalized for creating liveable cities, and attractive and efficient environments.

3. CASE STUDY

In the borders of GOP county, there are 29 residential quarters with a total area of 3500 ha. The pilot study area includes 3 quarters on 154 ha including 90.6 % squatters. The project is based on new planning subsequent to the clearance of slum housing beyond salvage because of the low economic status of the property owners and poor structural quality of the buildings. The project activities and steps include:

- analysis of existing conditions
- public survey
- database formation
- synthesis
• development of scenarios
  o public participation
• preliminary, detailed and construction projects design
  o interdisciplinary engineering
• implementation
  o management.

This work mainly focuses in gathering available existing data and new data obtained through field investigations, and briefly discusses the results.

3.1 Existing Data


3.1.1 Statistical data

Population change over time in the GOP region is shown in Figure 1. Obviously, there is a very high population growth rate. One of the most important characteristics of the county is that almost half of the population is under the age of 20.

![Figure 1. Population growth through years.](image)

Migration to GOP from abroad started in 1955 with Turkish people departed from Bulgaria and continued to migrate from other Balkan countries like Greece, former Yugoslavia and Romania. With the number of immigrants from other regions of Turkey, the population and, in turn, the housing construction have dramatically increased. Figure 2 displays the distribution of the population migrated to GOP according to their regions. As it is seen in the figure, the majority of the migration is from the Black Sea region, followed by the Eastern Anatolia region.
Regarding education, the number of schools has dropped over the years in GOP. According to the 2000 census, the literacy rate over the age of 6, at district center, is 88.1%. This is somewhat lower than the average of Istanbul city. 81.3% of literates graduated from educational institutions. It is clearly seen in Figure 3 that the majority of the population has only a primary school education. It is quite likely that these people had to work after the mandatory school education, which was then only 5 years, but is 8 now.

In GOP, there is one movie theatre with 5 cinema halls, one theatre building owned by the “City Theatres of Istanbul”, one public library with 18,000 members and 15,000 books, and a football field with a capacity of 500 people where amateur football teams train and practice. However, for a county with a population of almost one million, these social facilities and infrastructure seem to be insufficient. Moreover, according to the official records, there are 802 non-governmental organizations (NGO), most of which are religious or homecity clubs. According to data from Tradesman and Artisans’ Union, there are 498 small-scale, 145 middle-scale, and 18 large-scale businesses in GOP.
Manufacturing constitutes the main economic activity of the district while trade and public services come later.

There are two state hospitals and eight private hospitals in the district. The number of beds per 1000 people at private hospitals is 0.315 and at state hospitals is 0.398. The number of beds per 1000 people at all hospitals is 0.514.

### 3.1.2 Development plans

The first development plan (scale 1:5000) for GOP was approved in 1966. In 1985, before the approval of Rehabilitation Plans in 1992, the implementation plans (scale 1:1000) were prepared but not implemented. The illegal squatter occupations continued to grow on state-owned lands more than planned settlements in the study area.

Figure 4 illustrates the distribution of land use in the regeneration area as were actually implemented. There are 10 religious facility areas, 4 primary school areas, 3 secondary school areas, 30 green areas, and 1 forestation area in the development implementation plan. 65% of the planned area is currently allocated to green space. Northern GOP has potential for a dam lake, forest zones, planned zoo, beautiful landscape and an area reserved for housing. The implementation of educational facilities, a cultural center, shopping mall projects surrounding the study area, which are expected to trigger the regeneration, has already started.

![Figure 4. Distribution of functions on actual plan.](image)

### 3.2 Field Work

Field survey area, for the time being, is limited only to Sarigol, Yenidogan and Yildiztabya Neighborhoods with a total area of 154 hectares. The population settled in this area is 54,000 and the total number of buildings in this zone is 10,540. The population density in the study area is 351 persons/ha. These field works were completed in 3 months.

#### 3.2.1 Field analysis
Field analysis includes among others, land utilization, number of storeys in existing buildings and the ownership analysis.

