

**Effects of Land-ownership Transformation in  
Metropolitan Fringe Areas on Existing Urban Pattern  
(A Case Study of Ayrancılar-Torbali)**

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**A Dissertation Submitted to the  
Graduate School in Partial Fulfillment of the  
Requirements for the Degree of**

**MASTER OF CITY PLANNING**

**Department: City and Regional Planning  
Major: City Planning**

**İzmir Institute of Technology  
Izmir, Turkey  
January, 2000**

**İZMİR YÜKSEK TEKNOLOJİ ENSTİTÜSÜ  
REKTÖRLÜĞÜ  
Kütüphane ve Dokümantasyon Daire Bşk.**

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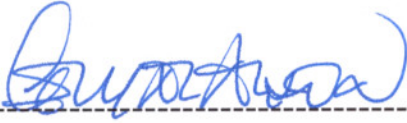


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## ACKNOWLEDGEMENT

There are undoubtedly numerous people who have accompanied me during this long and hard-working period – my graduate education – and I would like to thank all those people for their playing a great role in my improvement process in terms of intellectual and practical skills and abilities.

In this respect, my greatest thanks is to my thesis advisor Assoc. Prof. Dr. Semahat ÖZDEMİR for her kind concern, courage and constructive critics and Torbalı Title Deed Office and Ayrancılar Municipality for the gathering of data.

And my special thanks is to Dr. Yıldırım ORAL and Şebnem Gökçen DÜNDAR, for their patience, great supports and precious contributions to the translation process of the thesis.

I am also grateful to my family who have played a great role during my life. And more importantly, I'd like to thank to my beloved **FATHER**, whom I've lost forever, for his love and endless support even I feel today.

Thanks to all....

## ABSTRACT

Parallel to urbanisation, growing cities have affected their surrounding rural settlements. This effect has resulted in a structural transformation of the rural settlements in metropolitan fringe area. With this effect, the larger city grew and affected the settlements in their fringe area and with this interaction, the social, economic and physical transformations began to take place in the fringe.

One of the most important phenomena, which has been affected from these interaction and transformations is the land-ownership affair. The land-ownership has an important role especially in the physical planning process. Besides affecting the physical planning process, this phenomenon is also affected by physical planning process.

The aim of the thesis is to search for the effects of land-ownership transformation in metropolitan fringe areas on existing and potential urban pattern, and to find out if there are some negative result of this mentioned interaction. In this way, new proposals can be brought up to solve the existing and potential problems related with urban land and land-ownership phenomena, and the quality of living environment can be increased.

For this study, first, literature survey related to urban sprawl and urban fringe has been accomplished and land policies in Turkey have been considered. After these researches, all of the title deed data related to case study area which is Ayrancılar Municipality (plot numbers, plot sizes, plot owners, and changing of owners) have been searched between 1968-1998 in a three decades period and been transferred into maps. At the same time, a land-use survey has prepared for the area and the construction permits and physical plans have been taken from the municipality to account for three decades period. Thus, as a result of this study, it can be said that there exist a strong relationship among land-ownership transformation process, physical plan decisions, and existing and potential urban patterns and some urban problems can be solved by adopting more meaningful policies during this changing process.

## ÖZET

Kentleşmeye paralel olarak kentlerin yapılaşarak büyümesi, çevresindeki kırsal yerleşmeleri etkilemiştir. Bu etki, kentsel saçaklanma alanında yer alan kırsal yerleşmelerde yapısal dönüşüme neden olmuştur. Bu etki ile anakent hızla büyüyerek çeperlerinde bulunan yerleşmeleri etkilemiştir. Bu etkileşim ile birlikte çeperlerde ki yerleşmelerde sosyal, ekonomik ve fiziksel dönüşüm başlamıştır.

Bu etkileşim ve dönüşümden etkilenen en önemli olgulardan birisi de arazi mülkiyeti olgusudur. Mülkiyet olgusu özellikle fiziki planlama sürecinde önemli bir yere sahiptir. Arazi mülkiyeti fiziki planlama sürecini etkilerken aynı zamanda fiziksel planlama sürecinden de etkilenmektedir.

Bu çalışmanın amacında, arazi mülkiyeti dönüşüm sürecinin oluşmuş ve oluşmakta olan mekan üzerinde ki etkilerini incelemek, bu sürecin neden olduğu olumsuz sonuçları ortaya koymak ve çözüm önerileri getirmektir. Böylece çeperlerde yaşanan kentsel arazi ve mülkiyet ile ilgili sosyal, ekonomik ve fiziksel problemlerin büyük bir çoğunluğu engellenebilecek ve kaliteli bir yaşam çevresi oluşabilecektir.

Bu çalışma için, kentsel saçaklanma ve çeperle ilgili literatür araştırması yapılmış ve Türkiye’de ki arsa politikaları incelenmiştir. Literatür araştırmasından sonra, örnek alan olan Ayrancılar Belediyesi ile ilgili, 1968-1998 yılları arasında, 30 yıllık bir zaman dilimi içindeki tüm tapu bilgileri (parsel ve ada numaraları, sahipleri, büyüklükleri ve eldeğiştirmeler) incelenmiştir ve pafta üzerine işlenmiştir. Aynı zamanda arazi kullanışı yapılmış ve yine 30 yıllık zaman dilimi içerisinde yapılan fiziki planlar ile ruhsatlar elde edilmiştir ve yapılan bu çalışma sonucunda arazi mülkiyeti dönüşüm sürecinin fiziki plan kararları, oluşmuş ve oluşmakta olan mekan ile direk ilişkisi olduğu görülmüştür ve bu süreç içinde yaşanan kentsel problemler daha anlamlı arsa politikaları geliştirilerek önlenebilecektir.



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# CHAPTER I

## INTRODUCTION

Improvements in production technologies, and in transportation and communication systems have changed the structure of urban settlements. Together with these structural alterations, all human settlements and especially the metropolitan cities have achieved new formations differing in size and characteristics.

The urbanisation phenomenon has accelerated especially during the second half of the 20<sup>th</sup> century in the world. On account of this, the spatial structure has been affected by the population increase. This transformation process has left different reflections on the countries, which bear differences in socio-economic structures and development levels. Owing to metropolitanization, the cities have gained new shifts in their boundaries and have played some kind of leapfrog towards to the rural areas in their fringe. There exist vacant lands in those areas, so that the development has spread through larger areas. All these developments have been supported by technological developments and the metropolitan cities have all impinged upon their surroundings. Continual expansion of the boundary of the metropolitan city, then has affected the social, economic and physical formation of the settlements around the metropolitan city. For that reason, the transformation process appears to be more rapid in the metropolitan fringe areas.

This new development process has been investigated by an assessment of its reasons and effects on their surroundings for the last 5 decades. According to some researchers, this development process is unavoidable and useful, but for others it costs higher and leaves adverse effects. For this reason, in order to put some limitations on such a development process there can be set forth a general suggestion.

The rural areas which are under the influence of an urbanised centre responds in several ways. These responses arise in different forms and velocities and vary due to the peculiarities of rural areas, such as ownership pattern, organisation of production, natural environments etc. Therefore various patterns of change can be observed all over the country.



The spatial pattern, which has been engendered as a result of the transformations in the rural areas emerging by an urbanisation effect, has the characteristics of spatial integration with the urbanised area and the phases of ring shaped process expanding through an urban sprawl initiated by the metropolitan core.

The urban sprawl and fringe phenomena became the current issue during the last 15 years. The transformation process is a many-sided interference in the metropolitan fringe. The socio-economic structure, land-ownership pattern and spatial structure of rural areas remain in a continuously changing scope because of the effects arising from the metropolitan city. Most of these rural settlements act as territorial development areas for the metropolitan centre and play important roles. For that reason, all of these transformation processes have to be analysed further, in order to be able to eliminate the negatory effects.

There are a lot of problems related to such negatory effects of the metropolitan fringe in Turkey. Among these problems are unlicensed constructions, land speculations, emergence of squatter houses, decrease of public lands, demolition of agricultural land. There controversially are some research studies related to the transformations socio-economic and spatial structures but only one study searches for the effects of the land-ownership transformation on metropolitan fringe in Turkey.\*

One of the main institutions which determines the urban land use and planning, is urban land-ownership. The impact of land-ownership is very important in explaining the structural changes and developments for cities. Land-ownership is especially important in understanding the problems of urban development areas. Because, the land-ownership pattern affects or limits the urban form and urban development.

As the agricultural lands lose their characteristics in the course of time, due to the growth of the metropolitan city, they are to be given new roles within the urban land market. There fore the factors affecting the land market have to be analysed. The relationship between the land-ownership, spatial structure and planning studies have to be considered once more. Because, the problems are too congestive in our cities. Under market conditions, the planning decisions are usually in favour of land-owners . The public interest is hindered behind. For that reason, the relationship of the transformation process of land-ownership pattern, spatial pattern and planning process have to be

\*S. ÖZDEMİR, "Metropolitan kent çeperlerinde mülkiyet örüntüsü değişim süreci", unpublished doctorate thesis, D.E.Ü., İzmir, 1993

elaborated by all means. By this way, the problems can be analysed with respect to the metropolitanization process. The relationship of land-ownership transformation process, spatial structure, and physical planning process is thus, taken as the subject matter of this research.

