



Successes and Failures in Urban Development of Ankara

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Abstract

Ankara, the capital of Turkey, represents a modern model city built in the Republican period after 1923. The majority of the countries' population resides in this city after İstanbul and political, social and economic functions are mostly clustered in the urban zone. After 1940s, the city changed dramatically. Its population grew enormously and the city expanded through conversion of agricultural lands in the west. In addition, political and educational developments produced a significant population of officials and students within the city. This paper focuses on patterns of settlement in Ankara from ancient times to today and explains these from developments in the urban planning perspective. It concludes that the global shopping malls and local transport- landuse policies together with the structure of housing market have directed the city to car-oriented sprawled development without an identity, encouraged the development of gated communities in the city. It

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Ankara, Urban Planning, Car-Oriented policies, Transformation, Urban Sustainability

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concludes by posing the question whether this may change in the future and more mixed use can be expected.

Özet

Türkiye'nin başkenti Ankara, 1923'te Cumhuriyetin kurulmasıyla modern kentin simgesi olmuştur. İstanbul'dan sonra ülke nüfusunun çoğunluğunun yaşadığı kentte politik, sosyal ve ekonomik işlevler kentsel bölgede kümelenmiştir. 1940'lardan sonra kent, dramatik olarak değişmiştir. Nüfusu çok fazla artmış ve kent batıdaki tarım alanlarına doğru yayılmıştır. Politik ve eğitimsel gelişmeler kente memur ve öğrenci nüfusunu çekmiştir. Bu makale Ankara'nın antik zamandan günümüze olan kentsel yerleşme desenine odaklanmakta ve kent planlama perspektifinden gelişimini anlatmaktadır. Küresel alışveriş merkezleri ve yerel toplu taşıma-arazi kullanımı politikaları, beraberce konut piyasasını yönlendirerek araba odaklı, yayılmacı, kimliksiz bir kent haline getirmiş, kentte kapalı sitelerin gelişimini desteklemiştir. Makale bunun gelecekte değişerek daha fazla karma kullanımın görülmesini temenni ederek sonuçlanmaktadır.

INTRODUCTION

Ankara is the capital of Turkey and the country's second largest city after Istanbul (Figure 1). The city is located at 39°52'30" North, 32°52' East, about 351 km to the southeast of Istanbul. The city has a population of 4,630,735 in 2012 (greater city municipality border), which includes nine districts under the city's administration (TUIK ADNKS, 2012).



Figure 1.
Location of Ankara in Turkey and
Ankara Province with its districts
(google maps)

Figure 1.

The city of Ankara lies in the center of Anatolia on the edge of the high Anatolian Plateau with an altitude of 850 m (Figure 2). The city is mainly situated in the bowl-like topographical structure surrounded by mountains on three sides and opening as a plain towards the west. The historical center of Ankara is situated upon a steep and rocky hill, which rises 150 m above the plain on the left bank of the Ankara Stream. Ankara features cold winters and hot dry summers. Because of Ankara's high altitude and its dry summers, night temperatures in the summer months are cool. Although situated in one of the driest

places of Turkey and surrounded mostly by steppe vegetation except for the forested areas on the southern periphery, Ankara can be considered a green city in terms of green areas per inhabitant, which is 17 m² per capita (Ankara Greater City Municipality website). Centrally located in Anatolia, Ankara is an important commercial and service city. It is the center of the Turkish Government, and houses all foreign embassies. It is an important crossroads of trade, strategically located at the centre of Turkey's highway and railway networks, and serves as the marketing centre for the surrounding agricultural area.



Figure 2.
Ankara urban map with
topography (google maps)

Figure 2.

AN URBAN HISTORY OF ANKARA

Archaeological explorations show that Ankara has been inhabited since the Old Stone Age (Buluç, 1991). The earliest document about the physical appearance of Ankara is the sketch of Dershaw drawn in 1555. It is seen from this sketch that Ankara was an open city settled on the plain surrounding the hill where a castle was placed (Aktüre, 1992).

It is a very old city with various Hittite, Phrygian, Hellenistic, Roman, Byzantine, and Ottoman archaeological sites. The hill which overlooks the city is crowned by the ruins of the old castle (Figure 3). There are remains of Hellenistic, Roman and Byzantine architecture; the remarkable ones are the Temple of Augustus and Rome, Roman Bath and Column of Julian. The region's history can be traced back to the Bronze Age Hatti civilization, which was succeeded in the 2nd millennium BC by the Hittites, in the 10th century BC by the Phrygians, and later by the Lydians, Persians, Greeks, Galatians, Romans, Byzantines, and Turks (the Seljuks, the Ottoman Empire and Turkey) (Tunçer, 2001).



