Development Trends of Single Family Housing Estates in İzmir Metropolitan Fringe Area

By

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ABSTRACT

Sprawling urban land uses at the fringe areas is a very common development fact, today, in many cities around the world. 1980s is the breaking point when Turkish cities entered into a period when changes and sprawling began to be seen in fringe areas. High-rise satellite towns, shopping centers, office parks, international hotels, large-scale infrastructure projects are the indicators of this change in the fringe of metropolitan city scene. In this period, new housing areas also began to form around the fringe of cities. One of these new residential forms are "single family housing estate" that indicates to the new forms of urban growth and diffusion processes in metropolitan cities such as Istanbul and Ankara. These housing areas got distant from cities in order to be nearer to the amenity and represented a tendency to choose location closer to major transportation routes; mostly they are "gated" and "packaged" environments.

This study is important in examining the Izmir sample of this housing development type where only Istanbul and Ankara samples were discussed before. The aim of the study is to understand the transformation seen in Izmir metropolitan fringe, by studying the development aspects of single family housing estates increasing in number after 1990. The spatial development features and planning decisions orienting the development of single family housing estates that develop at the western axis of the Izmir metropolitan city, within the boundaries of Urla Municipality are studied under the topic "*process*". The reasons and managing factors affecting people leaving the previous housing areas and selecting new areas are discussed in "*behavior*" part. Besides, their satisfaction level about houses, housing environments, and accessibility to urban services are questioned.

Discussing the constraints created by single family housing estates in metropolitan fringe and potentials brought by them are making easier to perceive this new trend. As a result of the study, constraints of single family housing estates were determined as lack of public space and urban services, automobile dependency, unnecessary consumption and fragmentation of agricultural land and open space, and speculative building. It was also found that there are variety of problems in local government applications and planning regulations.

ÖZ

Kentlerin dış sınırlarına / çeperlerine doğru saçaklanması günümüzde pekçok kentin gelişme biçimi olarak karşımıza çıkmaktadır. Türk kentleri de 1980 sonrasında değişen sosyo-ekonomik koşullara paralel olarak çeperlerine doğru büyümeye ve saçaklanmaya başlamıştır. Çok katlı uydu yerleşimler, alışveriş merkezleri, ofisler, uluslararası oteller, büyük ölçekli altyapı projeleri ve rekreasyon alanları metropolitan kentlerin çeperindeki bu değişimin göstergeleridir. Bu dönemde kentlerin çeperinde belirmeye başlayan bir diğer kullanım ise yeni konut alanlarıdır. Bu konut gelişimlerinden biri de İstanbul ve Ankara gibi büyük metropollerin kentsel büyüme ve yayılma sürecininin göstergesi kabul edilen "müstakil konut siteleri"dir. Bu konut çevreleri kentin dışında, ana ulaşım aksları etrafında ve doğal güzelliklere yakın olma eğilimi göstermelerinin yanında, çevresine "kapalı" ve konut dışı fonksiyonları barındıran "paketlenmiş" bir yaşam çevresi sunmaktadırlar.

Bu çalışma, yalnızca İstanbul ve Ankara örneklerinin tartışıldığı bir konut gelişme biçimine dair İzmir örneğini ele alması bakımından önemlidir. 1990 sonrasında Izmir metropolitan kentinin çeperinde yaşanmakta olan dönüşümü, müstakil konut sitelerinin gelişim özelliklerinden hareketle anlamayı amaçlamıştır. Kentin batı aksında, Urla belediyesi sınırları içinde gelişen müstakil konut sitelerinin mekansal gelişim özellikleri ve gelişimi yönlendiren planlama kararları "süreç" başlığı altında incelenmiştir. Bu konut çevrelerinde yaşayanların hangi yönlendirici faktörlerle eski konut alanlarını terk ettikleri, konut-konut çevresi ve kentsel servislere erişim konusundaki memnuniyet düzeyleri ise "davranış" olarak ele alınmıştır.

Metropolitan kentin çeperinde saçaklanarak gelişen müstakil konut sitelerinin gelişim sürecinin yarattığı kısıtlılıkların ve taşıdığı potansiyellerin tartışılması bu yeni eğilimi anlamaya yardımcı olmuştur. Araştırma sonucunda, kamu alanlarından ve servislerinden yoksun olarak gelişen müstakil konut sitelerinin, otomobil bağımlı, arazi tüketen, parçalı ve spekülatif yapılaşmaya neden olduğu tespit edilmiştir. Planlama süreci ve yerel yönetim uygulamaları açısından da sorunların yaşandığı belirlenmiştir.

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CHAPTER I

INTRODUCTION

"The future city will be spread out, it will be regional, it will be natural product of the automobile, the good road, electricity, the telephone and the radio, combined with the growing desire to live in a more natural, biological life under pleasanter and more natural conditions." (John Nolen, 1930)

Cities are very important component of modern societies. More than half the world's population lives in and around urban areas. Over the last two decades, urbanization rates in the advanced industrialized countries have stabilized, and in many countries declined, urban population growth in the Third World countries has risen dramatically (Browder and Bohland 1995). According to World Resources Institute's 1990s report, nearly all of the future growth in the world's urban population is taking place in the cities of the developing countries, and most of this urban growth is occurring on the metropolitan fringe.

The "metropolitan fringe", "urban fringe" or "rural-urban fringe" is a transitional location where city and countryside overlap and is found at the edges of built-up urban areas. The landscape on the metropolitan fringe is characterized by a diversity of land uses, which are often thought to vary in relation to their functional linkages to urban and to rural sectors (Browder and Bohland 1995). Old villages, new residential extensions, commerce, industry, city service and farming are interacted in a random fashion which gives a distinctive quality to the land use pattern of metropolitan fringe. The haphazard development of slums, piecemeal commercial development, intermixes of conforming and non-conforming uses of land coupled with inadequate services and facilities have become common features in the fringe especially in developing countries (Saxena 2003). The nature and complexity of the metropolitan fringe is well established in the literature under the terms like periphery, periurban, semi-urban, urban fringe etc.

The spread of the city has been comprehensive; it is not simply people, who have dispersed, but also jobs and many other activities. The processes of peripheral growth (fringe development) have for a long time been observed and interpreted in the context of 'dissolution of urban structures' (Burdack 2002). At the end of the dissolution of urban structure, urban-rural boundaries are increasingly blurred and the

relationship between city and countryside shifting. A key term of the discourse is 'urban sprawl': "*A variety of urban forms have been covered by the term "urban sprawl" ranging from contiguous suburban growth, linear patterns of strip development, leapfrog and scattered development"* (Chin 2002, p.3).

Sprawling urban growth at the fringe areas is a very common development fact, today, in many cities around the world. There are researches who study this fact from two opposite ends. Some researchers defend their viewpoint by emphasizing that "sprawl growth" create many environmental problems as well as having too much economic and social costs and consequently restrictive interventions should be taken. Other researchers on the other hand agree that even though "sprawl growth" is an unwanted development, interfering personal freedom and lifestyle of individuals is out of question.

Multidimensional transformation occurring in metropolitan fringe area has become subject to different studies. Fringe studies are affected by its partly urban and partly rural socio-spatial characteristics. Planners, geographers and social science researchers who have tried to explain size, form, rate of expansion, and socioeconomic-environmental effects of fringe areas were debating for years. Researches, about metropolitan fringe areas, in Turkey started to be done in 1980s when sprawling began to be seen in Turkish cities. In these researches, metropolitan fringe areas were studied with their urban and rural aspects but there are some neglected issues as well. Fringe areas in urban studies today are considered as areas where different development trends (economic, social and land uses) occur and therefore, these areas are subjects to many researches increasing every day.

Housing development is one of the important functions currently seen in urban fringe. Certainly, housing development that began to appear at urban fringe areas is not a recent phenomenon. In developed countries, such as USA and England, the roots of this formation go back to 18th century when industrial city is born. It diversified throughout time and reached today with its changed social and spatial characteristics. Starting with 1980s, some similar developments began to occur in Turkey, also, that broke the high density urban structure in a decentralized urban form (Tekeli 1991). As a result, the housing development at fringe areas created some changes at these areas different from the ones in developed countries. One of these new residential forms is "single family housing estate" that indicates to the new forms of urban growth and diffusion processes in metropolitan cities such as Istanbul and Ankara starting in 1990's

(Sey 1998). The basic point of this study is to explore and discuss about this development trend on the basis of Izmir metropolitan fringe area.

1.1. Aim of the Study and Methodology

The nature and structure of the city are both changing. Different parts of the city are changing in different ways, and much depends upon the state of the local and national and global forces (Kivell 1993). The urban fringe has important role on urban growth process. For that reason, urban fringe is thought of not just as a geographic area within a metropolitan region, but also as a step constituting hierarchy between rural areas and central city (Daniels 1999). Land use trends and growth pressure in the urban fringe is driven by series of interrelated processes of change: economic, social, political and demographic.

1980s is the breaking point when Turkish cities entered into a period when changes and sprawling began to be seen in fringe areas. Increases in rental incomes and accordingly tendency toward the real estate investments such as house, office, secondary housing, tourism, and mass consumption norms began to gain importance in cities and new institutional organizations began to be seen as reasons of sprawling urban pattern (Eraydin 1992). At the end of this process various demands increased and at the same time multifaceted and conflicting uses began to be seen at the fringe area of the metropolitan cities.

When urban fringe area is studied from the viewpoint of housing development, one of the most evident transformations in metropolitan areas in Turkey after 1990 is escaping to peripheral areas from cities. Starting at the end of 1980s new housing areas began to form around the cities where people go to their offices at the city center in the morning and return back their home in the evening (Tanyeli 2000). These new housing areas got distant from cities in order to be nearer to the amenity and at the same time represented a tendency to choose location closer to major transportation routes where they could reach cities easily. Mostly they are “gated” and “packaged” environments have high prices and also appear as the most active part of housing market after 1990 particularly in Istanbul (Sey 1998). This tendency which started to appear at the fringe area of the metropolitan city of Izmir, has a fragmented and disintegrated development pattern. Especially housing estates which spread alongside the major transportation routes at the western corridor of the city began to change the scene of the fringe area.

The aim of this study is to understand the transformation seen in Izmir metropolitan fringe, by studying the development aspects of single family housing estates increasing in number after 1990. This study examines the spatial development characteristics of housing estates, planning decisions channeling this development and their user dimension in the case of Izmir. In this sense, it is important in examining the Izmir sample of this housing development type where only Istanbul and Ankara samples were discussed before. Besides, this study aiming to examine the urban planning, spatial and user dimensions of this housing development and trying to form a knowledge base grounding on empirical research, distinguishes it from the others and make it important. The biggest limitation here is that there is no other study examining the Izmir case from this stance.

Development process in this study is examined under two main topics called as "process" and "behavior".

- **Process:** It is aimed to (1) consider the spatial development characteristics of single family housing estates, (2) study the planning decisions orienting this development (i.e. land use pressures) and so (3) to understand the challenges which urban fringe area has to face.
- **Behavior:** Users' decisions or preferences are studied (1) who prefers single family housing estates outside the city, (2) their reasons, (3) and problems and advantages of living in this area are questioned. In other words, potentials and constraints which urban fringe supply are tried to be discovered by using the users' viewpoints and perceptions.

Within this framework, the scope of this research can be defined and directed by these questions:

1. What kind of spatial development pattern do the single family housing estates show at the metropolitan fringe area?
2. How do local planning decisions and policies adjust this development? What are the general characteristics of planning process and the insufficiencies if any exist? Is there any incongruity among planning decisions and applications?
3. What are the built-up properties of single family housing estates? (The size of site, number of houses, size of houses, management of the site, infrastructural properties, location according to services, and occupation rate of buildings.)
4. What are the general characteristics of users and how is the household structure, for which reasons do they leave their former residences? What is the underlying

factors playing role in the selection of single family housing estates at urban fringe area? What is the satisfaction level about the houses, housing areas and access to basic urban services? What are the gains and difficulties of living at the urban fringe area?

5. What are the constraints and possibilities that come out with the development of single family housing estates at the urban fringe area?

Literature survey indicates that there are different methods and studies in understanding the change and development at the metropolitan fringe area. Some of the studies are searching the effects and evidences of macro level societal/state/economic forces causing structural changes at urban fringe. Others are concerned about the roles of micro-level socio-economic 'actors'[*] in this change (Askew 2002). This study is trying to perceive the development processes and characteristics of single family housing estates from the perspective of the metropolitan city, Izmir. During this study, new settlers (users) among local actors and urban planning regulations are also considered and their roles in changes are examined. This study takes an approach that is partly descriptive, partly analytical in order to shape the future researches. When the aim of the study and questions are considered the methods of the study can be listed as follows:

- Literature and policy review about fringe development (Documents, books, publications and thesis),
- Interviews and archival analysis of local authority in order to understand spatial development and planning process (Local planning and building records, maps, newspaper articles, interviews with local authority staff),
- Surveys and interviews with key actors (users) in order to understand preferences, satisfactions, population and organizational properties of housing estates.

Detailed information about the methods in examining the "process" and "behavior" will be given in the case study chapter.

[*] Private and government actors: Entrepreneurs or speculators, developers, landowners, farmers, original residents, new settlers are called private actors. Public institutions, government policy, and urban planning regulations are called government actors

1.2. Relevance of Research and Contributions to Field

There are several important reasons for closer attention to analysis and understanding of the urban fringe. Firstly, the urban fringe forms the interface between the urban and rural areas and variety of populations occupies or uses the fringe areas. Secondly, it is a source for urban development process and consequently different land uses apply pressure. Thirdly, it is important from the viewpoint of natural resources and continuity of agricultural activities. Despite its specific importance the metropolitan fringe is frequently ignored within the area of urban studies. The reason of not finding many studies on this field is the complexity of the area and difficulties in making research at these areas.

When studies about "urban fringe" are classified, a duality can be detected at first; "rural and urban". This differentiation determines the viewpoint of the researchers and consequently the scope of the study. Researches about the urban fringe can be broadly subdivided into "urban" if they emphasize change and expansion of urban structure and function, and "rural" if they emphasize on agriculture, farmland and rural change (Audirac 1999).

It is possible to categorize the concepts and studies about the internal structure, formation and evolution of fringe areas that were examined by various researchers, in different ways. Three classifications handled in this study are constituted through the researches of Gober and Burns (Gober and Burns 2002).

1. Part of the studies about the development of metropolitan fringe area that are considered as an expansion metropolitan city to its periphery and examine the facts affecting this development and their consequences. So, in this context the study of urban expansion has been informed by; (1) the character of land conversion and rural-urban fringe land markets/land value change[*] (Clawson 1971; McMillen 1989; Thorson 1994, Firey 1946; Beesley and Russwurn 1981; Bryant, Russwurm and McLellan 1982; Evans and Mabbitt1997); (2) the process of land development and actors involved, (Kaiser and Weiss 1970; Brown, Philips, and Roberts 1981; Gore and Nicholson 1991; Bentinck

[*] Studies in land market are grouped as: "Research into development at the rural-urban fringe embraces both theoretical models of urban growth (Burgess 1925; Hoyt 1939; Harris and Ulman 1945; Lowry 1964; Muth 1969) and parcel-level studies that modeled land use or land prices at the rural-urban fringe. (Hushak 1975; McMillen 1989; Broomhall 1995)" Drews, P.L.; Modelling Land Use Conversion At The Rural-Urban Fringe, Phd Thesis, University of South Carolina, 1999

J.V., 2000); (3) role of public planning and private investment, (Pacione 1990; Bryant 1995; Daniels 1999).

2. Second approach constitutes of theoretical modeling studies about the conceptualism of fringe development. Conceptualism of fringe development consists of zonal model and wave model. These models are based upon defining the rural-urban transformation in stages. [Ilbery (1985), Bryant (1982), Blumenfeld (1954), Hart (1991)]

3. A third approach is the European centered urban fringe morphology based on studies of cities with detailed historical records about local economic conditions, buildings, and parcel-based changes in property ownership. M.R.G. Conzen (1960) and Whitehand (1967-1987) are pioneering figures of this approach.

As aforementioned, studies about metropolitan fringe areas in Turkey started to be done in 1980's when sprawling began to be recognized in large cities. In 1985, Middle East Technical University City and Regional Planning Department students made a research, "Ankara Metropolitan Fringe Area Studies" and following this, some thesis researches are made on this subject (Özdemir 1993). In the first studies, the characteristics of rural land and effects of urban development on rural land were studied. The master thesis of Bilgen (1986) entitled "Rural transformation at the Urban Fringe- A case Study in Ankara Metropolitan Area" is one of the first studies in this field. Following these studies, the spatial location selection dynamics, their interrelations, legal and institutional frames of various land uses (industry, commerce, housing etc.) began to be seen in urban planning studies. Landownership pattern at urban fringe area and changes in plot market and effects of the changes on urban growth are the important studies after 1990. Özdemir's (1993) study on Izmir metropolitan fringe area and Gülöksüz's (1998) study on Ankara metropolitan fringe area the initiators about this subject. However, it can be concluded that data about this subject is very limited because the metropolitan fringe concept and its characteristics started to be discussed only after 1980s. Indeed, for third world countries, metropolitan fringe is involving components which are difficult to define and generalize due to its dynamic processes.

Graduate studies that were done in Turkey about this subject can be categorized into four major groups:

1. Studies examining the spatial changes at metropolitan fringe. These are the studies that examine urban growth and sprawling processes from the viewpoint of housing,

industry and other land use dynamics and their relation with planning process. (Büyükaltıntaş, 1985; Celep, 2000; Buğu, 1999; Çelik, 1999; Marulyalı, 1991; Özbek, 1994; Danış, 2001; Ersöz, 1997; Kardeş, 1998; Kaya, 2001; Kılınç, 2000; Kuşhan, 2001; Şen, 2000; İnal, 2002; Yazar, 2002; Ertuna, 2003)

2. Researches studying the changes and structural dynamics of rural settlements at the metropolitan fringe: They are about agricultural activities level, changes at this level, formation of labor force and economic activities and social structure. (Bilgen, 1986; Emiroğlu, 1987; Eser, 1988; Özçevik, 1999; Doğru, 2002; Yazar, 2002; Sazak, 2001)
3. Third group is about studies on changing process of landownership pattern at metropolitan fringe areas and behavior of actors. (Özdemir, 1993; Gülöksüz, 1998; Karataş, 2000)
4. Researches studying land use pattern changes by using GIS and remote sensing. (Aşık, 2001)

Housing developments in metropolitan fringe areas in Turkey consists of; cooperatives, mass housing areas, secondary houses, and squatter houses (gecekondu). Studies about these housing areas change in time in accordance with the development trend of any given housing types. Researches that were done after 1990 indicate the phenomenon of suburbanization, satellite towns and housing estates and development dynamics of these housing areas. These development trends studied by social scientist and urban researchers tried to be explained by dynamics such as capital accumulation process, changing in lifestyle and consumption behaviors, technological advances, and impacts of globalization. Developments in Istanbul are considered in relation with the global city arguments and issues about social and spatial segregation are especially highlighted. Another important point here is the differentiations in naming this phenomenon. These gated communities developing outside the metropolitan city are named as “the garden city” by Öncü (1999), “the welfare enclave” by Kurtuluş (2002), “the prestige community” by Bartu (2001). Ayata (2001) in his study subjecting suburbanization process in Ankara, uses the term “*site* type residence” based on the Turkish term “*site*-leşme”. In some sources terms like “secure suburban estate” and “gated community” are used. However, in this study a more neutral term is preferred without emphasizing the prefixes like ‘gated’ or ‘secure’. In this context, “single family housing estate” will be considered as housing groups that develop at the periphery of

the metropolitan city, managed from a central authority, and with security precautions. Trying to understand the changing aspects of housing areas at the periphery of the metropolitan city and aiming to put forward this development tendency's characteristics about Izmir distinguishes this study from the others.

Uneven-unbalanced growth of cities toward their outer skirts and not having effective planning policies for managing this growth are the important problems of Turkey, as well as other developing countries. In order to produce accurate urban policies it is necessary to perceive the present conditions. Analyzing the current changes in the fringe areas of large cities will be effective in the solution of urban growth problems and in the orientation of fringe development.

1.3. Structure of the Thesis

In the first chapter the aim of the thesis, its importance and study method is explained. The second chapter is devoted to the conceptual, physical, and socio-economic characteristics of the concepts of "urban fringe" and urban sprawl" and its challenges.

In the third chapter, the land use dynamics at the metropolitan fringe area will be examined from the perspective of developed and developing countries. Also the brief history of 19th and 20th century housing development is discussed.

In the fourth chapter, the macro changes and housing developments at the metropolitan fringe area in Turkey are studied and findings of studies that examine the housing estates in Istanbul and Ankara are mentioned.

The fifth chapter is about the characteristics of sprawling in Izmir metropolitan city. In this chapter also the selection reasons of (Urla) western corridor of the city as case study area, study methods, and findings are mentioned.

In the final chapter, the constraints and possibilities created by the development of single family housing estates at the metropolitan fringe area are discussed and local characteristics of this development are emphasized.

CHAPTER II

"FRINGE" AND "URBAN SPRAWL" PHENOMENON

> "Cities have become impossible to describe. Their centers are not as central as they used to be, their edges ambiguous, they have no beginnings and apparently no end." (Ingersoll, 1992)

2.1. Fringe Phenomenon

Any study of the fringe area needs to begin with a consideration of what is meant by this term. In literal sense, the word "fringe" is defined as;

- The outside boundary or surface of something,
- A part of the city far removed from the center (Collins Cobuild 1994).

If "fringe" is considered as a space its characteristic properties gain importance as well besides its literal meaning. Fringe area properties change according to time and place so its definition varies, also. Besides, geographers, social scientists and economists try to perceive and define this area from their own point of view, adding many more meanings to it. Common emphasize on these definitions is the tension between "rural" and urban", in other words the struggle between "urban" and "rural".

It is little agreement between academics and planners over definitions or the appropriate terminology to describe the fringe area. Different terms are used sometimes interchangeably, sometimes to identify quite separate areas, but sometimes overlapping each others:

- Periphery,
- rural-urban fringe (Wehrwein 1942, Pryor 1968),
- metropolitan fringe (Browder et al. 1995, Rao 1991, Saini 1989, Daniels 1999),
- urban fringe (Kumar 1998, Hill 1986, Kabra 1980, Bryant et al. 1982, Pryor 1968),
- peri-urban areas (Dupont 1997, McGee 1991),
- rurban fringe (Firey 1947, Schenk 1997),
- peri-urban fringe (Swindell 1988),
- desakota regions (McGee 1991- in Malay, desa means rural or village and kota refers to a city or town) (Bentinck 2000).

2.1.1. Defining Fringe Area

The term "urban fringe" appeared for the first time in 1937 when T. L. Smith used. Urban fringe was defined in his study "*as the built-up area just outside the corporate limits of the city*" (Audirac 1999, p.7). Since then Wehrwein(1942) noted, over 60 year ago, the "fringe" is: "*the area of transition, between well recognized urban land uses and the area devoted to agriculture*" (Bryant et al. 1982, p.11).

Fact of "fringe" started to take its place in academic literature in 1940 and 1950s, taking attendance of other disciplines especially geographers. First definitions and conceptual frame formed according to American experiences. Similar studies were done in Australian and European metropolitan cities. Fringe approaches in this period studied morphological and structural transformations (density, land use pattern etc.) from urban view point. Rural scientists criticized this situation defending that it is impossible to define fringe area that represents transition between urban and rural areas with urban dynamics. As the result of these criticisms terminology varied even more and terms like rurban-ruralurban began to exist (Audirac 1999).

Pryor (1968) summarized the previous definition of the fringe depending on 60 earlier case studies. He described the rural-urban fringe as the zone of the transition in land use, social and demographic characteristics between built up urban areas and the rural hinterland. Pryor distinguished the rural-urban fringe as two components **(Figure 2.1)**:

> *"1. The urban fringe: That subzone of the rural-urban fringe in contact and contiguous relation with the central city, exhibiting a density of occupied dwelling higher than the median density of the total rural-urban fringe, a high proportion of residential, commercial, industrial and vacant as distinct from farmland, and a higher rate of increase in population density land-use conversion, and commuting.*
>
> *2. The rural fringe: That subzone of the rural-urban fringe contiguous with the urban fringe, exhibiting a density of occupied dwellings lower than the median density of the total rural-urban fringe, a high proportion of farm as distinct from non-farm and vacant land, and a lower rate of increase in population*" (Bilgen 1986).

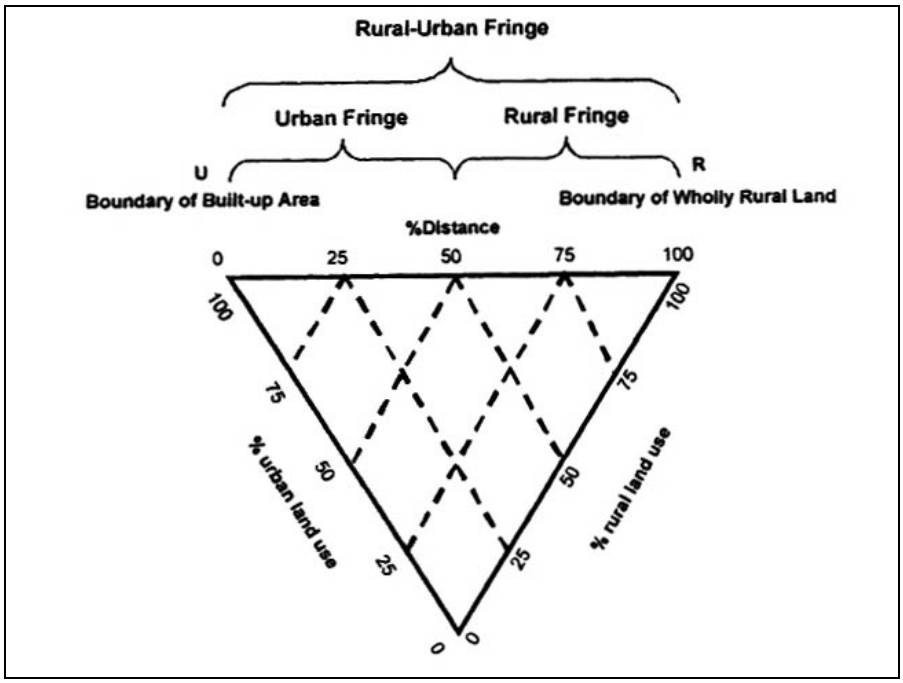

Figure 2.1 Rural-urban fringe scheme (source: Pryor 1968)

Moving away from a physical definition of the fringe, Pahl defined it as being the result of particular social processes. He suggests four main characteristics about rural-urban fringe: *Segregation, Selective Immigration, Commuting, the Collapse of Geographical and Social Hierarchies* (Pahl 1965).

Hushak (1975) described urban fringe as "*includes land along boundaries of a city, in the suburbs, in small incorporated towns near the city and extending into the unincorporated, partially developed countryside surrounding the city*" (Buğu 1999, p.7).

Carter (1981) regarded the fringe as the best area in which to study rural-urban continuum. He proposed a definition of the rural-urban fringe:

> *"as the space into which the town extends as the process of dispersion operates,...an area with distinctive characteristics which is only partly assimilated into the growing urban complex, which is still partly rural and where many of the residents live in the country but are not socially and economically of it"* (Adell 1999).

Bryant (1982) developed Pryor's definition and scheme (**Figure 2.2)**. He distinguished "inner fringe" in which the transition to urban uses is advanced, from an "outer fringe" where rural landscape features remain dominant. Bryant's model depicts characteristics of rural areas near an urban area which include: the rural-urban fringe or

urban fringe, the urban shadow and the rural hinterlands. Bryant detailed Pryor's urban fringe area as inner and outer fringe.

Urban fringe or Rural-urban fringe;

a) *Inner fringe* is characterized by land in the advanced stages of transition from rural-urban uses, land under construction.
b) *Outer fringe* is an area where although rural land uses dominate the landscape, the penetration of urban oriented elements is clear. (Often single family housing)

Urban shadow; an area where physical evidence of urban influences on the landscape is minimal but metropolitan influence emerges through the commuting patterns of part-time and hobby farmers and residents of small towns.

Rural hinterland: second homes/recreational uses, extensive agricultural uses and open space (Bryant et al. 1982).

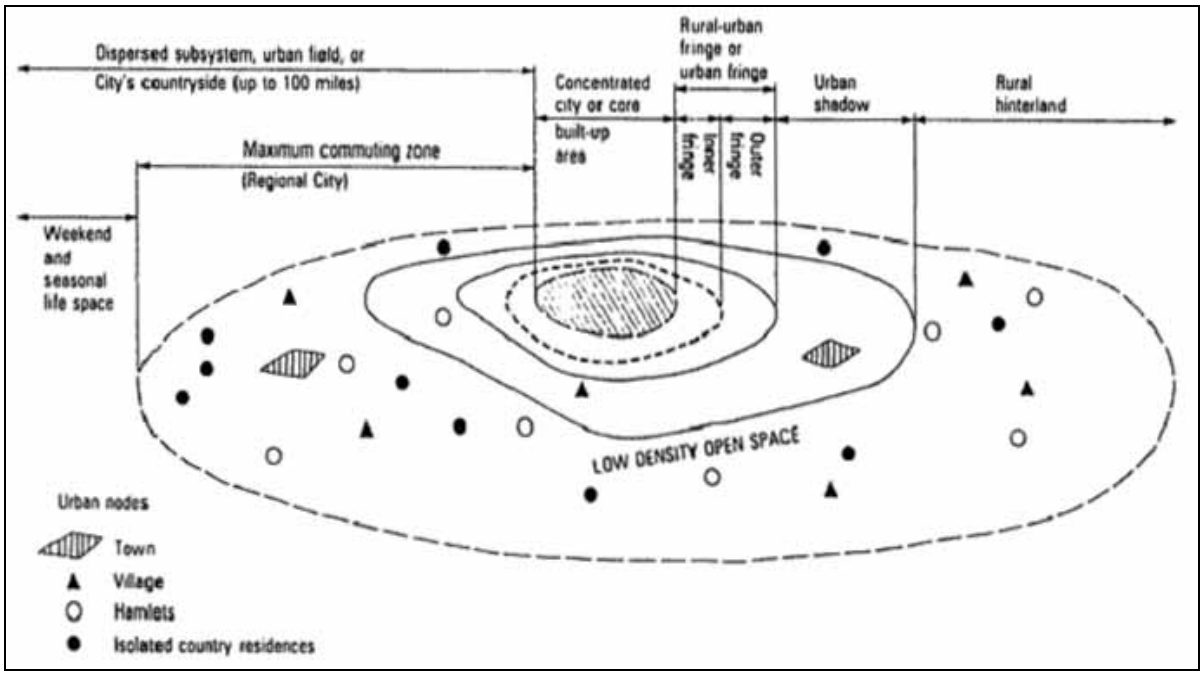

Figure 2.2 Rural-urban fringe scheme (source: Bryant-1991, p.12)

Another latest study realized by Daniels (1999) who tells about American experience. Daniels defined the rural-urban fringe area as "*a hybrid region no longer remote yet and with a lower density of population and development than a city… Strips of urban and suburban fabric have extended into the countryside, creating a ragged*

settlement pattern; those patterns blur the distinction between rural, urban and suburban" (Daniels 1999, p.9).