The aim and the objectives of this study and the methodology used will be explained in the second chapter of the thesis. The new development and growth processes specific to the metropolitan cities, the phenomenon of “urban sprawl” and the theoretical framework will take place in the third chapter of the thesis.

The transformation and changing process of the cities are not independent of the socio-economic conditions, development alteration processes and the political structures of the cities. The urbanisation phenomenon which parallels to the socio-economic alterations, and the policies that are related to urban land for the last 5 decades in Türkiye are discussed in the fourth chapter. These research studies, determinations and generalisations which are related to the alterations in metropolitan urban fringe in our country will also be given in this part.

In the fifth chapter, there are evaluations of those subjects which take place in the former parts and the sub-hypothesis which is related to relationship of transformation process of land-ownership pattern, spatial pattern and physical planning in the metropolitan fringe. At the same time, variables for formulating and identifying the land-ownership are also included in fifth chapter.

The hypotheses are to be tested in a case study area, that is Municipality of Ayrancılar in İzmir Metropolitan fringe. These evaluations will be given in the sixth chapter of the thesis.

The evaluations are related to land-ownership transformation process, land-use, physical planning and their relationships and the negatory aspects of these relationship will be studied in the last chapter of this thesis.



## CHAPTER II

### THE AIM AND THE METHODOLOGY OF THE THESIS

The fringe areas which are nearby the outskirts of existing settled areas of the cities are affected by the urban development. We can identify these areas by the terms of "fringe area", "urban sprawl", "suburban areas" etc. In some of these cities the stage of metropolitanisation starts after some time though. The improvements in transportation facilities and technology, rapid population increase and change in economic structure are the basic reason for such an event. As a result, the fringe areas of these cities are much more affected by this change. Thus, the villages in such areas are to be faced up with a transformation process.

This dense interaction and expansion began to dominate as well, to exist in our planning practice such that the cities bearing metropolitan characteristics, started to be considered by their influence areas for a metropolitan planning approach. On account of this, The Metropolitan Planning Bureaus have been established in metropolitan cities. (Ankara, Istanbul, Izmir). Initially these offices were under the administrative structure of central government but then after the legislation of the act numbered 3030 the metropolitan planning bureaus have all been closed. In this way, the planning authority has passed onto the local administrations and to those new establishments called as greater city municipalities .

Today, there are 1/50000 and 1/25000 scaled master plans of the metropolitan cities. Thus, there exists proposed macro forms for these cities. At the same time, there are problems unlicensed construction, demolition of the agricultural lands, location of the conflicting land-uses which cause environmental pollutions, devastation of the natural landscape in the fringe areas. For that reason these macro forms are obliged to change as a result of these effects. The aim of urban planning does not only refer to spatial considerations. All these processes have to be taken up also with the policy, social, and economic structure of the country. First, the factors related to the formation of the urban systems have to be determined and defined. The variables which can be controlled have to be selected and the development has to be directed by these variables. In order to attain the planning objectives, these variables have to be

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controlled. For that reason, the research related to the urban planning process also involves understanding of the variables and the relationships of these variables with each other.

The research for transformation process, determining these variables and their relationships with each other proves that transformation in development is very important for achieving the goals in metropolitan fringe areas and villages.

## 2.1. THE AIM AND OBJECTIVES OF THE THESIS

Some studies in M.E.T.U. and D.E.U. have searched for the transformation process in fringe areas in levels of master or doctorate theses. They have analysed the spatial transformation of metropolitan urban fringes, residential areas, transformation of agricultural land and institutions, formation of labour force and economic activities in these areas.

Besides all these transformation processes, there is another important transformation process, called as land-ownership transformation process. In time, some larger cities develop and affect the settlements in their fringe areas. Some urban activities locate in rural areas and this development cause an increase in the land values. For that reason, these rural lands are divided into small parts and the owners of these lands changed and number of owners increase. This transformation process is affected by the existing spatial pattern and it also will affect the future spatial patterns to come. At the same time, the planning decisions have an impact on affect the new transformation processes as well and the transformation of land-ownership pattern will then be influenced by these new planning decisions.

There are very strong relationships between land-ownership structure, spatial pattern and urban planning process and besides rural area, urban areas are as well adversely affected by the new expansions and growth process. Owing to this, the general characteristics of land-ownership transformation imply that the mutual relationships of physical planning and spatial structure should be taken as a concrete and comprehensive subject for analysing the urban development and fringe areas.

The land-ownership phenomenon is a very important variable because of the afore-mentioned relationship. If we can control this variable, we will be able to attain some of the planning goals.



It is very difficult to make an overall examination of the land-ownership phenomenon. On account of this, the aim of this study is to analyse this transformation process in our country, the general characteristics of land-ownership transformation phenomenon in the metropolitan fringe areas and rural areas in the course of time, and the mutual relationships between active variables and this transformation process and physical planning in order to achieve. For this goal, the general characteristics of the oldest land-ownership pattern in fringe area will be analysed. In this way, the land potential which belong to public land-ownership will be determined and plot distribution will be searched over.

The transformation of the oldest land-ownership pattern will be examined in time. For that reason;

- a.) The rate of public and private lands in the settlement,
- b.) The rate and reason of transformation from public lands to private lands,
- c.) The distribution of lands between owners and their differentiation,
- d.) The plot sizes, plot numbers, and changes in spatial pattern of shared and private title deed plots in time,
- e.) The differentiation of plot size and plot numbers in time,
- f.) The characteristics and dimension of subdivisions in time,
- g.) The rate of the change in ownership by time in terms of quantity, location and size, will all be searched.

The relationships between existing land-ownership pattern and existing land-use will have to be searched. For that reason, the formation of settlements in the fringe areas the existence of private or public land, the shared or private title deed plots, their sale and subdivisions will be analysed. The usage of public lands, interaction of land-ownership pattern and the larger city, relationship between leapfrog urban functions in the fringe areas, land-ownership pattern, general characteristics and problems of spatial pattern in the settlement or villages in the fringe areas, differentiation of population increase, transformation process of land-ownership pattern and land-use in the settlements, which have different distances to larger cities in fringe areas will be considered within this thesis.

The relationship between land-use, land-ownership and physical planning process will have to be searched as well. On account of this, the effects of existing physical planning decisions on land-ownership pattern and changes in land market, the effects of existing land-ownership pattern on physical planning decisions, and on their

implementation the distribution of the unearned income which emerges as a result of physical planning decisions between owners, the role of the public for implementation of physical planning decisions on the existing land-ownership pattern and land-use will be elaborately analysed.

On the other hand an important problem pertains to the settlements within the boundaries of larger cities. The settlements under the local administration, the level of amenities the impacts of urbanisation, dwellings and land polycys in the transformation process of fringe areas, the problems and conflicts within this transformation process and general suggestions will all be discussed in this research as to be studied in case of the Ayrancilar Municipality.

## **2.2. METHODOLOGY**

As a result of literature survey, examining previous researches, the main hypothesises have been determined. One of these is the existence of relationship between land-ownership pattern, spatial structure and urban planning action. There is no doubt that the socio-economic structure of the country and the other variables also impinge upon these three main structures. The other hypothesis is that the metropolitan city within its development process, causes for a structural transformation of the settlements in fringe areas. All these transformations have spatial, social and economic aspects. First of all, all of these researches which are related to this transformation process will be investigated as required by the methodology of this study and then the domestic planning and urban land policies of metropolitan cities will then be studied over. Because, all these transformation processes are affected by urbanisation, planning and urban land policies of the country.

Furthermore, all these main and the sub hypothesis will be tested in a case study area so that the relationship between land-ownership, transformation process, land-use and physical planning can be explained.

Ayrancilar Municipality which is located at the southern axis of Izmir has been chosen as the case study area. The distance between Izmir and Ayrancilar is 30km and Ayrancilar is the first settlement on the south axis of Izmir. As the Tahtalı Dam conservation boundaries reach the boundaries of Ayrancilar Municipality and since it holds a higher density in comparison with other settlements in fringe the Ayrancilar Municipality appears to be the nearest settlement for the purpose of relocation and



growth on the southern axis of İzmir. At the same time, the industrial areas and residential areas develop rapidly. This happens to be a rapid urbanisation which threatens the agricultural lands. Thus, there exist urban and rural activities in the area. Ayrancilar is located on an important transportation axis as highway, railway and airway routes and it shelters important investments. In this way, Ayrancilar Municipality is subject to a rapid transformation process. Hence, the leapfrog development becomes prevalent in Ayrancilar Municipality. This means that, it bears all the development characteristics of metropolitan fringe areas.

The master and development plans of Ayrancilar Municipality has to be elaborated in terms of the amount of time to be valid for. In this way, it is possible to observe the position of physical planning within the interaction and transformation process. But the first plan of Ayrancilar Municipality has been prepared in 1992. Since, It was approved to be a municipality in 1991. However, the cadastral surveys have been made in between 1968-1998. The first cadastral survey year is 1968. No plan has been prepared for Ayrancilar before 1992. The first plan was approved in 1992 and the second and last plan one in 1995. For that reason, the physical planning process can not be searched before 1991. It only avails for a search for the relationships of land-ownership and physical planning. In fact, the Ayrancilar Municipality has displayed a rapid transformation process after 1991. The land-ownership transformation has also increased after 1991. The relationships between land-ownership pattern and physical planning thus, can be more clearly identified for the period after 1991.