Figure 3.
Ankara citadel

Figure 3.

The foundations of the Ankara citadel were laid by the Galatians and completed by the Romans. The Byzantines and Seljuks further made restorations and additions. The area around and inside the citadel, being the oldest part of Ankara, contains many fine examples of traditional architecture. Many restored traditional Turkish houses inside the citadel area have found new life as restaurants, serving local cuisine (Figure 4).

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Figure 4.
Hamamönü district, a traditional urban pattern near citadel

Figure 4.

Anıtkabir is located on a hill, Anittepe quarter of the city, where the mausoleum of Mustafa Kemal Atatürk, founder of the

Republic of Turkey, stands (Figure 5). Ankara Ethnography Museum presents a fine collection of folkloric artifacts. Museum of Anatolian Civilizations situated at the entrance of Ankara Castle houses a collection of Paleolithic, Neolithic, Hatti, Hittite, Lydian, Phrygian, Urartian, and Roman treasures. State Art and Sculpture Museum houses a rich collection of Turkish art from the late 19th century to the present day. War of Independence Museum, the first Parliament building, houses various photos, items and wax figures of former presidents.



Figure 5.
Anıtkabir

Figure 5.

The importance of Ankara changed to great extent at the beginning of the 1920's; as it became the capital of Turkish Republic in 1923 (Bademli, 1985). It was a small town of no importance when it was made the capital of Turkey. It was a strategic and symbolic decision that Ankara represented new and contemporary future (Bayraktar et al., 2008).

After Ankara became the capital of the newly founded Republic of Turkey, new development divided the city into an old section, called Ulus, and a new section, called Yenisehir (Figure 6 and 7). Ancient buildings reflecting Byzantine, Ottoman and early Republican history and narrow streets mark the old section. The new section, now centered on Kızılay, has the remarks of a modern city: wide streets, hotels, theaters, shopping malls, and high-rises. Government offices and foreign embassies are also located in the new section. Turkish State Opera and Ballet, State Theatres, concert halls serve the city with many venues. The city hosts several annual theater, music and film festivals. A contemporary art museum is newly opened in the city center

that their buildings were transformed from old wagon production spaces.



Figure 6.
Kızılay, Atatürk Boulevard and
Güven Park in 1930s
(Sağdıç, 2002)

Figure 6.



Figure 7.
Ulus city center in 1930s
(Sağdıç, 2002)

Figure 7.

DEMOGRAPHICS

City of Ankara has a population of 4,306,105 (2009) of which 2,146,755 are men and 2,159,350 are women. The metropolitan municipality contains the central part of the city and the remaining 9 districts under its jurisdiction.

The urban population of Ankara increased rapidly after being a capital (Table 1). From 1920s to 2000s, population increased more than 100 times because of service sector. Societal and spatial structure changed parallel to this development. Ankara was a small town inhabiting 30,000 people in 1923, its population rised to 74,553 in 1927. The population was over 2,500,000 in 1990 and 3,000,000 in 2000. The municipality borders were enlarged after this date.

Tablo 1.
Population of Ankara (TUIK Statistics)

Year	Population
2012	4,630,735
2011	4,550,662
2010	4,431,719
2009	4,306,105
2000	3,356,877
1990	2,584,594
1985	2,304,166
1970	1,236,152
1965	905,660
1960	650,067
1955	451,241
1950	288,536
1940	157,242
1927	74,553

The migration reason of young people between 15 and 24 can be explained as university students, soldiers and job seekers. The denser districts are Çankaya and Altındağ over 2800 inhabitants per square kilometer. The average family size is 3.69. The unemployment rate is 11% in the city. The main sectors are service (70.4%), agriculture (16.2%) and industry (13.4%) (Ankara Greater Mucipality 2023 Plan Report, 2009). Ankara inhabits many universities. These include 11 universities, several of them being among the most reputable in the country. Ankara is the center of technoparks after 2001 Technopark Law. 5 technoparks next to Middle East Technical, Bilkent, Ankara, Gazi and Hacettepe Universities provides R&D activities in their large campuses (Ministry of Industry and Commerce website).