Patel (1980), Healey and Short (1983), Nelson and Dueker (1990), John Fraser Hart (1991) and lately Ponds and Yeates (1993) tried to describe the urban development at rural-urban fringe area and the transformation process created by this development **(Figure 2.3)**

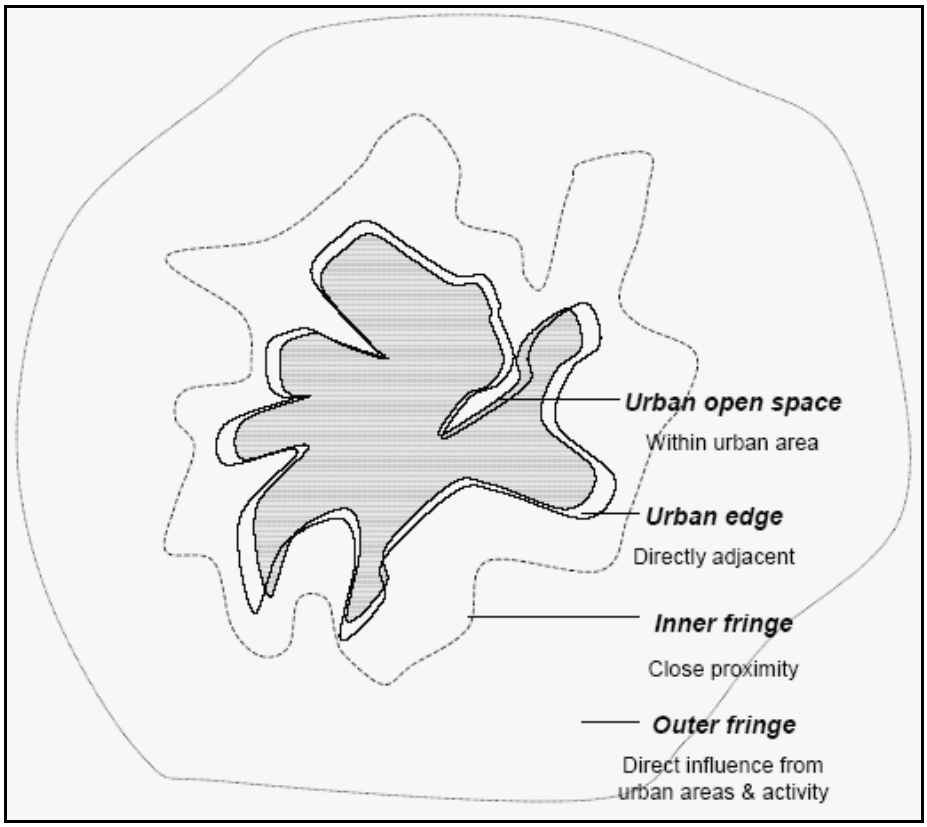

Figure 2.3 Urban Fringe Definitions, source: (Countryside Agency Research Programme 2002)

2.1.2. Characteristics of Urban Fringe Area

The difficulty in defining the rural-urban fringe compared to built-up urban areas and rural areas highlights the complexity of the fringe. How can the boundaries of this indefinite fact drawn? In England and in other European countries urban fringe can exist to 6-10 miles (10-16 km.) from the built-up area of the city, whereas in American cities it may reach to two or three times more of this level. Commuting time is another indicative in defining the limits of fringe area. According to this, urban fringe area indicates to 25 minutes or more commuting time (Daniels 1999). In Australia qualities

of fringe area can be listed as: "*Rural urban fringe - on the edge of a town with a lot size of 4000 sq. m to 2 hectares and which has the same types of facilities as the town (kerb and guttering, water, etc)"* (Sinclair 1999). In Canada, urban fringe area is described according to population: "*Urban fringe includes all small urban areas (with less than 10,000 populations)"* (Canada statistics, 2001). Besides these; land-uses, street patterns, housing density, employment levels, urban life quality, and administrative criteria are some of the indicators in describing rural-urban fringe boundaries.

In spite of all these indicators, there is no definite boundaries of fringe area administratively, regionally and land use pattern. It changes continuously accordingly with the structure of the city and country, with the growth of the city and with the hierarchical relations between the center and periphery (METU 1985). Schemes defining the boundaries of fringe area are idealizes, so mostly it never coincides with the existing development (Bryant et al. 1982). Therefore in this study, (in place of defining urban fringe area according to the boundaries in these idealized schemes) simply focusing on land outside the continuously built up metropolitan urban area and where rapid urban development exists will be examined. Criteria about the selection of study area will be mentioned in chapter V.

2.1.2.1 Land-use Characteristics of Urban Fringe Area

The border between urban and rural areas used to be considered as a clear-cut line in the landscape; clear-cut both in the physical and organizational sense. However, increasingly it is recognized that rural and urban features tend to coexist within cities and beyond their limits (Veenhuizen 2003). The urban fringe is an area characterized by a mixture of urban and rural features. As a result of the influence of the expanding city, the rural character of the fringe is replaced by a more urban profile in terms of land use, employment, income, and culture (Audirac 1999).

Urban fringe is often a discontinuous spatial phenomenon around most cities. "*The existence of a "fringe" at all is dependent upon pressures for growth and these are certainly not equal in all directions. Growth often follows major access routes or concentrates in areas with other features attractive for development*" (Bryant et al. 1982, p.14). The differing availability of land for urban uses results in a "leapfrogging"

of parcels creating a pattern of scattered residences. This type of development is described as “urban sprawl” and will be argued about in the other section.

General characteristics of urban fringe area are:

1. Conflicting land uses, (residential and non-residential)
2. Rapidly residential expansion, (new and more spacious housing)
3. The population is mobile and low or moderate density,
4. Speculative building and subdivision of land,
5. The provision of services and public utilities is incomplete,
6. Changing pattern of land occupancy,
7. Poor network of public transport,
8. Crop production is intensive (Adapted from Carter, Bryant, Daniels, and Audirac).

Housing area has an important place in the various land-uses which take places at urban fringe area. Besides housing, other land use types taking place in urban fringe area as follows:

- there are the activities that are excluded from the city, such as cemeteries, airports, unwanted industries,
- the activities that require plenty of space and therefore are situated on the periphery, like sport fields, parks or intensive agricultural activities (greenhouse) (Ottone 1998).

It is also important to examine the fringe zone in the perspective of evolution; space use in the urban fringe can be characterized as a continuously changing pattern where we observe a rapid residential expansion with low to average densities. One of the reasons that gain “fringe” a transitional characteristic is these land uses which withdraw from the city center and orient to rural areas. Old town houses and new housing areas, warehouses, shopping centers and agricultural areas all taking place close to each other, give this area distinctive character with its disjointed land use structure.

Sennett (1999) describes the closest points of these totally different land-uses as the most active and vivacious places (Sennett 1999). Urban fringe area is also very active and changeable where urban and rural land uses touch each other. Physical, social and economic transformation brings forth a conflict, also. Daniels (1999) mentions about this conflict as: “*urban/rural fringe is a land use battle ground, where developers, long-term landowners, land speculators, politicians and realtors are matched against*

other long-term landowners, politicians, environmentalists and newcomers…" (Daniels 1999).

Bryant who has done important research on rural-urban fringe indicates that "*the urban fringe is an arena in which a variety of forces and processes operate to influence the structure and dynamic of human activities*" (Bryant 1995). In urban fringe there are many complex forces affecting rural to urban conversion of land uses. Besides macro scale social, economic and political diagnosis, there are other meso and micro scale factors such as housing and land market, planning decisions, ownership patterns, land characteristics, infrastructure and transportation structure and roles of actors within this process (Kivell 1993). For example, the desires, benefits and policies about future of the private actors (developers, landowners, farmers, original residents, new settlers) and government actors (public institutions, government policy and planning regulations) that take place at urban fringe area direct the development (Bentinck 2000). Behavior of land owners who are having the same quality of land may differ. Land owner's control over his land may change according to his choice of living on his land, size of the land, whether the land is owned by one person or more, to its rentability. According to some other, developer, another actor during the process, is the starting point of the change. Developers who decide on buying the land, parcelation, construction of infrastructure and quality of houses directly affect the land-use decisions at urban fringe (Mangawang 2000).

2.1.2.2. Social-Economic Characteristics of Urban Fringe Area

Variations observed during the development of fringe area also reflect the socio-economic characteristics of the settlers. Because fringe areas of developed and developing countries show different development properties, socio-economic characteristics of the users and why and how they use this area may change. For example, while developing countries experiences indicate that mostly rural rooted people occupy this area, economic activities highly informal; in developed countries on the other hand users are mostly from upper and middle income groups. Different residential development types and characteristics at fringe area will be studied in detail in the next chapter.

Pahl (1965) tells about social characteristics at fringe area as:

- Segregation: the ability to pay for the new housing of the fringe results in a pattern of segregation to appear.
- Selective Immigration: the rural-urban fringe will attract in particular, the mobile, middle class commuters who tend to live and work indistinct and separate social and economic worlds from the established populations.
- Commuting: indicates the availability and cost of transport.
- The Collapse of Geographical and Social Hierarchies: With the population partly directed towards other parts of the city for specific services, the service content of fringe settlements becomes modified. They do not need to carry an array of goods and services adequate with the population they serve, but can become specialized in particular directions (Pahl 1965).

Some other indications about social characteristics at fringe area are as follows:

- High house ownership rate,
- Heterogeneous occupational structure,
- Heterogeneous socio-economic status,
- Conflicts between new and old residents.

In this area where social and economic characteristics are heterogeneous, the main motive is continuous and rapid change. Small farmers, informal settlers, industrial entrepreneurs and urban middle and upper class commuters may all coexist in the same territory but with different and often competing interests, practices and perceptions. Problems in the rural-urban fringe are most often characterized by a lack of 'urban' values, such as the lack of adequate infrastructure, services and regulations etc., or the disappearance of ‘rural’ values, like the high prices for the land, loss of fertile soil and social cohesion, etc. (Saxena 2003).

2.1.2.3. Challenges to the Urban Fringe: Current Trends and Perspectives

We need to know something about the current trends and perspectives to deepen our understanding of challenges to the metropolitan fringe. Current trends change the traditional urban pattern and replace it with another urban from. Kivell summarizes

these trends as: (1) the decline of manufacturing, (2) suburbanization and decentralization, (3) new economic activities and locations, (4) technological change, and (5) social/lifestyle trends (Kivell 1993).

There is a two way relationships of these current trends for the city in transition: on the one hand, land-use pattern and the built urban form, and the economic and social activities of the citizens on the other. The possible transitions may contain: (Kivell 1993)

From industrial	to post industrial
From material flows	to information flows
From modern	to postmodern
From mechanical	to electronic
From public welfare	to privatism
From compact suburban	to spread metropolitan
From mono-centric	to poly-centric

All of these transitions outlined above have larger impacts on the urban land use pattern as well as urban fringe. The cumulative effect of many of these changes, within the context of urban spread, has been to turn the economic life of the city inside out and to place increasing demands for land from a range of activities on the fringe. At the same time the whole notion of the city is becoming more fragmented and dispersed.

The dispersal of population, commerce and industry to the outer edges of cities is the most important development in western industrial societies in the last half of the 20th century. This process can be expressed in the context of "dissolution of urban structures" that highlights the dichotomy between "compact/dispersed", or "mono-centric/poly-centric" (Burdack 2002).

The classical monocentric and polycentric dichotomy represents different periods of urban form. Monocentric urban structure corresponds to the pre-1960's industrial era metropolis. It emphasizes accessibility to the CBD and the suburbs serve primarily a bedroom function. This was extensively documented in countless studies of suburbanization in 1960s and 70s. In these studies the development of periphery has been viewed from the perspective of inner city.

Polycentric urban structure represents the post-industrial or post-suburban metropolis rising significantly after 1980s. Polycentric urban structure allows the rise of the suburban centers and more complex structural and functional relationship among its

elements: Peoples, jobs, and many other activities have dispersed (Audirac 1999). People's perceptions of desirable locations have changed and the city has lost much of its prestige and urbanity. Rural-urban boundaries are increasingly blurred and the previous conception of urban fringe has begun to change: the growth of large-lot single family housing, shopping centers, and high-tech manufacturing and office buildings that located in good quality modern buildings in an attractively landscaped site. These significant changes throughout 1980s and 1990s have also influenced the direction of fringe studies. These studies concentrate on the newly developing structures on the fringe itself. Garreau's concept of "*edge cities*" (1991), Hart's (1991) agricultural intensity waves at the *perimetropolitan fringe*, Hartshorn and Muller's (1992) *suburban downtowns*, Fishman's (1987) *technoburbs*, or Scott's (1993,1996) *technopolises* express a rural-to-urban mutation time of 30 years (Audirac 1999). These geographers and urban and transportation historians combine a mixture of rural, urban, and suburban, light industrial and high-tech landscapes. They emphasize the importance of transportation and communications infrastructure in shaping postindustrial urban form.

Among the studies mentioned previously Joel Garreau's concept of "*edge city*" is the most significant that explains the experience of North American post-suburban metropolis **(Figure 2.4)**.

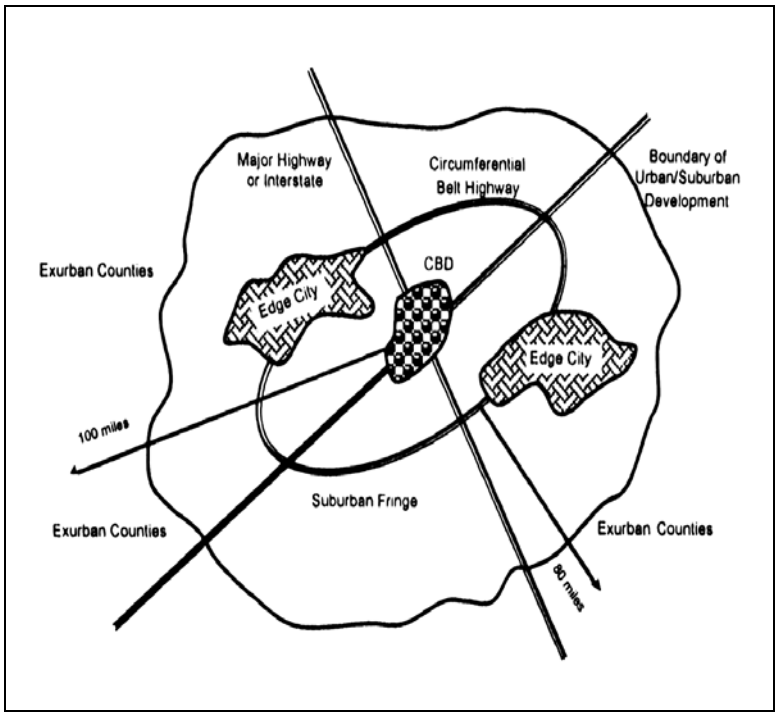

Figure 2.4 Edge city Scheme (Nelson and Dueker, 1993)

Garreau describes edge city as "*a fraction of lifetime still in progress. It is a psychological location - a state of mind - even more than a physical place…Edge City far beyond architecture and landscape. It is to the philosophical ground on which we are building our information age society*" (Friedrich and Klingele 1997). He sees edge cities as the biggest change in the way American's live and work for a century. The metropolitan area is growing not from the center but by spawning new edge cities on its fringes (Kivell 1993). As Garreau and others illustrated the process of dissolution of urban structures is most evident in America: "*During the 1980s and 1990s a new lexicon has emerged that attempts to capture contemporary forms of urbanisation: edge city, megalopolis, technoburbs, flexspace, peperoni-pizza cities, a city of realms, superburbia, disurb, perimeter cities, outer cities, technopolis, heteropolis, exopolis, and perimetropolitan bow waves*" (Adell 1999).

But this process of transformation has followed different paths in different contexts. For example, in Europe, large numbers of people live outside of major cities and retain distinctive cultures and lifestyles. Despite the major cities of Western Europe followed the similar economic and technological changes with their American counterparts some first reviews of European developments find that different results: For example, Rohr-Zenker (1996) considers unlikely that real edge cities will emerge in western Europe. Radical changes in settlement structure in Europe will be held back by the different cultural values associated with cities, the differences in planning systems and contrast in the form of political regulation (Burdack 2002). Examining the five case studies in major European centers (Berlin, Budapest, Madrid, Moscow, Paris) Burdack suggests that the fringe of European metropolitan areas are clearly depart from the development pattern of U.S. metropolitan area in general and metropolitan fringe in particular: "*The CBDs of all European cities studies remain the dominant centers of agglomeration. The American development of a declining city centre and a prospering periphery cannot be observed in the European cities studies*" (Burdack 2002).

With the impact of globalization, some third world cities have experienced substantial new industrial and commercial development in fringe areas with formation of new subcenters. Among the fringe studies of the third world cities, McGee's (1991) "desakota" model on rapidly developing Asian cities is important. McGee have challenged the conventional view accepting that the distinction between rural and urban would persist as the urbanization process advances: "*Distinctive areas of agricultural and non-agricultural activity are emerging adjacent to and between urban cores, which*

are a direct response to preexisting conditions, time-space collapse, economic change, technological developments, and labor force change occurring in a different manner and mix from the operation of these factors in the Western industrialized countries in the nineteenth and early twentieth centuries" (Adell 1999). He points out that if this trend continues, the largest Asian cities might even go beyond the familiar polycentric pattern into a cluster of strongly related city networks. "*As a result of these dynamics and as a consequence of the influx of new capital, two opposite and simultaneous trends have been observed in many third world cities: concentration and deconcentration, urbanization and exurbanization"* (Pizarro et al. 2003).

2.2. Urban Sprawl Phenomenon

Sprawl is a world-wide phenomenon. It is widely recognized by the popular motto of "*you know it when you see it…*" The phenomenon of "urban sprawl" has received extensive attention in the literature particularly since the 1980's. The term sprawl is frequently used to describe spread of urban land uses currently taking place at the metropolitan fringe. "Sprawl", like fringe, is a vague concept.

Urban sprawl is one name for many conditions. It has been attached to *patterns* of residential and nonresidential land use, the *process* of extending the reach of urbanized areas, the *causes* of particular practices of land use, and the *consequences* of those practices (Galster et al. 2000).

2.2.1. Defining Urban Sprawl

The dictionary defines sprawl as "to be stretched out in irregular or ungraceful movements" or "a straggling array of something" (Lioz 1999). Definition of "urban sprawl" on the other hand can become more varied in literature.

"*Tendency to discontinuity—large closely settled areas intermingled haphazardly with unused areas*" (Clawson 1962).

"*Sprawl … is composed of areas of essentially urban character located at the urban fringe but which are scattered or strung out, or surrounded by, or adjacent to undeveloped sites or agricultural uses*" (Harvey and Clark 1965).

"*The scattering of new development on isolated tracts, separated from other areas by vacant land*" (Ottensmann 1977).

"*Sprawl is a development pattern characterized by scattered, unplanned, low-density development that is not functionally related to adjacent land uses*" (Duncan et al. 1989)

"Continuous low density residential development on the metropolitan fringe, ribbon low density development along major suburban highways, and development that leapfrogs past undeveloped land to leave a patchwork of developed and undeveloped tracts" (Altshuler and Gomez-Ibanez 1993).

"*Sprawl is the spread-out, skipped-over development that characterizes the non-central city metropolitan areas and non-metropolitan areas of the United States*" (Ewing 1997).

A good portion of definitions for "sprawl" come from the popular press and activist groups concerned with environmental issues. Some of notes are from the Sierra Club and the Vermont Forum on Sprawl:

"*Sprawl is low-density development beyond the edge of service and employment, which separates where people live from where they shop, work, recreate, and educate - thus requiring cars to move between zones*" (Sierra Club 1998).

"*Sprawl is dispersed development outside of compact urban and village centers along highways and in rural countryside*" (Vermont_Forum 1999).

The above definitions have some similarities and on the other hand there are significant differences between them. Some of the similarities, noted by Ewing, are scattered development, the similar leapfrog development, low-density development and finally the least discussed of the common identities of sprawl is the aesthetically challenged strip mall development. The generic definition of the English language term sprawl is "to spread out in a straggling or disordered fashion" giving the term it's negative connotation which is very intentional. While "undesirable" land use patterns generally sum up most definitions, some have equated sprawl to natural expansions of the city and others to "haphazard" or unplanned growth. Most other literature refers to sprawl without actually defining it (Bolioli 2001).

"*Given that there is no agreed definition, it is not surprising that there is also little agreement on the characteristics, causes and impacts of sprawl. It is agreed that sprawl occurs on the urban fringe in rapidly growing areas but apart from this there is little consensus*" (Chin 2002).

2.2.2. Characteristics of Urban Sprawl

Urban sprawl is an inherently dynamic spatial phenomenon. A number of recent studies have attempted to develop a means of characterizing sprawl by measuring particular spatial characteristics associated to sprawl and comparing between metropolitan areas (Galster, Hanson, Wolman, Coleman & Freihage, 2001; El Nasser & Overberg, 2001; Ewing, Pendall, & Chen, 2002). An analysis of sprawl in the social science and planning literature suggests that characteristics of sprawl can be grouped into five general categories (Galster et al. 2000).

Firstly, sprawl is characterized as an aesthetic judgment about a general urban development pattern. It is evident that in low-density residential and nonresidential growth that spreads out from established urban areas, converting woodlands, wetlands, agricultural lands and other natural habitat to urbanized uses. Development of this type typically includes subdivision-style residential development (single-family house) and nonresidential development (shopping centers, office and industrial parks, entertainment centers, discount stores etc.). In many cases, the new growth is actually a migration of residents and jobs from urban areas to metropolitan fringe areas (Burchell and Shad 1998). Urban sprawl development pattern is characterized as follows;

- Unnecessary land consumption,
- Fragmented open space,
- Low average densities in comparison with older centers,
- Separation of uses into distinct areas,
- Lack of public spaces and services (Vermont_Forum 1999).

Secondly, sprawl is a cause of an externality, such as high automobile dependence, the job-housing spatial mismatch, or loss of environmental qualities.

- Increase in auto dependency, fuel consumption, and air pollution
- Increased commuting times and costs
- Reduced opportunity for public transportation services
- Loss of productive farmland and wildlife habitat
- Decline in water quality from increased urban runoff, shoreline development and loss of wetlands.
- Decline in vitality (economic and fiscal) of existing urban and village centers (Sierra Club 1998).

Thirdly, sprawl is the consequence or effect of some independent variable, such as fragmented local government, "poor" planning, or exclusionary zoning.

Fourthly, sprawl is characterized as one or more existing patterns of development. Sprawl development which is positioned against the self sufficient compact city consists of three basic spatial forms:

1. Low-density sprawl is the consumptive use of land for urban purposes along the margins of existing metropolitan areas. This type of sprawl is supported by piecemeal extensions of basic urban infrastructure such as water, sewer and roads.
2. Ribbon sprawl is development that follows major transportation corridors outward from the urban cores. Lands adjacent the corridors are developed, but those without direct access remain in rural uses/covers. Over the time these nearby lands maybe converted to urban uses as land values increase and infrastructure is extended from the major roads and lines.
3. Scattered or Leapfrog development is a discontinuous pattern of urbanization parches of developed lands that are widely separated from each other and from the boundaries of recognized urbanized areas. This form of development is the most costly with respect to providing urban services such as water and sewerage

Other development patterns frequently characterized as sprawl include large lot single-family residential *(Popenoe 1979)*, radial discontinuity *(Mills 1980)*, single land use or physical separation of land uses *(Cervero 1991; Burchell et al., 1998)*, widespread commercial development *(Downs 1998)*; strip commercial *(Black 1996; Burchell et al. 1998)*, and non-compact *(Gordon and Richardson 1997)* (Galster et al. 2000).

Finally, sprawl is characterized as a process of development that occurs over some period of time as an urban area expands. Some observers suggest that sprawl represents a stage in the development process (Harvey and Clark 1965; Ewing 1997) rather than a static condition.

As in the definition of sprawl, there are different view points and arguments in its description. For instance many definitions of urban sprawl use the concept of low density to identify sprawl, however, this is neither quantified nor explained adequately. What is considered low density is relative and varies with each country's cultural prospects. In the north America low density development of two to four houses per acre

while in the England low density would not consist of less than eight to twelve houses per acre (Chin 2002).

2.2.2.1. Driving Forces for Urban Sprawl

As a process, sprawl is based fundamentally on land development, converting agricultural or vacant land to other uses, often residential. Even though low land prices at urban fringe area may be effective in their transformation. It is possible to summarize the orienting powers affecting the development of sprawling as below. However, sprawl development, depends on the characteristics of the city and country.

1. Urban growth

Urban growth has pushed cities further and further out. While rural people moved into urban areas, the dense populations of central cities emptied out into the surrounding countryside. Moreover growing population and changing household characteristics have influenced on demand for land. *The compact urban areas have increasingly been replaced by unending miles of malls, office parks and houses on larger and larger lots* (Glaeser and Kahn 2003). At first, people continued to work in cities but lived in sprawling suburbs. But the jobs followed the people and now metropolitan areas are characterized by decentralized homes and decentralized jobs.

2. Increased Mobility, Transportation and Technology

Increased mobility of populations in last three decades is recognized as an important factor for sprawling development occurring at the urban fringe. The most significant component has been increased the car ownership which has changed the household's range of locational choice for a residence. Public investment in roads and associated infrastructure have played significant role in relation to the urban sprawl (Heimlich and Anderson 2001).

The other driving force is information and communication technology. Technology is changing very rapidly and it has an impact upon almost every aspect of urban life. New information and communication technologies (such as internet, local and wide-area networks, fiber optics, portable computers and so on) are indirectly reshaping today cities. Changing patterns of employment and manufacturing process,

changing fortunes for urban locations and changing land use demands are associated with new information and communications technologies (Kivell 1993).

3. Economic Development

The traditional role of the city, as the centre of the economic activity, has been challenged both by the changing locational preferences shown by established activities and by the emergence of new economic activities with new land use and locational requirements (Kivell 1993). New Economy or high-technology company's developments have grown up on spacious sites around small towns, university campuses and urban fringes in the newly favored locations.

4. Consumer Demand

Rather than economic factors, it is much more difficult to define the social factors and understand their effects on land-use pattern, because, these are personal and eclectic. Choices of every actor playing role in the transformation of land use at urban fringe area affect the development as mentioned before. For instance, the developments of housing areas which are the main issues in the development of sprawl are closely related with the households' choices and demand. Demands on housing environment in secure and natural amenities, with low density, larger houses increase and this is closely related with increase in income and changes in life style.

5. Public Policy

The regulatory and policy framework, including land-use planning, transportation policy, development control, fiscal policy, and the policies followed by various national or local government on location of their services (such as housing, health and education). Sprawl development and planning policy practice is mentioned on the next section.

2.2.2.2. Impacts of Urban Sprawl

The costs and negative externalities of urban sprawl have been widely studied and documented for long time (Duncan et al., 1989; Frank, 1989; Kunstler, 1993; Burchell et al., 1998; Kahn, 2000; Freeman, 2001). More recently, sprawl has been studied within the general context of "growth management" and "sustainable development". Authors in these fields draw attention to the negative impact of sprawl:

the interruption of farm activities by urban-type development; the destruction of ecosystems; noise and air pollution, car dependency and depletion of energy resources, the absence of a public space and social disintegration. In sum, the general assertion of this literature is that sprawl has a cost (Hasse and Lathrop 2003).

Others have pointed out the benefits incurred from sprawl-style development (Gordon & Richardson, 1997; Carliner, 1999; Easterbrook, 1999). Especially Gordon and Richardson look at several costs of sprawl. They do not attempt to claim that these costs are non existent or are not caused by urban sprawl. For instance, "*Gordon and Richardson agree that low density development makes public transit unfeasible, however, they also claim that ridership is in decline despite increases in public subsidies and that more compact development in the form of New Urbanist neighborhoods does not make a difference in transit use"* (Chin 2002).

Confusion in the definition and characteristics of sprawl is also seen in their effects and their measurement. Positive and negative effects created by the development of sprawl are not totally agreed upon (**Table 2.1**).

Table 2.1 Impacts of Urban Sprawl Development
(Based on Nancy Chin, 2002 and Transportation Research Board, 1998)

Substantive Concern	Negative Impact	Positive Impact
Economic Costs	Higher infrastructure costs under sprawl than compact development Higher public operating costs More expensive private residential and non-residential development costs More adverse public fiscal impacts	Lower public operating costs Less expensive private residential and non-residential development Fosters efficient infill development
Transportation and Travel Costs	More vehicle miles traveled Longer travel times More automobile trips Higher household transportation spending Less cost efficient and effective transit Higher social costs of travel	Shorter commuting times Less congestion Lower governmental costs for transportation Automobile most efficient mode of transportation
Environmental Costs	Loss of agricultural land Reduced farmland productivity Reduced farmland viability(Water Constraints) Loss of fragile environmental lands Reduced regional open space	Enhanced personal and public open space

Quality of Life	Aesthetically displeasing Weakened sense of community Greater stress Higher energy consumption More air pollution Lessened historic preservation	Preference for low-density living Lower crime rates Enhanced value or reduced costs of public and private goods Fosters greater economic well being
Social Issues	Fosters suburban exclusion Fosters spatial mismatch Fosters residential segregation Worsens fiscal stress Worsens inner city deterioration	Fosters localized land use decisions Enhanced municipal diversity and choice

2.2.2.3. Planning Policies about Urban Sprawl

Urban sprawl has been frequently viewed as a source of the problems, which arise from unplanned, scattered and piecemeal residential and commercial development. Conflicting land uses, pressures on agricultural and open space, high costs of service provision, adverse consequences on traffic and public transport, and social disparities are among the more noticeable problems. Municipal fragmentation frequently associated with urban sprawl is likely to intensify these problems (Razin 1998).

Development at urban fringe area differs from country to country and from developing countries to developed countries. These different urban developments at fringe area, is reflected on the development policies. So, North America, Canada, Australia, England, Europe and other developing countries are in search of producing policies about decreasing the congeniality of urban sprawl. However, the complex structure of urban sprawl decreases the effects of urban planners and politicians to direct the urban development.

America is one of the countries trying to produce policies and alternative development types in fighting the sprawl. In this context some alternative proposals are formed in place of sprawl development.

- *New Urbanism:* New Urbanism has founded in the middle of 1980's by architects and planners in California and Florida. (Andres Duany and Elizabeth Plater-Zyberk) "*They believe these strategies are the best way to reduce how long people spend in traffic, to increase the supply of affordable housing, and to rein in urban sprawl"* (source: http://www.cnu.org). The New Urbanism attempts to revive the features that make pre-World War II towns. Principles of New Urbanism consist of walkability, connectivity,

mixed-use & diversity, mixed housing, increased density, smart transportation, sustainability, quality of life.

- *Transit-oriented development*: Transit-oriented development is occurred new urbanism trend and defined as walkable, livable, mixed-use communities built around transit stops in feasible locations in both urban and suburban areas.
- *Smart Growth:* Smart growth is usually defined by advocates as the antithesis of sprawl. Smart growth is growth that helps to achieve these six goals: Neighborhood livability, better access, less traffic, preserving open space, lower costs and lower taxes.
- *Urban growth boundaries*: Urban growth boundaries have been defined by Stoel as "*a line drawn around a city at a distance sufficient to accommodate expected urban growth. Beyond the boundary, urban development is prohibited*" (Kurtz 1999). The urban growth boundary (UGB) marks the separation between rural and urbanized land. They are intended to promote the efficient of public facilities and services, and preserve prime farm and forest lands outside the boundaries.