There also are public investments in the case study area, which can be regarded as to motivate further investments and projects to take place. Among the important public investments are for example, Egekent 4 housing co-operative area being located in this area. At the same time, there also are industrial investments in this area.

The southern development axis of İzmir has been restricted by the Aegean Free Zone, Tahtali Dam conservation boundaries, and the Adnan Menderes airport. Thus, it can be revealed that the south axis develops as leapfrog. The first settlement being affected by this development is Ayrancilar Municipality in the southern axis.

The cadastral registration within the case study area has been taken from title deed office of Torbalı. (Torbalı Tapu Sicil Mudurlugu), because, the Ayrancilar Municipality administratively belongs to the sub-province of Torbalı. There exist a total of 47 registered title deeds, each of which includes 100 plots, under search. There are 3869 plots in Ayrancilar Municipality. The maps, building blocks, plot numbers,

plot sizes and plot ownerships have all been taken from the title deed office to account for a 3 decades period. (1968-1998).

The public lands , private lands, shared title deed plots, private title deed plots, plot size, shareholder numbers and big plot owners have been transferred to computer databases. Followingly, the new informations of plots have been recorded as computer databases for a five year period, as well. There are eight cross sectional analyses in this study, between 1968-1998.

The sale numbers of plots, characteristics of sales and changes in ownerships, subdivisions, the reason of subdivisions and the subdivisions years have all been determined by the registrations of the title deeds.

The new land-ownership maps in 1/6000 scale have been produced to transfer plot data in terms of five years periods. Public and private plots, private and shared title deed plots, their spatial location and land-uses have been transferred to the maps. Sold plots and their types (private sale or shared sale) have been identified by differing years. The analysis related to the changes in ownership numbers and the analysis related to relationship between physical planning decisions and land-ownership have been realised in this study. All mentioned data and the owner names have also been taken from the registrations of title deeds. But since the owners' names are referred to as secret data, for that reason, these data are not given in this study.

Consequently, in the light of these analysis, the problems and determinations for the case study area have been identified and some solutions have been suggested as to be related to these problems.



## CHAPTER III

### NEW DEVELOPMENT AND GROWTH PROCESS IN METROPOLITAN CITIES AND THE PHENOMENON OF "URBAN SPRAWL"

Within the structure of metropolitan cities, and in their expansions, and also in the settlements surrounding the cities changes and new developments have begun to occur. This refers to the improvements in technology, communication, transformation and production after the second half of the 20<sup>th</sup> century. In most of the cities, these developments and changes have occurred in different times and different forms. Especially, the development of high speed, multiple lane highways after World War II have allowed workers to move away from the cities to smaller towns within a distance of 20-30 miles from their work places. As the lands in these small towns were cheap, these new residents were able to afford to build a house on a much larger parcel of land than it was possible in the city. Thus, the suburban communities were far less dense than their urban counterparts. Shortly, there after, businesses wishing to avoid the high rental values of the down-town office buildings have moved to less dense office parks outside the city. Eventually, the demand for suburban land have raised its prices and land developers then have begun to buy cheaper lands even farther from the city and the same process revolves again.<sup>1</sup>

The theoretical frame, which defines the structure of cities as a whole, is insufficient to explain this new process and especially after the 1950's, researches explaining this changing structure of the cities have increased in number. But most of these researches, include the UK and U.S.A. experiences.

Under the impact of modern technology, particularly the private automobile, the pattern of small dependent communities strung along inter urban rail lines has given way to a mass residential decentralisation independent of the rail-roads and to those areas of settlement, which were virtually nonexistent prior to the great "explosion" of cities that accompanied the development of rapid transportation and mass communication systems and the related extension of urban conveniences beyond the city's policyal boundaries. The continuing expansion of the population concentrated on this peripheral or "fringe" area is one of the most significant population trends.<sup>2</sup>

A number of definitions have been made both for this new development process and for the areas in which this development has become a reality. The new growth process of metropolitan area is the urban sprawl. Now, these definitions will be given in the following section.

### 3.1. THE CONCEPTS OF "METROPOLITANISATION", "FRINGE", AND "SPRAWL"

A metropolitan city is the most advanced stage of city development involving, in addition to basic control functions, the supplementary functions such as high population volume and heterogeneity, rich variety of production activities, high level of integration and co-ordination and most important of all, detailed co-operation, wide effective area of expertisation, closely interrelated socio-economic chain of expertised fields of activities, sub-centres, resettlement units, all integrated within spatial frame.<sup>3</sup>

A metropolitan is a texture of incorporated and organised relations starting from the lowest up to the highest levels, laterally or centrally and in opposite directions, and with reflections there of, and involving every sort of social group of extensively different social, cultural and economic positions.

By means of attaining a certain population density and of the essential urban functions to manifest industrial production and inspection, the metropolitan cities have emerged. Together with the development of the metropolitan city, industries and dwellings in the centre have moved outside the city and the residents have gradually travelled, from the rural settlements surrounding the city to the city centre. They have begun to accommodate labour power for urban functions.<sup>3</sup>

The region surrounding the city and which is the source of labour power for urban activities and which depends on the family for daily labour power is defined as the "metropolitan area". The boundary of this area is determined by the facilities for travel and communication.<sup>3</sup>

The area which is wider than metropolitan area, has a radius of 100-150 km radius and depends on the centre in terms of economical and administrative aspects but not in terms of daily labour force and residential area, is the metropolitan effect area. This area has sufficient working areas and labour power for itself.



### 3.2. DEFINITION AND GENERAL CHARACTERISTICS OF FRINGE AREA

The phenomenon of sprawl and the concept of fringe area have both emerged as a result of metropolitanisation. The definition of the fringe has been used in those countries which have started to develop rapidly because of industrial revolution, and most countries have referred to some different definitions of "fringe".

Around the developing metropolitan city, the transition region, which is located between the city and its hinterland; which has not completely been transformed into an urban structure but on which the rural uses and rural life styles have been retreated, is defined as the "fringe"<sup>4</sup>

T.L. Smith's discussion of the urban fringe around Louisiana in 1937 marks the first use of this term signifying "the built-up area just outside the corporate limits of the city." As a landscape phenomenon, the fringe varies from city to city, and from one time to another.<sup>5</sup>

Fringe phenomenon, in the earlier attempts of its description, has been defined within regard to visual evolutions and on basis of decentralisation in urban spaces as the capital internationalisation. Within this frame, fringe has been defined as extensions or fringes just beyond the city boundaries along the main railway lines and highways, somehow dependent upon the economic activities of urban population of higher income level and upon the urban land use pattern. Later, the widespread development which has originated from the fact that urban activities have taken place at locations in somewhat far distances from the public transportation axes has been added to this definition. In the fringe area, the mode of rural living has in turn been rapidly recessed and replaced by urban functions with intensive land uses, such as housing, trade training, recreation, and public services. In sketch, fringe is a rural area transformed in this or that way, although urban functions continue both in physical and living spaces along the axes of main transportation lines extending in different directions outwards through the urban boundaries as far as the topography of land allows then to.<sup>3</sup>

Urban influence extends well beyond the continuous built-up area including, at least, the area from which daily commuters are drawn. The single-family homes of such commuters mix with rural uses of land in the rural-urban fringe. Such commuters enjoy high incomes, and the relative importance of commuting costs is less for them than for lower income groups : thus accessibility behaves as an inferior good. Since the value of land may reflect on the possibilities of urban development, the agriculture,

directly adapted to market demand and supply forces such as horticultural specialities, are to be found, A correlation between part-time farming and urban opportunities is also to be expected, where adjustments of farming operations permit the combination of farm and off-farm employment.<sup>6</sup>

Golledge in a study of Sydney, presents seven proposals:

- " 1. There is a constantly changing pattern of land occupancy
2. Farms are small
3. Crop production is intensive
4. The population is mobile and of low or moderate density
5. Residential expansion is rapid
6. The provision of services and public utilities is incomplete
7. Speculative building is common"<sup>7</sup>

These conditions reflect the nature of the fringe as already outlined and represent the push into rural surroundings of young, mobile middle class populations and the attempts by speculative builders being provided at a rate which, in some cases, outreaches the input of services and utilities. The additional features Golledge includes are farm size and crop production, presumably related to urban demand.<sup>7</sup>

Another definition has been made by R.E.D.Pahl. He also suggests his four main headings involving many of the characteristics proposed by Gollodge:

"1. **Segregation:** The ability to pay for the new housing of the fringe results in a pattern of segregation to appear.

2. **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.

3. **Commuting:** This follows from the previous point and needs little comment except for noting that it is not confined to the more wealthy but that the availability and cost of transport necessarily confine to the less well-off.

4. **The Collapse of Geographical and Social Hierarchies:** This is one of the most interesting suggestions of Pahl's conclusion and advances the concept of a distinctive fringe . 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 commensurate with the population they serve, but can become specialised in particular directions."<sup>7</sup>



The other definitions has been made by Pryor. Pryor has defined the fringe "as the zone of transition in social and demographic land-use."