PLANNING STRUCTURES OF ANKARA

For the increasing population, Lörcher prepared a local plan, opening a new settlement area in 1925. This was the first attempt in realising the development of the city on new lands, apart from the old city; creating a dual structure (Bademli, 1987). The increase in the population caused changes in the

intensity in the old city, thus new development areas began to evolve towards the south of the old city. “Within this era there is no frame that would determine and guide development and integrate the old and new settlement areas” (Tankut, 1993:44) thus, the need for a development plan for this rapidly growing city was obvious. Since being the capital Ankara has lived seven planning experiences. These seven plans till now are:

1. Lörcher Plan (1925)
2. Jansen Plan (1928)
3. Uybadin-Yücel Plan (1957)
4. Metropolitan Planning Office Plan (1970)
5. Ankara 2015 Structure Plan of METU (1985)
6. 2025 Plan of Ankara Greater City Municipality (1996)
7. 2023 Ankara Development Plan of Ankara Greater City Municipality (2007)

1.Lörcher Plan (1925): Lörcher made a plan for old city-Ulus in 1924 and he prepared a second plan for new city- Kızılay in 1925 for the next 5 years in those dates (Figure 8). His idea was to build main boulevards and squares representing new capital and public spaces. Old city was protected and new city was directed to Çankaya in the south. Lörcher connected two parts with station-parliament-citadel axis. The squares were the focus in this axis. Zafer Square was the space of culture with theaters and cinemas. Millet Square was a green and open space with a mosque and bath. Cumhuriyet Square was an administrative space with new ministry buildings (Cengizkan, 2002). Lörcher plan was rejected without any reason but the main boulevards and public space ideology were remained. Cumhuriyet Square renamed as Kızılay Square which become the city center. New city concept was protected and public interest in the west view was legalized in the next years (Sargin, 2009). Turkish Revolution struggled with monarchy. It was reflected in the built environment. New capital with new administrative buildings, designing for people, reforming society with city planning and reflecting revolution idea on the city space was the main principle. Governmental buildings were constructed in Ankara with geometrical shapes, new material and production methods (Baslo, Yürekli, 2009).



Figure 8.
Lörcher Plan, 1924
(Yazman, 2009)

Figure 8.

2. Jansen Plan: An international competition was arranged and among three plans, Jansen Plan with its modest approach was found to be more compatible determining the image of the new capital and the new regime. The plan proposed a development in the north-south direction with a single artery connecting north to south, and a secondary artery parallel to the railroad or east-west extension of the new town (Günay, 1988). Neighbourhood units were forming the basis of the plan and these units were designed to have an organic internal pattern following the Garden City approach. The plan emphasised the pedestrian routes. Jansen utilised a green belt around the city, and integrated this green belt with the city through the protection of riverbeds, valleys and hills protecting the topographic, morphological and microclimatic values. This responsive plan for natural values showed the importance of green areas such as 1490 ha green area for the population of 300,000 (49.66 square meters per capita) (Altaban, 1998). Jansen proposed a reserve area in the northern slopes of the old city for further growth; however the development pressures that were not compatible with the plan caused squatting in certain portions of the city and comprised density increase in the city opening up of new land for urban development (Tankut, 1993: 243). The plan reached its target population already in 20 years period thus a new competition is held to produce a new master plan for the city.

3. Uybadin-Yücel Plan: The winning plan was an extension of Jansen plan, which brought an organic internal pattern as the

follower of the Garden City tradition. It emphasised the north-south axis and the limits of development reached to higher altitudes. A contribution of the plan was the peripheral road in the west of the city connecting to other arteries as intercity highway network (Günay, 1988). Jansen's determination of the new city as the administrative centre caused the development jump into the southern part of the city. The old city expanded its central functions, and the major artery, which was proposed towards south axis, gained too much importance with residential and commercial functions in the new city (AMNPB, 1977). The plan remained insufficient in bringing solutions to the problems of the city and failed in providing a form and structure of the city to guide further development (Bademli, 1987). In the 1960s, it was disturbed by local plans aiming at density increases. The increments in building densities brought an overloaded population in the plan area. The idea of low-density garden city was used to create a high density, dull and monotonous city (Günay, 1988). The first skyscraper of Turkey was constructed in 1964 in Kızılay Square (İlkay, 2008). The city in this era, continued to grow in an oil-drop form and environmental problems like air pollution emerged in the late 1960s. The continuous increase in population and development pressures necessitated a new plan.

4. Metropolitan Planning Office Plan-1990 Master Plan: The new plan which has recently been the legal document directed the development towards the western corridor including the squatter prevention zones, new housing developments and industrial zones (Bademli, 1987). During this plan period, the city spread continuously over the higher edges of the bowl-like entity and also exceeded outside the bowl to the valleys around it. The city extended along its boundaries in every direction and at the same time linear growth along the main roads to the city came into existence in the last decades. In order to overcome the disadvantages of the centralised macroform, new planning strategies directed the growth along axes; most densely along western corridor.