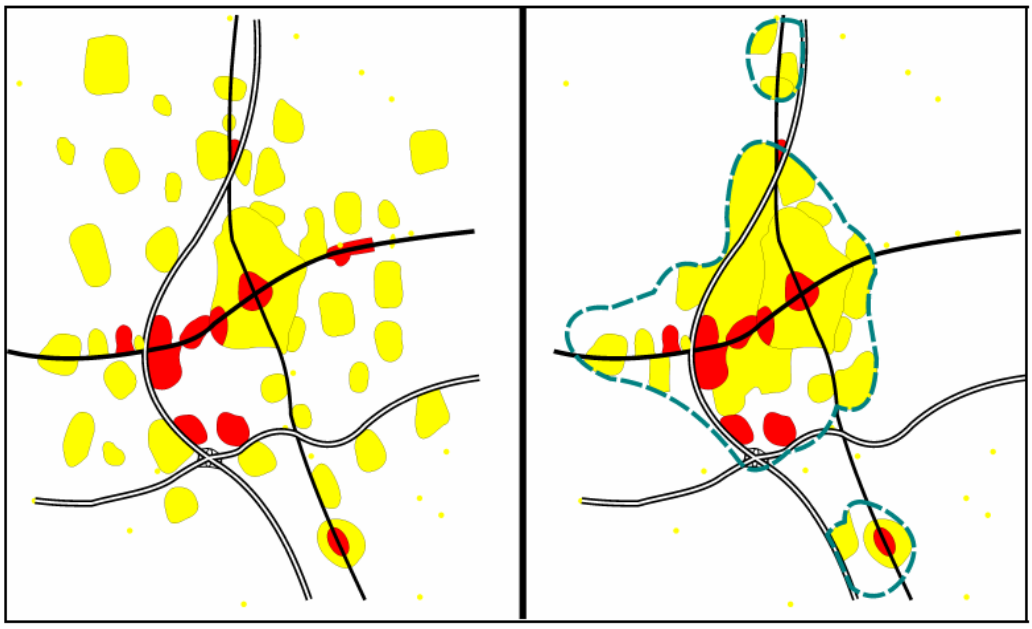

Figure 2.5 Sprawl Development Pattern

The question of the relationship between different patterns of urban sprawl and environmental or social costs is inquired, especially in North America context, but it is now becoming an important issue in urban research also in Europe (Camagni et al. 2002). One of the most important tools in struggle with the sprawl in Europe is sustainable development (Johnson 2001). The recent development of urban policies at European Union (EU) level so far shows a heavy emphasis on urban environment. In October 1998 the European Commission adopted the Communication Sustainable Urban Development in the European Union: a framework for action setting out objectives for urban areas and a range of existing and proposed actions to address these issues. The Communication represents progress towards a more strategic and integrated approach to urban issues at European level. The framework for action summarizes the main challenges for sustainable land use:

> "*The extension of built-up areas… linked to the decentralisation of employment, retail and leisure centres as well as to patterns of consumption and to changes in residential preferences, reduces the environmental worth of large areas of land for an indefinite period. Loss of green space both within and around urban areas threatens biodiversity as well as the quality of life of citizens. Many European cities contain extensive areas of derelict and contaminated land (brownfield sites), the legacy of industrial restructuring. Urban sprawl reinforces the need to travel and increases dependence upon private motorised transport, leading in turn to increased traffic congestion, energy consumption and polluting emissions including noise. These problems are most acute in urban areas where residential densities are low and where day-to-day activities (home, work, shopping) are widely separated*." (Expert Group On The Urban Enviroment 2001).

Through the framework for action the Commission has put in place a set of policy objectives for urban sustainability in Europe, including several related to land use. The objectives for the urban environment support an overall policy aim to reduce the total environmental impact of urban activities:

- *Promote resource-efficient settlement patterns that minimize land take and urban sprawl;* (Controlling the urban sprawl; limiting trends towards suburbanisation by increasing the supply of building land in towns and cities, activation of gap sites and use of space-saving building methods, developing building land near transport nodes, promoting inner urban development, raising the quality of living and housing conditions in urban areas, which includes the conservation of

existing ecosystems and the creation of new green areas and biotopes.) (Grant et al. 1996).

- *Protect and improve the built environment and cultural heritage, and promote biodiversity and green space within urban areas.* (The first objective in this context is promoting a more balanced settlement structure, with the aim of preventing further polarisation and concentration in metropolitan areas. Rehabilitation of "brownfields" should be supported by public policies in order to limit new "greenfields" developments.) (Johnson 2001).

In decreasing sprawl, clustered development, transferable development rights, regional coordination, planning/zoning changes and taxation are the other planning policies. In developing countries, there are some other applications such as land tenur, land use, infrastructure and institutional studies in decreasing the urban sprawl.

2.3. Summary

The spreading of population, commerce and industry to the outer edges of the cities is the most important development in the second half of the 20th century. One of two concepts related with the urban sprawling process is "fringe" and the other is "sprawl". Definitions and studies about these concepts made us to perceive different sides and characteristics of them. The terms such as "physical boundaries", "physical features", "socio-economic properties", and "urban development pattern" about urban fringe area are considered. General characteristics based on these definitions can be grouped under four main groups:

Firstly, the urban fringe is an area characterized by a mixture of urban and rural features. As a result of the influence of the expanding city, the rural character of the fringe is replaced by a more urban profile in terms of land use, employment, income, and culture.

Secondly, urban fringe area is a transition region. In other words, urban fringe area is a place where urban, suburban and rural characteristics may be observed at the same time. Old town houses, new and more spacious housing areas, warehouses, shopping centers and agricultural areas are all taking place close to each other.

Thirdly, besides macro scale social, economic and political diagnosis, there are meso and micro scale factors such as housing and land market, planning decisions,

ownership patterns, land characteristics, infrastructure and transportation structure and roles of actors within urban development process in urban fringe area.

Lastly, urban fringe area contains heterogeneous social and economic characteristics. Small farmers, informal settlers, industrial entrepreneurs and urban middle and upper class commuters may all coexist in the same territory but with different and often competing interests, practices and perceptions.

In this study, the area just at the boundaries of metropolitan city where land use transformation and urban expansion observed will be examined. Also, the terms "metropolitan fringe", "periphery" and "urban fringe" will be used more or less interchangeably with each other.

"Urban Sprawl", on the other hand, indicates to the type and structure of urban development (residential and nonresidential) at the urban fringe area. Urban sprawl development pattern is usually characterized as an aesthetic judgment about a general urban development pattern. Unnecessary land consumption, fragmented open space, the absence of a public space and social disintegration, car dependency and depletion of energy resources, loss of productive farmland and wildlife habitat are all related with the growth of urban sprawl. Municipal fragmentation, "poor" planning, or exclusionary zoning frequently associated with urban sprawl is likely to increase these problems.

The aim of this study, as aforementioned, is to understand the spatial development process of single family housing development that develop at the fringe area of the metropolitan city of Izmir and the reasons shaping this process. The literature survey about the characteristics of urban fringe and urban sprawl is important in giving clues about our case study area. **Figure 2.6** taking place below is formed as the implications from the theoretical part of the study. This conceptual figure describes the driving forces orienting the urban development at the urban fringe area and possible impacts of urban development process. Besides, the meso and micro indicators shaping the urban development process are also grouped in this figure (characteristics of land, accessibility factor, characteristics of landowners etc.). At the end, a very large and comprehensive framework formed describing the dimensions of urban development at the urban fringe area. In this study, the figure's sections of "planning process" and users' preferences" are examined and the development of single family housing estates is discussed in terms of these dimensions (**Figure 2.6**).

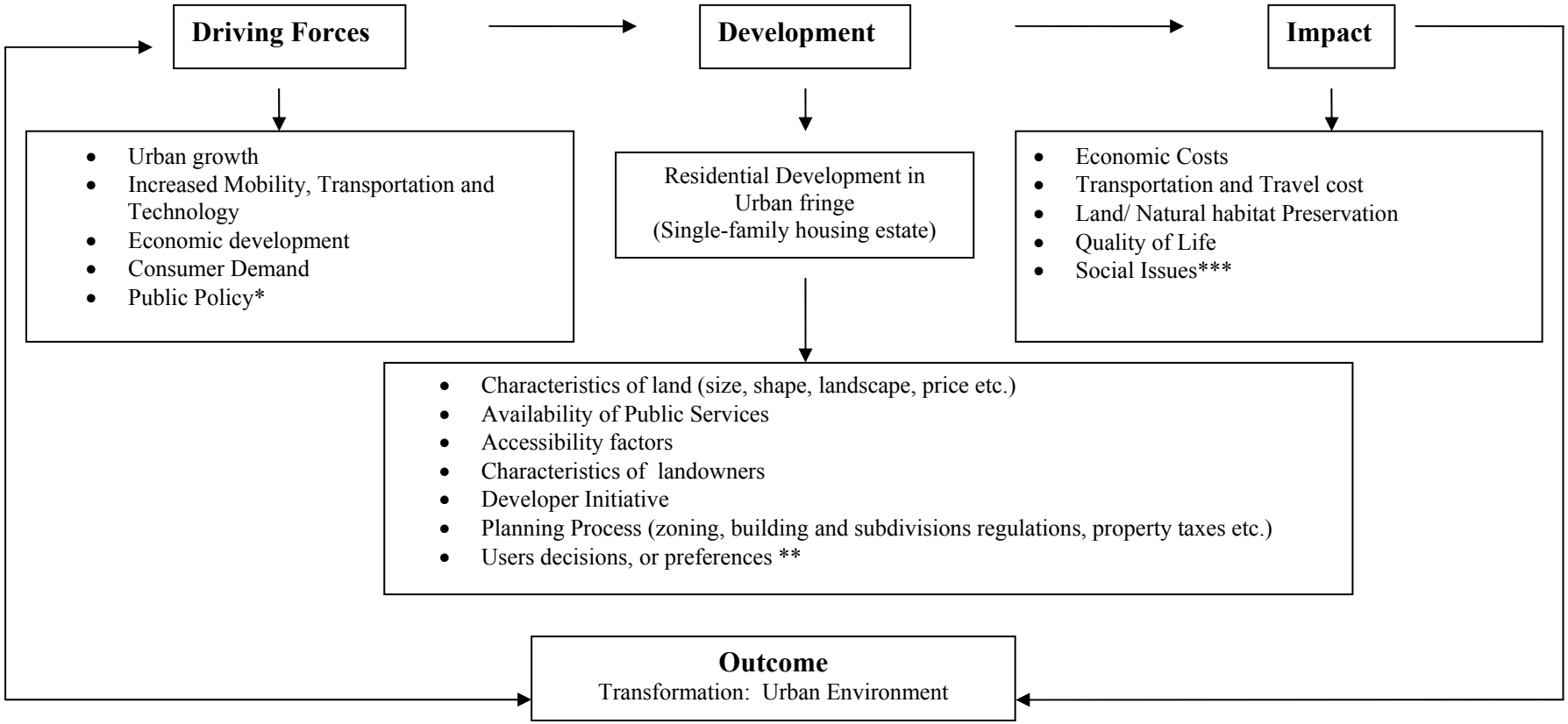

Figure 2.6 Residential Development Process in Urban fringe (single family housing estate)

* Driving Forces adapted from Bryant et al, 1982; Kivell, 1993; Bolioli 2001; Glaeser et al., 2003; Ralph et al., 2001
** Development adapted from Lee, 1979; Bryant et al, 1982; Kivell, 1993; Daniels, 1999; Audirac, 1999
*** Impact: Based on Nancy Chin, 2002; Transportation Research Board, 1998

We have mentioned that residential developments at the urban fringe area indicate variety and differentiate from country to country and even among different cities. In order to be able to understand the housing estates evolving as a new trend at the periphery of the metropolitan cities in Turkey, firstly, we have to examine the residential developments at the urban fringe from the historical perspective. Therefore, in the next section, the transformation of urban fringe area, from the perspective of housing developments will be studied. Therefore, the changes and new trends seen in housing developments and housing supply types will be understood better.

CHAPTER III
RESIDENTIAL DEVELOPMENT DYNAMICS IN URBAN FRINGE AREAS

Request for living beyond the city center limits goes as back as the 5th century B.C. Development of housing areas at the fringe of the cities where secondary houses were seen at the beginning can be seen as the characteristics of industrial revolution (Ozbek 1994). Transformations created by industrial revolution influenced global social structure. One of the results of this transformation is population boom and this changed cities demographically and socially. In this chapter, how urban fringe area changed after industrial revolution will be studied from the viewpoint of housing development and usage. However, because it is impossible to distinguish the transformation of urban fringe area from the development of the city, these processes will be studied together. Because the worldwide development of urban pattern involves differentiations it is aimed that this subject will be studied from two macro perspectives as developed and developing countries. Therefore, increasing housing areas at the fringe in Turkey will be understood better.

3.1. Residential Developments in Developed Countries

Before industrial revolution, there was no distinctive separation of land uses between work space and living space in medieval European cities. City center involved commercial, production and housing functions. Although different social groups took place together, there was also a hierarchy in residential areas. Robert Fishman tells that in pre-modern western cities the closeness to the center reflects the economic and social position of people (Fishman 1997). In other words, people gets stronger economically and socially as they get closer to the city center. Until the industrial revolution, urban fringe was seen as the place of unwanted groups and had a negative effect.

Industrial revolution at the end of 18th century caused many changes in the social and physical structures of settlements, especially in England. This change resulted from the transformation of traditional works caused by the economic and technological developments of the era. Steam machine, mechanical weaving and railroads and other new methods did not only affect the production dimensions but also caused them to gather in certain centers (Dostoglu 2001). As a result, dense population groups

immigrated to large cities where production facilities are seen and, so, cities which are the attractive centers of industrial capitalism and modern life reached to enormous size. Economic development also caused segregation socially and spatially, among citizens. At the beginning of the 19th century middle and high income groups settled in qualified neighborhoods while most of the population lived in overcrowded buildings without any sanitary conditions. At this period of time dirt, poverty and epidemic diseases reached to the point of putting the cities in a dangerous situation.

Incredible increase in the population of cities also increased the need for houses and for urban land. As a result, Western European cities, with the help of new transportation systems began to grow to outer skirts of the cities. The rapid decline in quality of inner city caused the upper and middle income groups to leave inner city dwellings, to create new living environment in the countryside. The first suburban development locations were not so far from city center and public transport routes. In twentieth century, development of private car-ownership and highway made a drastic change in the process of urban growth and extended the urban fringe up to hundred kilometers from city center (Benevolo 1980).

Early industrialization and modernity as it is very well known, firstly, was influential at Western Europe, England and USA. Even though economic similarities are seen, 18th and 19th century urban development and tradition differentiated at these parts of world. In terms of residential development, in continental European cities, prosperous groups stayed at the core while the poorest segments of the population moved into the peripheral shantytowns. But Anglo-American cities followed a different pattern and favored affluent suburbanization. Therefore American upper and middle classes moved into the peripheral land and the working class in the inner city, around the central business district (Fishman 1997). Thus, suburban areas developed as a reaction to industrial city, also, changed the demands and perceptions to the urban fringe area. Not surprisingly, possible answers to solve the problems of rapidly growing and complicating modern cities are not limited with suburbs only. It comprises, Haussmann's re-building city of Paris in 1860's, Ebenezer Howard's "garden city" projects (1898), Wrights Broadacre projects (1935) and high scale urban renewal projects of 1950's and 1960's (Holton 1999).

Suburban developments that created important changes in urban development and form also caused diversification and pace of housing developments in urban fringe areas. Therefore, it is aimed to study this development process under three topics

historically. So it will be possible to perceive this diversification and describe the situation of today.

3.1.1. Suburban Development and Early Suburbs

"Suburbia" is an ever changing and developing phenomenon. Many researches about the changing parts and today's characteristics of suburbs are done. Relations with city center, densities, commuting pattern, building shapes and life styles of suburbia always are included in the urban researches and arguments.

"Suburb" is used either as the name for residential settlements or as a general term to define the developments outside the city. There are five characteristics of suburbs that are agreed upon:

1. Peripherial location in relation to a dominant urban centre,
2. A partly (or wholly) residential character,
3. Low densities, often associated with decentralized patterns of settlement and high levels of owner-occupation,
4. A distinctive culture or way of life.
5. Separate community identities, often embodied in local governments (Harris and Larkham 1999).

One of the basic figures under the concept of suburbia is the development of rapid transportation technologies. Residential suburban areas are closely connected to the cities in terms of laborforce and social facility, therefore commuting time gains importance. Robert Fishman tells about this situation in his article "Bourgeois Utopias: Visions of Suburbia" as:

> "*a suburb is a community that lies apart from the city but is adjacent to and dependent upon it; both economically for the jobs that supports its residents and culturally for major institutions of urban life; professional offices, department stores and other specialized shops, hospitals, theaters and the like*" (Fishman 1997).

Suburbia characterizes dual structure between urban and rural contexts. In other words, with its settlement pattern, spatial organization, density and scale, it expresses an in-between situation between city and countryside. This in-between situation abandoned being an exception through time, and became one of the basic standards of 20th century modern world. This approach presented a very loose spatial pattern that spread over

nature (Bilgin 2002). This "escape to the nature" idea also forms one of the roots of "garden city" concept proposed by Ebenezer Howard. His idea of urban-rural combination which contains the most positive characteristics of cities and rural areas is one of the most important urban theories of 20th century. Basic forms of this theory are gardens, farms and small towns referring to rural areas. Later self sufficient garden city idea was abandoned and a new theory of garden city emerged called as dormitory settlements included under a satellite-city title. This settlement pattern is especially a preference of Anglo-American world (Bilgin 2002).

Levis Mumford (1961) distinguishes the early move towards suburban areas through "*impulse to escape from the industrial environment*" (Mumford 1961). For him, the romantic movement of upper classes towards the fringe area of the city in the 18th century was mainly a flight from the smoky, unhealthy and overcrowded town. "Hygienic superiority of the suburb" with its better air, healthier and less noisy environment offered a better milieu for family life, but of course only for those who could afford it. Mumford takes attention to another point of suburban areas, which is segregation.* He emphasizes that this social and spatial segregation has both positive and negative facts. It is positive because they are far from the pollution and chaos of cities. And negative because being away from the city means being away from the cultural and intellectual activities (Mumford 1961).

Advance in transportation system, widespread usage of highways and railroads, increase in car production and decrease in the prices caused suburban areas discovered by middle income groups. In Australia and North America, for example, it is evident that numerous working-class suburbs existed in the nineteenth and early twentieth centuries. *Especially in the United States by the beginning of the twentieth century a suburb was a socially-desirable residential area, one which had developed at a relatively low density at the urban fringe* (Harris and Larkham 1999).

Besides transportation technologies, other factors also played role in the settlement of working and middle classes at the suburbs. Empty and low-priced lands surrounding metropolitan areas made developers invest on that area. Low prices of land also decreased house costs. Increase in the income levels of middle income groups and decrease in working hours accelerated the attention to suburbia. Suburban settlements in

* Especially in America, the new suburban settlements became solely WASP (white, Anglo-Saxon, protestant) residential areas with the exclusion of the poor, the working class and the non-whites from the suburbs.

a natural setting instead of metropolitan city center, detached houses with gardens instead of high density housing areas and desire for owning a house instead of renting it, spread among middle classes as a new life-style (Harris and Larkham 1999). Consequently, it has been occurred a total transformation of urban values with the emergence of the low-density suburban houses and the meaning of core and periphery got reversed together with the strict separation of work and domestic life.

3.1.2. Postwar Development in Metropolitan Fringe

Suburban settlements that developed as an answer to the negative facts of industrial cities fastly surrounded metropolitan fringe area like mushrooms and caused some unpredictable negativeness. Two important results of this extreme demand to suburban areas emerged later. One of them is the physical and social corruption of abandoned metropolitan city and the second is the unconscious planning and over-growth of suburban areas. Housing areas formed by investors for high profits, constitute of similar houses scattered on rural land without any urban pattern comprehension. Low density monotonous and similar geometric forms, absence of a center and social facilities make these kinds of settlements rather boring. Mumford criticizes 20th century mass suburbanization phenomenon and defines it as "*a uniform, unidentifiable houses, lined up inflexibly, at uniform distances, on uniform roads…Inhabited by people of the same class, the same income, the same age group...*" (Mumford 1961). He also points out automobile-dominated lifestyles, automobile-sensitive planning activities and ineffective municipal control for suburban overcrowding which destroyed the original suburban assets such as face-to-face relations and neighborhood associations.

During post World War II period, new resolutions were tried to be found that can diminish the negative effects of suburban developments. Thus, in the planning approaches after 1945's a preference to constitute a new spatial form for suburban areas that turned into a dormitory and into an identity producing different housing areas is seen. Commercial and industrial activities that were excluded before became the basic elements of the late 20th century suburban areas. This, according to Fishman, is the end of traditional suburbs and formation of a new decentralized city form. He gives poly-nucleic, non-centralized city of Los-Angeles as an example of a suburban collage (Fishman 1997). "New Town" approach that emerged in England during this period contains different house sizes and types (garden types, row houses, and apartment

blocks) in order to mixture different social classes, business and other central facilities (Ward 1992). With new town approach that spread over other European countries, many new towns were established from 1940's to 1970's. In new towns the faults that were done in suburban areas during pre-war period were tried to be eliminated and it was aimed to constitute social integration and to empower neighborhood relations. Garden houses, row houses and apartment blocks with different sizes and standards were planned together. So, apartment buildings were added to single family houses which were popular during pre-war period.

At the same period, in North America, demands on houses were too much as the result of post-war demographic changes (marriage and baby boom). The most efficient way to solve this problem was to build houses on the empty and cheap lands at the urban fringe area. Construction companies and federal governments' policies and also low interested housing credits increased the attention to these new housing areas at the urban fringe. Transportation systems played an important role in this situation, also. Development of communication technologies, construction of new highways, and shortened commuting time caused housing areas grow and spread over. Consequently, the automobile and the suburb have together created "an American drive-in culture" with icons such as the interstate highway, the garage, the motel, the drive-in theater, the gasoline service station and the shopping center (Fishman 1992). Mumford in his classical work '*Culture of Cities*' tells about decentralization of cities at that period as, "the whole region becomes open for settlement" (Mumford 1938).

The basic differences between the United States and Britain in terms of urban expansion in the postwar era are the scarcity of peripheral land for residential developments, and the severe planning controls of British authorities to inhibit the amorphous suburban expansion and to protect farming land. Unlike the rapid and limitless expansion of American cities, suburbanization is restrained in Britain through land use planning controls administered by central governments. A famous example of these attempts to contain peripheral growth of the cities is the Green Belt restriction of the "Town and Country Planning Act" of 1947. Another difference between the United States and Britain in terms of suburban expansion is observed in the movement of retail activities to the periphery. While suburban shopping centers were highly popular in the United States, more strict suburban planning controls and less general car ownership inhibited the suburbanization of shopping activities in Britain (Danış 2001).

3.1.3. Changing Metropolitan Fringe after 1980s

After 1980, metropolitan cities gained a central role in direction and control of capitals, humans and knowledge flow. Metropolitan cities, as a response to this development and growth, are transformed to a fragmented urban structure where high specialization and spatial segregation is observed. Communication and transportation technologies helping to form a metropolitan integration in modernist paradigm, turned into a mediator of separation and division for "post-metropol". Privatization of infrastructure services caused inequality in their distribution, communication technologies diminished distances and highway oriented transportation systems decentralized industrial and commercial activities and made a ground for suburbs and edge-cities. In post-modern North America metropolis, movement of housing, industrial and commercial developments to the outer skirts of cities slid to rural new settlements where loose legal control is seen and functionally, separated from urban center. In this system development of rural settlements that take place around powerful transportation systems gained speed and structurally changed (Fishman 1997). So, a new phase of spatial disintegration began to be seen which started with modernity and this new phase is "post-urban era". This era explains a period when urban rural continuity does not spatially carry much importance but on the other hand forms its own spatial forms and time scale (Paquot 1999).

With 1980's a rapid uncontrolled, partial and speculative development of housing area at urban fringe area began to be seen (**Figure 3.1-3.2**). Carruthers describes experiences in America about this subject as: "*...The 1980s gave rise to the Edge City phenomenon of regional shopping malls and office parks: a sprawling pattern of automobile dependent growth without a core. Edge Cities pushed residential development and the extent of the rural-urban fringe further out into the countryside*" (Carruthers 2003). At the same time period, new urbanist trends began to develop aganist "suburban sprawl" fact; these movements proposed new settlements with different land-uses that are central-compact and which are planned according to walking distance, instead of complex, scattered suburban areas without any limits. Studies of Peter Calthorpe, (TOD: Transit oriented development), and Andres Duany-Elizabeth Plater-Zyberk (TND: Traditional neighborhood design) can be given as samples to these trends. These new settlements as seen as balanced community developments with physical, social and economical balances in other words as developments in which

community and privacy, auto and pedestrian suburban and urban concepts mold together.[*]

Figure 3.1 new suburban growths in Baltimore (US), (source: www.aede.osu.edu).

Figure 3.2 Suburban growths in Miami (US), (source: www.aede.osu.edu).

[*] The form of the contemporary suburb is not a completely new invention but has roots in early models for ideal suburban communities such as the Garden city schemes of Ebenezer Howard and Raymond Unwin and the neighborhood unit of Clarence Perry and Thomas Adams. However, the Garden city ideals of a communal, self-sufficient satellite city set within a greenbelt of parks and farms seem to have been completely lost, as have notions of walkable, transit-supported living within convenient mixed-use neighborhoods and communities. High land values and pressures for development have eroded or completely obliterated most greenbelts. What has survived from these models is the residential district of primarily single-family homes, set on a green plot of land, within a short distance of an elementary school. Another surviving design feature is the emphasis on quit, safe, pedestrian and bicycle pathways, relatively private residential street pattern that exclude through traffic (Southworth and Owens, 1993)

In Europe a very different kind of development takes place of these new "suburban villages" that were built by professionals. Small rural settlements that existed through history and that take place at metropolitan fringe area turned into places where low density suburban clusters developed. As a natural result, transformations in population structure and social background in rural settlements. Restrictions of metropolitan city developments and directions of residential growth to commuter villages are expected as reasons of "commuter villages" development, in England. However, this kind of development caused unwanted results in social meaning. Polarization of old and new settlers in these settlements result a two different social groups that try to live without any get in touch with.

After 1980 a rapid residential development aiming seasonal or weekly usages began to be observed. The growth of a dispersed urban residential fringe has reached its most extreme development with the expansion of vacation home ownership in the more distant enviros of large cities. This phenomenon has taken place in societies where increased affluence, greater leisure time and the widespread availability of cars. As a result of this process urban fringe can be thought of as extending, at least seasonally, for up to a hundred miles from those metropolitan centres that have attractive countryside nearby which is easily accessible by road for a week-end and summer visits (Johnson 1974).

In developed countries the latest trend is immigration phenomena from metropolitan urban areas to non-metropolitan areas. Old city centers and their suburbs experienced a loss of residents in the 1970s and early 1980s as people moved to non-metropolitan rural areas. The developments in transportation and production technology as well as rising income levels are major factors in this process. Many experts concluded that this meant a whole new era of "counter-urbanization". Counterurbanization is described as movement of people and employment away from urban areas to smaller towns and villages in rural locations (Harris and Larkham 1999). This phenomenon is found mainly in the United States and Britain though, and could be seen rather as an evolution than a vanishing of cities. Tony Champion's detailed analysis of migration patterns shows that "*at the beginning of the 1990s, the 'counterurbanization cascade' seems to be a dominant feature of population distribution in Britain in other words we are moving to smaller and smaller places*" (Hall and Ward 1998). American and British studies tend to concentrate on the quality of life aspects of counterurbanization. The pastoral ideal of access to nature, close-knit

communities, safety, privacy and lack of traffic are the main components of which motivate people to move to the country. Certainly this residential development type is not limited with developed countries' experiences. It turned into a trend seen in developing countries, too.

There are two development types mentioned at the rural-urban fringe area after 1980. One of these is "exurban" type of development which emphasizes to residential growth in metropolitan fringe area. Another development is "gated communities". However this type of development is not only seen at urban fringe area. It can take place at city center or at rural areas. This housing development trend is argued throughout the world as "closed and gated places". Therefore, in order to understand residential developments at fringe areas better referring to these development types and their characteristics should be made.

3.1.3.1. Exurban Development

The terms 'exurbanization' or 'extended suburban fringe' are used more or less interchangeably with each other. Exurbia has been a topic of concern since Spectorsky (1955) described the societal aspects of the emerging phenomenon of "exurbia" in 1950s (Nelson and Sanchez 1999). "Exurbanization" is generally defined as the dispersion of urban land uses in a noncontiguous pattern through the rural-urban fringe.

In an article "Development at the Urban Fringe and Beyond: Impacts on Agriculture and Rural Land" published in America some data are given about exurban development: *"Another kind of development occurs beyond the existing urban fringe, often far out in the rural countryside of metropolitan counties or adjacent nonmetropolitan counties. Development of new housing on large parcels of land is growth with a different character than that occurring at the city's edge. Instead of relatively dense development of 4-6 houses per acre, exurban development consists of scattered single houses on large parcels (often 10 acres or more)"* (Heimlich and Anderson 2001).

The question whether there are any differences between "exurban" and "suburban" developments are subject to most of the researches, today.[*] While some

[*] A research provided by Nelson ve Sanchez (1999) on exurban and suburban household in America indicates the following evidences: Exurban households are significantly different in: larger households, longer commute times, work at home more often, mix of jobs, smaller houses and large lots. Besides this,

researchers indicate that there is no big difference between suburban and exurban in the meaning of development process and type, and defend the idea that exurban development emerged as suburban areas spread through in rural areas, some other researches indicate that exurban developments differs from suburban developments in distance, density, demography, fragmentation and governing jurisdiction. From this viewpoint, it can be concluded that, suburban areas are middle dense urban areas, are the continuity of build-up area of cities and are zones carrying urban characteristics at urban fringe are. Exurbs on the other hand constitute of low-density single family home subdivisions and a scatter of suburban type houses beyond urban fringe area and they have their own private wells and septic thanks apart from urban infrastructure system. The point of which these two different approaches agree on is that "suburbanites" and "exurbanites" are similar to in their urban origins (Walker 2000).

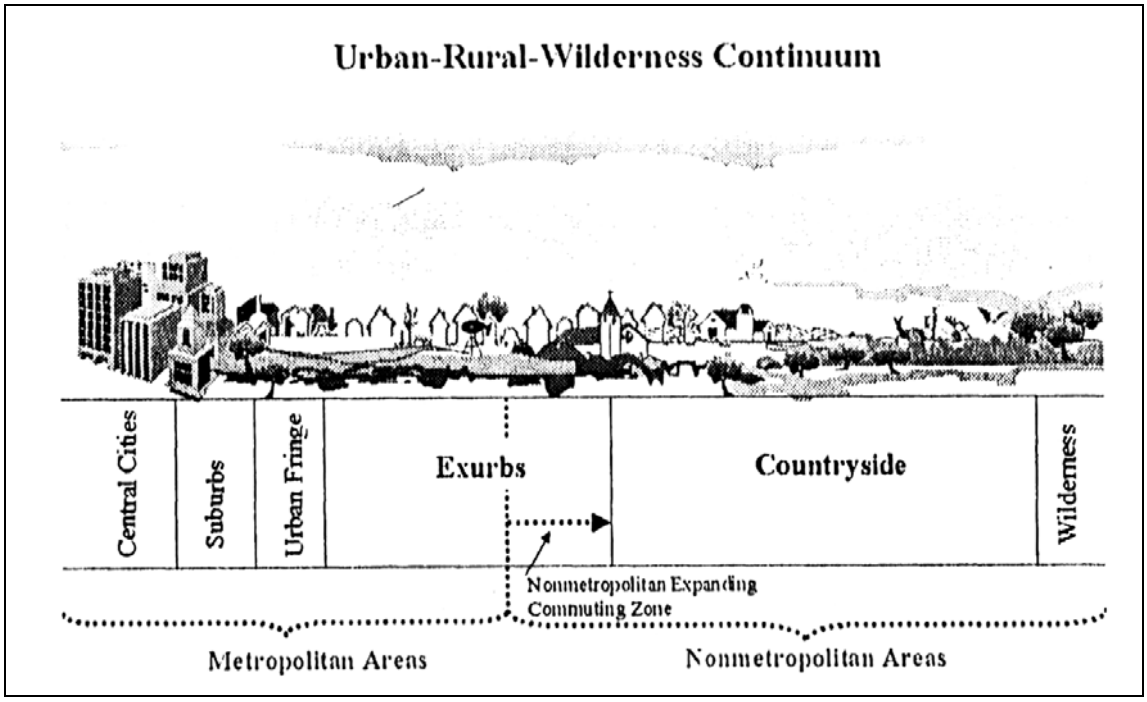

Figure 3.3 Exurbs boundary; (Healy and Short, 1981). (Healey and Short the exurbs' outer edge demarcates the boundary between metropolitan and nonmetropolitan areas).