3.2.1.1 Land utilization

Figure 5 represents an aerial view of the study area. The main green area seen in the center of the picture and within the borders of the study area is the cemetery. Density is somewhat increasing along the main transportation arteries. Except for the areas with high slopes and the cemetery, almost the entire field has been developed by buildings. There are total 10,540 building units in the study area. 10,519 of them are residential buildings, 11 of them are religious buildings and 6 of them are official buildings. It is horrible that 99.8% of the current land utilization is for housing.

All the green areas, social facilities and public properties are occupied by illegal housing. Compulsory purchase of the squatters at the social facility site has already started, and they are being expropriated. Since 2005, expropriation of 44 squatter units was completed, 42 units of which are still ongoing, and 12 units of which were requested to be expropriated.

![Aerial photo of the study area.](image)

There is currently no commercial land use in the area. The inhabitants of these 3 neighbourhoods shop either from the square in the center of the county, or from the shops on the Yildiztabya Street, which is one of the
main transport axes of the district. Furthermore, there are no children's playgrounds, parks, playgrounds in these neighbourhoods, and the amount of green open spaces is inadequate. But the need for green space is partially met by trees in the gardens of houses and by the river protection band on Istanbul Street in the north. There are 2 elementary schools and 1 sport facility in the area.

3.2.1.2 Number of storeys in existing buildings

Table 1 represents the number of storeys in the existing buildings. Roughly 90.2% of the 10,540 buildings are dilapidated. Construction safety, urban quality, and healthy physical and social environment, pose serious problems in the area.

<table>
<thead>
<tr>
<th>Number of floors</th>
<th>Ground</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>10</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of buildings</td>
<td>3662</td>
<td>4182</td>
<td>1665</td>
<td>672</td>
<td>266</td>
<td>76</td>
<td>14</td>
<td>1</td>
<td>1</td>
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<td>34.7</td>
<td>39.7</td>
<td>15.8</td>
<td>6.4</td>
<td>2.5</td>
<td>0.8</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

3.2.1.3 Ownership analysis

In the study area, there are a total of 1854 plots; 1199 of which are private, 552 of which are owned by GOP Municipality, 49 by treasury, 46 by Istanbul Metropolitan Municipality and 8 by public institutions. Figure 6 displays the distribution of land ownership in the study area. The smallest parcel, which is a public-owned property at the project site, is 66 m²; the biggest one is 57,127 m² and is owned by the Istanbul Metropolitan Municipality. Average parcel size is 477 m². Ownership is the most important problem in regeneration projects, and increases the project costs. In our cities, urban plots are mostly multi-shared and small in size.

In spite of the low income level, 68.5% of GOP residents own their home. This is the result of licensing the illegal houses occupied public areas by "property allocation certificates".
3.2.2 Questionnaire

Surveys have not been carried out yet. Data aimed to be collected through questionnaires include: demographics, educational data, economic and employment information, reasons for selecting the region, habits (reading, movie, theatre, etc), expectations about home and environment etc.

3.2.3 Organization of public participation

The participation of the local community involves some important problems. For example, the participation of the socially marginalized groups is almost impossible, and this causes them to be less efficient compared with sides in the partnership, which have more access to information and sources. The local authority will help to convince the community about the rehabilitation of the area, build trust, and encourage citizen participation in the local decision-making (i.e. encourage their participation in the activities which are at the core of the social development). Some information centres are planning to be opened for people’s demand for gathering information about the project, improving the sense of belonging, and highlighting their expectations and proposals.

In order to achieve successful partnership, arranging carefully the partnerships between public and private sector is as important as public participation. A successful partnership depends on harmonic execution of a sensitive balance between power and authority.

3.3 Preparation of Project
In urban regeneration projects, shareholder analysis, developing a vision, actual situation analysis, target analysis, determination of sectoral strategies, developing action plans, coordination-monitoring-evaluating-execution processes have to be collectively addressed.

Evaluation and programming of the socio-economic, cultural and survey data are almost completed. After data analysis and interpretation, alternative scenarios will be prepared according to the synthesis and the preliminary project design studies will start.