5. Ankara-2015 Structure Plan of METU: After the four plans, Ankara-2015 plan which was prepared by academicians of Middle East Technical University (METU) brought a different perspective to the growth of the city. Decentralization was determined as the primary aim for the future developments of Ankara in this plan. The population estimations for 30 years period showed that, the city would double and would reach to a population of 5 millions, so it was no more feasible to concentrate this population in compact form. Günay (1988:46)

states “the new form is based on six growth directions where geographically suitable western corridor is still the bulkiest. In between the growth directions, green belts are proposed”. The new plan proposed a parallel system to the existing road network to provide new hierarchy in the transportation. With this structure plan, the dense structure of the city was being decentralized and an axial development structure was aimed (Ceylan, 2003). From 1985 to 1997, city macroform of Ankara has expanded to higher altitudes of surrounding mountains to the north, southeast, and to valley bottoms and basin floors to the west and southwest. The continuous expanding after 1985 has reached to unsuitable lands by unplanned squatter developments settled on periphery of planned development and cheap land markets.

6. 2025 Plan of Ankara Greater City Municipality: The 2025 master plan, prepared by Ankara Greater City Municipality but not become a legal document, enlarges the city towards the limits of the ring road, even goes beyond the ring road in the northwest direction. At the plan, especially in the areas between the ring road and the city were suggested new settlements, forestation and recreational uses. With the plan, it is aimed that, the expected population for the year 2025 would be 6.5 million, which is quite high for the city whose population increase is slowed down since 1990s. The areas including the universities towards the south are defined as huge green areas of the city and natural valleys and mountains in the south are offered as tourism recreation centres. Although the plan determines conservation areas and defines the methods for preserving the Metropolitan Area, some of the proposed residential developments like in southwest development may results in unsustainable development due to the excess land development in the ecologically sensitive areas (Ercoşkun et al., 2005).

7.2023 Ankara Development Plan of Ankara Greater City Municipality: The 2023 master plan, 1/25000 scale, prepared by Ankara Greater City Municipality became a legal document in 2007 (Figure 9). City gained a plan after 15 years. Fragmented plans and regeneration projects brought many residential areas and legalized unplanned settlements in the periphery in recent years. This plan offered new sub-plans in the thematic areas of CBD, transportation and environment. A good inventory has been built under the headings of history, urban form, demography and social life. Five main planning corridors regarding water basins and development zones, also strategic sub-centers, special projects areas have been defined in this plan

which should be supported by detailed local plans and designs (Ankara Greater Municipality 2023 Plan Report, 2009).

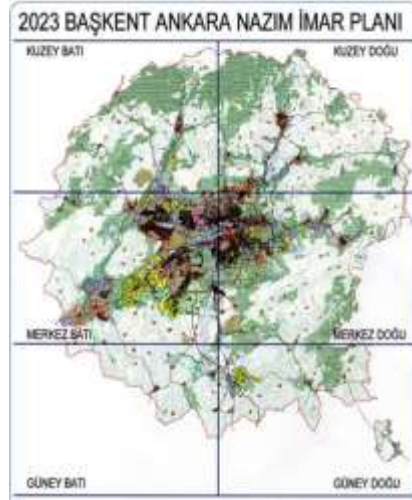


Figure 9.
2023 Ankara Development Plan
of Ankara Greater City
Municipality
(Ankara Greater City Municipality
website)

Figure 9.

ENVIRONMENTAL, ECONOMIC AND SOCIAL SUSTAINABILITY

Lörcher puts public spaces and squares and axial development for the city core in his plan. The Jansen plan proposes a compact organic development form and the Uybadin-Yücel plan shapes the city core together with two former plans. The plan of Metropolitan Office brings linear extensions over the existing compact form. However, 2015 METU plan proposes a different approach bringing decentralization. Although the plan proposes a decentralized form, the rapid increase in population fills the transition areas with illegal settlements thus causes an oil drop development. The 2025 plan of the Greater Municipality proposes excess development areas. Lörcher plan was only a pinpoint in the 2023 plan that city sprawled more than 30 times. Although the studies of 2023 plan aim a participatory ecological and strategic approach, ongoing city actions in the short term, come from top to bottom, and seem to continue to damage the ecological areas, agricultural lands, valleys and water resources with suburbanization and wrong transportation policies.