Exurbia is generally characterized as; a) having low population density than city and their suburbs, and b) beginning at the edge of most urban development **(Figure 3.3)** (Nelson and Sanchez 1999). It is highly accepted idea that variables such as increased

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the research states no siginificant differences in terms of the variables such as age, income, and work locations (Nelson and Sanchez, 1999).

income, car ownership, demand for larger lots and amenities direct exurban development. Characteristics of exurban developments are:

- A "middle landscape" whose residents (formerly urban or suburbanites) commute to the city.
- A "band of transitional land" that may appear rural but is typically rented out by farmers and speculators in anticipation of urbanization.
- Exurbanization process creates conflict between farmers and new exurban residents (Audirac 1999).

It is known that there are many studies and researches about this subject in Britain, North America and Australia where exurban development is highly seen. These studies strengthen the opinion that exurbanization processes of different countries may be different too. Davis expressed his idea about changes in suburban development through time in US, as: "*Exurban subdivision can vary from pre-1940's hamlets to conventional suburban-like development. The latter can consist of gated communities and subdivisions of exclusive country estates for the wealthy or of modest suburban style housing or mobile homes subdivisions for the economy-minded and family-oriented households*" (Audirac 1999) (**Figure 3.4**).

Figure 3.4 Exurban developments in US. (source: www.aede.osu.edu)

The opinion accepted today, is whether named as suburban or exurban, demands on countryside resources increase gradually and it gets rather complicated from the view point of traditional planning approaches. Perhaps, one of the most important problems of contemporary planning is to constitute a balance between the orientation of these developments and protection of natural amenity.

3.1.3.2. Gated Community

A striking aspect of the globalizing world has been the multi-dimensional fragmentation of urban space, and this process has had a considerable effect on residential areas. The increasing spatial and social differentiation in recent decades has led to the appearance of enclosed residential communities within cities and beyond the city limits. The issue of enclosed or gated communities raises important questions about the future form of urban development. At the core of the studies analyzing and understanding this development type after 1990, mostly the reasons behind their formation and effects on the social formation of urban areas is seen.

Gated communities are examined in the context of larger theoretical and practical areas of study such as privatization, economic polarization, urban design, and land use law. Webster (2002) points out the three major perspectives of the gated community debate: (1) social-spatial polarisation, (2) changing tastes and values, and (3) institutional evolution:

- **Social-spatial polarisation**: *Authors such as Friedman and Goetz (1982) and Sassen (1996) debate that global economic restructuring has led to a new class structure: a transnational elite and a growing number of economically excluded. In the metropolises, social polarisation leads to a dual-city structure (Harloe and Fainstein, 1992) and the guarded enclaves are the places in which transnational elites organise their administration, consumption, production, leisure, education, and housing.*
- **Changing tastes and values**: *There is a strong tradition of empirical studies examining the relationship between housing and locational choice and urban form (Orford, 2002; Rosen, 1974). The search for personal security, quality local public goods (water, energy, services, open space), a socially homogeneous neighborhood and prestige, naturally leads to clustering and segregation. Authors researching cities of the developing world often stress the influence of Western tastes on local elites.*
- **Institutional evolution**: *Other approaches draw attention to the complex cooperation between public and private actors in urban development…Modern proprietary developments (also called club communities) such as shopping malls, retirement communities,*

condominiums, and science parks are viewed as a new form of territorial organisation. Some are critical of the trend (Sennett, 1986); some view it as a positive evolutionary step, delivering civic services more efficiently (Foldvary, 1994). Others stress that judgment should be informed by facts and that the balance of private and social costs and benefits may be different in different local contexts and at different times (Webster et al. 2002, p.318-319).

What is Gated Community?

In describing this new development, mostly "gated community" term is used. However, there are some other terms used by other researches, for example: ""fortress communities" (Blakely and Synder, 1997, 1999), "enclave communities" (Luymes, 1997), "city of walls" and "fortified enclaves" (Calderia, 1996), "enclosed communities" (Massey, 1999; Hook and Vrdoljak, 2002) "fortified cells", "security village" and the like (Dündar and Özcan 2003).

Gated community is described as residential areas that are fenced or walled off from their surroundings, prohibiting or controlling access by means of gates. The concept basically refers to a residential area with restricted access but it also defines a self-sufficient environment with swimming pools, private activity centers, children's play areas, and a full accompaniment of care-taking staff and security forces. There are many types of gated communities with differing degrees of amenities, exclusivity, and security. Gated communities include new developments and older areas retrofitted with gates and fences, and they are found from the inner cities to the exurbs and from the richest neighborhoods to the poorest (Blakely and Snyder 1997). Common characteristics of gated communities as follows:

- Gated communities are multi-unit housing developments with private roads that are not open to general traffic. The residential component of gated communities can be vertical (luxury apartments) or horizontal (enclosed security suburbs).
- They are physically isolated, either by walls or empty spaces or other design devices.
- They are controlled by armed guards and security systems which enforce rules of inclusion and exclusion.

- Maintenance of some services such as security, landscaping, garbage pickup, infrastructure facilities are contracted with private firms.
- They tend to be socially homogenous environments, mostly for middle and upper classes. Gated community residents' shared values which may include racial, class or religious characteristics or common history. Also gated community may include charitable organizations, social and recreational clubs etc.
- They bring self-government with its unique rules and regulations to be strictly obeyed by the community members. (adapted Caldeira, 1996; Blakely and Synder, 1997)

Teresa Caldeira, who has done extensive research on gated communities in Brazil, states that "*The Garden City model, modernist design and city planning, and now the fortified enclaves, `outer cities', and theme parks are part of the repertoire from which different cities around the world are now drawing.*" Caldeira's survey demonstrates that gated communities have different uses and specializations in terms of residence, leisure and consumption such as office complexes, shopping centres and also other facilities that have been adapted to this model: schools, hospitals and entertainment centres (Caldeira 1996).

Gated community around the World

Gated communities are a global phenomenon that occurs in various forms in many countries (including Argentina, Brazil, India, Malaysia, Saudi Arabia, Spain, the United Kingdom, United States and the other). There are many similarities between gated communities throughout the world. However there are a number of significant differences between gated communities in developed countries and those in developing countries. For instance, in the Lebanon modern gated developments first emerged during the civil war. In South Africa secure communities were the consequences of ethnic segregation. In Saudi Arabia gated compounds of linked houses provide family groups with a sense of privacy and identity. The sprawling gated suburbs of Latin America serve a different purpose. The divisions they represent and create are starker than most of their US counterparts, but they arise from individual needs that have to be taken seriously. Like the residential club communities scattered through Southeast Asia's cities, they offer a growing professional class a relatively secure lifestyle in the face of social and fiscal poverty. In US cities, gated communities have become one of

the key actors in the urban development over the past 15 years. Their long-term consequences for social fragmentation are different from those in the US and vastly different from the long-term consequences of gated developments in Europe (Webster et al. 2002).

In Europe there are so far relatively few private residential neighborhoods. Nevertheless, an increase in this kind of housing is apparent in some countries:

- Mediterranean coast of Western Europe (Spain and France) starting in the 1980s as guarded residential complexes offering exclusive second homes as well as all-year dwellings;
- Madrid and in Greater Lisbon during the 1990s as numbers of suburban gated settlements;
- Britain in the 1990s as three forms of complex: upgraded social housing estates transformed by gates, concierges, and innovative local management institutions; smart city-centre condominium-style developments; and small gated suburban developments of no more than 300 homes, and
- In the metropolitan regions of Vienna and Berlin developers have attempted to introduce gated housing projects to real estate markets. *These trends notwithstanding, it is hard to foresee a time when gated suburbs or gated city-centre developments could reach the critical threshold at which the US issues of secession and tax withdrawal become a problem for European societies* (Webster et al. 2002).

Even though they have different usages and characteristics there are some basic qualities behind them. These basic and common qualities are: private ownership, physically isolated with the help of walls, empty spaces or by other design methods, introverted rather than extroverted, usage of new communication and security systems, meeting all its requirements within its private land, having a property of being located at anywhere disregarding the environment which they have notions. The basic slogans of the producers are: comfort, neighborhood, community, security, identity, privacy and prestige. As mentioned above gated community concept is accepted as an important indication of social and spatial segregation. Besides residential usage, addition of business and commercial usages points out a new spatial order within the axis of arguments on social space/private space. Today, developers, land owners, investors and consumers and other actors shapes modern urban habitat. The challenges tackling by

urban planners and designers not only deal with spatial issues, but also socio-economic and political consequences that are posed by these developments.

3.2. Residential Developments in Developing Countries

In 2000, developing countries had nearly 2 billion urban dwellers compared with 900 million in industrialized countries. Over the next 30 years, virtually all population growth will be in the urban areas of developing countries. The urban population in the developing world will double to nearly 4 billion by 2030, according to UN projections. Over the same period, the urban population of developed countries is projected to increase from 900 million to 1 billion.[*] Resources indicate that world's population in the future will be determined by Third world cities and in these cities population increases mostly occur at "fringe" area. Developed and developing countries of the world differ not only in the percent living in cities, but also in the way in which urbanization is occurring. As urban areas expand they have over-run surrounding land. In developing countries, urban sprawl captures one-half million hectares of land each year. In Mexico City, as in many other megacities in the developing world, urban sprawl exists as nearly 40% of city dwellers live in the urban periphery in poverty and environmental degradation (Aguilar and Ward 2003).

In developing countries "fringe" settlements have different names: "Zones of spatial contact between town and country" (Mortimore 1975), "agglomerations of poverty" (Peil 1975), "metropolitan village" (Van der Berg 1982), "Belts of misery" (Granotier 1980), "Slums of despair" (Stokes 1962) etc. The main accent of these phrases is that people living at "fringe" areas have rural roots; economic activities have an informal structure and effectiveness of urban activities decrease when go away from the city center (Browder and Bohland 1995).

Primate city in developing countries began to gain a "metropolitan city" property in 1960's as a result of developments in transportation, communication and production technologies. However, the most powerful changes influencing urban development occurred after 1980 with changing economic structure and globalization and is still continuing. In the formation of metropolitan city migration movements and advanced

[*] http://www.peopleandplanet.net

technological industries their location selection are also influential today as it was in the past. These production units having advanced technologies selected location far from city centers while small scale industries located just around the cities. Agricultural lands and rural settlements that are squeezed between industrial areas at metropolitan fringe area and the city began to change by migrations (Özdemir 1993). Growth of metropolitan city caused engulfment of surrounding agricultural lands and small villages, but the rural characteristics of the region are still protected. Different land uses like housing, commerce, industry, and services compete with each other in this kind of sprawling. Housing developments also vary at metropolitan fringe area. In some situations it can be observed that new settlements at metropolitan fringe area affect "suburbanization" process and speed up the development. Mass housing areas of high and middle income groups, social housing areas, luxurious housing estate constitute the residential developments at the fringe area. Another development type is formed around the fringe by people who migrate to the metropolitan city. In social terms this can be seen as a social transition area for themselves. The residential structure of the squatter settlement or low quality residential areas along the urban periphery is a phenomenon typical of the Third World city. Low land prices, speculations are effective in the development of informal sector during this process with high rents at city center and modernization of economic activities; fringe area supply cheap houses and legal flexibility for settlers and investors.

Rapid transformation process in metropolitan fringe area takes place in the agricultural production, spatial structure, social structure, land ownership and land market (Browder and Bohland 1995). So, fringe area, where all kinds of usages mix together becomes more important for developing countries.

World Samples

Even though urban development in third world countries shows some common properties it also has some differentiations. Changing socio-economic situations, increasing influences of globalization, connected distant cities quickens the spatial changes. In third world cities as the result of natural high birth rates and immigration, sheltering became an important problem. According to UN estimates about 1.3 billion urban residents currently live in inadequate housing. Today another important characteristic of both developed and developing countries cities is spatial segregation.

Some researchers indicate that spatial segregation is seen more frequently in developing countries depending on social classes and ethnic-religious properties (Adell 1999).

Many studies done on Asia represent facts that increase in movement between rural and urban sectors decrease the differences. McGee (1991) is one of the researchers who studied urban dynamics in Asian countries and brought a different conceptualism to it. McGee developed a new regional economic model by studying the formations around Asian metropolitan cities. Desakota (desa meaning rural or village and, Kota meaning city or town in Malay language and means extended metropolitan region when used together) defines the spread of agricultural and non-agricultural activities at city center and along its development corridors. It is emphasized that it is hard to distinguish urban/rural differences along the highway roads and at the rapidly developing rural areas, in Asia. Main Characteristics of desakota areas can be listed as:

- Small agricultural activities and dense population
- Increasing non-agricultural production
- Increasing population mobility
- Conflict land uses (suburban, small production, agriculture)
- Increasing female labor
- Informal and illegal activities defined as "grey zone" (Adell 1999).

Most land-related conflicts in peri-urban areas occur when land is converted from agricultural to non agricultural uses. Although from a macro-economic and planning point of view this conversion must be regarded as a normal part of urbanization and structural change, the micro-effects at the household or rural settlement level can be substantial creating many reasons for conflicts. Ongoing population growth and rapid urbanization is not only leading to mega-cities but also to new small and medium-sized urban centers. Increasing market liberalization in combination with a competition of jurisdictions aiming to attract (foreign) private investment have created new challenges and intensified existing ones to establish efficient land management systems in peri-urban areas in Asia (Kirk 2003). *The ongoing expansion of informal settlements into urban fringe areas takes place in the context of accelerated globalization and structural adjustment, combining deregulation measures, privatization of urban services, state disengagement in urban planning and the housing sector, and innovative attempts to better integrate informal land and*

housing transactions into the formal market economy (Durand-Lasserve and Royston 2002).

In recent years the transformation of the 'urban fringe' of Bangkok and other Asian cities has attracted the increased attention and study of policy-makers, planners, regional geographers and a variety of other social science researchers. A number of prominent geographers have identified the mixed and dynamic functions of these spaces as a new regional phenomenon heralding the break-down of distinctively 'rural' and 'urban' geographies*." The ecological and economic spaces formerly defined as 'urban fringes' are now generally viewed as interacting components of new 'mega-urban' regions of Southeast Asia (McGee 1989; Ginsburg 1991). The detailed social studies conducted in these mega-urban regions of Southeast Asia show that ordinary local people have played a crucial role in shaping the changes taking place (Allen 1994; Brookfield, Hadi and Mahmud 1991)"* (Adell 1999). Studies of the rural-urban fringe are dominated by the metaphor of 'invasion', applied to the process whereby industrial and residential extensions of the metropolis encroach into the countryside. Among regional and environmental planners, much attention has been given to the impact of industrial land uses on urban fringe agriculture.

China and Vietnam entered into a rapid transformation state after 1980 with changing political situation. With market economy social transformation occurred as well as economic transformation. The newly confronted market economy realized an economy that never existed before in their cities. A very evident result of this transformation is decentralization of city center to the old rural settlements around the city. Thus, changing economic structure and production process caused incredible transformations in the physical and social structures of rural settlements. In these areas where urban and rural economy and culture mix together a very different changing process can be observed from the suburbanization of developed countries. These sudden transformations started inevitable changes. In other words this new type of development carried the mixed up usages, walled off housing areas, dense land pieces, small scale industrial and commercial establishments to the outerskirts of the city (Leaf 2002).

In Latin America 70% of the whole population live in cities, especially in large metropolitan areas. These great metropols in parallel with economic developments rapidly grew in last 50 years. Latin America has the largest metropolitan areas such as Mexico City, Sao Paulo, Buenos Aires and Rio Janerio. The main characteristics of these mega-cities, such as overpopulation, mass poverty, residential segregation and so

on, have emerged out of a rapid process of urban transformation. The major expansion towards the outskirts of the city was realized by the 1940s as a result of the rapid growth of urban population. The massive migrations and the consequent occupation of all the available land in central areas resulted in the settlement of low-income groups in the urban fringe. Consequently, Latin American urban fringe became mostly crowded by the squatter developments of the new migrants, unlike the North American urbanization pattern. By the 1980s, the central areas of the Latin American cities witnessed the dual process of gentrification and deterioration with the return of the poorest groups to the slums of the central city areas (Danış 2001). Along with the transformation of the inner areas, middle and upper class suburbanization became more widespread in the urban fringe. So, squatter settlements areas and affluent residential areas (mostly gated communities) began to take place at urban fringe area (Aguilar and Ward 2003).

Low land prices when compared with city center, social and physical collapse of old city center, developments in transportation and communication technologies, changes in residential preferences, planning regulations and policies are some of the factors effecting the urban development at urban fringe area. Developing country experiences indicate that one of the most critical urban problems faced by the metropolitan authority is the management of integrated development on the urban fringe. The management of the urban fringe cannot be addressed separately from other urban problems such as fragmented growth patterns, the occurrence of urban sprawl or the decline of the urban core.

3.3. Summary

In this chapter, the transformation of residential developments that occurred at the urban fringe from industrial revolution to our time was discussed briefly. So, information about the various housing development types and experiences from different countries were summarized.

Literature survey indicates that there were many socio-economic and political changes in the world after 1980s. During this turbulent decade, the importance of cities, especially the importance of the metropolitan cities, increased. The growth and decentralization process of the metropolitan cities, where capital, population and technology converge, differentiated. In this new development type which is poly-nuclear, fragmented and with spatial segregation, urban fringe area gained too much

importance. Different land uses compete with each other in order to benefit from the advantages and potentials of the urban fringe area. In this scene, residential areas always had an importance in the peripheral development.

Suburban developments created important changes in urban pattern and also caused diversification and pace of housing developments in urban fringe areas. Today, western communities show tendency of living outside the traditional suburban areas uniting with the city. Urban population gaining mobility toward rural land caused uncontrolled, partial and speculative housing developments. These developments mostly are related with socio-spatial polarization, changing tastes and values, institutional evolution, and technological changes. Fragmented urban core, on the other hand, form the challenging areas of urban planning discipline within this development process.

Post 1980s is a period when quantitative and qualitative specializations occurred in the housing development in Turkey. Especially at the fringe areas of the metropolitan cities there are large changes in this sense. The main aim of the study is to understand the new housing development trends at the metropolitan fringe area. Therefore, in the next chapter, the development process of the metropolitan cities in Turkey and transformations at the fringe area will be discussed.

CHAPTER IV

RESIDENTIAL DEVELOPMENT DYNAMICS IN METROPOLITAN FRINGE AREAS IN TÜRKİYE

In the second chapter of the study which forms the theoretical frame of the fact of "fringe", its characteristics, "sprawl" as an urban development pattern and the importance of these concepts in the meaning of urban planning were discussed. In the third chapter, housing development at urban fringe area from the viewpoint of developed and developing countries changes through time, and today's tendencies in these countries were examined. In this chapter, urban fringe concept in Turkey, housing development dynamics at metropolitan fringe area after 1980 will be covered.

4.1. Development Dynamics in Metropolitan Fringe Areas

Turkey, starting at the end of World War II is living with a very dynamic urbanization fact and with its problems in the last fifty years. From 1950s to today, many cities have grown and gained metropolitan characteristics in parallel with rapid population increase, and economical, transportational and technological developments. Today expanding in metropolitan city limits into rural areas causing changes and transformations at these areas.

During the period till 1980s, cities in Turkey, show a development within a compact macroform as the result of technological, infrastructural possibilities and other socio-economic reasons. The cities of pre-1980 period are cities which grow in the form of a high dense, surrounded by squatters, with insufficient public services and without any green areas. Decentralization processes which break through this high density structure of Turkish cities, started to develop in 1980s. Increase in car ownership, housing supply diversing from small scale production to mass housing production, increase in organized industrial areas and public institutions selecting location as a campus-like areas at the outer skirts of cities are the main influential reasons in the decentralization process (Tekeli 1991).

Eraydın (1992) lists the factors influencing sprawling from the viewpoint of capital accumulation as; increases in rents after 1980 and relatedly most of investments

directed towards houses-offices-secondary houses-tourism sites and other kinds of real estate investments (Eraydin 1992). One the factors affecting this transformation is reconstruction of laws and institutional structure which direct the urbanization of Turkey, after 1980s. Development laws that were accepted during this period (such as Law no: 3194, The Bosphorus Law Number 2960, Amnesty law No. 2981, Mass Housing Law, Metropolitan Municipality Act number: 3030 etc.) were affective at the development of urban fringe area as well as urban space. At the end of this process metropolitan cities began to transform into a different kind of city form which develop with vacant spaces in-between and which is called as spread-out, skipped-over cities.

Turkey, after 1980, started to live new transformations as a result of the economic situation of the world. Urban development process has begun to change into the form of large-scale urban development projects rather than piece by piece development of land with the addition of each new single building. This new form urban development particularly has taken place in the periphery of the cities. Therefore, urban fringe phenomena became a current issue in urban development studies that became popular after 1980, as mentioned previously. On the other hand, because urban fringe studies are relatively a new area of research it is not possible to clearly perceive the underlying socio-economic and spatial processes of rapidly developing cities in last two decades. Urban studies of the 1970s began to point to the "dualistic city" where formal and informal economic sectors and housing areas coexisted. By 1980s, urban areas begin to be analyzed by focusing at various dynamics of the globalization process and consequently, cities are conceptualized as fragmented and differentiated areas.

Studies about residential areas demonstrate variations through time in Turkey. The basic reasons of this are the transformations in housing areas and housing supply types. In order to be able to understand the development of cities, housing studies carry very much importance. Post 1980 is a period when housing studies varied and deepened. During this period, new studies were done about different housing supply types and their effects on the urban development process. Especially series of studies done by Mass Housing Administration after 1992 provides an important original data based upon this subject (Tekeli 1998b). There are studies about housing supply type concept, qualities of housing environments, and especially about the effects of mass housing areas on the city form.

In the center of this study development dynamics of post-1980 take place. But, mentioning pre 1980s shortly is important in elaborating the differences

between these two periods. So, firstly, the urban development form of pre-1980, its characteristics and housing areas at the fringe will be studied. In the post 1980's which also indicate the period in which we still live, the changes in urban development form and new housing areas at the fringe are is studied.

4.1.1. Urban Development Dynamics before 1980s

Turkey faced with problems of urbanization after World War II for the first time. Economic, political and demographic changes in Turkey caused many significant differentiations in urban development process, as in the whole world. Rural-to-urban migration seen in large cities like Istanbul, Ankara, and Izmir after 1950 directly influenced the urban development dynamics. As the result of this massive migration, problem of housing shortage emerged at urban areas. Cities growing only, with build-and-sell (yap-satçı) housing supply type, searched for other alternative housing supply types in order to overcome the problems caused by high density population. In this period, there were three housing supply types which had different settlement characteristics. First of these is the build-and-sell production realized at the existing development areas and at the adjacent areas in cities (Bilgin 2000). Second slice of urban housing production is (%40-45) realized by illegal housing development and called as gecekondu. This type of supply, which spread at public lands surrounding the planned development areas and near the industrial areas, developed as the result of populist planning policies. The third supply type is cooperative houses (approximately 10% of the whole supply ratio). It helped income groups with systematic revenue to own houses with suitable credits. Progressive construction techniques and organizations were not used even though they were mass production. With their sizes, space organizations and equipments they modeled mid-income groups' apartment standards (Bilgin 2000).

Before 1980 outer skirts of the cities were mostly extended with gecekondu areas. As in Latin America cities urban periphery in Turkey, too, have a structure that mostly developed illegally and is a place where lowest income groups lived. One of the housing supply types of this era, housing cooperatives, firstly took place at the vacant areas within city boundaries later skipped to the inexpensive and unplanned areas at the exterior of the cities. For state subvented cooperatives, local governments also, appropriated them with public-owned lands (Keyder 1999). In 1970s high-rise, high-

density housing areas constructed by housing cooperatives took place at the periphery. Housing cooperatives played an important role in the prevalence of second homes that started to develop after 1950s and highly spread over in quantity and quality in 1970s (Seymen and Koç 1996). All these rapid developments increased the level of heterogeneity at urban fringe area.

Not only housing areas changed in cities but also the demographic pattern. As urban population increased and as most of the population gathered in large cities the transition solitary municipal governing to metropolitan areas under the jurisdictions of various municipalities began to be seen. In this period, another important factor influential on the change of cities is the starting of car production in Turkey in 1970s and increasing in the number of car-owners. Industry in Turkey became intense, light industry selected location at the city center, while heavy industry selected location at the periphery. Production activities began to go further from city center and adjacent areas with the construction of small scale industrial sites and organized industrial regions. Under these developments cities grew and at the end of 1970s, cities began to give signals of congestion (Tekeli 1998b). Because build-and-sell (yap-satçı) mechanism consumed all the planned lands and gecekondu mechanism invaded all the public lands at the periphery of cities, they have filled their life-span. Although these mechanisms partially continued their activities, they were no longer sufficient, in meeting all the requirements of the sector (Bilgin 2000). They started searching for new housing supply types for the purpose of large-scale structuring instead of small scale production mechanisms that were congested and unable to enlargen themselves. During this period, although mass housing supply system was tried to take the place of these mechanisms, their organization and efficiency extended to post-1980.

4.1.2. Urban Development Dynamics after 1980s

Global changes in the types/processes of the production and political and economic differentiation trends as a manner in integrating with the world, distinguish this period from the others (Bilgin 2000). Post 1980s was created many changes on economic renewals and changes in laws, institutional structure, and social and economic life in Turkey.

In this period it is mentioned that; most of urbanization process is realized, migration movement changed (instead of rural-to-urban migration, interurban migration

occurred) and spatial distribution of the population changed (population movements to coastal areas, imbalances between regions)*. Appropriation of market-oriented, outward-looking development strategy and integration with the world market as a result, development of new institutions necessary for global economy (foundation of capital trading, free trading and production zones reforms in banking) and giving priority for infrastructural investments are the factors that created changes in economic structure (Tekeli 1998a). These factors and parallel with them caused some changes in the settlement system of the country, too. After 1980 new foreign trading based centers started to develop. So, in the last two decades capital accumulation possibilities, development of information technology, opening to outer world, increase in trading and tourism incomes are seen and with these while new spatial focuses developed on one hand, on the other hand some other spatial changes are observed in metropolitan cities (Eraydin 1992). Behind these multi-dimensional changes seen in metropolitan centers, new legal and institutional organizations played an important role, too. Factors like foundation of metropolitan municipalities (1984), transfer of planning authorities from central government to local governments (1985), establishment of new municipalities around the central city and increases in the financial resources are among the reasons of spatial changes in metropolitan cities.

4.1.2.1. Spatial Changes in Metropolitan Cities After 1980

Post-1980s defines a new urbanization phase in Turkey. This period loads cities with new functions, while, bringing new organizations pattern to city center. Changes began to be seen in the qualities, shapes and location selections in urban usages. While some usages decentralized some others centralized (Tekeli 1998a).

Industrial activities within the city are decentralized by moving to organized industrial districts and other usages took their place in city centers. While the functions at CBD changed (control functions, banking, finance, information services etc. replace the production) on the other hand new prestige areas are constructed. With the help of growing trade capital new commercial centers are constructed, more qualified new offices and houses were built. Bozdoğan (1998) points out the global influences on

* In 1980s 43.9% of population in Turkey lived in cities. In 2000's this ratio rised to 70.6%. Mediterrenean, Egean and Marmara Regions are the places where population ratio increased the most. After 1980, to the metropolitan cities of İstanbul-Izmir-Ankara, Adana, Bursa, Diyarbakır, Gaziantep, Içel, Samsun, Konya etc., were added.

postmodern architecture in the Turkish urban scene, mainly in the form of satellite towns, office towers, hotels, and shopping malls. Luxurious housing, shopping centers, offices, large mass housing projects, infrastructure projects, international hotels, recreational areas and large building contractor firms are the indicators of this change. Some factors that affect this change are: increase in the number of car ownership, developments in public transportation systems, public institutions and large education institutions selecting locations at the periphery and changes in life styles and consumption norms. All these transformations result in the evolution of the urban form from the previous dual structure towards a new multi faceted pattern.

4.1.2.2. Transformations in Housing Areas

Istanbul metropolitan area with its new image that started with 1980's and that gradually gained clarity also formed a model for other metropolitan cities. So it is obvious to consider Istanbul as the first step in urban studies. Also Ankara became a subject to this new development pattern and to the studies new development. Perhaps one of the reasons is development and transformation being rather slow in Izmir when compared with Istanbul and Ankara.

Below characteristics of two different tendencies developing at urban fringe are defined. One of them is called as satellite town or high rise suburban development (also called site in Turkish). Second one is single family housing estates related with garden city concept. Studies subjecting Istanbul and Ankara help to examine the similar developments in Izmir.

4.2. Mass Housing Areas and Cooperatives Getting Widespread

The main characteristics that distinguish post-1980 from the former period are large capital holders making investments on construction sector and on real estate systematically (Bilgin 1998). As a result, big construction firms and cooperatives (ENKA, Maya, Doğuş, Alarko, Mesa and so on) took place of build-and-sell mechanism. Impacts of this on housing development are the emerging of various housing alternatives for middle and upper groups in the last two decades.

In the urban growth and changes at fringe area, Mass Housing Law (1984) and Mass Housing Association based on this law and financial supports, were effective.

This law caused a mass housing and cooperative boom in Turkey never seen before (Işık and Pınarcıoğlu 2001). Increase in the quantity of housing production and starting with 1990's changes in the scene of housing environments began to be seen. A new settlement type of apartment groups constructed at the periphery took the place of apartment buildings build on separate plots, side by side. Bilgin (1998), however, indicates to an interesting development at this point. He tells that, growth in production scale did not cause any change in construction organizations and techniques and, actors oriented to this new system without changing their structures and relations (Bilgin 1998).

There are some factors which were effective on mass housing areas and cooperatives, supported by credit options, selecting location at the periphery;

- As the result of big housing projects with requirement for more space and unfilled spaces within cities being insufficient,
- Low land prices,
- Public lands used for these developments,
- Municipalities making speculative plans to respond pressures.

As a result, periphery of cities in Turkey turned into a different form than the pre-1980s and turned into an area where new high-density residential development is seen just near the gecekondu areas. These residential areas developed by the transportational corridors in metropolitan cities mostly have a dormitory characteristic. Because these building did not have the same quality, housing areas for different income groups formed. Mass housing areas constructed by private sector mostly planned as closed suburban developments with high standards.[*] These high-rise and high-density suburban areas built mostly for upper and middle groups turn into complexes which have different urban services (education, recreation, security, etc.). In order to increase the variety among housing types single houses or "villas" also take place within this development pattern. Current studies arguing Istanbul and Ankara cases indicate that most of middle income groups prefer homogeneity in these housing areas (Öncü 1999). However, it is said that this new middle income groups have different lifestyle preferences and consumption manners than the previous ones. A new

[*] Bahçeşehir satellite settlement in Istanbul has 50000 population and is planned on an area of 500 ha. It is a good sample for satellite settlements which are located far from city and which have high walls surrounding and protecting them (Danış, 2001)

middle income groups profile started to appear who had good education and who work at high prices in finance and service sectors of multi-national firms. This new groups carries the global consumption culture also in parallel with the increase in their incomes (Öncü 1999). Danış's study (2001) has done for Istanbul Bahçeşehir indicate that:

- It consists of married couples with children, ages between 35-50,
- Most are university graduates,
- Heterogeneity of occupation. Both managers who are highly educated and have high incomes and also the industrialists and traders share the same area.