He has defined the characteristics of the fringe as follows:

1. "The continuously built-up urban and suburban areas of the central city,
2. The rural hinterland, characterised by the almost complete absence of nonfarm dwellings, occupations and land-use, and of urban and rural social orientation
3. An incomplete range and penetration of urban utility services
4. Uncoordinated zoning or planning regulations
5. Areal extension beyond although contiguous with policy boundary of the central city
6. An actual and potential increase in population density with the current density above that of surrounding rural districts but lower than the central city"<sup>4</sup>

These characteristics may differ zonally and sectorally , and will be modified through time.<sup>5</sup>

A rural-urban fringe can only exist between a growing urban centre and its rural hinterland, so it is no diminution of the concept to view it as the residual zone between two more readily defined poles.<sup>5</sup>

For the fringe phenomenon, a new definition of two subzones has as well been revealed by Pryor.

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 nonfarm and vacant land, and a lower rate of increase in population."<sup>5</sup>

In the rural areas social and economic structure shows differentiation with land-use. The age distribution is affirmatively skewed with a greater proportion in younger

age groups. The fertility ratio of the fringe is higher than that of the urban place itself, but lower than surrounding rural areas. The fringe is characterised by a high proportion of married residents as compared to the adjacent urban and rural areas. Households in the fringe area on the average are larger than those of the urban area itself, but smaller than those in surrounding rural areas. The proportion of abroad-born residents in the fringe is lower than that of the urban area itself, but higher than surrounding rural areas. Although in a sense "decentralised" fringe residents are usually economically tied to central city, the residents in the fringe display a heterogeneous occupational structure, with both zonal and sectoral components, and a slightly greater proportion in the commercial and skilled-worker classes than urban or rural areas. Residents in the fringe display a wide heterogeneity of socio-economic status, a lower educational level, by various measures, than residents of the urban place itself, but higher than the surrounding rural areas. The residents in the fringe as well hold a low degree of social and community participation and associational ties. They are generally well satisfied with their residence location with the exception of unsatisfactory utility services. The fringe commonly lacks an adequate network of public transport modes, and consequently there may be dissatisfaction with this service presumably among some residents, because of the inadequacy the fringe area, it is characterised by relatively high car ownership as compared to the associated urban and rural areas.<sup>8</sup>

The expansion of the urban fringe has been described as a spatial diffusion process where the development of new property is on the condition of, land being homogenous, essentially random in direction.<sup>6</sup>

The rural urban fringe is a marginal area in the sense that it represents a margin of transference between alternative types of land uses. There the land is indifferently suited to more than one use.<sup>6</sup>

Owing to the car ownership, the location of business activity in the city centre has caused an increase in the number of those who have houses in the fringe area. With the effect of metropolitanisation, transformation has started in these agricultural lands. So, both economic and social structures have begun to transform in the fringe. The decrease of the effective economy of agriculture caused an increase of other economic facilities and social and cultural services. All of these are the results of the metropolitanisation in the fringe area.



### 3.3. URBAN SPRAWL PHENOMENON AND ITS GENERAL CHARACTERISTICS

In fringe areas, similar settlements have been located along the highway as having generally, low density. At the same time, there are vacant areas within this areas. These areas are defined as "urban sprawl".

The term "sprawl" is frequently used to describe much of the land development currently taking place at the periphery of expanding urban areas. This pattern is characterised by substantial by passed tracts of raw land between developing areas and a scattering of urban developments over the rural landscape. As Jean Gottman has put it: "Where two cities are close together, the intervening rural space becomes covered with new developments. This kind of leapfrogging sprawl outflanks some farms while it covers others."<sup>9</sup>

According to the Vermont Forum on sprawl "Sprawl is dispersed development outside of compact urban and village centres along highways and in rural countryside".<sup>10</sup>

Sprawl is typically characterised by: unnecessary land consumption; auto dependence; fragmented open space, wide gaps between developments and a scattered appearance; separation of uses into distinct areas; repetitive one story commercial buildings surrounded by acres of parking; lack of public spaces and community centres.<sup>10</sup>

Sprawl is technically defined as "low density, automobile - dependent development beyond the edge of service and employment areas."<sup>11</sup>

While there is no universally accepted definition, the Vermont Forum on sprawl concisely defines the term as "dispersed development outside of compact urban and village centres along highways and in rural countryside.

Noted policy analyst Anthony Downs, in the Transportation Research Conference at May'98, has identified ten "traits" associated with sprawl;

1. "Unlimited outward extension
2. Low-density residential and commercial settlements
3. Leapfrog development
4. Fragmentation of powers over land use among many small localities
5. Dominance of transportation by private automotive vehicles
6. No centralised planning or control of land-uses

7. Widespread strip commercial development
8. Great fiscal disparities among localities
9. Segregation of types of land uses in different zones
10. Reliance mainly on the trickle-down or filtering process to provide housing to low-income household"<sup>12</sup>

H. Handerson has defined the term stating that; "Sprawl has been defined as development in a leapfrog pattern, development containing commercial strips and large expanses of separate land uses accessible only by car, lacking "functional open space", or disregarding" established principles of lot size and street geometry"<sup>13</sup>

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.<sup>14</sup>

Sprawl may occur with three types of physical development. It may result from a very low density development of a large area, where single family homes are built on lots of two to five acres, or more. This low density sprawl consumes large amounts of land where some argue that it should be developed at higher density ratios. A second form results from more intensive development extending out from built-up areas along major highways routes. Space between the strip development is underdeveloped and public service costs usually are more expansive to provide in strip sprawl than in low density urban sprawl. Finally, sprawl also is characterised by leapfrog developments where relatively compact urbanisation takes place, but being surrounded by substantial undeveloped land where such development usually requires the greatest initial capital expenditures for urban services.<sup>9</sup>

Robert O. Harvey and W.A.V. Clark suggest another important characteristic of sprawl;

"Sprawl, by any definition, refers to settled areas no matter what their characteristics may be, accordingly, at the time the sprawl occurred, the cost was not prohibitive to the settler, it provided a housing opportunity economically satisfactory relative to other alternatives. If sprawl were in fact economically unsound, it would occur only by the action of housing seekers artificially restricted from free compacted markets, but who could and would pay a premium for freedom to be found only in the sprawl. Sprawl occurs, in fact, because it is economic in terms of the alternatives available to the occupants."<sup>9</sup>



Urban sprawl is the haphazard, unmanaged growth that replaces our open space and farmland with asphalt and strip malls. It clogs our highways with commuters, pollutes our environment and spreads our population over a much larger area, leaving our cities to decay.<sup>15</sup>

Firstly, sprawled or discontinuous suburban development, even at densities comparable to existing settled areas, is more costly and less efficient than a more compact form of urban expansion. Many costs depend on maximum distances or maximum areas and if these could be reduced by more continuous development, costs per unit and per capita would be lower. Small fragmented developments may hinder progress towards optimum units in the provision of local public and utility services. Ribbon development can lead to congestion of radial routes and consequently to higher transport costs.

Secondly, where new development at the periphery is of a lower density than other settled areas, this is to be more extra vacant in its use of land. Such costs of criticism of sprawl is justified as providing a.) sprawl yields the some levels of benefit as alternative forms of settlement, and b.) a true cost comparison is being made.

A third major criticism of sprawl is the loss of prime farmland that is entailed. Allowing that it is the best, most intensively farmed land, such as market gardens and dairy farms, which is most often taken, the protest is as much emotional as rational. Urban expansion must take place somewhere and to protect prime agricultural land from urban encroachment would mean redirecting the urban expansion to alternative locations on poorer agricultural land.

Fourthly, sprawl is criticised because the land speculation which accompanies it, is regarded as unproductive, absorbing of capital manpower, and entrepreneurial skill. The correct speculation, however, performs a worth while economic function within the real property market.

Fifthly, urban sprawl is regarded as unaesthetic, unattractive and aimless overspill into the countryside. This is a value judgement. Sprawl is a form of growth but it is measured and described at a moment in time, usually as a static and unchanging thing.<sup>16</sup>

Urban sprawl is one of the most serious problems. This phenomenon, which refers to the urban fringe, is the result of the metropolitanisation and there are a lot of negatory results. This rapid expansion has affected the rural areas and so in the rural-urban fringe, where the new development has begun, urban uses have been located in



the around the city, thus in the urban fringe. The transformation has affected the structure, of land use and ownership, their agricultural structure and the level of alterations change as they get farther from the city.

### 3.4. THE PROBLEMS, REASONS AND COSTS OF SPRAWL

In the development period of metropolitan cities, decentralisation of urban use have an effect on the rural settlements which surround the city. As a result of urban effects, new problems emerged in the fringe areas.