In regard to the urban sustainability in Ankara; it is seen that because of the rapid population growth and insufficient guidance of the development plans, Ankara has developed in an oil-drop form expanding in the west and northwest. Within the environmental approach, such an oil-drop development has caused loss of natural areas and valleys like Dikmen, Portakalçiçeği, Kavaklıdere and Bentderesi which were the lungs of the city. The sprawl brought more energy consumption. It is seen that energy savings can rise up to 150 percent in cities by changing the form, size, residential density and the location of

activities (Leitmann, 1999). The changing form of the city has not been efficiently supported by the transportation systems. Especially, the quality and quantity of public transportation system in Ankara have become insufficient, so the percentage of the usage of private cars has increased gradually. This has caused lots of environmental problems like air, water and noise pollution and traffic congestion. Besides, the green areas in Ankara have decreased because of rapidly growing population and the density increment in the city centre. Consequently, the quality of life reduces and urban sustainability of the city runs a risk. However, in the recent years local authorities have realised that green areas need to be given extra attention to ensure a better quality of life in their cities. Thus, they try to increase this ratio by activating new projects in the urban periphery.

From the point of view of economic consideration, Ankara as being the service centre of Turkey continuously has been attracting population. The development of the city in the oil-drop form increases the cost of infrastructure. In contrast to the rapid increase in population, the development of land is quite slow that causes illegal settlements especially in the fringes. The density increment in the centre of the city and the land demand especially in the western corridor increase the land prices and urban land rent. As a result, it is seen that Ankara has become one of the cities with the highest land prices in Turkey. The linear development of the city towards west causes linear commercial and public activities along two main highways and the formation of shopping malls in the new development areas. This development trend goes towards a polycentric urban structure.

With the 27 km of sprawl from the city center to the west, many new residential areas have emerged in southwest and northwest parts. Northwest districts have middle income and southwest districts have high income inhabitants. Such decentralised housing policies bring a social segregation in Ankara. Also, zoning of residential areas has protected the privacy in these areas. Coming to the social interaction, it can be found in the main city centre, in the urban square with meeting and shopping activities. Also there are some cultural facilities in the city centre like cinemas, theater and some festivals.

SUCSESSES AND FAILURES ON URBAN DEVELOPMENT

Infrastructure and Transportation

Much of Turkey suffered one of its driest years in 2007. Ankara had serious water shortage and experts criticized the policies and actions of the Greater Ankara Municipality in solving the problem as political. The municipality provided water from two dams, built upon the Kızılırmak River, as an urgent solution

to the problem. However, Ankara residents faced to consume unsafe and more expensive water as a result of the Kızılırmak project where the river is dangerously contaminated and cannot be treated with the existing technology. Today, citizens cannot trust and have to buy demijohn water served to the doors.

Considering transportation system, the landuse variables that may influence Ankara's transportation structure are listed in Table 2. Car ownership is 0.168. In transport planning studies of Ankara, car ownership level is used as an indicator of the income level.

Table 2.

Ankara's transportation structure (EGO, 2009)

Population	Labour force	Number of private cars
4,306,105	1,285,139	688,750

During the last 50 years' urbanization process in Ankara, many transportation problems have appeared. In the 1930's, population was about 90.000 and automobile trips consisted the 15% of total trips. Today, automobile trips have a significant role in urban transport. The number of total motorized trips is 952.077 in the peak hour in Ankara. The occupancy rate of private cars and taxis is about 1.6 people/per vehicle. The most important trip purpose is going to work and it holds 61% of the total motorized trips (Öcalır et al., 2010). Particularly Ankara has been home to extensive road programmes that increased road capacities and constructed grade separated junctions, resulting in increased traffic speeds and significantly deteriorated travel conditions for pedestrians and cyclists. The municipality is criticized because of car-oriented policies and high public transport fees.

The Electricity, Gas, Bus General Directorate (EGO) operates the Ankara Metro and other forms of public transportation. Ankara is currently served by suburban rail and two subway lines with about 300,000 total daily commuters, and three additional subway lines are under construction.

Green Areas

Ankara has lost valleys replaced by high rise housing developments but many parks established in the early years of the Republic remain. The most important of these parks are: Gençlik Park (main urban park from Republican period) (Uludağ, 1998), the Botanical Garden, Seğmenler Park, Anayasa Park, Kuğulu Park, Abdi İpekçi Park, Güven Park, Kurtuluş Park, Altınpark. The main aim of the Republic was to change ummah ideology and to create citizenship. The space of the citizen was

the public space since Roman times. All revolutions brought with the Republic for the new citizen and his city. A transformation was aimed from appearance to behaviors. Contemporary city spaces were shaped with city parks, city clubs etc. Gençlik Park in Ankara symbolized this idea. However, today, there is an implementation in the parks which should be used for picnic and barbeque places opposite to the idea of contemporary citizens (Çağıl, 2007). It becomes clear that some drastic measures need to be taken for the general upgrading of services and facilities in parks (Oğuz, 2000).