So, it can be concluded that, these new satellite settlements with high walls surrounding them and that are protected by private security teams are differentiated culturally and socially (Danış 2001a). Consequently, upper and middle groups gained a higher mobility to the urban fringe and new alternative development patterns started to emerge.

4.3. Single Family Housing Estate as a New Trend

Crossing over the squatter housing (gecekondu) areas surrounding the metropolitan cities, mass housing and cooperative housing areas in Turkey, a new fact taking place at distant areas from central district began to emerge which can be named as single family housing estate. These residential areas indicate to a new type of development never detected before in Turkey. Because, Turkish cities before, did not have this kind of development that spreads toward urban fringe areas, that recur each other and with low density and car dependent characteristics. It is defined that this trend indicates to a new type of urban development at the metropolitan cities, especially in Istanbul. Houses in these estates that increase in number gradually constituted the most vivid part of housing market after 1990 even though they had very high prices (Sey 1998).

Studies about single family housing estates that appeared as a new trend at fringe areas of the metropolitan cities are very limited due to its novelty. In most of the studies, this development form is studied under the topics like 'suburbanization', 'gated community', 'luxurious housing development', or 'urban antagonism and social segregation'. Among the studies involving the development in Istanbul, the studies of Öncü (1999), Kurtuluş (2002) and Bali (1999) can be acknowledged. Studies in Ankara,

on the other hand, usually approach to the subject from the viewpoint of suburbanization. Among them, Ayata (2002), Imamoglu and Imamoglu (1996) can be cited as important contributions to the field. Besides all these, the graduate dissertations have also great importance on the accumulation of knowledge within the field.

Firstly the economic development dynamics and the development of transportation and telecommunications infrastructure as well as social transformation process are all closely related with this new type of urban growth and sprawling. Global economic system, changes in capital accumulation processes, differentiation in income distribution, new trends in lifestyle and consumption forms and their impact on the spread of urban development are one of the most challenging debates today. With the effects of these macro factors demands on urban space varies and transformation on urban and residential pattern are seen.

This study, as aforementioned, aims to examine the spatial development caharacteristics of single family housing estates that develop at the fringe area of the metropolitan city of Izmir, their planning processes, and users' dimension. In other words, it is aimed to understand the characteristics of this new trend from the perspective of Izmir case. Examining the studies subjecting the developments at Istanbul and Ankara was become helpful and illuminating for this study, also. Literature survey about single family housing estates is mentioned below.

Basic Characteristics of Single Family Housing Estates Developments in Turkey

One of the important factor shaping housing developments at urban fringe is increases in mobility that is closely related with private car ownership. While number of motor cars in Turkey in 1980 was around 1.300.000 it increased up to 7.400.000 according to State Institute of Statistics's data belonging to the year 2003[1]. While increase in car ownership positively changed the mobility, it negatively affected the urban space. Especially traffic congestion and car parking problem in the metropolitan cities were the most complaining facts. It is also known that detoriation, crowding, and pollution of urban environment related to rapid population increase, the desire of

[1] Source: State Institute of Statistics, viewed at: http://www.die.gov.tr

leaving city center and moving to suburbs increased, too[*]. Besides "a longing for a healthy life, a non-polluted environment and a new house", the idea of living in comfortable and secure estates are also the reasons affecting housing development at urban fringe.

> *"Longing for the past, getting away from crowds, searching for green areas… they caused emerged of estates that began to be seen in the latter half of 1980s and densened with the beginning of 1990s"* (Bali 1999).

"Ideal home" concept in dreams is integrated with clean air, clean water, where everybody is making sports, secure and a socially homogeneous neighborhood (Öncü 1999). Bilsel (2004) defines the orientation of high-income groups to these housing areas which is related with global economic system as a desire for living without meeting the 'others'(Bilsel 2004). Designing almost all of single family housing estates as 'gated' and 'privatized' is related to this reason. Tanyeli (2000) mentions that the ones who can pay the cost get away from the chaos of the metropolitan city and buy themselves "*islands of order*" and tells that:

> "*Almost all of new suburb areas being constituted of gated and controlled estates can be explained with metropol fears. An interest towards gated communities in a country where house security problems have not reached to a phobia yet, for example cannot be compared with the realities of U.S.A. High income groups here, do not buy security with their money but an isolation from the chaotic social and cultural realities that are natural for metropolis*" (Tanyeli 2000).

Environmental quality becoming worse in the metropolitan cities or decreases in security can be seen as enabler for this development form but another important point here is the changing lifestyle and expectations of people from the neighborhood area. Changing tastes and values change people's expectations from the form and location of the houses, too. During every period 'prestige neighborhood areas' and 'prestige housing models' have developed as 'prestige and status' symbols. Asatekin explains the phenomena of detached houses and villas with swimming pools becoming a fashion after 1980s as;

> "*Even in villages far from Ankara where infrastructure is insufficient, where problems of road system, water and electricity supply system exists villas began to be constructed by cooperatives. Families have to use at least two cars for transportation …and pay costs as much as their*

[*] In the study of İmamoğlu&İmamoğlu (1996), they indicate the existing attitude aganist the living in apartments among the people living outside the city. Moreover, the desire of private house is a common preference both for the ones living in the city and outside the city.

> *income for heating their villas. In spite of families becoming smaller houses with 2-3 bathrooms are built according to the trends in the Western countries. Even though Turkey is rich in sun, they put solarium systems in their villas*" (Asatekin 2002).

Spatial development characteristics and their building scale of single family housing estates show variety. Their number of houses, house sizes, architectural style, recreational, shopping and other facilities they involve determine the spatial characteristics of housing estates. Kurtuluş (2000) divides the housing estates into two main groups in terms of spatial organization and architectural design. The first group constitutes of the ones taking references from history and oriented toward traditional Istanbul neighborhood culture and architecture (Ottoman neighborhood, Turkish house). The other group, on the other hand, is inspired from architectural style of American suburbs (i.e. California houses). Besides designing of these housing areas their marketing strategies differ, also. Television commercials, periodicals, newspapers, and advertising pamphlets are some of the marketing techniques used for this purpose. Emphasizes in advertisements involve certain themes. Usually it is revealed that "they are outside the city" but "very close to the highway" and that they have all the comfort essential for a contemporary life. In some advertisements humanitarian values like "a very intimate and friendly environment" referring to the old neighborhood culture comes forward. The metaphors accompanying all these are "being in close contact with nature", "healthy life", and "clean air". Some other assertive slogans like "paradise" or "place in your dreams" are used, also (Öncü 1999).

Developments in Istanbul and Ankara

Starting with 1990s Istanbul proceeded a long way in becoming a "global city" (Tekeli 1998a). With the restructuring process that speeds up Istanbul experienced an increasing fragmentation of urban space. Especially with the housing area preferences of upper-middle classes at the periphery of the cities in 1980s and 1990s a new urban development process different from the previous one started, also (**Figure 4.1**).

> "*It is accepted very normal for upper-middle classes and high income groups in Istanbul to invest to one of the 'villa' complexes built in groups toward the coast of Black Sea. Partially completed and partially under construction, these houses have prices starting from 250.000 USD up to 1.000.000 USD according to their garden sizes, construction quality, and materials used in the kitchens and bathrooms. It is estimated that by mid-1990s the number of villas for sale in Istanbul has reached up to 5000.*

Most of the completed houses are either vacant or used during the weekends" (Öncü 1999).

Figure 4.1 A view from a housing estate construction site in Istanbul (www.arkitera.com)

Most of the housing estates in Istanbul claim that they do not only design a new living environment but also design a new lifestyle (Kurtuluş 2002). Advertisements for these developments emphasize the promotion of a new lifestyle and sense of local belonging (since the old, nostalgic sense of belonging is lost in the inner city neighborhoods of Istanbul). For these luxurious estates which generally took names Alkent 2000, Acarkent, Kemer Country, and Beykoz Konakları can be given as samples. Each of these samples has an appearance of a model of a town with its education, shopping, and recreational facilities. For this reason, they form the extreme samples for the development of single family housing estates.

Kemer Country is one of the earliest samples for this development which started to be constructed at the beginning of 1990s with a motto of "not getting away from metropol but reaching a dream" (Bali, 1999; Kurtuluş, 2003; Öncü, 1999). Its design being made by Andres Duany and Elizabeth Plate-Zyberk who are the founders of new urbanism in United States gained it a privileged situation. It involves total amount of 1250 villas design with a reference to historical traditional architecture and covers an area of 120 ha. (Inal 2002). The price of houses is between 300.000 – 2.000.000 USD and it indicates that the owners are from a very affluent part of the society.

Inal (2002) who studied single family housing estate projects getting common at the metropolitan fringe of Istanbul lists their characteristics as follows:

- They select location within the municipal boundaries of villages adjacent to forest areas
- During location selection, existence of transportation facilities, finding an extensive piece of land, and existence of other housing projects are determinants
- Half of the projects consist of 500 houses or more
- Completed projects also increase the urban development level and land prices surrounding them (Inal 2002).

These characteristics were helpful in our understanding the location selection and spatial characteristics of housing estate developments in Istanbul. Opportunities to find appropriate land close to natural amenities like sea and forest, and existence of major transportation routes are determinant in these developments.

The new settlements of the middle and upper classes have become widespread in other Turkish cities as well as İstanbul: Bilkent, Konutkent and many other housing estate developments around Çayyolu in Ankara are some examples of these developments. Actually, the housing estate boom in Ankara has started in late 80s and early 90s. Mesa Koru Sitesi, on the Eskişehir highway, Angora Houses near Beysukent in Ankara are designed as satellite towns. Besides these developments, especially at Batıkent and Çayyolu, small scale housing estates constructed by housing cooperatives take place (Ersöz 1997).

As aforementioned, there are very few studies done about new developing suburban residential districts taking place at the periphery of the city. One of these is the study of Dülgeroglu (1996) who studied samples of Istanbul and Ankara. According to the results of this comparative study most people wish to live in houses with garden and one or two storey houses. Surrounding open green areas increase the satisfaction level. In their study of Ankara, Imamoglu and Imamoglu (1996) indicate that these new housing estates form a good alternative for apartment flats even with their major deficiencies. As Sencer Ayata demonstrates, the new middle classes of Ankara began to move to these suburban areas claiming “a powerful desire for escape from pollution, street life and social heterogeneity” of the city (Ersöz 1997).

4.4. Summary

This chapter is based on two major topics. Firstly, the changes seen at the urban fringe of the metropolitan cities in Turkey are mentioned. Secondly, the tendency of fragmentation and sprawling is examined at the housing market alongside the dynamic structure of post-1980s. During this period, high rise suburban developments, single family housing estates, shopping malls, office parks, big infrastructure projects, international hotels, recreational areas and theme parks came out as new land uses managing the tendency of urban development. Among the factors affecting this development process the most, increase in the number of car ownership and income, developments in public transportation systems, public sector agencies, changes in lifestyles and consumption norms can be counted.

The features of this development are basis of the following case study chapter. Implications derived from the studies about Ankara and Istanbul samples will help us to understand the developments and its characteristics in Izmir. In this context, findings about single family housing estates can be summarized as follows:

- They are preferred by high and mid-high income groups
- They develop at the urban fringe, mostly by the rapid transportation routes
- Which have a tendency to develop within the boundaries of non-metropolitan municipalities or outside the adjacent areas because of legal flexibilities
- They have fragmented and uncontrolled
- Having a tendency to prefer location outside the city and adjacent to natural amenities like forests, sea, or lakes
- They are auto dependent developments, deprived of daily urban services
- They are mostly gated communities and they present a structure providing essential services (i.e. entertainment, shopping, security) by themselves
- Reasons behind the development of housing estates show variation. The main promise of this development is; “getting away from the disturbed urban environment and from traffic congestion”, and “reaching to nature”.

CHAPTER V

CASE STUDY RESEARCH

In this chapter, the development of the single family housing estates at the Izmir metropolitan fringe is studied: Firstly, the development process of the metropolitan city of Izmir is mentioned. Secondly, the selection reasons of (Urla) western corridor of the city as case study area, study methods, and findings are discussed.

5.1. General View on the Izmir Metropolitan City

Starting with 1960s the city of Izmir grew fast and gained a metropolitan identity. Urban services, banks and commercial firms, at this period, selected location at Gümrük, Basmane and Cumhuriyet Square that were accepted as CBD (central business district). The most prestige housing areas are at Alsancak, Göztepe, Güzelyalı, Karşıyaka and Hatay. The most important urban problem in Izmir in 1960s is "gecekondu" formed as the result of immigration. Increasing population and demand to housing areas and also the 'Flat Ownership Law' (Kat Mülkiyeti Kanunu) accepted in 1965 caused a transformation period from single houses to high-rise buildings, in Izmir.

Izmir Development Plan dated in 1973 was important factor mediated urban growth after 1970s. This plan determined development areas as north-south and east-west corridors. For industrial development, Şemikler-Aliağa axis at north and Karabağlar-Cumaovası (Menderes) axis at South were recommended. Tourism and secondary housing areas took place at western corridor, at Narlıdere-Urla-Seferihisar. In this period the total size of Greater City of Izmir reached to 76.000 ha (Sonmez 2001).

With 1980's a sprawling development began to be increased in each development corridors in Izmir. At the periphery, gecekondu areas, cooperatives and mass housing areas were seen together. As public sector gained an active role in mass housing construction, some large scale projects began to be done at the periphery of the city, like Evka and Ege-Kent. On the other hand, big construction firms which started to get dominant in housing sector and also the banking sector entered into mass housing projects.

New capital system formed by liberal economy policies and its aggressive demands mostly shows itself in housing areas, in 1990s. Public withdraws from competing market, leaving its place to the private entrepreneurs. In this period, housing estates, schools, shopping malls began to be seen (like EGS, Kipa, Agora, Palmiye and Özdilek) (**Figure 5.1**). Areas selected for prestige houses are denser at east-west corridor like İnciraltı, Narlıdere, Urla, Seferihisar and Bornova. Big shopping malls, which have magnitude effect on the edge of the city, are located in Balçova, Çiğli, Gaziemir and Bornova. This process has also directed the way of sprawling.

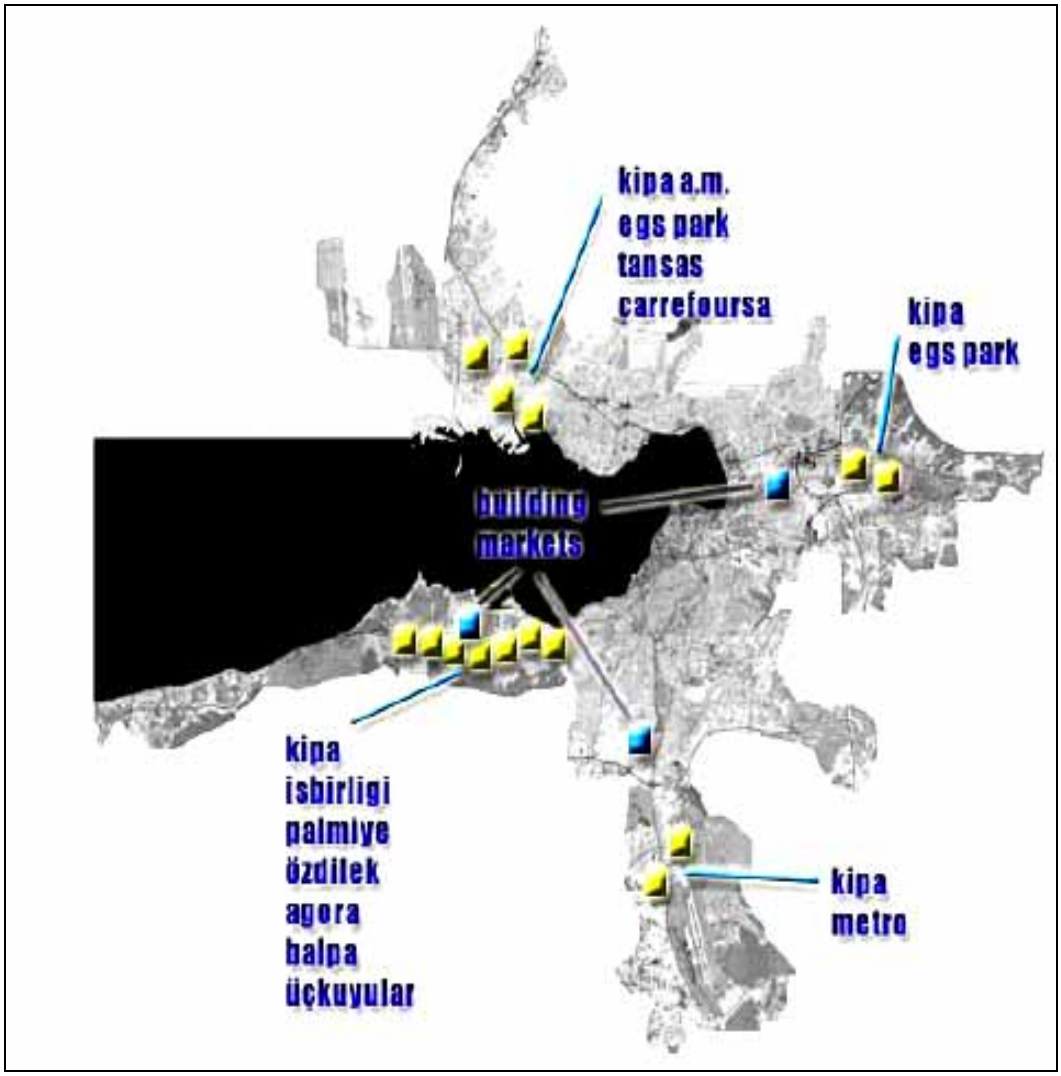

Figure 5.1: Shopping Centers in İzmir, source: (Çilingir 2001)

5.1.1. Urban Dispersion Process

Even though the population rate of Izmir slows down, it is still one of the growing metropolitan cities of Turkey with its high immigration rate. Izmir's population share in the whole country was 1.6% in 1950, 3,3% in 1997 and increased six times in 47 years (Sonmez 2001). Metropolitan municipality population in the year 2000 was 2.284.000 and provincial population was 3.287.000 (source: www. die.gov.tr).

Since the boundaries of metropolitan fringe are always changing, accumulation of spatial and socio-economic based data is required continuously. For Izmir metropolitan city, there are no comprehensive studies reached about urban growth rate, land-use changes, population movements, commuting pattern etc. Therefore, it is not viable to estimate the spatial, social and economic dimensions of the metropolitan fringe area. However, in the preliminary report of the Izmir strategic planning study formulates some assumptions: "*In the analysis of population distribution and urban development area it is seen that economic and spatial effects of the city of Izmir influence an area with a 90 km. radius*" (Sonmez 2001).

Urban development is denser on the corridors determined by geographic thresholds and major transportation connections. Izmir as the result of population increase and economic growth spreads to the periphery as in the other metropolitan cities. However, this decentralization is not realized with an integral and regional planning but with patchwork of partial plans. This causes negative effects on urban environment, forests, fertile agricultural land and cultural values are threatened. This kind of sprawling process creates a settlement pattern that increases the costs of infrastructure. Developments in corridors of Izmir can be summarized as follows:

Northern corridor connecting Izmir to Aliağa involves both mass housing areas and intensive industrial areas. At this corridor, in Seyrek, there are "Villakent" and "Bahçekent" projects developed by Ege-Koop. "Villakent" project is designed as 2500 houses on an area of 2000 acres. A "Bahçekent" project involves 3000 houses (Koç 2001). Besides "villa"constructions there is also a sell out of parcels with the project (with sizes of 400-1200 sqm.). The slogan used in the advertisements is "spaces which lie in the arms of nature".

South corridor is one of the important development corridors of Izmir. Aegean free zone, light industry areas, airport and mass housing projects are stregthened the urban sprawling. Tahtalı Dam and its catchment basin (Tahtalı Barajı Koruma Havzası)

were insufficient in controlling this urban spread. Especially, Torbalı and Ayrancılar with numerous housing cooperatives seem like a massive construction site.

At east of Izmir, there are important land uses such as heavy industry, mass housing areas and campus of Aegean University. Urban development at this area is interrupted by the mountains surrounded of Belkahve at east and Sabuncubeli at north. In the east, at Kemalpaşa and Ulucak, industry, mass housing areas and weekend houses have developed. Weekend or seasonal houses are especially in rural fringe and adjacent the villages of Çiçekli, Karaçam and Yakaköy (Kara 1997). Karadağ's (1998) study concerning the villages of Çiçekli, Yakaköy, Karaçam, Sarnıç, Kaynaklar and Yelki indicates that cheap land prices, natural amenities and proximity to the city affect the location choice of houses at villages and adjacent areas. Karadağ also indicates that most of these consist of villa houses (92%) and some of them consist of (8%) housing estate (site) developments. According to this study 56% of the houses is used permanently (retire rate is high) and 36% is used seasonally (Karadağ 1998). Consequently, at rural areas surrounding the metropolitan city there are physical, economical and social changes. Planning processes of these seasonal houses have distinctions, too. Some of them are built with the permission of mukhtar and some informally. Especially informal buildings at Yakaköy are destructed by government authority from time to time.

Recently, metropolitan city of Izmir entered into a spreading process especially on the western corridor. Secondary houses and single family housing estates that develop adjacent to Yelki-Urla-Seferihisar and the construction of Çeşme Highway encourage this sprawling process. Within the framework of Development Law no: 3194 Provincial Directorate of Public Works and Settlement (Bayındırlık İl Müdürlüğü) give permission for construction at parcel scale and this causes development of fragmented housing estates (Buğu 1999). For this reason, western corridor (Urla) is selected as case study area.

New development areas in Izmir spread outs the boundaries of Izmir Metropolitan Municipality and begin to affect non-metropolitan settlements. Therefore, there are problems in administrative structure in the management and coordination of planning applications and controlling facilities such as informal and speculative building, lost of public lands, lost of agricultural lands etc.

5.2. Research Strategy

Western corridor of Izmir is the place where housing developments, especially single family housing estates are seen. Therefore, the study area is selected as western corridor which takes place at the metropolitan fringe area where rapid urban development and transformation occurs with intense single family housing estate constructions. Administratively the study area takes place within the jurisdiction of Urla municipality. Study area is the land outside the continuously built up metropolitan urban area, a corridor limited by Çeşme highway in the south and by Urla municipality boundaries at west and east (**Figure 5.2**).

Figure 5.2 Location of the Urla

The case study research constitutes of two main parts. The aim of the first part is to study the planning '*process'* orienting the development of single family housing estates and find out how this process differentiated and spatial reflection of them. Second part is about the social pattern or '*behavior'*, the users' reasons in preferring these estates and their satisfaction levels. In other words it is evaluating the house, housing environment and urban fringe perception from the view points of the users (**Figure 5.3**).

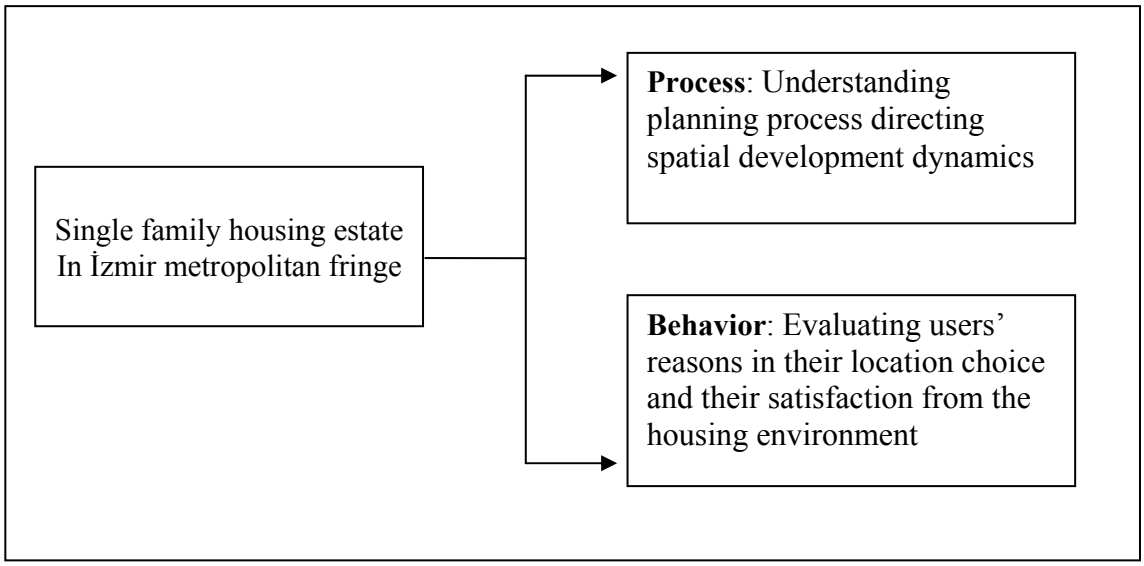

Figure 5.3 Conceptual sheme of case study research

The **process** part of the case study research consists of three steps.

1. Firstly, the planning process of single family housing estates is examined based on the institutional data. For this purpose, the planning archives and council's decisions of Urla Municipality is studied between July-February 2003. Also, in order to be able to consider the development process in detail, newspaper archives of the municipality is searched thoroughly.
2. Secondly, single family housing estates that were built after the partial plan approvement are determined.
3. The spatial properties and occupancy rate of single family housing estates are determined.

In the second part of the case study research, called **behavior**, samples that can represent different locations in the study area with high occupancy rate is chosen among built-up single family housing estates and user survey is done. This survey consists of three main parts:

- Questions about the characteristics of the household
- Reasons for their location choice and
- Their satisfaction level from the house and its environment is questioned.

5.2.1. General Characteristics of Urla

Urla is selected as a case study area and therefore firstly the general characteristics of Urla and its urban development process are examined. In this way, both the urban development process and also the urban planning process are explored better.

Urla is an administrative district of province of Izmir. It is 35 km far from Izmir central city and its population is 36759 according to the year 2000 data. The road and highway connecting Karaburun and Çeşme peninsula are within the boundaries of Urla Municipality (**Table 5.1**).

There are 20 neighborhood areas in Urla. 10 of them take place at "central Urla", in the old part of the city. The other 10 has developed far from the town center. Most of these neighborhood areas formed by the division of old neighborhood areas with the effect of increasing urban development (İçmeler, Torasan, Yenikent, Kalabak). Altıntaş, Camiatik, Hacıisa, Yeni, Naipli, Sıra, Yaka, Yelaltı, Yenikent and Yenice take place near town center. Rüstem, Deniz, Güvendik, İskele, Atatürk, Zeytinalan, Çamlıçay, Kalabak, Torasan and İçmeler are the neighborhood areas far from town center.

Çeşmealtı, İskele, Zeytinalanı and İçmeler are the neighborhood areas where second houses are seen, mostly. In Urla central and coastal neighborhood areas are different from each other in urban pattern characteristics. On one hand there are the old town center neighborhood areas involving the existing settlement area and population on the other hand there are the surrounding neighborhood areas with their partial developments.

Economy of Urla is mainly based on agriculture. In the last years, greenhousing and flourists also became an important income sources. Within the boundaries of the town 2000 ha area of total 10000 ha is used for active agricultural land. Other income sources are trading and tourism. An important portion of the population works in Izmir that is the biggest city of the Aegean region (Uyar 2001).

Table 5.1 Population by census years of Urla district

Population by Census Years	**1980**	**1985**	**1990**	**1997**	**2000**
Urla District	**26066**	**26907**	**35467**	**43087**	**49269**
City	14416	21641	25648	31723	36579
Merkez Sub-district	**9551**	**3237**	**7761**	**9163**	**10370**
Bademler	895	927	1007	1284	1178
Balıklıova	726		1317	1252	1644
Demircili	139	139	161	153	199
Denizlikocadere*	614				
Gödence	376	377	366	307	322
Gölcük	176	152	136	166	139
Gülbahçe	1425		2134	2163	2466
Güvendik*	999				
Kuşçular	859	640	918	1336	1646
Ovacık	185	168	173	183	156
Özbek	845	900	1428	1861	2139
Yağcılar	316	311	487	765	803
Zeytinalanı*	1996				
Barbaros Sub-district	**2099**	**2029**	**2058**	**2201**	**2320**
Uzunkuyu	490	464	477	467	445
Barbaros	494	442	435	468	566
Birgi	125	98	164	136	141
Kadıovacık	205	217	225	256	275
Nohutalanı	166	161	151	150	161
Zeytineli	287	283	292	366	380
Zeytinler	332	364	314	358	352
Total	**11650**	**5266**	**9819**	**11364**	**12690**

5.2.2. Planning Process in Urla

Metropolitan planning process started in 1968 partially influenced Urla, too. At 1973, Izmir Metropolitan Planning Bureau had prepared a plan considering all the coastal areas of Izmir at a scale of 1/200 000. At 1976, the coasts of Urla were taken into the Tourism Recreation Master Plan at 1/25000 scale which was prepared by the Ministry of Tourism and Information. This plan was approved in 1981. With this plan,

* The population belongs to these villages were calculated as a distinct neighborhood in Urla-district afterward.

planning decisions for Gülbahçe and İçmeler at west and Zeytinalan in east were taken. No master plan decisions were taken for the area that takes place inbetween İçmeler and Zeytinalanı (also involving central Urla) (Ozbek 1994).

The first development plan for Urla was done in the early 1960s. The first district plan done by Bank of Provinces involves central Urla and İskele which takes at the coast. With rapid development and increasing secondary houses demands a new plan was done in 1978. In 1984, the plans were approved. Denizli and Güvendik which were separate villages till 1981 were taken into the jurisdiction of Urla Municipality and so the municipal borders and coastal area widened (Urla Analytical Report 1992). Delays in planning and approval periods and increasing demands caused speculative developments and many informal constructions. Especially the development process of Zeytinalanı set the scene of such kind of speculative land subdivision. Özdemir (1993) quotes this development as:

> "*Houses mostly took place on the slopes near the coast in the village with a population of 2000 people according to the records. On the land between and intense agricultural facilities were made… In the analysis of ownership pattern a very striking view came out. On the vacant and agricultural land of the village with a population of 2000 people, 2519 separate plots have formed. 2380 of these were 100-250 sqm. In this area which was an agricultural land that should not be opened to settlement, no social facility area was planned and no relation was formed between the plots. In this village close to metropolitan city, all these cadastral subdivisions were legal which let construction of houses for a population of 20000*" (Özdemir 1993).

Besides Zeytinalanı, İskele and Çeşmealtı also faced informal, illegal developments. All these buildings took legal permissions with Amnesty Laws No: 2981. New district plans that took Amnesty Laws and applications into consideration were done in 1987. New building demands starting with 1990s made it essential to make a new plan. Considering that the construction of Campus of Izmir Institute of Technology may create a new additional demand a new plan was made in 1995.

On the other hand, planning studies of new development plan also had some problems. Since base maps were not up-to-date and dating back to 1970s some application problems began to be seen. At the end of 1999, new base maps were provided and new master plan studies was started. This new master plan is still

continuing and application plans are done through stages. The overall process can be summarized as follows:

- District plans that started in 1978 were approved in 1984.
- Because of Amnesty Laws and Informal developments revisions were made in 1988 in district plans.
- Development plan revisions started in 1992 and the new master plan was approved in 1995
- Because this revision plan was insufficient, new development and district plans began to be made.

5.2.3. Urban development in Urla

Narlıdere and Güzelbahçe forming the western axis of Izmir are resort areas of Izmir. These settlements took migration after 1960s and they grew and united with the built up area of the metropolitan city. At the end of changes in their jurisdictions Narlıdere, Güzelbahçe and Balçova became separate municipalities connected to the Metropolitan Municipality of Izmir in 1997. Besides the administrative changes some spatial changes were seen also. Secondary houses transformed into permanent houses, agricultural facilities vanished, speculative land division became obvious, and gecekondu areas grew. In sum, while Narlıdere and Güzelbahçe were settlements at the fringe area they connected with the city and became part of it as the result of rapid urban development and transformation after 1980. Therefore, urban fringe area was pushed forward and included the next belt, Urla, within its limits.