The urban sprawl debate usually pits farmers and other land owners against environmentalist or preservationists, a brawl that is mediated by small town municipal boards looking for some compromise and hopefully a little tax base to boot.<sup>17</sup>

But lost in the debate is the plight of the urban core and loss is the impact that sprawl has on entire regions economic livelihood, whose very foundation is grounded in urban downtown still being recognised as the business engine of any region. Traditionally, sprawl has moved people and homes to suburban or rural areas. But with greater frequency, jobs move as well, and so does it the economic machine that drives the large metropolitan vehicle.<sup>17</sup>

Ironically, urban flight has itself been the source of "growth" for many years. New subdivisions represent significant economic activity in and of themselves, and often are followed quickly by commercial growth in bedroom communities.<sup>17</sup>

By increasing dependence on the automobile as the primary mode of transportation, and by encouraging inefficient community models, sprawl is contributes to one of the biggest international environmental problems.<sup>11</sup>

Urban sprawl is a process driven by cumulative, positive feedback loops that overpower the self-correcting, adverse feedback loops of urban land markets. Although the problems associated with sprawl are exacerbated by growth, sprawl has its own internal dynamic, especially in metropolitan areas with fragmented local governmental institutions. Consequently, sprawl needs to be studied in site specific cases in order to isolate the dynamics of sprawl from other influences such as population and employment growth. In metropolitan areas, the fiscal system can induce sprawl by spatially separating the locus of benefits and costs associated with growth.<sup>18</sup>

Urban sprawl is caused by a population increase, on the condition that this increase is not combined with a rise in urban density. If urban density is low, and

population increase is high, then the sprawl will be rapid and will have dire consequences, if not carefully controlled.<sup>19</sup>

The present pattern of development is responsible for the increasing cost of providing essential services, escalating demand for resources and the threat to environmental quality caused by continuing urban sprawl.<sup>19</sup>

Sprawl is a problem that affects urban, suburban, and rural communities. The result of sprawl range from the loss of farmland to the decay of older urban centres. The bad news is that sprawl continues to be the norm in most parts of the country. The good news is that a growing number of people, including many citizens, are fighting back by advocating alternatives to sprawl.<sup>12</sup>

Sprawl has been widely criticised as leading to unnecessarily high costs of social services and of private transportation, as well as for the frequent lack of publicly available open areas. It is also responsible for, or associated with, much wastage of land, since the intervening unused areas are mostly not used at all. The differential or locational effect of agriculture upon suburban land values has been very small. It seems highly doubtful that agriculture can perfect an institutional barrier against urban expansion, at the most, it may help guide the direction and nature of the suburbs which develop.<sup>16</sup>

Marion Clawson has succinctly summarised the case against sprawl as follows:

1. "As sprawled or discontinuous urban development is more costly and less efficient than a compact one each of the same density within settled areas.
2. Sprawl is anaesthetic and unattractive .
3. Sprawl is a waste of land since the intervening land is not specifically used for any purpose.
4. Land speculation is unproductive, absorbing capital, manpower and entrepreneur skills without commensurate public gains.
5. It is inequitable to allow a system in which the new land occupier is required to shoulder such a heavy burden of capital charges or debt merely for site costs-costs which in large part are unnecessary and avoidable."<sup>9</sup>

Mayor William Johnson has defined the problems of sprawl as the following;

1. Loss of Green space: Sprawl destroys the unique character of urban and rural areas creating miles of undifferentiated new development. Those activities, which once took place in the centre of cities and towns have been segregated to the periphery of these more densely populated areas. As centres lose their importance as the hearth of



communities, civic values also get weakened. Individuals become alienated from their neighbours as downtown and village centres no longer function as meeting places.

2. Land Consumption - Threat to Farmland: As existing centres are abandoned in favour of low density development the agricultural landscape, which surrounds cities and towns, is obliterated. Farmland is transformed into subdivision and malls with expansive parking lots.

3. Costs to Local Government ... How Taxpayers Subsidise Sprawl: Urban sprawl is a burden on local government because it forces limited resources to be allocated to the creation of new infrastructure. As sprawl encourages populations to move outside of older established communities, the tax base of these communities is diminished requiring a reduction of services to the remaining population. Ironically, many state and local government policies actually end up subsidising a sprawl pattern of development.

4. Increased auto dependence - Fuel Consumption: Sprawl isolates different land-uses causing increased reliance on the automobile. People commute greater distances to work or to shop. The present trend is not sustainable, as highways become clogged with traffic and energy consumption increases.

5. Inner City-Racial Impacts: Sprawl can have a divesting impact on the poor and racial minorities who are often concentrated in inner city neighbourhoods. Not only does sprawl lead to the dispersal of job opportunities, but it absorbs large amounts of government spending (on new infrastructure) which might otherwise be used to deal with inner city problems. In addition, sprawl may well sharpen racial segregation within metropolitan areas.

6. Public Health Impacts: The health impacts of sprawl is a topic that is just recently gaining attention. Just as architects have come to recognise that the design and construction of building can affect our well-being. At the same time, research findings have begun to document the correlation between a dispersed pattern of development and increased incursions to pedestrians.

7. Wildlife Habitat & Wetlands at Risk : A sprawl pattern of development not only leads to loss of wildlife habitat, but can also increase hazards to public safety. Wetlands and other natural resources are also put at risk by increased land consumption for roads and housing development.<sup>20</sup>

Lynda McDonnell has stated the following as to be associated with problems of sprawl;



1. "Rising concentrations of poverty in central cities and older suburbs
2. More congested highways and no money to build new ones
3. Shift of employment to the fringe
4. Leapfrog development beyond urbanised counties
5. Rising local taxes and fees: Developing suburbs often require large lots in hopes of attractive more expensive homes with higher property taxes and lower social costs. But such development patterns exclude moderate income families and incur high costs for sewers, schools and roads.
6. Loss of farmland and open spaces.
7. Environmental pollution: More sprawl means more driving which sends more carbon monoxide and other pollutants flow into storm sewers, rivers and lakes, rather than soaking into the ground.<sup>21</sup>

The other definition for effects of sprawl, which mentions the undiscussed matters of the other definition is as stated below;

1. Social effects of urban sprawl: A large social problem caused by urban sprawl is the division of the suburbs into income brackets. Low income earners tend to concentrate, often because they are forced to, in the suburbs where urban problem are worst. These areas usually have lower rents and house prices, as well as containing a large proportion of public housing. Problems caused by economic division include; inadequate public transport; difficulties of house affordability; legislative problems; poor education facilities; higher than average pollution and congestion. These problems cannot be solved by welfare alone planning on a regional scale is needed.

2. Economic effects of urban sprawl: The cost of servicing fringe urban areas is enormous. Costs associated with water provision, and waste disposal are expected to increase more than proportionally.

3. Environmental effects of urban sprawl: So much of the population is concentrated in urban areas, they have a disproportionate impact on the environment. Our cities use so many resources, and produce so much waste and pollution that we are endangering our states ecology, we are placing the most stress on the two resources that are essential to life; air and water. Air quality is affected most by the activities in urban areas, we burn fossil fuels for industry and transport and place unacceptable amounts of polluting gases into the air.

4. Rural effects of urban sprawl: The obvious problem caused by suburbs

taking over previously rural land, has already been happening for a long time. Another problem to be faced up by the rural areas is the lack of services. This is not a cause of urban sprawl itself, but the fact that such a high percentage of people live in cities.<sup>18</sup>

Urban development began about two centuries ago in England, at the start of the Industrial Revolution. This involves two processes. Firstly, plenty of low-skilled workers were required by factories in the cities. Secondly, rural activities needed less workers. These factors led to rapidly growing cities and with it a loss of community spirit. In this way, result of the metropolitanisation is sprawl and there are some causes of sprawl.

1. Economic causes: Urban sprawl is also caused by increases in housing prices. Although it is difficult to separate out the impact of the various factors, it would seem indisputable in recent years that high levels of immigration have contributed to the very high growth in housing prices.

2. Urban population increase: Although most of the population increase is due to immigration, there is also a significant drift of country dwellers to the city. This in itself is a symptom of some major problems like lack of employment; lack of tertiary education; lack of entertainment and the list goes on.

3. Social Reasons: Autonomy; this is one of the most understated reasons behind our obsession with detached, single family housing. In terms of its functioning, the afore mentioned single family, detached home is legally under the jurisdiction of its owner. Within the boundaries of the land parcel, the owner can make changes at will, without necessary disruption to neighbours or the community. The owner can modify it to best suit the personal needs and also the owner is not subject to other people controlling his land; Home; it is a basic need of every human being to have a sense of home, a place where they belong. As cities become more and more institutionalised and less and less personal, they cease to acknowledge the individuality of people. This forces people to look for a sense of belonging elsewhere. By withdrawing into their dream home, however, they may be reducing even further the community spirit that they long for.