Atatürk Forest Farm and Zoo is an expansive recreational farming area (1471 ha) which houses a zoo, several small agricultural farms, greenhouses, restaurants, a dairy farm and a brewery (Tekel et al., 2005). It is a pleasant place to spend a day with family. There is also a replica of the house where Atatürk was born in Thessaloniki, Greece. Visitors of the farm can taste famous products such as ice cream, fresh dairy products and kebaps in the cafés. However, Greater City Municipality of Ankara prepared a plan for this large area in 2007 and many opposite ideas came up. A safari park, lots of commercial facilities and new traffic roads were on debate and today roads are being built.

Housing Developments and Shopping Malls

High income people living in the city center and in the gated community tend to avoid the same areas of Ankara, all of which are low-income districts or squatter areas. Spatial segregation has long been present with invisible boundaries. Economic restructuring, urban transformation created gated communities as a new form of spatial segregation for high income people (Erkip, 2010). Cooperatives or sites developed by large construction firms formed gated communities in Çayyolu, Beysukent, Yaşamkent etc. Sub-centers were not planned and there was lack of public spaces in these development areas.

Ankara has important experiences with squatter (gecekondu) areas and their transformation processes. Gecekondu areas located in close to the city centre in Ankara. The central gecekondu areas were on rough topography. In the later stages of urban development, after 1950s the gecekondu areas formed a belt around the city centre with the expansion of urban form. These constituted avoided areas in the city like Mamak, Çiğir etc. In order to solve the problems of gecekondu areas and to achieve rapid urban transformation on a mass scale, transformation in gecekondu areas was first included in the Improvement and Development Laws. They became important implementation tools for transformation of gecekondu areas. After the 1980s, Ankara Greater City Municipality prepared and

implemented various 'gecekondu transformation projects'. Today, the preparation process of improvement plans has been finished for almost all gecekondu areas in Ankara, the implementation of transformation projects continues (Köroğlu, Ercoşkun, 2006).

There are 7 urban transformation projects coordinated by Greater City Municipality of Ankara (North Ankara City Entrance, Güneykent, Çukurambar, Nasreddin Hoca, Batıkent I-II, Çayyolu), 4 projects in Çankaya (Dikmen I-V, Geçak), 5 in Altındağ (Ulus, Atilla-Aktaş, Gültepe-Çinçin, Ankara old city center), 1 in Sincan, 2 in Yenimahalle (Demetevler, Şentepe) and 12 in Mamak (Doğukent, Araplar, Durali Alıç, Gaz Maske, Yatık Musluk, Hüseyin Gazi, İmrahor, Kazım Orbay, South Bayındır, Samsun Road, 50. Yıl, Ekin quarter). Beyond Greater City Municipality of Ankara, the others are owned by private ownership and organized by the consortium of the municipality, The Mass Housing Directorate of Turkey (TOKİ) and private sector (Güzey, 2009). Most of the projects' aim is to change the negative fabric of squatter settlements and create housing for middle and high income groups. Only Ulus and Ankara old city centre are the conservation projects and they aim to increase prestige in the areas. 6100 ha of land are being regenerated in the municipality border after 2004.

Urban transformation and regeneration is developing as a tool in the re-gaining the squatter housing areas. However, discussions focus on the exclusion of the present residents, increase in the prices of land, inability to control urban development (Güzey, 2009). Furthermore, single-recipe applications overlook the differences between urban areas and thus harm the agricultural and natural areas. For this, increasing the participatory eco-planning processes, involving the stakeholders to the process is a way and there is need for intervention to plot scale applications of the developers and architects to direct and establish an urban design in the area (Köroğlu, Ercoşkun, 2006).

Parallel to the boom of transformation projects, fast paced growth of the number of shopping centers has an impact on allocation of retailing activities in cities. Most stores selling national and international brands, located at city centers have moved to shopping centers, leaving these areas deprived. This puts an economic strain on most of the local retailers located in city centers. In Ankara, there have not been comprehensive plans and projects to promote shopping street vitality and viability since the 1990s, and public spaces with this potential are often ignored. The amount of shopping center leasable area per 1000 persons is the highest in Ankara in Turkey (Soysal, 2008), mostly due to 1) its socio-economic structure, which is mainly

composed of public officials and university students, creating a relatively stable economic system, convenient for shopping center investments, and 2) the encouragement of shopping center construction by the Greater Municipality of Ankara. In 2012, 36 shopping centers exist in the city and citizens prefer these centers for easy parking and leisure activities.