Starting from the end of Aegean Military Commanding Area to Urla Iskele and Çeşmealtı the construction and usage of secondary houses on the coast began in 1950s. During this period Urla and its coastal area always stayed in the *urban shadow*. In Urla where natural amenities always attracted people, secondary houses showed an increase in quantity after 1980. New transformation options increased the process of uniting with the metropolitan city caused secondary houses transforming into permanent homes. Özbek (1994) studied the transformation of secondary houses to permanent homes in Urla. The findings of this study indicate that at the coasts of Zeytinalanı and Iskele this transformation rate is 1/3. According to Ozbek, this transformation brings some technical and social problems (Ozbek 1994).

Post 1980s is the turning point in the urban development of Urla. Izmir-Urla-Çeşme highway project done by General Directorate of Highways was approved by Urla Municipality in 1990 and the construction started. In 1992, Urla phase of the project opened to traffic and in 1994 its connection up to Çeşme finished. Even before the construction finished land prices increased and land speculations started (Urla Analytical Report 1992). During the construction of highway, changes in the quantity and quality about the housing development of Urla accelerated. With the encouragements of Urla Municipality, large cooperative housing projects surrounding central Urla began to develop like "544 Houses" and "1000 Houses". On the other hand, low density single family housing estates based on parcels began to develop in the middle of agricultural lands and forests areas. Behind the coast of Urla, around Çeşme highway a new single family housing estates that began to form, have differentiations both in planning process and development types. These housing areas that formed by partial plans after 1990 because of development pressures of the metropolitan city, is examined below.

5.3. Findings about "Process"

5.3.1. Planning Process

Development of single family housing estates are largerly based on partial plans. Therefore, examining partial plan process for Urla may give important clues on the evolution of these estates.

What is partial plan?

Partial plan is "the plan, which is prepared for the areas that are outside the existing development plan boundaries is an unintegrated situation with this plan and which provides its social and technical infrastructure requirements in its own structure" (Odyakmaz 1996). Definition of partial plan is mentioned in the "By-law Concerning Development Plan Preparation and Plan Changes" (İmar planı yapılması ve değişikliklerine ait esaslara dair yönetmelik) in the Act no: 3194. Partial plan can be prepared on the lands within the boundary of municipality and its adjacent area. When partial plan implementation is approved by its related municipality building permit is given subsequently.

Planning Decisions affecting Partial plan process of Urla

At the end of 1980s as house demands toward Urla increases, local government was in search of producing planning decisions in order to balance the pressures. As revisions were made in development plans in 1988 as the result of informal developments, a decision called "*special yield zone*" (özel mahsul alanı) was added to the plan legend. During the revision of these plans, agricultural lands were observed and categorized into four groups:

- The first group is described as 'TKI' and form of a fertile agricultural land. In partial plans the built-up area rate is 7% and minimum parcel size is described 3000 sqm. Cadastral parcel border is determined as the building border and has no other planning decision other than the road connection.
- The second group is 'TKII' and constitutes of sloping and rather unproductive agricultural lands. For houses minimum parcel size is 2500 sqm. and built-up rate is 7%. Plan decisions for building, parcel border, and road connection is the same as the first group.
- Third group is the agricultural lands involving the greenhouses that were active during the planning period. No planning decision was made for these areas.
- Protected forest areas are determined by observation. Built-up rate is 5% and minimum parcel size is 2500 sqm. (Uyar 2001).

The main purpose of this plan was to protect agricultural land as much as possible, balance the increasing built-up demands and prevent informal building. Because, as the metropolitan city get closer land speculations started, agricultural activities receded and number of vacant land increased. With weekend houses or farm houses built on parcels of 2500-3000 sqm. the agricultural activities would partially continue agricultural lands would be built-up in low density. Land owners whose parcels under the jurisdictions of Urla municipality and which did not have district plans began to apply for benefiting from this decision. Planning decisions followed partial plan process.

Partial Plan Process for Urla

In order to be able to understand the partial plan process in Urla decision of municipal council and planning archives were explored. Because planning archives were constituted after 1990 data belonging to the period before that date could not be found. It was detected that the planning archives have some problems in organizing and collecting data and therefore some documents were lost. Especially most of the institutional opinions about the partial plan demands could not be found.

Partial plan applications were evaluated in two stages. Partial plan applications that based upon 'special yield zone' planning decisions were first discussed at the municipality council and prior-approvals were given. In the next stage, the demanders had to make the partial plan applications and took confirmity assessment from the related public institutions. The ones who take the assent of authorities and make the development plan could take building permit. The first stage of the approval process is "*partial plan demands issued prior-approval permit*" and the second stage is "*partial plan applications for prior approval permit*".

Searching through the municipal decisions inbetween the years 1986-2003 was effective in showing the partial planning process and municipality's attitude toward this process. Municipal council decisions show that the first partial plan demand based upon the legend 'special yield zone' is dated back to 1988 (by council decision no: 1988/3-4). It was determined that even before that date there partial plan demands. Most of them were rejected with reasons like "may be harmful to agricultural lands", "distant from district plan limits", "absence of social and technical facilities", "exceeding the floor area ratio".

Partial plans done during this period were mostly about secondary housing demands. It was found out that before 1990 there were only nine single family housing estates developed by partial plans (**Table 5.2**). These estates played an important role in the evolution of the upcoming residential developments.

Table 5.2 Single family housing estates developed by partial plans before 1990

Name	Location
Öztunçer Yapı Kooperatifi	Zeytinalanı
Hemşin Konut Yapı Kooperatifi	Zeytinalanı
Yağmurkent Konut Yapı Kooperatifi	Zeytinalanı
Çamdibi Konut Yapı Kooperatifi	Güvendik
Hoşbelde Konut Yapı Kooperatifi	Zeytinalanı
Çamkent Sitesi	Kalabak
Gündaş (Çamlıbel) Yapı Kooperatifi	Kalabak
SS. Mavi Gök Konut Yapı Koop.	İçmeler
SS. Özpetek Kerem Konut Yapı Koop.	İçmeler

After 1990 partial plan demands began to increase. Inbetween the years 1990-2003, 357 demands were made for total 676 parcels. When annual distributions are studied it can be seen that partial plan demands began to increase between 1992 and 1998 and reached to the highest point inbetween 1994-1995 (**Figure 5.4**) When these demands were studied in districts it is seen that Yelaltı, Yenice, Zeytinalanı and İçmeler have the highest development dynamics (**Figure 5.5**). Proximity to the metropolitan city, ease of accessibility, characteristics of land, and land ownership pattern are affective in location choice of housing estates.

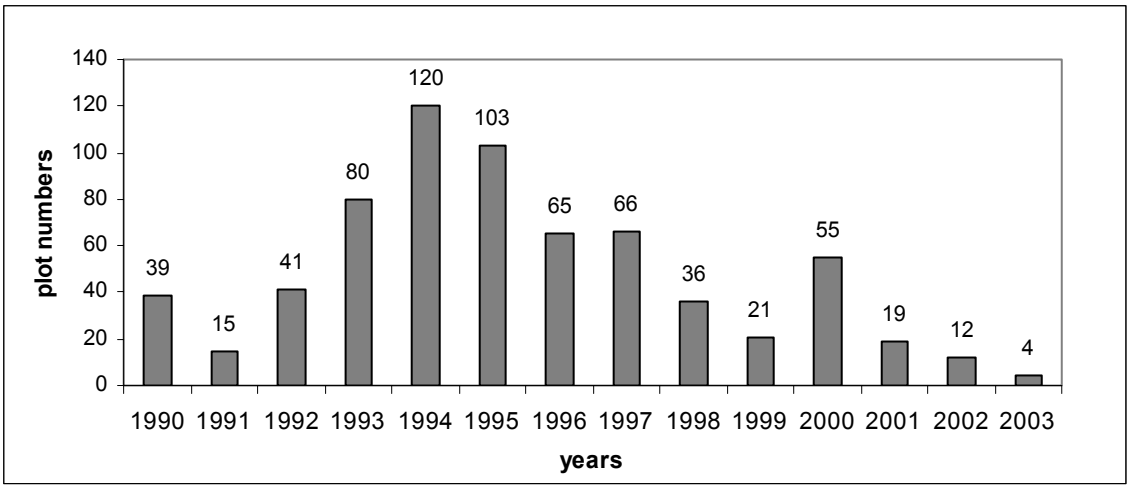

Figure 5.4 Partial Plan Demands

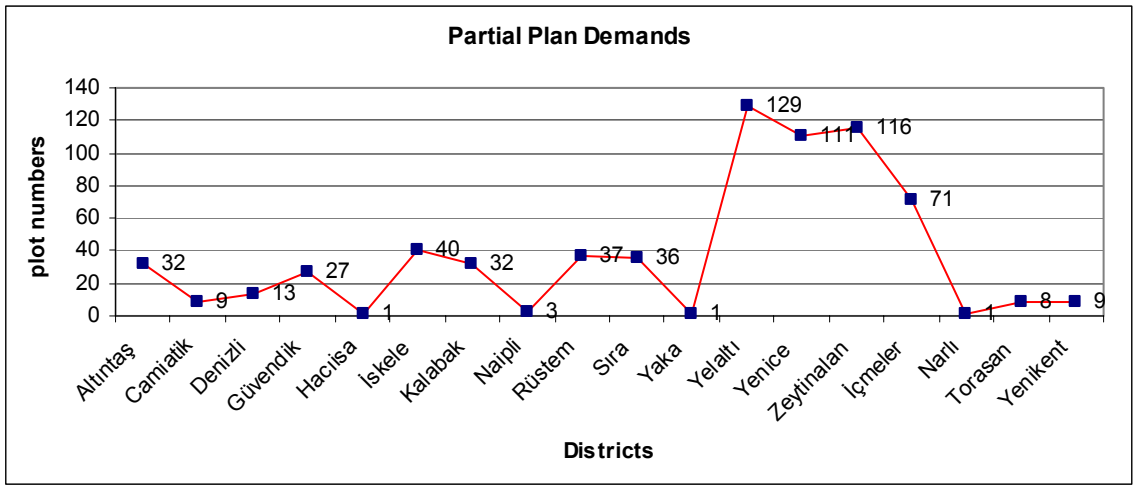

Figure 5.5 Partial Plan Demands

Some of these demands made partial plan applications after prior approval process. Among 627 parcels that took prior approvals 482 made partial plan applications (**Figure 5.6**). If stated in percentages; among general demands 71% made partial plan applications. When annually studied, in parallel with general demand process partial plan applications increased inbetween 1992-1998 and made a peak in 1994 (**Figure 5.7**).

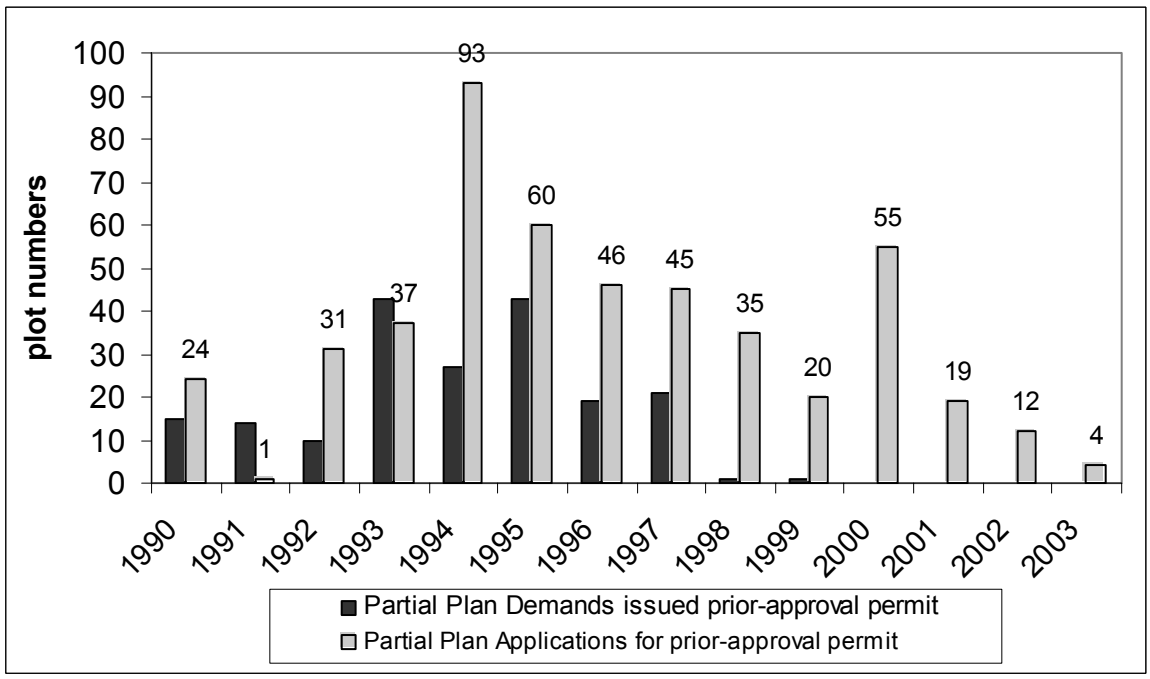

Figure 5.7 Partial Plan Demands

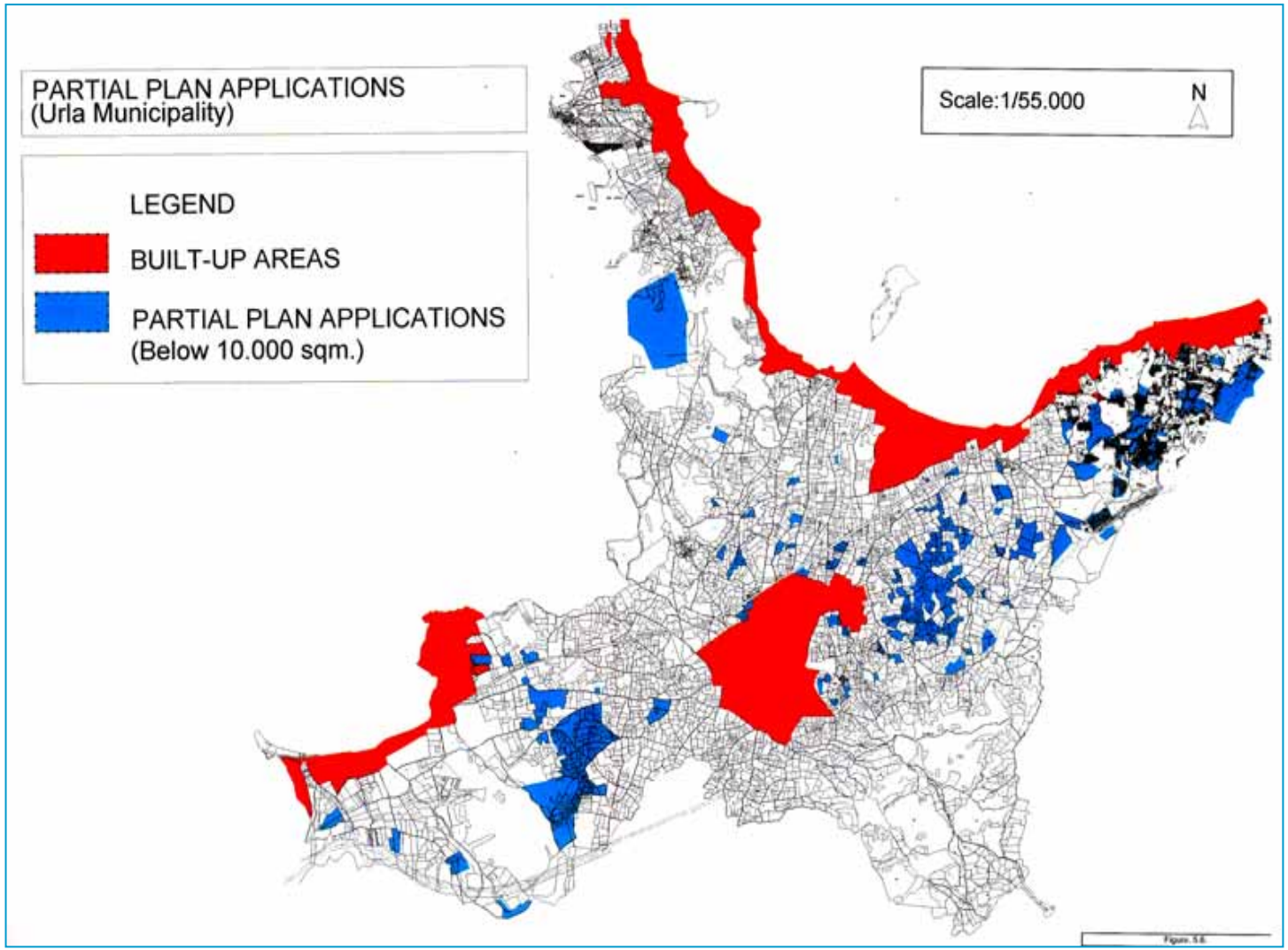

Figure 5.6. Partial Plan Applications

Opinion of Authorities in the Partial Plan Process

For partial plans, opinions of five different public institutions were taken. During the evaluation of archival records it was found out that opinions of these institutions were not taken for every partial plan appliations. General Directorate of Forestry in Izmir (Orman Genel Müdürlüğü), İzmir Provincial Directorate of Rural Affairs (Köy Hizmetleri Bölge Müdürlüğü), General Directorate of Highways İzmir 2nd Division (Karayolları Şube Müdürlüğü 2. Bölge), Local Conservation Council (Kültür ve Tabiat Varlıklarını Koruma Kurulu), Regional Directorate of State Hydraulic Works – DSI (Devlet Su İşleri Bölge Müdürlüğü) are the institutions asked for opinions. Opinions of Izmir Provincial Directorate of Rural Affairs were influential on the evaluation and approval of the partial plans. Because building permission is given according to the soil class and agricultural products of the area (**Figure 5.8**). Partial plan demands were studied according to the "Regulation Concerning the Use of the Agricultural Lands for Non-agricultural Purposes" (Tarım alanlarının tarım dışı gaye ile kullanılmasına dair yönetmelik) and dissented ones were determined. For partial plan applications that involve olive groves decisions were taken according to law no: 3573/4086 this law give 10% built-up permission for olive groves taking place within municipality boundaries. Therefore, almost all of partial plan applications involving olivegroves were approved. During the study of partial plan demands it was seen that the attitude of the municipality has more importance than the other institutions.

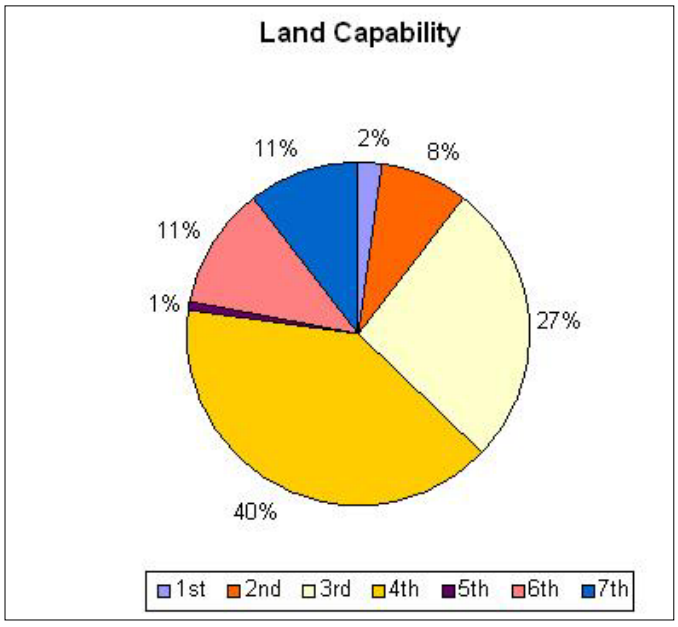

Figure 5.8 Distribution of Soil classes for Urla

482 parcels that made partial plan applications were evaluated according to the opinion of authorities and among them 449 were accepted and 33 were rejected (**Figure 5.9**). (Average parcels size 10646 and there are 99 parcels below 10000 sqm.) Partial plan applications were made approximately for 532 ha of an area and only 19 ha of it was rejected.

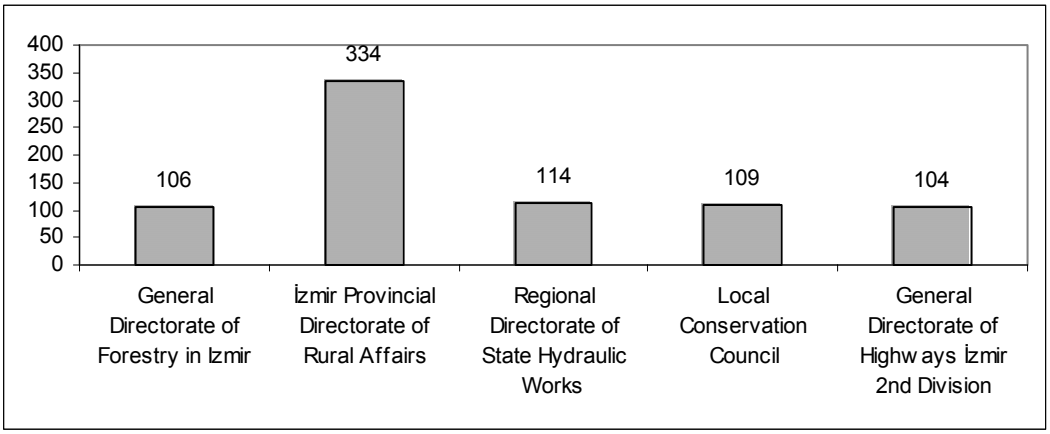

Figure 5.9 Number of Opinions according to Public Institutions

Evaluation of Partial Plan Process

Studying the partial plan demands and applications between the years 1990-2003 was helpful in understanding the urban development dynamics within the jurisdiction of Urla municipality. With this study it was possible to understand how local authority has managed partial plan demands.

For, Urla which was included within the metropolitan fringe after 1990, it was a period when urban development dynamics gained speed. In terms of housing areas distinctions in quality and quantity started at this period. Studying the partial plan process is important in explaining the development of single family housing estates which is the subject of this study. Municipality of Urla in last 13 years tried to cope with the urban development pressures with two different development plans, numerous partial plans and development plan revisions. Firstly, in 1988, 'special yield zone' decisions was added to the plan legend and so almost all the land outside the development plan border was opened to building constructions. In fact, the real reason form this decision was to balance the increasing growth pressure of the metropolitan city, preserving of agricultural land, and providing a low density development type.

However, in the contrary, the land was dominated by scattered family housing estates without any road connections.

Partial plan demands that started to increase in 1992 and their effects were indicated in "Urla Analytical Study" as: "*At the western parts of the city new settlement areas take place. At the south of Izmir state road new constructions is seen. These are mostly cooperatives. Houses are duplex and have gardens*" (Urla Analytical Report 1992). In 1993, in one way the increasing demands of partial plans and in other the results of applications began to create concerns. İdil (1993), who was the consultant of the municipality, expresses his thoughts about this development type as: "*At the special yield zones' of district plans some arbitrary decisions and negative developments are seen. For this reason, the plan legend and planning stipulations have to be changed*". Given building permissions to buildings that do not fit with density regulations and being inharmonious with the condition of minimum parcel size became an important problem. During built-up process, also the possibility of building more than one house on a single parcel speed up this development. Besides all these, opening of Izmir-Çeşme highway in 1994 and partial plan demands reaching its peak point in this year are not a coincidence.

In the master plan report in 1995 these are expressed as: "*Development type which was thought as farm houses in low density, which would be helpful in preventing urban development pressures and diminish of agricultural lands in the beginning, showed completely a development tendency just at the opposite through time. Housing estates formed of Izmir's high income groups at rural areas should be limited and controlled*" (Idil et al. 1995). As aforementioned, during the studies of 1995 master plan, up-to-date base maps were not used. Areas developed by partial plans were skipped at the master plan and so there is lack of basic urban services for technical and social functions. Patchwork developments of partial plans began to create problems during application periods. Consequently, master plan became nonfunctional, insufficient in managing the urban development. Decision taken by the local Municipality Council in 1995 was remarkable: "*At the special yield zones there are parcels without any road connection. In order to solve this problem a road system and car parking areas should be planned*" (Municipality Council, February, 1995 / decision no: 175)

In the years following 1995 it was aimed to manage this so-called 'undisciplined' development. Furthermore, in order to control these patchwork developments it was aimed to enlargen the municipality's boundaries and make a comprehensive plan involving these areas, too. "*...applications just outside the municipality border are under the control of province. Because there is no development plan for this area, agricultural lands and forests are diminishing. Southern coasts are damaged by piecemeal developments. Urla's relation with the surrounding villages got tighter. For this reason, it is accepted that Ovacık, Kuşçular, Yağçılar and Demircili are taken within the boundaries of adjacent area*" (Municipality council, June 1996 / decision no: 99). However, this decision did not put into practice.

1997 was the year when partial plan demands reached to its greatest capacity. However, during this period another problem came out namely the infrastructural problems of single family housing estates: "*... TKI and TK2 areas have to be drawn on a 1/1000 scale district plans and those zones have to be connected to a planned transportation system…building farm houses instead of dense urban pattern gradually lost its purpose. The method that was thought to be a good idea at the beginning unfortunately caused destruction of the environment*" (Baran İdil's notes, December 1997). Environmental effects of partial plans approved unthoughtfully were perceived better as applications began and numerous "villas" built-up. Dozen of single family housing estates are under construction without sufficient infrastructural facilities and with the problems of road, water and electricity supply systems. There are two main negative aspects of these developments: environmental deterioration and the additional costs of municipal services demanded increasingly by the housing estates. However, municipality did not have the financial power to meet these costs[*]. News about housing estates in Urla in these years describe the dimensions of development as: "*Escaping from the city cost too much. The will to live within the nature, outside the city that speeds up with the construction of Çeşme highway caused the construction of five thousand permanent houses*" (Yeni Asır, September 1998).

Before local elections of 1999, Urla Municipality took a decision about increasing the floor area ratio (FAR) in "special yield zones". With this decision the FAR in 1/5000 scale development plans increased to TKI=0.10 and TK2=0.12 (Municipality Council, April 1999/ decision no: 177). This development is reflected at

[*] Baran İdil's note to the municipality on 10.05.1999; "…with the revenue gained by partial plan approvals, the salaries of the workers were paid…. Part of the rent should be paid to the municipality."

newspapers as: “Green pillage at Urla” (Yeni Asır, 7.04.1999), “Green areas in danger, developed areas widened up at Urla” (Cumhuriyet, 7.04.1999). There are two reasons behind this decision. One of these is to legalize the single family housing estates where arbitrary construction rights were given because of application faults. Second reason is, outside the municipality, the building density was FAR: 0.30 in the partial plans approved by Provincial Directorate of Public Works and Settlement. Landowners and developers were making pressure in order to increase the building density for benefiting more from the development rents. This decision taken just before the local elections was a good move both for the local government and for the other actors sharing the rent. However, after the elections, the local government changed and the new government cancelled this decision. These developments clearly indicate that how the urban development at the urban fringe was oriented by different actors and how they compete with each other in order to increase their own share.

The new development plan that started in 2000 aimed to put piecemeal developments with many problems under control. During this planning period it was observed that almost all of single family housing estates were exceeded the legal density limits. Afterward, demolishing decisions were taken but a few of them were applied. Therefore, a start of new master plan was given avoiding such problems. With this new plan housing estate that take place at İçmeler was increased as FAR: 0.15.

As a result, with the approval of partial plans (especially in the areas with TKI regulations), low density urban areas which involve hundreds of single family houses began to form. A development type that defines parcel border as building border, without any social and technical facilities and without a road system evolved. The important point, here, is it is still the beginning of this process, because there are many parcels with approved partial plans but not built-up yet. When all of these will finish the fringe area of the metropolitan city will turn into an environment that is independent, fragmented, introverted, and without any urban services.

5.3.2. General structure of Housing Estate

In this second part of “process” it is aimed to reach to “housing estates” that were built after the partial plan approval. Two different studies were done in order to understand the spatial and structural characteristics and the dimensions of development:

- Archival Analysis: The first step, as mentioned before involves the studies about partial plan demands and approvals between the years 1990-2003. In this context, it was found out that partial plans of total 449 parcels were approved. In order to determine the ones that were built as single family housing estates the archives of building permissions were searched through. Therefore, based on the records of municipality, the inventory of the housing estates that took building permission between 1990 and 2003 was done. The houses that were built over 10 units were defined as "housing estate". Therefore during the permission inventory there were 38 housing estates found matching this criteria (See Appendix A). It was collected additional information about estates' area size, permission date, number of houses and other spatial data during this research, also.

- Field Survey: In the second step, the spatial development of housing estates that took permission is studied. The occupancy rates, the ones that are still under construction and the one that are finished and changes in usage purposes were examined. For this purpose, a field survey was done between February-May 2004 and data involving 38 housing estates were collected. Interviews with the 13 project and estate managers were conducted. With these interviews, information about the general problems of the estates, extent of infrastructural facilities and the structure of the management organization were collected as well as the information about the characteristics of houses (**Figure 5.10**).

Spatial structure of Housing Estate

Partial plan approvals, as aforementioned based on cadastral parcels. The sizes of the cadastral parcels determine the sizes of the single family housing estates built according to the partial plans. No housing estate smaller than 10.000 sqm was found during the research. The smallest housing estate is "Greenway" 1.2 ha and the largest is "Itokent" 52.3 ha. As it can be seen in **Figure 5.11**, 16 of these 38 estates (42%) are smaller than 25.000 sqm. There are three estates that are larger than 150.000 sqm and they constitute 38% of the total area. In general, 38 single family housing estate form of 127 parcels and 2.280.000 sqm.