4. Poor planning: Bad planning of our suburbs has been blamed for many of the problems that our community has to encounter. In the past, surveyors have designed the suburbs and then town planning have become a separate discipline.<sup>18</sup>

The consequences of sprawl are a.) traffic congestion, b.) longer commutes that steal time from family and work, c.) worsening air and water pollution, d.) loss of



farmland, open fields, forests and wetlands e.) increased flooding f.) raised taxes to pay for services police and fire departments and infrastructure, new schools, roads, water and sewer structure.<sup>14</sup>

At the same time, sprawl damage cities, thus; 1. Sprawl erodes the city's tax base as people flock to the suburbs, forcing cities to raise taxes on remaining taxpayers to pay for city services. 2. Sprawl destroys downtown commerce by pulling shoppers from once-thriving locally owned stores and restaurants to large regional malls. 3. Sprawl increases unemployment and concentrates poverty in urban centres. 4. Sprawl undercuts property values and investment opportunities 5. Sprawl robs cities of character as abandoned factories, boarded-up homes and decaying retail centres dominate the landscape.<sup>14</sup>

Understanding the policy roots of sprawl as well as what is not causing sprawl is important. It means that sprawl and disinvestment are not the inevitable, unavoidable, and "natural" consequences of market forces. On the contrary, when policy is understood as a major cause of sprawl, land use reform becomes an appropriate subject for corrective legislative action.<sup>22</sup>

Urban sprawl is widely acknowledged as an undesirable form of development, due to its economic, social and environmental disadvantages. Attempts to control urban sprawl are frequently based on land-use plans at the national, regional or metropolitan levels. The establishment of large regional or metropolitan municipalities is also considered as an option to reduce irrational scattered patterns of land-use development.<sup>23</sup>

Urban sprawl, evident primarily in rural-urban fringe areas has been frequently viewed as a source of problems, which stem 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 one among the more noticeable problems.<sup>23</sup>

At the same time, urban sprawl has adverse effects on suburbs, cities the economy and the environment.

The development of the suburbs has had many ill effects on the suburbanites themselves. Proliferation of housing developments, strip malls, and office, parks, robs just as much "nature" from a suburb as skyscrapers and apartment buildings do from the city. The "green leafy" suburbs, to which many families have moved, turned out to be



just as grey as the cities they left behind. Moreover, because suburban dwellers cannot walk to most public accommodations suburban traffic can often be worse than traffic in the city. Furthermore, time spent commuting to work, driving children to activities, and caring for large properties often robs many suburbanites of leisure time. Finally the placement of suburbanites on an automobile prevents the day-to-day interaction among neighbours, thus denying the residents a sense of community that is seen in the old-time neighbourhoods in the city.<sup>1</sup>

Urban sprawl has also had negative effects on city dwellers. Because there are fewer rental units in the suburbs than in the city, and because suburban survival necessitates the ownership of a car, the poor are often denied the opportunity to move into the suburbs. Therefore, the average income of the city declines. Schools and city services suffer. Buildings remain vacant and decay. The flight of businesses to the suburbs take their job out of reach of the poor who often cannot afford a car needed to commute to the new location.<sup>1</sup>

The low density housing in the suburbs drains the infrastructure. Roads and utilities must be stretched much further to serve the same number of people than they do in the city.<sup>1</sup>

It is clear that the slash and burn philosophy of urban sprawl is detrimental to the environment. Used areas of the city are left vacant. The suburban reliance on the automobile causes air pollution and depletes natural resources. The chemical treatment of so many ½ acre “pieces of green” pollute the environment.<sup>1</sup>

As it can be seen; the sprawl has a lot of adverse effects and for that reason, we have to get rid of such negative effects. Fringe, sprawl is the area located between the city boundaries and metropolitan influence area and includes all the spatial, miscellaneous metropolitan-urban phenomena. It possess structures of lower quality with respect to those of metropolis and characterised by the long term and complex activities along with the rural structuring out side its own natural development. In this sense, fringe is a transition area. In other words, it displays all the economic and social phenomena, which have each been experienced in the past, can be experienced at present and which will as well be experienced in future. One feature of post-war suburbanisation has been its tendency to discontinue large, chosely settled areas intermingled haphazardly with unused areas. This intermixture of open and developed areas is largely independent of the density of the settlement within the developed areas. The lack of continuity in expansion has been given the descriptive designation of

“sprawl”, which as well can note its hit or miss character...”sprawl” has been widely criticised as leading to unnecessarily high costs of social services and of private transportation, as well as for the frequent lack of publicly available open areas.<sup>3</sup>

### **3.5. GENERAL CHARACTERISTICS OF LAND MARKET IN THE FRINGE AREA**

One of the reasons and results of sprawl is the fact of land speculation. In this section, the dimensions of land speculation and change in ownership process will be researched.

The general characteristics of land-market in fringe areas can be subject to a general evaluation. The process of changing ownership and land value in the fringe, have been affected directly from policies and attempts of private and public sectors.<sup>24</sup>

One of the main causes of this scattered development is land speculation whereby land is purchased and held for resale at a later date for a higher price. Farmers and developers can also act as speculators by withholding their land from development and expecting for higher prices. These landowners hold their land out of the current market so that land and building developers have to travel to a further field to purchase new residential lands. Land speculation is usually condemned because it causes a scattered pattern of urban development and land use and increases the current prices of housing sites.

It can be concluded that the main sources of market failure have been the pricing policy of the commercial service and public utility organisations, the apparent failure of homebuyers to properly estimate the travel cost differentials between alternative home sites and the market uncertainty to be faced up by landowners.<sup>25</sup>

In the fringe, the land possesses different characteristics. First of all; land for suburban development is not a homogenous commodity, any more than it is any other possible use. Slope of land may be highly important, as affecting building costs. The risk of flood damage differ greatly from one area to another. In these and other ways, the native or natural qualities of potential suburban lands may differ greatly. Subdivision of large tracts often creates a “plottage” value, which is at its peak when the size of tract coincides with the tract best suited to the intended use of the land. Tracts, being either larger or smaller than the optimum have lower values. The location with respect to transportation, water supply, sewerage, and to other services vitally affects



the potential of land for suburban development. Society has affected the value of suburban land by taxes, by zoning and building codes, and the like. Suburban land also differs greatly in accessibility, especially to major highways and sometimes to rail lines. The market for suburban land is a derived one, dependent upon the market for the dwellings, shopping centres or industrial plants erected on it. Differences in price of houses are often reflected back into those of undeveloped land, but in varying degrees. Lastly, the market for suburban land is usually very weak. There are very few buyers and very few sellers at any one time. Annual turnover in relation to the total area is small.<sup>19</sup>

Land use in the rural-urban fringe is distinctively intermingled and transitional with an irregular transition from farm to nonfarm land. In the rural areas, land values and rates increase with the anticipation of urbanisation. The fringe is characterised by inadequate control of subdivision, tax delinquency, zoning inadequately geared to the present and future needs of the expanding urban place; and a conflict of interest in the type and extent of control, between long established residents and new-comers, and between the central (metropolitan) and local planning or administrative authorities. Land values and rates lower than those of the adjacent urban centre, but rising above those of the surrounding rural areas as the urban invasion, continues by the gradual and irregular conversion of farm to nonfarm to urban land use. Lot size of residential properties in the fringe area characteristically are greater, in area and frontage, than in the urban centre land to have larger lots than other fringe residents.<sup>26</sup> The rapid decline of price per acre as parcel size increases for small parcels of land implies that large-lot zoning (minimum lot size) of residential housing may impose great costs on undeveloped landowners through reduced property values. Land-use zoning policies can generate large economic values on property zoned for commercial use. While there is a negative and significant relationship between land prices and property tax rates, the impact of property taxes on land prices is small when compared to other factors.<sup>27</sup> Dwelling size, in terms of number of rooms is lower in the fringe area than in the city. The value of dwellings in the fringe area exhibits both a lower mean and a narrower range than the urban area itself. Conversely, the cost of the primary installation of utility services, roads, etc means that some fringe areas have higher rates than larger established urban areas. Average house rents in the fringe are lower than for the urban place, but higher than for the surrounding rural areas.<sup>5</sup> If the planner knew which

parcels of this kind were likely to be sold during the next few years, he would be in a good position to anticipate pressure for land use change in the fringe area.<sup>26</sup>

The variables that determine land value;

- "plot size
- the distance to centre
- the distance to highway
- the distance to railway
- the distance to other urban land-use in the fringe areas
- to be limited with some zoning and etc. policies
- tax value
- the population increase in the metropolitan area for building of dwelling
- the characteristic of development
- the quality of land, its slope and surrounding properties
- the existing service possibilities
- the characteristics of the land-use right next to the settlement"<sup>24</sup>

Land owners has gained much; because of land speculation, but he very much has paid for the social cost, too.<sup>25</sup>

### **3.6. TRANSFORMATION PROCESS OF SPRAWL PHENOMENON IN DEVELOPED AND DEVELOPING COUNTRIES**

#### **3.6.1. TRANSFORMATION PROCESS OF METROPOLITAN FRINGE AREAS IN DEVELOPED COUNTRIES**

In the developed countries, the relation between settlements is two-folded.

Metropolitan area phenomenon is the result of high transportation, communication and production technology in these areas. Besides, differentiation, exportation and organisation have affected the metropolitan areas.<sup>28</sup> In the middle of the 20<sup>th</sup> century, the developed countries have fostered new transportation, communication, production, exportation, and organisation possibilities. So, production, management and control functions have been differentiated and routine management and control functions have been separated from one to another. The routine management and production functions have been located out of the city. Because, they have necessitated larger lands. Some industrial units have been located as satellite cities and the new cities have emerged. Consequently, in the metropolitan areas of developed countries, dwelling and industrial



suburbs have emerged as to be related to the city centre, at the same time, in the dwellings sprawl. There are big shopping centres which take place in the residential areas, too.<sup>29</sup>

In the developed countries, development of the city slows down after having reached the definite limits. The new settlements then develop as leaping. Land values do not increase rapidly. The agricultural structure keep its characteristic in the vacant lands, which are between city and the settlements. Outside boarder of the fringe do not go beyond the metropolitan border. The industrial units have been located in the fringe like campus. The residential areas have low-density, wide-area, garden and detached houses in the developed countries. At the same time, there are secondary homes. In the developed countries, the urban land uses and developments outside the city have been located further in distance and they get independent from the main road, as to be lower in density.