FUTURE DEVELOPMENTS

Ankara Greater Municipality forecasts population of 5.445.803 in 2023. The migration from rural to city will be decreased and semi-rural areas will gain importance. The population will settle to west and southwest areas. The sub-centers will be the strategic attraction points (Ankara Greater Municipality 2023 Plan Report, 2009).

Large land areas where squatters live in Ankara have become attractive and offer potential for constructing large development complexes as gentrified neighborhoods and new consumption places operated by under the new global economy. The government seems to prefer to follow a more marketbased open economic policy by supporting private construction sector and private construction firms. However, the high interest rates and lack of financial support by the government makes it impossible for the poor households and even the lower-middle income households to own a house. The mass housing projects of the TOKİ has to be considered at this point that public sector as the big housing producers should show more effort to fulfill the increasing demand of the urban poor. However, the large scale constructions in Ankara, mass housing projects have an effect to increase the house prices (Akpınar, 2008). There are 15 housing projects of TOKİ whose construction finished. The number of 49 housing projects is under construction, named as North Ankara City Entrance, Eryaman and Sincan suburban areas in the north-west, Turkuaz and Yapracık in the west axis (TOKİ website).

There are M2, M3 and M4 metro line constructions which will serve to these residential areas. First is from city center to suburban areas in the west (Kızılay- Çayyolu 2). Second line is an extension from a suburban area to other one near to the industry areas in the north-west (Batıkent, Sincan, Törekent) and the third one connects commercial and office development to major housing areas to the north (Tandoğan- Keçiören) (EGO website). However, the metro projects are expected to finish in 2016.

Lastly, for the shopping malls, Turkey's Council of Shopping Centers states that the shopping center total space grew from the current 4.5 million square meters to 5.5 million square meters by the end of 2009, or early 2010 in the country (Hürriyet, 2010). However, two shopping centers (plus 36) are on the way and almost every district has a luxury shopping

center in Ankara. Beyond global big box investments, citizens need revitalized shopping streets and open air activities which municipality disregards.

CONCLUSION

As a result, lower levels of economic development, smaller urban budgets, and shortages of environmental infrastructures, shelter and basic services in developing countries have resulted in a different pattern of urban development and environmental degradation which looks as unsustainable. Similarly for Ankara, when environmental, social and economic approaches are evaluated the development seems quite unsustainable. However, urban sustainability could be achieved by applying sustainable principles by eco-planning. A strong emphasis should be given to urban management. There may be a shift away from development planning on controlling and limiting development towards participatory eco-planning using proactive and flexible measures based on a consensus of city interests. They should be incorporated within existing structures like strategic plans for the CBD and periphery, urban transport strategies, urban regeneration, urban compaction, suburbanization etc. Polycentric cities whose centres contain mix-use land pattern and connect to different subcentres by effective and environmentally sound public transport infrastructure should also be encouraged within metropolitan areas where the central cities are unable to function efficiently if they retain their original monocentric spatial structures. Environmental issues should be integrated into the planning system on spatial, land use, energy and transport dimensions considering economic and social decisions. Sustainability principles should be incorporated into effective implementation on the city to build a city vision.

KAYNAKLAR

- Akçura, T. (1971). *Ankara - Türkiye Cumhuriyeti'nin Başkenti Hakkında Monografik Bir Araştırma*. ODTÜ, Ankara.
- Akpınar, F. (2008). "Class dimension of housing inequalities in the new era of liberalization: a case study in Ankara", *METU JFA* 25:2, pp. 39-69.
- Aktüre, S. (1992). Osmanlı döneminde Ankara'nın ticaret merkezi hanlar bölgesi, in Şahin, N. (Ed), *Ankara Konuşmaları*. TMMOB Chamber of Architects, Ankara Branch, Ankara.
- Altaban, Ö. (1998). *75 Yılda Değişen Kent ve Mimarlık*, Tarih Vakfı Yayınları, İstanbul.