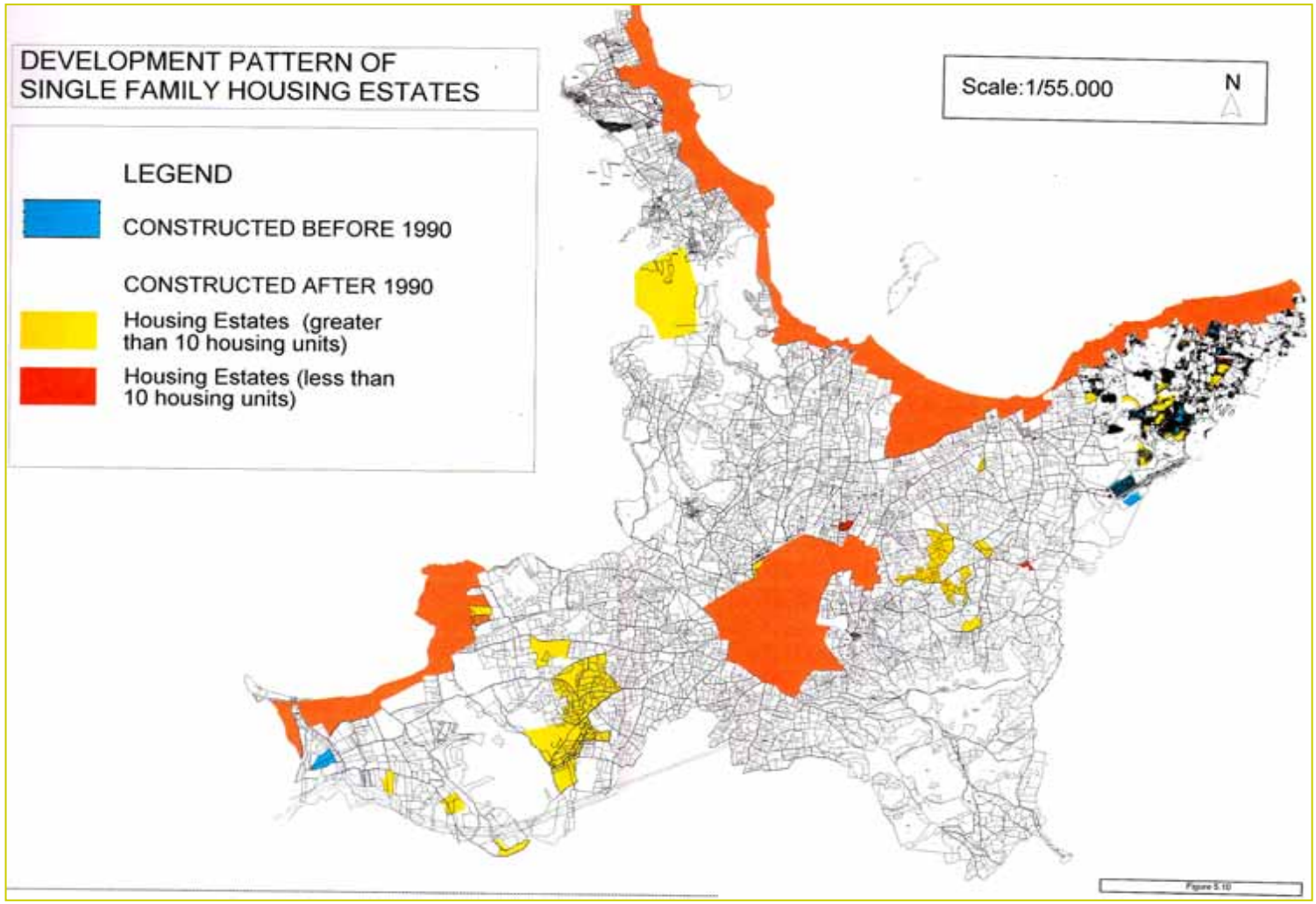

Figure 5.10 Development pattern of single family housing estates

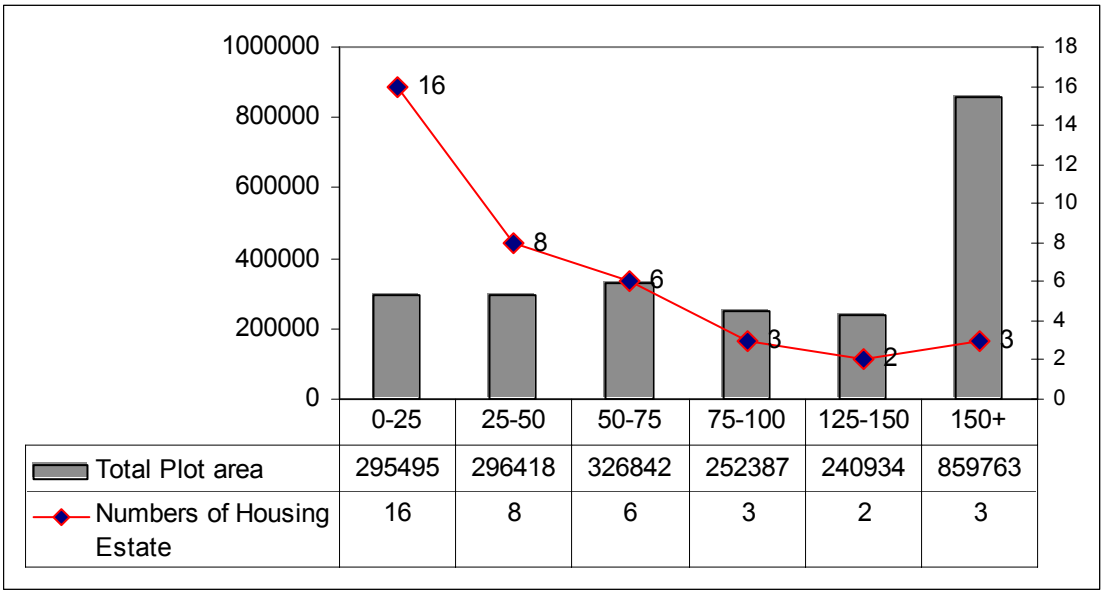

Figure 5.11 The areas of single family housing estates

Housing estates vary in number of houses they involve. 52% of these (20 estates) form of 10 to 30 housing units. The ratio, estates with these 31-50 housing units, is 29% (11 estates), 51-70 is 8% (3 estates), 71-90 is 3% (1 estate) and lastly 91 housing units and more is 8% (3 estates).

170583 sqm building permission was given for 1382 houses. Average house size is 132 sqm. Increases in building permissions are in parallel with the partial plan demands. (The number of estates that took building permission is the lowest between years 1991-1993 with a ratio of 16%, and the highest between years 1994-1996 with a ratio of 34% (**Figure 5.12**).

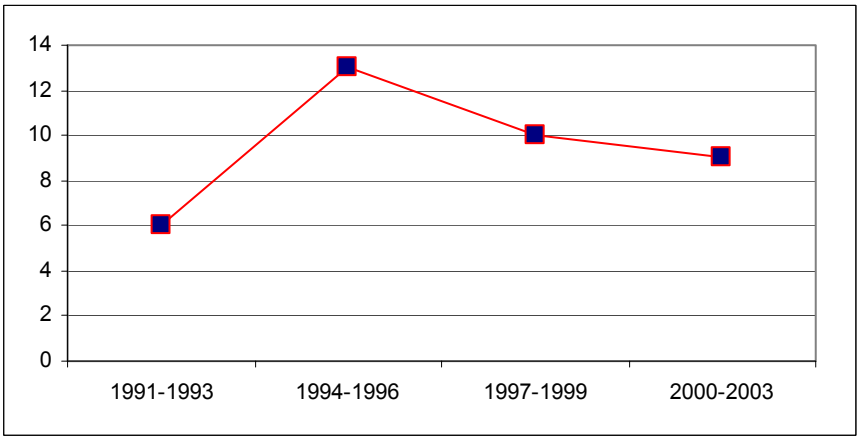

Figure 5.12 Distribution of single family housing estates according to years

Among 1382 houses that took building permission 65% (901/1382) is finished, 24% (328/1382) still under construction, and 11% not yet started to be constructed. Among 901 houses completed, 185 (21%) are permanently used, 155 (17%) are seasonally or weekendly used, 561 (62%) are vacant. 13 of 38 estates are still under construction, 4 of them constructed but all the houses are vacant. Occupancy rate of the remaining 21 estates is 38%.

There are 3 main districts were detected where single family housing estates denser. The first is Zeytinalanı and Kalabak which are the nearest to the metropolitan city. The second district is Yenice, close to Urla and highway. The third is İçmeler that is far from the metropolitan city and where the largest four estates take place (Umutköy, İtokent, Sıraselviler, and Menesköy) (**Figure 5.13**).

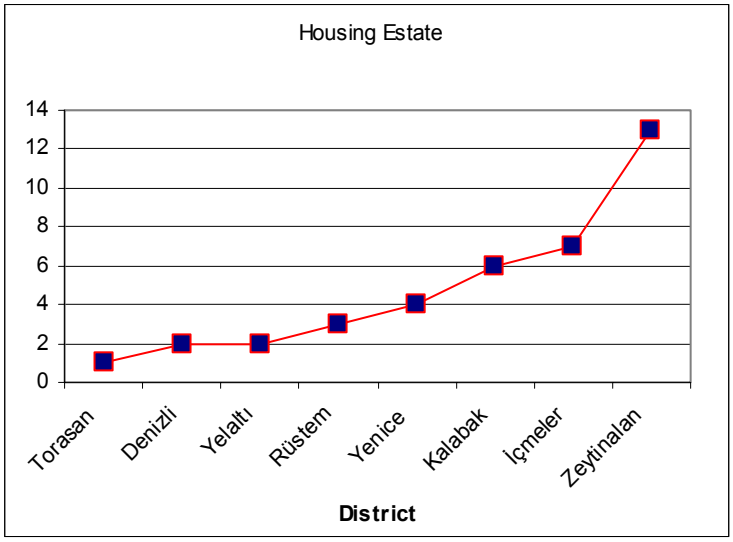

Figure 5.13 Distribution of single family housing estates according to the districts

Evaluation of Development of Single family housing estates

The disintegrated structure of partial plans is reflected on the housing estates developed by these plans. In other words, this kind of planning process brings forth a scattered and piecemeal residential development also. When housing estates developed between the years 1990-2003 with these partial plans are examined, the following outcomes can be noted:

(1) Distinctions in organization and design: Field survey indicates that some of the estates have developed as secondary houses. 4 out of 38 estates were constructed as secondary houses*. The mass-produced and identical looking seasonal houses constitute a typology that aim to involve as much house as it can be are differentiated from the others (house sizes, designs, security, and activity centers etc.), easily. Another typology of housing estates can be defined as "packaged development" which is constructed for permanent usage and with lower density. The reason they are called "packaged" is that they have a professional management system on the provision of services and facilities (paved streets, sewers, garbage collection, recreational facilities and so on.) Therefore, emphasize here is to the lifestyle they provide as well as the qualities of the houses. To examine the characteristics of single family housing in detail, 13 interviews were conducted and data gathered about the design, organizational structure, and infrastructural facilities. In sum, three different organization and design dimensions can be highlighted:

- Eight of these single family housing estates were constructed as cooperative houses (Umutköy, İznom, Sıraselviler, Onbeşevler, İtokent, Mavi Nokta ve Kapkınlar). During land-purchasing and partial plan process these estates acted as cooperatives and differentiated in terms of development scale, also. Especially, Itokent, Umutköy and Sıraselviler (under construction) are larger than the others both in number of houses and in the area covered. In these estates housing units are mass produced and identical. Therefore a homogeneous housing environment is formed.
- In the second group, whole production process is completed by one developer. The developer buys the land, construct the houses and sell them. Even though they are mass-produced, they have different designs. 'Çamyuva Rustik', 'Çamyuva' (contructed by the same developer) and 'Egeli Zeytialanı Evleri' are constructed by this system. 'Sefaköy' differs from the others in the building process goes on according to the tastes and preferences of the consumers. Consumers select the land, architectural project and construction is done according to his/or her demands.

* 'Ege Denizi Yapı Kooperatifi', 'Güvenler Sitesi', 'Şirinobakent' and 'Manzara Yapı Kooperatifi' took their building permission as vacational estates. Sizes, scenes, construction qualities of houses and characteristics of estates differentiate. Even though they were planned as secondary houses they are permanently used.

Table 5.3 List of single family housing estates interviewed with.

	Housing Coop.	Developer	Construction Firms	Occupancy Rate
Çam Yuva Rustik Vilları		x		78%
Çamyuva Villaları		x		84%
Umutköy Sitesi	X			60%
İznom Noterler Sitesi	X			34%
Sıraselviler	X			und. construction
Sefaköy		x		100%
SS. Onbeşevler Sitesi	X			0
Zeytinler Çiftlik Evleri	X			65%
İtokent	X			35%
Egeli (2) Zeytinalan Evleri		x		und. construction
Mesa Urla Evleri			x	50%
SS. Mavi Nokta Sitesi	X			17%
Kapkınlar Sitesi	X			und. construction

- In the third group, the construction firm and land-owner enter production process together. Construction firm constructs the housing units in mass production and land owner gets houses in return to his land. Mesa Urla Evleri that was built by Mesa construction firm is the only sample to this group. Mesa constructs similar, large scale housing estates in Istanbul and Ankara (i.e. Akasya Evleri and Yonca Evleri in Ankara, Bahçeşehir, Sarı Konaklar, Ataköy in Istanbul), also. In Urla, there is no other large construction firm than Mesa. Other estates are developed by local developers and capital.

(2) Distinctions in usage types: One of the aims of this study is to find out the occupancy rates and usage types of the houses. As aforementioned, the occupancy rate is 38%, permanent usage ratio is 54%, and weekend-seasonal usage ratio is 46%. These low ratios of new and more spacious houses produced at the fringe area of the metropolitan city show as the dimensions of speculative building and unnecessary land consumption. On the other hand, the weekend and/or seasonal usage of single family housing estates that were built for permanent usage show a dualistic structure:

"There are some housing developments in Urla, their meaning is indefinite, whether they are farm houses, villa, permanent houses or secondary houses it is unknown" (Yeni Asır newspaper).

"They are all villas but they do not have roads, water & electricity supply systems, markets or telephone connections. Because of insufficient infrastructure and services all the houses are unused…Most people buy them as permanent houses but they are disappointed when they realize insufficient infrastructure systems. Sometimes transportation costs obstruct the development. They cannot find tenants because of the same reasons" (Yeni Asır, September 1998).

The poorly planned and uncontrolled sprawling pattern in Urla after 1990 that was caused by single family housing estates is reflected on the newspapers as above. These areas developed coincidentally and identically produced houses scattered on rural land. Indeed, secondary houses in one hand and single family housing estate as new trend on the other hand and also old town houses owned by original residents indicate to diversity at the metropolitan fringe.

General characteristics of single family housing estates can be listed as follows:

- Houses are mostly designed as introverted and detached and show differences in size and appearances. Itokent, Sefaköy, Çamyuva Rustik Villaları, Mesa Urla Evleri and Egeli Zeytinalan Evleri differentiate from the others with their characteristics. The single family housing estates with suffixes like "Evleri", "Villaları", "köy", kent" is occupied by the high income groups. Houses are produced as "luxurious houses" and marketed as "villas". Generally no information is given about prices and it is told that their size, view, location within the estate and construction material effect the price. Estates not even having a site plan indicate to a spontaneous development during design process (Çamyuva Rustik, Çamyuva, Sefaköy, Egeli Zeytinalan Evleri, etc.).
- Almost all the estates are physically separated from the outer environment with walls, greenery and other design elements. They are protected by security systems or elements. They are administered by professional managers and they have staff for general services like maintenance, landscaping, garbage picking, etc.

- Each single family housing estate has to provide the required technical services by itself. This necessity was put forward during the partial plan process, because local governments cannot provide these scattered and piecemeal residential areas taking place far from each other and from the city center, with urban infrastructural systems. The cost of this process is rather high. Therefore, every estate has to reserve an area for transformer and sewage system. Septic tanks instead of sewage system and private wells instead of urban water supply system are used. Garbage is collected by the management of the estate. The maintenance of the roads surrounding the estate is done by the estate management (like lighting and paved streets), also. Transportation service is also provided because mass transportation does not exist.
- There are sports or recreational areas in the estates which are rather small in size. There can be activity centers like swimming pool, meeting hall, tennis courts, hobby centers but no facilities exits for daily services (See Appendix A).

5.4. Findings about "Behavior"

Studies about "process" gave us information about the planning process and spatial development characteristics of housing estates. Even though the dimensions of spatial development and the planning decisions at the background are understood, there are no data about the users' social and economic properties, location choice, and satisfaction levels. Observations and interviews done with estate managers are insufficient even though they gave us some clues about the socio-economic levels of the users. The aim of the second part, which is called as "behavior", is to evaluate housing environments and fringe phenomenon from the perspective of users under four main topics: (1) Demographic pattern, (2) Property characteristics and residential mobility pattern, (3) Their reasons in selecting the housing estates distant from city centre, (4) Their satisfaction level about the house, housing estate and urban service accessibility are determined.

Population and Sampling

16 housing estates are excluded from the survey because either they are still under construction or vacant. Samples from the remaining housing estates are chosen that fit the below listed criteria and survey is done. Besides two important restrictions time and cost, the difficulties in reaching the users made it necessary to make a less but a thorough survey.

Criteria that are considered in the selection of single family housing estates are:

- *Occupancy rate*: It is aimed to select single family housing estates with high occupancy rate and consequently to be able to reach to as many users as it can be.
- *Location:* Single family housing estates as mentioned in "process" section, are grouped in three different locations. Zeytinalanı-Kalabak districts close to metropolitan city, Yenice districts closest to Urla highway entrance, and İçmeler districts at the west of city center are the areas selected for household survey (**Figure 5.14**).
- *Distinctions in design and organization processes*: There are 3 different single family housing estates developments in terms of design and organization processes. Surveys are conducted at these 3 different groups: the ones built as housing cooperatives, the ones built by large construction firms like MESA, and lastly the ones built by developer and with different housing types.
- *Attitudes of estate managers*: At the beginning of survey firstly permissions from the estate managers were taken because of inaccessibility to the gated and controlled estates. Concerns and sincerity of estate managers are the most important factors in reaching the users.

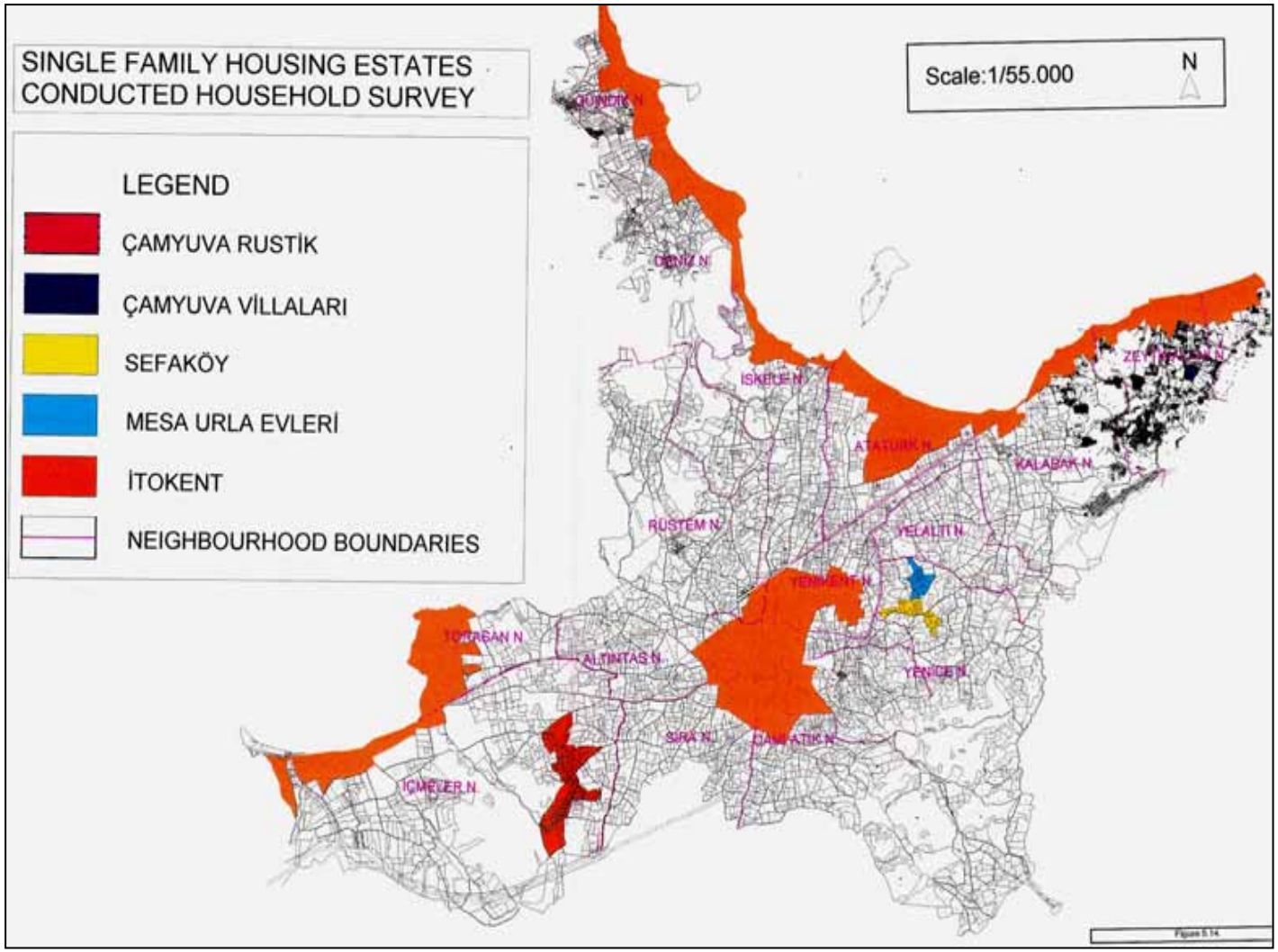

Figure 5.14. Single family housing estates conducted household survey

In the guidance of these factors, five single family housing estates were selected as case study estates. Even though it was aimed to reach to all users in these estates it could not be realized. Danış's (2001) survey in Istanbul/Bahçeşehir case tells about the problems she had to face as: "*establishing relationship with urban upper classes is more difficult than making a contact with lower classes*" (Danış 2001). Interviews with estate managers gave us clues that similar experiences and difficulties could be faced. In order to eliminate these problems and in order to reach as much users as can be, assistance and cooperation of managers was preferred. As a first step, a contact with the users is established with the help of managers and the aim and scope of this study is explained. Then, the survey and unstructured interviews related with the survey questions were conducted with the 30 households who accepted our requests (**Table 5.4**). In the selection of interviewees, households from different ages and family structures were selected and so distinctions in their housing preferences and satisfactory levels were observed. Interviews being done in house environment and all family members being participated in this process from time to time caused us to make better observation.

Table 5.4 Housing estates in which surveys are done

	Total	Permanent use	Seasonal and Weekend use	Vacant	Number of Respondents	%
Çam Yuva (2) Rustik Villaları	18	14	0	4	3	21
Çamyuva (1) Villaları	24	15	5	4	4	20
Sefaköy	22	22	0	0	9	40
İtokent	126	25	20	81	10	22
Mesa Urla Evleri	30	15	0	15	4	26
Total	**220**	**91**	**25**	**104**	**30**	**25**

Questionnaire Content

This survey is organized in three major parts with 26 questions. The first part of the survey consists of socio-economic structure of households, their mobility pattern and properties; second part consists of their reasons in selecting the outer city housing environment; and the third part consists of questions about satisfaction level on houses, housing environment, and accessibility to urban services. During the preparation of the survey, a literature study was done and similar studies were examined. One of the studies taken into consideration was "Homeowner Satisfaction and Mobility Decisions"

done by Morrow and Irwin in 1995, 1999 and 2001. This survey is focused on a variety of issues such as homeowner satisfaction and mobility, changes in spatial land use patterns in suburban, exurban, and rural areas; the influence of government policies on residential location decisions; and the relationship between sprawl and urban decline.

The respondents' perceptions about preferences were ranked on a Likert-type five-point scale. The five categories were: "1-Very Important", "2-Important", "3-Neutral", "4-Not very important", and "5-Not applicable". Questions about "Satisfaction" are prepared likewise with Likert-type and five-point scale. The scale ranges from 1 to 5, where "1-very satisfied", "2-satisfied", "3-fairly satisfied", "4-dissatisfied", and "5" indicates "very dissatisfied". In the processing of these data a widely known statistical package SPSS was used.

5.4.1. Findings of the Household Characteristics

In this first part of the survey, questions about their age, educational level, and occupation were asked, in order to explore the households' socio-economic characteristics.

1. Demographic Characteristics of the Respondents

When residents' age distribution is examined it is seen that there is a concentration at middle ages and over. Therefore it can be concluded that there is a homogenous age distribution. The lowest limit in female is age 31, there is a concentration between ages 46-50 and consequently a decrease is seen as age gets older. In men below 45 is very low and a concentration is seen between ages 56-60 and over 60 (**Figure 5.15**). The findings of this survey about age distribution show parallelism with the findings of other studies. The studies of Kurtuluş (2002) and Danış (2001) show us that the processes of family formation and reaching to a certain economic situation effect and raise the age distribution of the users. Findings of this study confirm this information, also.

Marital status rate is very high. There is homogeneity in this subject, too. Majority of the households were married. When education level is examined which is very important in socio-economic status it is seen that graduates of university and high school are in majority. University graduates in men are in majority while in women high school and university graduates are close in number. (**Figure 5.16**)

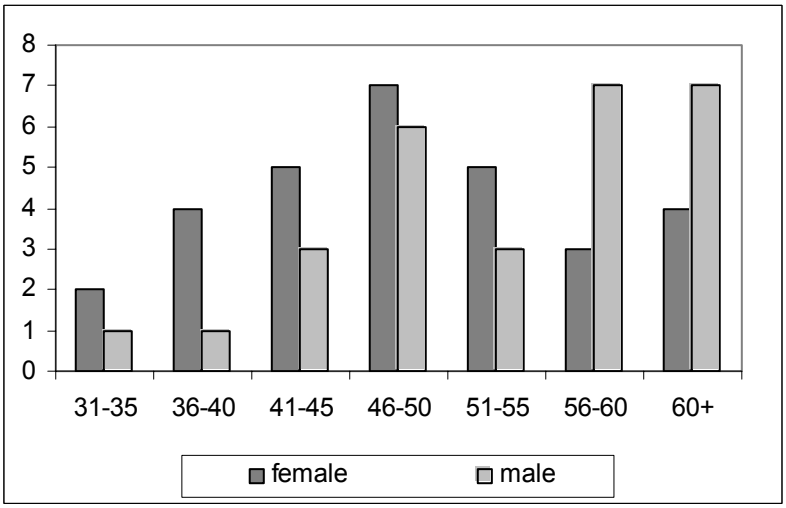

Figure 5.15 Age Distribution of households

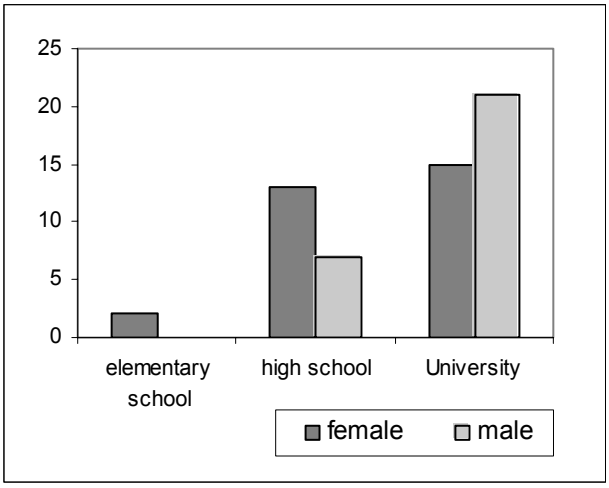

Figure 5.16 Educational level

There are two main groups in males in terms of occupation: On the one hand, there is a highly educated professional-managerial group and on the other, a commercial and entrepreneur group. The professional group consists of university graduates who work as high salaried managerial and professionals in large corporations. For instance, among the interviewees there are doctors, architects, engineers, lawyer and bankers. The entrepreneurial group includes merchants and industrialists who are wealthier than the first group. All of high school graduates are in this group. The rate of retired is also very high (**Table 5.5**). 80% of women do not work (housewife and retired). Most of the working women (16.7%) are university graduates and there are doctors, teachers and merchants among them.

Table 5.5 Occupation distribution of men

		Frequency	Percent
Valid		2	6,7
	entrepreneurial	16	53,3
	professional	10	33,3
	retired	2	6,7
	Total	30	100,0

56.7% (17/30) of households are families with children. Total children number is 27, eight of them go to school, number of pre-school children is four and post-school children are 15.

Under the guidance of the findings and direct observations during the survey a profile of inhabitants can be listed as follows:

- They have certain wealth and comfort (high and mid-high income groups)
- Form of mid-aged and above people
- Ratio of families with children is low
- They have a family centered lifestyle
- Number of working women is low
- Education level is high.

2. Property Characteristics and Residential Mobility

In this section, questions like ownership, buying houses and usage purposes, duration of use, and where they come from are asked to the inhabitants.

Ownership rate is very high, 96%. It is coherent with "high ownership rate" that was emphasized as characteristics of the urban fringe area. Low rental rate is a fact that was emphasized during the interviews with the managers also. It has two main reasons. First is based on owners not wanting to rent these houses (because of high rents and dues) few houses are rented to foreigners; especially to NATO members (There is no solid information about the rents. There is only one tenant in the survey and the rent he pays is 1500 USD per month).

Buying a house and payment conditions are related with the building process. Cash payment is in the first line (33.3%), installment plan (30.0%), cooperative (26.7%) and home credit follow cash payment. Generally, no information is given about the buying and selling prices. However, it was indicated that the houses still under construction have prices 250.000 USD at least. The answer given to the question "*Do you think that you did a good investment by buying a house in this area?*" is 70% "yes". The ones answering "yes" to this question mostly think that in near future this area will become part of the city and suburb and so will gain value. The group answering "no" indicates that did not buy this house for investment purpose but only because they wished to live in such an environment.

According to household survey 86.7% (26) of the total household permanently use their houses. The other 13.3% (4) use their houses as weekend-homes. However, these values do not indicate to a general data, because, the usage types of houses within the boundaries of study area were determined beforehand. The field survey findings, on the other hand, indicate that permanent usage rate is 54% and weekend and seasonal usage rate is 46%. This deviation seen in the results of field survey is derived from the low usages of those houses as weekend and seasonal houses during the time this study was done.

In order to analyze the users' residential mobility pattern their previous residential area was questioned. 86.7% of the respondents have moved from different regions of the city. Karşıyaka and Alsancak are the districts that take the first places. Güzelyalı and Hatay follow them. It is remarkable that prestige districts of the city are in the first place (**Table 5.6**).

Table 5.6 Distribution of Users according to their previous residential areas

		Frequency	Percent
Valid	Alsancak	8	26,7
	other city	4	13,3
	Guzelyali	6	20,0
	Hatay	3	10,0
	Karsiyaka	9	30,0
	Total	30	100,0

5.4.2. Reasons of preferring housing areas at the metropolitan fringe

Factors that affect the decentralization of cities toward their periphery were defined in the first chapter. Public policy, changes in economic structure growing population, increased mobility, progressions in transportation and technology, changing household characteristics, changes in income distribution and life styles are the factors related with urban development and growth.

In the changes, developments and location choice of housing areas these macro factors are influential. Another factor related with the development of housing areas is the preferences and choices of households (Filion et al. 1999). These choices that are determined by some multi-dimensional and complicated decision processes vary according to economic and socio-cultural values. Factors which affect the choices are 'dwelling size', 'house price', 'quality', 'social homogeneity' (especially among high-income groups), 'quality of life' and 'accessibility to activities'.

Literature survey presents us with two distinct perspectives about the location preference of housing areas at urban fringe areas (Bryant et al. 1982, Daniels 1999). "Urban" and "rural" characteristics based on the duality of the fringe area, are connected with "push" and "pull" factors that was effective on the preparation of the survey and on the determination of reasons of choices. "Pull" factors come out as advantages of urban fringe areas and are related with natural beauties, open and green space, quality of living environment and privacy. "Push" factors on the other hand indicate to the negative images of the urban environment. Factors which lies beneath the development of the single family housing estate, like "being with the nature", "healthy life", " a clean environment", "quality of living environment", "metropol-phobia", "a homogeneous social environment", "single houses" are all related with this viewpoint. In this scope, the advantages provided by pull of the rural that is called as "a new life style and the push created by urban environment and their effects on the orientation of users' choices are examined.

In the second part of the survey prepared in this way, 16 factors that can affect their choices were oriented to the users and it was asked them to list these factors by their importance. These factors were grouped in three groups as: "pull", push" and "other" and they are summarized as below (**Table 5.7**) (**Table 5.8**) (**Table 5.9**). "1-Very Important", "2-Important", "3-Neutral", "4-Not very important", "5-Not applicable" are the importance levels of the answers and mean values are determined accordingly.