### **3.6.2. TRANSFORMATION PROCESS OF METROPOLITAN FRINGE AREAS IN DEVELOPING COUNTRIES**

In developing countries, only primate city develops and so the surrounding settlements around become smaller.

In the 19<sup>th</sup> century, production and transportation possibilities have changed and the new dimensions of market economics have affected the international commerce. The development of transportation, communication and production also has influenced the structure of metropolitan city, and so the city could relate to surrounding. In the developing countries, metropolitanisation has become clear with industrial production, differentiation, control and management. After 1965 the characteristic of settlement has been affected by intensive capital, location of high technology, of middle scale industrial estates, and of those, who have migrated from rural areas to cities. In the metropolitan areas, the industrial estates with high technology have been located further from city centre. The middle scale estates have been located in the fringe, so, migrated population from rural to city, have firstly, been located in the surrounding area of the city centre, but after the location of middle scale estates in the fringe, the population has been located in the surrounding area of these industrial estates where they have begun to work at. In this way, location of the residential areas have changed and they have been located in the surrounding area of the industrial units within these areas. First, the residential and industrial areas distant from a city or another settlement, develop and get

united to each other by the time. The metropolitan cities has grown by virtue of the locations of high technological industrial estates. The rural areas and agricultural lands have begun to encounter a with transformation process between these areas and the city. In these areas, new settlements have begun to develop. The low quality residential areas and small industrial and commercial units have been located in the rural areas and along the high-way or at points of intersection. At the same time, the social and economic structure of the population can be differentiated in the area. So, the sprawl has increased. Transportation possibilities, land-ownership, the demand for services have as well increased. Due to the sprawl by big investments and organisations, the difference of quality have emerged such that, the residential areas which belong to middle and upper classes, the apartment houses and the housing estates have all been located in the fringe areas.<sup>28</sup>

In the developing countries, metropolitanisation have not developed by industrialisation. It pertains to a development with rapid population increase. That is not a real economic development. For that reason, the industrial development has been embodied to the area as nonplanned and complex expansion. This development has created an imbalance within the region.<sup>29</sup>

In the developing countries, agricultural activities continue, but land values cost more in amount than rural land. The rate of change in ownership is higher. Especially, the people who move out from the rural areas have begun to buy land in these areas. Agricultural production has chosen the metropolitan city as its market. The characteristics of vacant lands between the city and rural areas are different from rural areas, and these vacant lands have been covered rapidly with expansion. In the developing areas, the outer border of fringe has gone beyond the metropolitan border but inner border has developed more rapidly than outer one. Large scale and decentralised industrial estates are few in number. Middle scale industrial estates have been located along the main transportation axes near the city. The other small scaled production units have been located within the fringe areas. The people located in fringe areas are of middle or low-classes. The residential areas have high-density and apartment houses. On the other hand, there exist squatter housing in these areas. However, there also are luxury dwellings in the fringe areas. The characteristic of agricultural land appears to be different in the fringe areas, because, they raise vegetables, fruits, etc for the closed markets on the lands near the city, such that subdivision gets increased. Crops like wheat, and barley are produced outside the area.



Another characteristic of developing countries' fringes is that the vacant lands obtained out of agricultural uses seem to proliferate. Transportation and infrastructure facilities are insufficient in the developing countries. On account of this, urban development depends on main transportation axes. The available areas are insufficient for uses to be located outside the city. So, the density has increased in the centre.<sup>29</sup>

Urbanisation does not relate to industrialisation. So;

- there are imbalanced distributions in the fringes,
- infrastructure and service facilities are insufficient,

For that reason, such facilities have to be provided by the centre. Some activities have been located in the fringe because of the higher land costs. The activities, being inconsistent with urban activities, have as well been located in the centre. So, the leapfrog is lower. Some land speculators keep their ownership of lands for longer times. Hence, the land values rise up and the land market shifts towards the fringe areas.

In the urban fringe; the transformation process of rural settlements are as follows;

- the rural land transformed into urban land
- the land divided into small parts and land speculation increased
- the agricultural production decreased
- the population, being migrated to city, prefer these areas to settle
- the round trip to city centre increased
- the workers who work out of agricultural sector increased
- the rental values of houses increased

In the rural fringe, the transformation process of settlements are like that;

- strong bonds to city centre but it is not dense
- land market is not active, land values do not charge and land sale is few
- traditional products continue to be produced in the rural areas
- the workers who work out of agricultural sector are a few in number<sup>24</sup>

As it can be seen, there exists a rapid transformation process in the urban fringe. The transformation take place in the agricultural production, spatial structure, social structure, land-ownership and land market. The transformation level is higher in areas near the city more than the other areas.

In Turkey, only a few studies have been accomplished as to be related to metropolitan fringe areas. One of them is titled as "Metropolitan Kent Çeperlerinde Mülkiyet Örüntüsü Değişim Süreci". It has been prepared by Semahat Özdemir as a

doctorate thesis in D.E.Ü., İzmir. She has researched the effects of land-ownership transformation process on metropolitan fringe area and planning. Another study has been prepared by Hürriyet Bilgen in M.E.T.U., Ankara. The title of study is "Rural Transformation at the Urban Fringe A Case Study in Ankara metropolitan area as a master's thesis. He has searched for the urban fringe and rural activities in these areas and rural transformation within theoretical framework corresponding the rural fringe areas. The other studies are titled successively as "Effects of Metropolitan City to Size and Production Kind of Farming: A Case Study in Ankara Metropolitan Fringe Area" and "The Formation of Laborforce and The Transformation Diversification of Economic Activities at The Metropolitan Fringe A Case Study in Ankara Metropolitan Area". The first study has been prepared by Ayşe Işık Sezer as a master thesis in M.E.T.U., Ankara. She has analysed the transformation of the agricultural structure and production kind in the fringe areas of the metropolitan fringe area. The last study has been prepared by Levin Özgen Emiroğlu in M.E.T.U., Ankara as a master's thesis. In this study, the wholeness of formation of "laborforce" and transformation – diversification of economic activities have been considered in the fringe area. As it can be seen, there exist only a few studies related to urban fringe areas and there is only one study which corresponds to land-ownership transformation process within the metropolitan fringe area.



## **CHAPTER IV**

### **PLANNING AND URBAN LAND POLICIES IN THE PROCESS OF METROPOLITANISATION IN TURKEY**

In the previous chapter, metropolitanisation and transformation process within the fringe areas has been defined and outlined in the developed and developing countries and the data accumulation in Turkey has been explained.

The research of land-ownership transformation process and the relationship between this process, land-use and physical planning is adopted as the basic aim of this study. This transformation process and the holistic relationships have affected planning and urban land policies in metropolitanisation process of Turkey. Planning and urban land policies in Turkey both before and after the World War I will be analysed in order to understand how land-ownership transformation process and the relationships within this process can be related to land-use and physical planning. Turkey has practised plenty of socio-economic transformations during this period. The urbanisation process has been slow until the World War II but after that it has been accelerated. Due to the political change in 1961, the new constitution period of planned development has been an important turning point. The third period is the liberal period (after 1980). In this chapter planning and urban land policies in our country will be investigated.

#### **4.1. STRUCTURAL TRANSFORMATION PROCESS IN RURAL AREAS BEFORE AND AFTER THE WORLD WAR I-II**

Turkey has entered the republican period with a slow urbanisation speed except for Ankara. In the World War I period, some legislative regulations have been executed. Actually, these legislative regulations have initiated a new phase of financial activities and real estate market in Republic of Turkey. The roots of attaining real estate ownership have stemmed in this period. There were seven main Acts legislated before World War II.

I. Act : (14.5.1915) "Vakfi Seferde İcraatı Hukumete Karsi Gelenler İcin Ciheti Askeriyece İttihaz Olunarak Tedabir Kanun-u Muvakkat. No:21899". By this law: if

people were to delayed their service for the army, the government would bring them some obligations another place.

**II. Act :** (13.9.1915) “Ahar Mahallere Nakledilen Eshasin Emval ve Duyun ve Matlukabi Metrekesi Hakkinda Kanunu Muvakkat No: 2303” By this law, the properties belonging to moving people, was going to be transferred by law courts.

**III. Act :** (22.9.1916) By this law, the new land and dwelling would be obtained by these who have moved at the new settlements.

**IV. Act :** (20.4.1922) (No:224) By this law, after militaristic invasions such places were going to be sold by public auction after the liberation and then this money would be kept in deposit and they were to return, this money would be given back to them.