- AMNPB (1977). *Ankara Metropolitan Nazım Plan Bürosu Raporu*, pp. 321-322.
- Ankara Greater Municipality 2023 Plan Report, 2009, http://www.ankara.bel.tr/AbbSayfaları/ABB_Nazim_Planı/ABB_nazim_plani.aspx
- Ankara Greater City Municipality website, <http://www.ankara.bel.tr>
- Bademli, R. (1985). "1920-40 döneminde Ankara'nın yazgısını etkileyen tutumlar", *Mimarlık Journal* 121, pp.10-16.
- Bademli, R. (1987). Ankara'da kent planlama deneyi ve ulaşılan sonuçlar, in Tekeli, İ. (Ed) *Ankara 1985'ten 2015'e*. Ajans İletişim, Ankara.
- Baslo, M. A.; Yürekli, F. (2009). "Bir devrim mekanı: Ankara", *İTÜ Dergisi/A* 8(2), pp. 121-132.
- Bayraktar, N.; Tekel, A.; Ercoşkun, Ö.Y. (2008). "An evaluation and classification of urban furniture on Ankara Atatürk Boulevard and relation with urban identity", *Journal of Gazi University Engineering and Architecture Faculty* 23(1),pp. 105-118.
- Buluç, S. (1991). "İlkçağda Ankara", *Ankara Dergisi* 2,13-22.
- Cengizkan, A. (2002). *1924-25 Lörcher Planı: Ankara'nın İlk Planı*, Arkadaş Yayınları, Ankara.
- Ceylan, A. (2003). Structural tools in the making of cities: form as a development control mechanism, *unpublished Msc thesis*, METU, Ankara.
- Çağlı, İ. (2007). *Baykan Günay ile Ankara Üzerine*, <http://www.arkitera.com/s74-baykan-gunay-ile-ankara-uzerine.html>, 04/05/2010
- EGO 2009 website, <http://web.ego.gov.tr/inc/newsread.asp?id=265>
- Ercoşkun, Ö.Y.; Varol, Ç.; Güner, N. (2005). "From a planned capital to a scattered urban form: analysing sustainability of Ankara", *SB05 The 2005 World Sustainable Building Conference Proceedings CD*, Tokyo.
- Erkip, F. (2010). "Community and neighborhood relations in Ankara: an urban-suburban contrast", *Cities* 27, pp.96-102. *Hürriyet*, 01/05/2010, <http://www.hurriyet.com.tr/english/finance/11137233.aspx>
- İlkay, Y. (2008). "Kızılay Meydanı'nın politik-sembolik anlamı: 1960-1964 yılları", *Mülkiye Dergisi* 261, Ankara.
- Günay, B. (1988). "Our generation of planners, the hopes, the fears, the facts; case study: Ankara", *Scupad 88, 20th Anniversary Meeting*, Salzburg.
- Güzey, Ö. (2009.) "Urban regeneration and increased competitive power: Ankara in an era of globalization", *Cities* 26,pp. 27-37.
- Köroğlu, B.A.; Ercoşkun, Ö.Y. (2006). "Urban transformation: a case study on Çukurambar", Ankara, *Gazi University Journal of Science* 19(3),pp. 173-183.
- Leitmann, J. (1999). *Sustaining Cities: Environmental Planning and Management in Urban Design*, McGraw Hill Professional Architecture, USA.

- Ministry of Industry and Commerce website,
<http://www.sanayi.gov.tr>, 04/05/2010
- Oğuz, D. (2000). "User surveys of Ankara's urban parks", *Landscape and Urban Planning* 52, pp.165-171.
- Öcalır, E.V.; Ercoşkun, Ö.Y.; Tür, R. (2010). "An integrated model of GIS and fuzzy-logic (FMOTS) for location decisions of taxicab stands", *Expert Systems With Applications* 37, pp.4892-4901.
- Sağdıç, O. (2002). *Once upon a time Ankara*, Ankara Greater City Municipality Publication, Ankara.
- Sargın, G.A. (2009). "Öncül kamusal mekanları tasarlamak: başkent Ankara üzerine kısa notlar, 1923-1946", *Mülkiye Dergisi* 241, Ankara.
- Soysal Shopping Center Catalogue, 2008,
<http://www.soysal.com.tr/bolum/20/soysal-gorsel-magazacilik-katalogu-2008/tr>, 02/03/2009.
- Tankut, G. (1993). *Bir Başkent'in İmarı:(1929-1939)*, Anahtar Kitaplar, İstanbul.
- Tekel, A.; Varol, Ç.; Ercoşkun, Ö.Y.; Gürer, N. (2005). Bir yaz okulunun adından: Atatürk orman çiftliği, *Planlama Journal* 2005/4; pp. 26-34.
- TOKİ website,
http://www.toki.gov.tr/programlar/uygulamatakip/c_illist.asp?x_ilkodu=6, 20/03/2010.
- TUIK Statistics, ADNKS, 2009,
<http://tuikapp.tuik.gov.tr/adnksdagitapp/adnks.zul>, 23/04/2010.
- Tunçer, M. (2001). Ankara (Angora) Şehri Merkez Gelişimi (14-20.YY), T.C. Kültür Bakanlığı Kültür Eserleri, Ankara.
- Yazman, D. (2009).
<http://www.arkitera.com/news.php?action=displayNewsItem&ID=46008>, 13/10/2009.

RESUME

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