3.4 Legal Procedure and Implementation

The study area is declared as urban regeneration area based on the Municipality Act’s 73rd article (No. 5393), and the necessary arrangements for the evaluation of the project at higher scale plans (master plan etc.) are still ongoing. Because of the complex structure of problems in regeneration areas, the conventional implementation planning concept and construction legislation are insufficient. Working on a draft of an urban regeneration and renewal acts is still in progress. In our country, current legal and administrative frame is not sufficient for planning activity integrating development strategies and spatial decisions. The unintegrated aspect of construction (Act No. 3194 and Acts about city administration) restricts the effectiveness of spatial planning.

With legal arrangements, banks should become more effectively involved in the regeneration process. For example, new credit methods can be developed. A foundation for the regeneration project should be established. It is impossible to realize a regeneration project without public resources. New financial models have to be developed for regeneration projects in order to prevent bringing in financial burden to public authorities.

4. DISCUSSION

The preliminary studies and the preparatory work are briefly evaluated under three main subjects: physical conditions, economic conditions, and socio-cultural conditions.

4.1 Physical Conditions

Due to low economic status of the property owners, lack of resources for building maintenance projects, and difficulties in reaching financial sources, physical corruption occurred in the region. Such corruption requires urban reconstruction which is one of the implementation tools of urban regeneration.

The quality of physical life is considerably low. There are very little or almost no public facilities and spaces. Thus, beside the residential areas, public spaces and facilities like commercial and cultural areas, open and
multi-storey parking places, sports facilities, green areas and recreational spaces gain importance. A spatial sense of belonging should be developed.

Well-cared public and green spaces should be designed for different age groups. Various types of residential units, in sufficient numbers and easy to access, should be created. Moreover, durable, flexible in use and energy efficient buildings should be taken into consideration. Sources should be used effectively for the built environment and providing services.

4.2 Economic Conditions

Poverty and population growth are global problems. Because of the relation with poverty, regeneration and renewal actions in housing areas are never simple housing problems. Low- and middle-income groups are located in this area. Since the unemployment ratio is high, it is important to create new job opportunities. A more powerful labour society, integrated with greater economies, should be developed. Aspects of the urban regeneration implementations should have wider and comprehensive vision and strategic point of view.

4.3 Socio-Cultural Conditions

Separate urban identities characterize the site. Crime rate is high. Security problem affects social and economic structure. Activities of NGOs are insufficient. Site lacks organization and social participation. Level of education is low. In contrast with the high ratios of younger age groups, qualified population is very low. The city continues to suffer from migration and is used as a stepping stone toward social mobility. Those who improve their economic circumstances leave the area. Migration of unqualified and low-income population to the site increases the population density. An increase in the population density causes a decline of the construction quality and health conditions, and an increase in crime rates in the area. These areas pose real threats to their surroundings with their unhealthy conditions and high crime rates. Due to the strategic important location of the site for the district of GOP, a regeneration/renewal project for this site becomes urgent. Urban identity, a sense of belonging and membership should be improved. Opportunities for cultural, sports and public activities should be provided. Equality of opportunities for every member of the society should be the first goal. High quality health care and social services should be provided. It should not be forgotten that cultural investments will provide paybacks in the projects.

5. CONCLUSION
Social regeneration and physical regeneration have been jointly evaluated in the project. Instead of conventional methods, dynamic, flexible, and timely implementation planning concepts are adopted. Strategies and projects are being developed for improving the economic potential of the district and providing employment to local community. It is aimed to create commercial, cultural and social attractive centres serving the district and its surrounding areas, and also to create a self-financing method for solving the housing problems of the owners.

Regeneration projects can only be successful with taking into account the country’s socio-economical circumstances, regulations and codes. Thus, we should focus on: continuity of the project, flexible structure, determination of the project organisation and decision making mechanisms, a strong financial model, and correct determination of the priorities. Above all, the most important point is establishing an agreement between the local community, local and central governments, and the financial institutions.

In this context, field studies, which is the first step of the project are completed, available data are collected and evaluated. Studies about developing scenarios will begin after synthesis based on the completed studies and collected data. After these stages, design projects will be prepared and shared and discussed with the community and their input will be provided. Local government is working on the organization within the project context and financial model, and keeps on working with the 3K studies (initials of the Turkish words “Kentsel” = Urban; “Kültürel” = Cultural; “Kurumsal” = Institutional) related with the whole district.

6. REFERENCES