Table 5.7 Descriptive Statistics: pull factors (n=30)

	Mean	Std. Deviation
	Statistic	Statistic
existence of garden for private use	1,00	,000
beauty nature and environment	1,13	,346
preference of single family house	1,13	,346
existence of larger open and green areas	1,20	,551
a safer place than downtown	2,23	1,406
size of house	2,43	1,406
quality of living environment	2,53	1,570
Neighborhoods with homogenous character	2,60	1,589

Table 5.8 Descriptive Statistics: push factors (n=30)

	Mean	Std. Deviation
Escape from traffic congestion and pollution	1,37	,615
Decline of environmental quality in the densely populated central city	1,60	,894
Reduction of safety in the central city	3,23	1,612
Absence of preferred residential districts in the central city	3,30	1,765

Table 5.9 Descriptive Statistics: other factors (n=30)

	Mean	Std. Deviation
personal choice	1,27	,828
Ease of accessibility	2,63	1,402
other	3,40	1,993
Price of the house	3,67	1,539

As a result of evaluations mentioned above, the three categories were determined by tri-section of the five-point response scale. Those with a mean value less than or equal to 2 were designated as “very important”, those with a mean value between 2 and 3 were designated as “marginally important” and those with a mean value greater than or equal to 3 were designated as “not very important”.

At the end of this evaluation it is seen that seven factors are in the very important category. Within all these factors “existence of garden for private use” was marked as “1-very important” by whole respondents. From the viewpoint of pull factors, “beauty of nature”, single family house” and lastly “larger open and green area” are factors that have high scores on the list in the preference housing areas at the urban fringe. “Personal choice” grouped as other factors, and “traffic congestion and pollution”, “decline of urban environmental quality” among push factors are “very

important" factors. Consequently; idea of single family house within natural beauties in comparison with traffic problem and deterioration of urban environment take the first place in users' preference (**Table 5.10**). In this sense, urban fringe area provides an alternative living place and life-style to apartment living.

Table 5.10 Importance list of factors according to survey results

very important (mean 1-2)	marginally important (mean 2-3)	not very important (mean 3+)
1. Existence of garden for private use (pull) 2. Beauty of nature and environment (pull) 3. Preference of single family house (pull) 4. Existence of larger open and green areas (pull) 5. personal choice (other) 6. Escape from traffic congestion and pollution (push) 7. Decline of environmental quality in the densely populated central city (push)	8. A safer place than downtown 9. Size and quality of house 10. Quality of living environment 11. Socially homogenous environment 12. Ease of accessibility	13. Reduction of safety in the central city 14.Absence of preferred residential districts in the central city 15. other 16. Price of the house

It is mentioned that upper income groups preferring these housing environments designed as "gated" and "packaged", security, socially homogenous environment and environmental quality are the prior factors. However, these factors as seen in the table 5.10 are in the "marginally important" group. 'Security' factor is asked in two ways to the users'. First of them is new housing environment being secure and second is security decrease at the city center being effective on their choices. 43% of the respondents say "very important" to the factor "a safer place than downtown" while 20% of respondents say "very important" for the factor "reduction of safety in the central city". Most of the users indicate that city center is safer. It is defined that housing estates being distant from each other surrounding area being very deserted and uncontrolled create problems in providing security. It is seen that deteriorated environmental quality or traffic congestion may be more important reasons than security. Other factors that take place in marginally important group are "size and quality of house", "quality of living environment", "socially homogenous environment"* and "ease of accessibility". Homogenous social environment factor is not in the first place. 23.3% of the respondents told that they did not even thought of this reason. Accessibility factor was

* Answers for "Socially homogenous environment" have ratios 33.3%, "very important", 26.7%, "important" 10% "neutral", 6.7% "Not very important", 23.3% "Not applicable".

also defined as marginally important by the respondents. This may be explained with the high car-ownership ratio (mean= 1.93) and car dependency of this development type.

In "not very important" group, factors like "reduction of safety in the central city", "absence of preferred residential districts in the central city" and price of the house" take place. Respondents found the 15 factors listed in the survey were remarkable. The 'other' factor, which is designed as open-ended, determined by respondents as follows:

> "*I began to live here because I was one of the founder members of this housing cooperative. I thought I would be a sample for the others*" (Itokent).
>
> "*My childhood passed in a private garden house. Living in this kind of house was my dream. Now I realize it*" (Çamyuva Rustik, Itokent).
>
> "*It is close to my summer house in Çeşme that is why I prefer it*" (Itokent).
>
> "*We preferred this place because our friends live here*" (Itokent, Sefaköy).
>
> "*I love nature*" (Çamyuva, sefaköy).
>
> "*We preferred single house because of earthquake*" (Sefaköy).
>
> "*Living in an estate has many advantages. Security, maintenance and other services are provided by estate management. Otherwise it would be very difficult to live here*" (Sefaköy, Çamyuva).
>
> "*We live here because our children grew up*" (Çamyuva).

Among the reaons listed above "living in an estate has advantage" indicates an important point. Indeed, estate management besides providing security, maintenance services it also helps in gardening and amendments. So, providing all the required services makes life in estates easier and advantageous.

Reasons in preferring single family housing estates which develop at the fringe of the city of Izmir show variety as mentioned above. As this is the first study in determining the reasons of housing choice it could not be compared with other samples. Even though there are similar studies studying housing environment developing outside city the samples are different. They are mostly large scale projects like Bahçeşehir, Kemer country, Alkent, Angora including shopping center, recreation and other services. For this reason, it is thought that a priority list about housing choice may differ. For example, in the study of Danış (2001), Bahçeşehir is preferred for "being a

better and more secure environment for children and teenagers." However, in this study children especially during their teenages do not want to live in these housing areas. They say that they do not have friends; they cannot go to city center whenever they want and they have no activity center.

5.4.3. Satisfaction level of housing areas located outside the city

The aim of this chapter is to evaluate resident's perceptions of and feelings for their housing units and the environment. This evaluation is made for four different categories including (1) house, (2) housing environment, (3) accessibility to urban services, and (4) social relations. Satisfaction level explained for the factors in these categories achieved us to perceive the positive and negative sides of these housing estates outside the city. During the design of this part of the survey and in determining the factors the studies of Filion (1999), Ogu (2002), Nelson (1999) and Morrow (1995) are used as supplementary sources.

This section of the survey is arranged as Likert-type and five-point scale likewise with the previous part. The scale ranges from 1 to 5, where "1-very satisfied", "2-satisfied", "3-fairly satisfied", "4-dissatisfied", and "5" indicates "very dissatisfied". Evaluations firstly are done within each category then determined by tri-section of the five-point response scale. Those with a mean value less than or equal to 2 were designated as "satisfied", those with a mean value between 2 and 3 were designated as "marginally satisfied" and those with a mean value greater than or equal to 3 were designated as "dissatisfied".

Satisfaction of users in terms of 'residence' is evaluated according to six factors. Among these factors, the ones with the highest satisfaction level are "private garden" and "parking spaces". Generally the size and appearance of houses called as "villa" or "luxurious house" are approved by respondents. In the interviews based on survey it was understood that detailed construction of houses are done by their users. Reasons of this are explained as "*owners from high-income groups want to do detailed construction according to their tastes. That's why no detailed construction is done during the construction of these houses*"[*]. In the evaluation of 'construction quality' and 'maintenance costs' the satisfaction level drops down. Especially complaints about

[*] Interview with Sıraselviler Housing Estate-project manager, March 2004

infrastructure increase. During the survey it was observed that there are maintenance activities in most of the houses (**Table 5.11**). Among all housing estates the satisfaction level from construction quality is lowest in Itokent (mean=3.50) and highest in Sefaköy (mean=1.56) (**Figure 5.17**) (**Figure 5.18**).

Table 5.11 Descriptive Statistics: satisfaction with the residence (n=30)

	Mean	Std. Deviation
Existence of private garden	1,13	,434
Garage size/parking spaces	1,13	,346
General appearance of your house	1,70	,877
Size of house	1,90	,885
Maintenance costs of house	2,17	,874
Quality of construction	2,77	1,194

Figure 5.17 a view from Itokent

Figure 5.18 a view from Sefaköy

Users asked for evaluating the housing estates they live in according to seven factors as seen in the **Table 5.12**. 'Quality of landscaping' and 'management and maintenance' are the factors with highest satisfaction levels. Satisfaction levels belonging to accessibility and recreational facilities vary according to the location of the estate and its design options. Sefaköy (mean=1.56) and Çamyuva Villas (mean=1.75) have the highest scores in terms of accessibility (**Figure 5.19**). When their locations are examined Çamyuva is at the closest point to the Izmir and Sefaköy is at the closest point to the highway connection. Itokent from the viewpoint of 'accessibility from the central city' is the most remote and disadvantageous location (mean=2.7). Users mostly complain about the secondary collector roads due to their poor quality and maintenance.

Table 5.12 Descriptive Statistics: satisfaction with the housing estate (n=30)

	Mean	Std. Deviation
Quality of landscaping	1,83	,950
Management and maintenance	1,93	,868
Security of the neighborhood	2,03	,850
Accessibility from the central city	2,13	1,224
Recreational opportunities	2,23	1,040
Quality of infrastructure services	2,23	,679
Traffic connection with major roads and surrounding environment	2,53	1,137

Figure 5.19 a view from the swimming pool in Çamyuva Rustik Villas

Diversity of sports and recreational opportunities these estates have is reflected on their satisfaction level. For example, Mesa Urla Houses is the most equipped and with the highest satisfaction level (mean=1.75) (**Figure 5.20**). Mesa Construction firm tells about their giving importance to this subject as; "*In order this kind of a housing area to be livable social facilities and security systems have to exist. Therefore, before finishing the houses we completed the social facilities*" (Yeni Asır Newspaper, October-1998) However, not every housing estate is designed in this manner. In many samples, social facilities are either completed after the houses or even never constructed.

Accessibility level of housing estates to urban services and facilities is evaluated based upon ten factors (**Table 5.13**). Among them, 'accessibility to shopping center' has the highest satisfaction level. Respondents explained that they do their weekly shopping from big shopping malls in Balçova (i.e. KIPA, Agora, Migros) and daily shopping from Urla. We have mentioned that shopping centers taking place at the main transportation routes and junctions constituted attraction point and channeling the sprawl. This case confirms our earlier assumptions on this subject. Interviewees told that being close to shopping centers is an advantage.

Table 5.13 Descriptive Statistics: satisfaction with the accessibility to urban services and facilities (n=30)

	Mean	Std. Deviation
Access to shopping centers	1,50	,777
Access to local center (Urla)	1,63	,890
Access to central city (Izmir)	1,77	1,104
Access to health services	2,20	1,157
Access to work place	2,21	1,346
Access to local police	2,57	1,251
Access to relatives and friends	2,67	,959
Access to local public events and facilities	2,77	1,165
Access to mass transport options	3,73	,740
Access to municipal services	3,73	,583

Figure 5.20 Recreational Facilities in Mesa Urla Homes

Not having mass transportation system, on the other hand, is the most complaining issue. It seems as the most important constraints in the accessibility to urban services and facilities. This situation is especially an important problem for people who work in the case study estates. Families with children complain most about lack of mass transportation system. Families have to take their children to school by their own car if school service does not exist*.

'Access to municipal services' has the lowest satisfaction level. As aforementioned in the "process" section, local governments cannot provide services to these areas because of financial and technical shortages. Therefore, estate managements try to supply most of the municipal services by themselves. As it is very well known urban fringe area mostly characterized with the lack of urban values, for example, lack

* Number of families with children is six. Half of them (3 families) take thier children to school by their own car. The other ones use school service.

of infrastructure service provision, urban services etc. The satisfaction level about accessibility to urban services reflects the dimensions of this shortage, also.

It is determined that respondents spend average of 20 minutes in order to access to urban services. This access time can change according to the location of the estate, connection with the main road, and distance from the city center (Izmir or Urla) (**Table 5.14**). Average commuting time is about 48 minutes.

Table 5.14 Average commuting time in access to urban services according to housing estates

Count

		average arrival time from home to basic urban services (minute)					
		10	15	20	25	30	Total
	Camyuva		1	3			4
	Camyuva Rustik		1	2			3
	Itokent	3	2	3		2	10
	Sefakoy	1	1	2		5	9
	mesa urla		2	1	1		4
Total		4	7	11	1	7	30

Questions about understanding respondents' social relations, environmental perception, and belonging level were asked also. 53% told that they have good relations with their neighbors (**Table 5.15**). In spite of this the general opinion is that there is weak social contact and share. It is observed that in order to strengthen social relations hobby activities or weekly meetings are arranged in some housing estates. In this way, both the social relations and sense of belongings are tried to be developed.

Table 5.15 Frequency of visiting neighbors

		Frequency	Percent
Valid	Never	2	6,7
	Everyday	4	13,3
	Once a week	20	66,7
	A few times a year	4	13,3
	Total	30	100,0

The rate of the ones saying that living outside the city creates social isolation is 13%. Especially families with teenage children live this feeling more densely. There are two viewpoints about social isolation. One group says that there is social isolation but it

is their own choice to live like this. The other group says that they do not feel social isolation because there is always the possibility to go to the city whenever they want.

Satisfaction levels of 23 factors are grouped as in the **Table 5.16** based on their mean values. Among them, "private garden" is the first on the list (**Figure 5.21**). On the second row the satisfaction from having private car parking area takes place. When "satisfied" group is examined, factors about house, housing estate and access to urban services appear in the first places. Satisfaction level from the appearance of the house, size of the house from its car parking area and garden show us the real "ideal house" comprehension. Satisfaction level of users from the "management and maintenance" and "quality of landscaping" expresses their expectations from a housing environment. Lastly the satisfaction from access to surrounding city centers point out the location advantage of this area. In "marginally satisfied" group generally factors like access to services, construction and maintenance quality take place. In the last group the dissatisfaction from the non-existence of municipal services and mass transportation system is seen.

Figure 5.21 a view from Çamyuva Villas

Table 5.16 Categorization of satisfaction levels according to factors

Satisfied (mean 1-2)	**Marginally satisfied (2-3)**	**Dissatisfied (3+)**
1. Existence of private garden 2. Garage size/parking spaces 3. Access to shopping centers 4. Access to local center (Urla) 5. General appearance of the dwelling 6. Access to central city (Izmir) 7. Quality of landscaping 8. Size of the dwelling 9. Management and maintenance	10. Security of the neighborhood 11. Accessibility from the central city 12. Maintenance costs of house 13. Access to health services 14. Access to work place 15. Recreational opportunities of the housing estate 16. Quality of infrastructure services (water, electricity etc.) 17. Traffic connection with major roads and surrounding environment of the housing estate 18. Access to local police 19. Access to relatives and friends 20. Quality of construction 21. Access to local public events and facilities	22. Access to mass transport options 23. Access to municipal service

In the last part of the survey, the biggest problem and the most important benefit of living in the single family housing estates asked to users. Therefore, the positive and negative sides of these estates developing at the urban fringe area are studied from the viewpoint of the users. The most repeated negative characteristic is ‘insufficient urban services and infrastructure’. In the second row ‘time cost of transportation’ takes place. In the third place ‘monetary expense’ dimension is seen. It is claimed that this type of life-style has expensive with three reasons: (1) fuel expense based on car dependency, (2) heating expense caused by living in a detached large house, (3) maintenance cost of the houses. Another problems defined by respondents are the ‘dissatisfaction of teenagers’ and the ‘security’. It is mentioned that even though these housing estates are ‘gated’ and ‘controlled’ living outside the city causes some security problems. In spite of all these problems 93% of the users are happy in living to another place. “Being away from the uproar of the city”, “being close to nature”, “a very calm and silent life” are the most important benefit and these are all opportunities provided by rural land.

CHAPTER VI

CONCLUSION

After 1980 metropolitan cities were growing gradually within the dynamics of global developments. While changes in transportation infrastructure, telecommunications technologies, and socio-economic structure managing the urban growth, cities were spread out to their peripheries alongside the transportation routes, parallel with these developments.

Transformations seen in Turkey after 1980 in urban structure are the results of economical, political and social restructurings. With the impacts of these processes some changes in the quality, form, and location preferences of urban land uses began to be seen in the last two decades. As a result, in parallel with the trends throughout the world, cities began to grow and sprawling their peripheries. Housing development is one of the land uses that came forward in sprawling process. Exceeding gecekondu areas circling the metropolitan cities in Turkey and formation of housing areas outside the cities can be defined as a new trend. This novel and scattered growth type at the urban fringe can be defined as 'housing estates' and became a case observed in metropolitan cities, especially in Istanbul. Some variations in the quality and quantity of this development type can be observed. For example, some of these housing estates are designed as complex structures that are high-rise and high-density including various activities (i.e. education, recreation, shopping, security and so on). Another group constitutes of low density single family houses.

The scope of this study is the transformation seen at the fringe areas of the metropolitan cities. However, it was impossible to perceive this transformation occurring at the area where complex urban development processes and different land uses are seen with its entire dimensions because of the limits of this study. Therefore, the transformation is tried to be understood by examining the housing estates that increased their development dynamics at the metropolitan cities in the recent years. In this context, the spatial, behavioral, and urban planning dimensions of single family housing estates are examined.

In this framework, in the second chapter of the study, two important concepts related with the urban development process, "urban fringe" and "urban sprawl", are

examined. Definitions of these concepts, their characteristics and their importance from the perspective of urban planning are discussed. In the third chapter, the transformations of the residential areas at the urban fringe starting with industrial revolution are examined. Therefore, the diversity of housing development at the fringe area and experiences of different countries are studied. The suburbanization experiences of western communities and transformations at the suburban areas in the last years are summarized in the context of counter urbanization and exurban development. It is seen that these developments are related with socio-spatial polarization, changing tastes and values, institutional evaluation and technological changes. Fragmented growth patterns, urban sprawl and decline of the urban core constitute the challenging fields of urban planning practice and debate. In the fourth chapter, developments in Turkey are mentioned. Spatial changes and developments at housing areas seen at the metropolitan cities before and after 1980 are discussed. During this period, when sprawling tendency increased high rise suburban developments, single family housing estates, shopping malls and office parks appeared as new land uses developing at the outskirts of the metropolitan cities. Increase in the number of car ownership and income, developments in transportation systems, public and planning institutions, changes in lifestyles and consumption norms are the factors influencing this development process. In the fifth chapter, where case study is considered, firstly the development and sprawling process of metropolitan city of Izmir is studied. The spatial development features and planning decisions orienting the development of single family housing estates that develop at the western axis of the city, within the boundaries of Urla Municipality are studied under the topic "*process*". The reasons and managing factors affecting people leaving the previous housing areas and selecting new areas are discussed in "*behavior*" part. Besides, their satisfaction level about houses, housing environments, and accessibility to urban services are questioned.

This study is important in examining the Izmir case about a new housing development type where only Istanbul and Ankara cases were discussed so far. Besides, being a study involving the urban planning, spatial, and user dimensions of this housing development and aiming to form a knowledge base derived from case study research, distinguishes it from the others. The biggest limitation on this study was the absence of another research about Izmir case. Therefore, it became essential to discuss these housing estates showing development tendency at the periphery of the metropolitan city with their three different dimensions mentioned above.

Evaluation of Research Findings

Development of new housing areas becomes an important factor to manage the sprawling process that began to be seen at the metropolitan city of Izmir after 1980. Squatter housing (gecekondu) develops at the edges of the cities, mass housing and housing cooperative areas, and summer houses developing alongside the seashore played an important role in the sprawling of Izmir metropolitan city. During this period, besides large scale mass housing constructions like EVKA, EgeKent; houses began to be built also by another players such as banking sector and big construction firms. As a result, high-rise, high-density housing environments began to develop. Requiring larger areas as a result of large scale production system and insufficient inner city renewal; public land began to be allotted to the usage of private sector; low land prices and developments on transportation influenced the housing production process at the periphery of the city. Alongside these factors, it is seen that housing construction gained pace along all development corridors of Izmir metropolitan city. For example, 26790 houses are constructed by 84 housing cooperatives from 1992 to today just at the northern development corridor within the boundaries of non-metropolitan county municipalities like Ulukent, Harmandalı, Koyundere, Asarlık and Seyrek (Celep 2000).

However, at the region involving Yelki-Seferihisar and Urla forming the western development corridor of the Izmir a different type of housing development than the others can be detected. Scattered, disintegrated single family housing estates which spread alongside the highway played a dominant role in the development of this corridor. Another distinguishing characteristic of this axis is tourism activities taking place at this region. A transformation occurred at this area through time and seasonal houses and estates alongside the shore began to be used permanently. Single family housing estates can be considered as the result of this trend, also.

The development tendencies of single family housing estates in Izmir and their characteristics are considered in detail in the case study section. Discussing the constraints created by this development process and potentials brought by them will make easier to perceive this new trend. They will be discussed under nine main topics:

1. **Poor local government and planning regulations**: Examining the planning process of Urla Municipality in-between years 1990-2003 is important in two ways: Firstly, by this study urban development trends and dimensions could be defined. Secondly, detailed information could be provided about the orientation of these urban development trends by the local government and the planning decisions and applications they based on. Urla Municipality in last 13 years tried to manage the urban development pressures by two different development plans, numerous partial plans and development plan revisions. These planning decisions and applications were done in order to prevent informal developments, protect agricultural land, and balance increasing building demands. Land speculations started with the metropolitan city getting closer, receding agricultural activities, and increase in housing demands obligated the municipality to short term solutions. In this sense, the urban development pressures tried to be solved by the partial plans which seemed as a solution, then. The implications from the survey about the local government and planning decisions as follows:

   - Firstly, it was found out that there was uncongeniality between the planning decisions and applications. A low density development was aimed by building farm houses or weekend houses on 2500-3000 sqm plots instead of high density urban development. However, not conforming the density regulations and minimum plot decisions during the application resulted with a denser development pattern than considered.
   - Secondly, the problem of incompatibility between the institutions coordinating planning decisions. Urban fringe area is characterized as “nobody’s problem” or “institutional desert” from the perspective of urban management and planning. Decentralized structure, fragmentation of responsibilities and lack of coordination with any guiding principles or goals cause sprawling urban development at the urban fringe area (i.e. differentiations between the applications of Urla Municipality and Ministry of Public Works).
   - Thirdly, an unsystematic spatial development away from the city and from each other, which has no road system, which defines the plot boundary as building boundary, and without any social and technical infrastructure facilities is observed.

- Fourthly, local authorities do not develop adequate capacity to plan for and manage growth until it is too late to effectively channel development. Impacts of partial plans upon urban development are observed better after the applications started. Direct and indirect impacts of development and services required by the housing estates constitute a large amount of additional cost for the municipality. However, local government is not powerful in finance, technical knowledge and equipment.
- Fifthly, it was mentioned that urban development at urban fringe areas were determined by different actors and that they competed with each other in order to increase their own benefits. Examination of "process" provided us with verifying, clues that there were numerous and complex forces at the urban fringe area (pressures on increasing the density of building floor area, zoning decisions with different densities, chaos during taking the opinion of different institutions). Short-term political reactions and supply-and-demand mechanism between the actors orient the urban development process. In order to analyze these relations correctly, all the actors playing role in the local urban development process should be considered and examined in detail.

2. **Spatial mismatch of housing development:** The largest objection to partial plan applications is the formation of disintegrated housing areas. Fragmented, gated single family housing estates without any urban infrastructure provision are developing at the fringe of the metropolitan city. They are independent from their surroundings because they do not provided urban infrastructure services and try to solve their problems by themselves. As a result, they are distant from each other and surrounding urban environment, and they exhibit an unfamiliar appearance from their surroundings in the middle of the rural land. Single family housing estates, old town houses, farms, greenhouses all appear as mixed-up land uses. Lack of a public space (such as parks and squares) that can obtain the social cohesion around the distant and private islands of single family housing estates is one of the biggest problems. When we carry this development type to the future, a spatially disunited, privatized social environment without any public contact will form.

3. **Speculative building**: The results of case study indicate to two ways of speculative building process: (a) First is the 'density in partial plan demands' and 'increase in

the number of housing estates'. Besides this, when it is accepted that there are housing estates with approved partial plans but not started the construction process, it can be concluded that this development process will continue increasingly. (b) The second finding supporting the speculative building process is their occupancy rate which is about 38%. This low percentage also indicates the dimensions of unnecessary land consumption of the speculative building.

4. **Insufficient public space, services, and infrastructure:** Partial plan approvals being made on plot basis and not reserving land for social and technical facilities are one of the most serious problems. It is known that there are some technical and social facility deficiencies at the cost of Urla as the result of speculative building caused by summer houses. It is clear that the same problems will be seen at the newly developing regions where partial plan applications occur. Each of single family housing estates has to provide its own technical infrastructure. This obligation is proposed during the partial plan stage, because local government cannot provide basic urban infrastructure services to these areas that expand distant from each other and from the city center. Therefore, on-site septic systems and private wells are used causing pollution and over-consuming of underground water reserves. Single family housing estates forming of scattered suburban type houses, not using many of the urban infrastructure networks and not having adequate public space remind us of exurban developments at the rural fringe. However, they are quite different from each other except these mentioned characteristics. As aforementioned (see chapter III), exurban development differentiates with its life style, skips over to rural land outside the suburban ring and involves low-density residential developments.

5. **Fragmentation of agricultural land and open space:** In the study area, partial plans for about 513 ha. land is approved since 1990 and 228 ha. of this land is built as single family housing estates. An important part of fringe studies examines the rural-to-urban land conversion process and its results. Studies conducted in developing countries, rural-urban fringe are dominated by the metaphor of 'invasion', applied to the process whereby residential and non-residential extensions of the metropolitan city encroach into the countryside. The basic reason creating tension at the fringe area is this: uncontrolled and unplanned spreading of urban uses

at the rural land and its constitution threat for sustainable and balanced settlement pattern.

6. **Increase in automobile dependency:** Fragmented settlement pattern that not having a mass transportation system and expansion of commuting distances increase automobile dependency. Factor of 'access to mass transportation options' was evaluated as 'dissatisfied' by the households surveyed. The car ownership rate is 1.93 for each household and driving car for basic urban services (including school) increases traveling costs in short term.

7. **Increasing privatized service provision:** Housing estates at the urban fringe not benefiting from urban infrastructure and services increase the private service provision demand. The reason why these housing estates are defined as 'packaged' is provision of basic services like security, sewers, garbage collection, and recreational facilities by the internal management of the estates or by private firms. Case study estates, for example, especially demand private service provision for infrastructure and security.

8. **Changing residential location preferences:** One of the important point in case study is to perceive the changing residential location preferences of the users. Almost all of the households left the prestige districts like Alsancak, Bostanlı, Güzelyalı, and Hatay and opportunity of being close to city center and preferred living at the periphery of the city. Findings of the study indicate that forefront pull factors are desire to 'live in a detached house with a private garden', 'being close to natural amenities and large green open spaces', and push factors 'deteriorated environmental quality' and 'traffic congestion in the city center'. The push and pull factors influencing the people preferring these housing estates are important in two ways. Firstly, they are important from the viewpoint of usage, management and planning of urban fringe in the future. Secondly, they are important in perceiving and orienting the physical and social changes that may and can form in the city center. From the urban fringe perspective single family housing estates present a viable alternative to apartment flats in the city. However, it can be concluded that, demand for single family housing estates is limited, yet, because, they are consumed largely by high income groups. There needs a note for caution that this demand may create a development pattern that will make it impossible to have a sustainable development.

9. **A homogenous social environment:** Introducing the household profile is one of the important results of the study. It is told that desire to live in a socially homogenous environment is one of the important reason in the preference of single family housing estates. Even though it was determined in survey findings that it did not play an important role and listed in 'marginally important' group, when household profile examined it was observed that users had similar characteristics. A household profile which has certain wealth and comfort, form of middle aged and over people, with family centered lifestyle, and high education level is seen. Even though it is not a conscious choice, homogeneity in social structure can be argued upon by following the critics of Pahl (1965). He states that the ability to buy a new and spacious house at urban fringe creates segregation (Pahl 1965). Therefore, it is normal these people, who can meet the cost of living in this kind of housing environment, to show economic and social similarities.

Development of single family housing estates at the metropolitan fringe has the above mentioned limitations when examined from problem-oriented perspective. However, in some situations there can be positive aspects of a process and potentials: (1) development of housing estates also increases the economic activity and job growth (i.e. shopping made in Urla, marking local staff for construction and maintenance); (2) while creating a new and more spacious housing choices for users, it also provides a low density housing environment among natural amenities, (3) increasing land and house prices, in other words, economic rents are distributed among the property owners; (4) Local government too, can get its share from the economic rents without providing any basic urban services.

Single family housing estates that evolved as a new trend at the urban fringe of Izmir developed as 'gated' and 'packaged'. These housing estates being outside the city and distant from each other make it essential to be 'gated' enclaves. It is designed as 'packaged' because it takes place at the urban fringe, deprived of the urban services. Further explanation of this situation may be clarified with the transformation in the morphological structure of urban areas from outward facing urban blocks to **inward-focused complexes** of buildings, often referred to as '**pod developments**' (i.e. shopping mall, office park, housing cluster). Individual pods tend to be introverted and separated from adjacent developments by main roads and walls. Pod developments are usually private spaces with access and behavior closely controlled and regulated. According to

Garreau (1991), pod development is generally characteristic form of out-of-centre complexes and metropolitan fringe areas (Carmona et al. 2003). Southworth and Ben-Joseph's phrase similarly summarize the single family housing estates at the fringe of the metropolitan cities: "*the isolated, insular, private enclave, set in a formless sprawl of similar enclaves, separated socially and physically from the larger world, and dependent upon automobile for its survival*" (Soutworth and Ben-Joseph 1997).

In the local context, it will be misleading to compare Izmir case with the similar housing estate developments in Ankara and Istanbul. Satellite settlements like Kemer Country and Alkent in Istanbul, or with Angora houses in Ankara presented as one of the indicators of spatial and social segregation and that are subject to 'gated community' debates. They involve all kinds of privatized functions and management structure like education, shopping, recreation, health, and security that make them independent from the city and, as Bentley (1999) suggests "…*transformed into a series of islands, with spectacular interiors, set in a left over sea*" (Carmona et al. 2003)

On the contrary to these cases, single family housing estates Izmir Metropolitan fringe are more dependent on the city, because they have no privatized services (are smaller, except infrastructure, maintenance, and security). These housing areas which are; (1) outside the city but geographically not very distant, (2) dependent on the city economically, socially, and culturally and, (3) in this sense, reminds us about the early traditional suburbs reflecting the idea of 'escape to the nature'.

Another point distinguishing developments in Izmir from Ankara and Istanbul is national or international developers not participating in the production of single family housing estates. In this sense, Mesa Urla Houses is an exception. However, Mesa construction firm expresses that the demand for housing estates in Izmir is very limited when compared with Istanbul and Ankara. One of the possible explanations of this situation may be that the central city of Izmir is still involving prestige housing areas.

This study aimed to perceive the spatial, urban planning, and user dimensions of single family housing estates developing at the Izmir metropolitan fringe. Besides, it aimed to provide data for the following studies and also guide them. Constraints and potentials discussed in this chapter are broad enough for a rigorous study and can each be a subject to further studies. The final conclusion of this study relates to the need for further research. Indeed there is, in general, a lack of research on urban fringe. Some research issues are suggested, drawing from the foregoing discussion:

- environmental impacts of housing developments at the fringe areas
- interpretation of the urban development process in terms of other public and private actors which are not included in the study
- investigation of spatial development of urban fringe areas in the context of urban design such as preparation of building codes, and design guidelines
- further research on the characteristics of single family housing estates in urban fringe (i.e. what are the physical and social changes that may and can form in the city center?)
- policy and regulatory environment of urban fringe areas

Fringe area of the metropolitan city is a valuable resource for urban development process and can be used for various demands; agricultural production, residential and non-residential developments, recreation and leisure activities etc. Therefore, the development trends and their results at fringe area have to be reconsidered. Development process, according to short term motives and dynamics they create, can give negative results; for example, (1) lacking in human scale and interest, (2) stripped a sense of public life, (3) destructive of land, energy, and natural resources; (4) inconvenient and wasteful of time; (5) poorly organized and disorienting; and (6) ill-suited to adaptation and change. In order to prevent these kinds of results, long term perspectives and more holistic and proactive approaches are needed.

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