**V. Act :** (15.4.1923) (No:333) “Ahar Mahallere Nakledilen Eshasin Emval ve Duyun ve Matbuati Metrukesi Hakkinda Onyedi Zilkade 1333 ve 13 Eylul 1331 Tarihli Kanun Muvakkatin Bazi Mevadi ile 20 Nisan 3338 (1922) Tarihli Emvali Metruke Kanununa Muadi Kanun” By this law; the sale processes of real estate of those who without any trace leave their properties obtained in dispute by some other people and then to be sold with consensus, all being cancelled by the law court when perceived. If people migrate to other places, their lands or goods would be transferred to foundations or treasury.

**VI. Act :** (24.5.1923) “Tarih ve1331 Sayili Mubadil Gayrimubadil Muhacir ve Sairiye Kanunlarına Tevkifan Tevzi ve Tahsis Olunan Gayrimenkul Emvalin Tapuya Zaptina Dair Kanun” This law has been implemented after the declaration of Republic. The real estate to be distributed within those who were going to be registered in deed and those which were not distributed would be registered fore the treasury.

**VII. Act :** “Emvali Metruke Hesab-i Cariyelerin Butceye Irat Kaydina Dair Kanun” The whole confiscated properties would be registered to the property of treasury with Act numbered 1349.

By these seven laws, the system of the procedures for determining and obtaining the real estates for treasury has been initiated.<sup>30</sup>

After the war, the properties of immigrated people and the abandoned lands within the national boundaries by treaties turned out to be the properties of the Turkish Republic. At the same time, with the Act numbered 431, the whole real estate of Ottoman Monarch has been transferred to the Republic Government. According to item numbered 448 of Turkish Civil Law , If one dies without having inheritors, his properties were to be transferred to government and by item number 641 of Turkish Civil Law, the properties devoid of any an identifiable owners were also going to be



transferred to government. The properties belonging to lost people would be transferred to government in the once a decade year and if the disagreements would appear, the lands which were not registered also would be transferred to government.<sup>31</sup>

According to item numbered 74 of 1924 constitution, If the land values could be covered the private real estate would be expropriated, but there should be a public benefit for such expropriations. Another important law is the Housing Law (Iskan Kanunu) numbered 2510 / 2848 (1934 – 1935). By this law, the travelling immigrants and gypsies were to be settled and with Act numbered 2848, land and properties of lords, sheikhs, and tribe leaders were to be transferred to treasury. According to Act numbered 6183, the debtor's goods were to be transferred to the state. By the law of forestry (Orman Kanunu) numbered 6381, the lands which are not suitable for forestry, were to be left out of the border and these lands were to be registered for treasury and with the Deed Act (Tapu Kanunu) numbered 2644, the real estate properties were to be registered.<sup>31</sup>

The laws related to urban land policies of local administration and their implementations were also initiated. One of them is the law of municipalities (Belediyeler Kanunu) numbered 1580. (1930) By this law, the lands and properties devord of any owners had to be transferred to the ownership of the municipalities. Another one is the law of municipality and roads for buildings (Belediye ve Yapi Yollari Kanunu) numbered 2290 (1933). By this law, if the lands belonging to treasury, were planned as parking, green areas, roads in the plan these lands would transfer to municipalities without any payment. At the same time, the administration for the village settlement areas have been implemented by this law. In the Act numbered 442, the villages have been defined institutionally. (Tuzel Kisilik)<sup>31</sup>

According to conditions prior the war, it is stated the related urban land policies have activated the institutional structure. At the beginning of the 19<sup>th</sup> century most of the state owned land has been transferred to private ownership with “supporting and tax farmer” (iltizam ve multezim) institutions in Ottoman society but in 1925 with the act numbered 583, the expropriation authority has been given to city government of Ankara for 4000000m<sup>2</sup> of land. In 1933, by the law of buildings and roads (yapi ve yollar kanunu) “arrangement share” has been determined (15%). After the war, many numbers of real estate properties have been transferred to treasury. But between 1925-1936, more than hundred thousand real estates have been sold in instalments and in cheap prices.<sup>24</sup>

After the World War II, Turkey has entered structural transformation in its agricultural lands and the country has entered an urbanisation process, and then number of houses in settlements squatter have increased up to 82000 in number (1950 – 1960). The squatter houses which were located in the public and private lands were out of control causing land speculation to augment.<sup>24</sup>

Alterations have been made in the institutional structure for the solution of those problems. By the Acts numbered 5218 and 5228, which have been legislated in 1948, the buildings on those lands being distributed to people by municipalities, had to be constructed within two years.<sup>1</sup> At the same time, by the Act numbered 5228, the lands belonging to treasury and Provincial Administration (ozel idare) could be transferred to the property of municipalities on the condition of being paid. The Expropriation Law numbered 6830 (istimlak kanunu) has been implemented to solve the problems related to land to be obtained by public authorities. By this law expropriations have been regulated. In 1957, the unpaid lands from treasury or private lands with act numbered 6785 have been benefited for activities like parking, green areas, and roads for the municipalities. The Act numbered 7367 provided for the unpaid lands for municipalities from treasury in 1959. According to the Act numbered 6785 the establishment of a planning authority was the right of the central government. However, these laws were to provide unpaid lands only with 25% of the total building plots within the development areas whereas the Act numbered 48 compels land-owners to build on their plots, only on the condition that they are appropriate for construction on vacant lands. But most of these items have not been implemented successfully.<sup>24</sup>

At the same period the Act numbered 4753 aiming at availing the landless farmers to own lands (Ciftciyi topraklandirma kanunu) has been put into execution and this law basically was to correspond to the rural areas. However, it can be observed that the consequence rather referred to the metropolitanisation process. Today the results can be monitored in fringe areas.

Most of these laws have been put on execution during this period, all being related to urban land aiming at making the treasury to own more lands, but unfortunately, none could succeed.

#### **4.2. 1960-1980 PERIOD –THE PERIOD OF DEVELOPMENT PLANS**

As a result of the problems experienced between (1950 – 1960) such as deficits and the lack of national development programs, the National Planning Institution (DPT)



has been established and development planning periods have begun in 1963 as to correspond to a rapid increase of urban population, growing housing problems and beginning of metropolitanisation in the greater cities, all constituting the dominant characteristics of this period.

According to the 1961 constitution, everyone had the right of ownership and inheritance; but by limitations of public interest and law. The ownership rights are not contrary to the public interest. If the public interest proves it to be a necessity the government and the public enter prizes intends to expropriate. By the Act numbered 7660 (1966) the lands which do not belong to the private ownership have been registered to the property of treasury.

According to the first three development plans; the values of lands belong to public and the one public institution has to have control over these lands. For that reason, it has to be the state interference for public control.

The fourth development plan, was concerned with the measures to prevent land speculation. However, three laws which affected the urban land policies have been legislated during this period. These laws are; the Act of Flat Ownership Rights (Kat Mülkiyeti Yasası) in 1965, the Act of "Gecekondu" numbered 775 in 1966, and the Act of Land Office (Arsa Offisi) numbered 1164 in 1969. On the other hand, the laws concerned with the exemption of industrial land, have been put into execution by Ministry of Reconstruction and Resettlements in 1978. The land office has been established to set the obstructions for the increases in price, and to provide for lands to be allocated tourism, residential and industrial areas. For this reason, most lands under the control of land office have been transferred to private sector. But such efforts have not been sufficient enough to solve housing and land problems in the metropolitan cities. The most important policies of this period, refer to the fact that the metropolitan cities had to be holistically planned just as different organisations. In 1965, with the decision numbered 6/4970 of the Council of Ministers, The Metropolitan Planning Bureaus of Ankara, Istanbul and Izmir have been established. These bureause were the new planning organisations necessitated by this growth process, and the concepts "metropolitan region", "metropolitan area" and "adjacent area" were all new for this period in our country. But with Act numbered 1580, the municipalities have been established, but a satisfactory co-ordination between the municipalities and central government could not be provided. All municipalities take the planning decisions all by themselves. Then, the shared sale and subdivisions have increased.

During 1970's, the new understanding of comprehensive governing of cities, aimed at dominating the housing estates and production of dwelling both in the existing public and expropriated lands. BAG-KUR has become a part of cheap land assurance for residential areas. Several projects concerned with housing have been implemented by the Ministry of Reconstruction and Resettlement. "Emlak Kredi Bank" has provided bank loans for the construction of dwellings. As a result of these experiences and policies, the municipalities and other institutions of state have collected plenty of large lands and then have transferred them into urban lands. Followingly, these lands have later been transferred into co-operatives, companies or individuals for the production of dwelling units.

In addition; the acts numbered 6785 and 1605 have been approved in 1972 and by these laws, the implementations outside the adjacent areas have been put as extents of the laws. The definition of "village settlement area" has been brought for villages, which are out of the municipal boundaries and adjacent borders, in order to control implementations by means of the regulations in 1975. By these regulations, most of the areas, nearby the sea and having development potentials have been determined as village settlement areas. For that reason, plenty of subdivisions aiming at speculations have been realised at these areas.<sup>24</sup>

In 1978, a legislative document consisting of development regulations in those areas devoid of any development or road extension plans has been approved (İmar ve Yol İstikamet Planları Bulunmayan Beldelerde Uygulanacak İmar Yönetmeliği). Thus, the 19<sup>th</sup> of February regulation) has been put into execution. By this law, the subdivisions and construction conditions have been determined in those areas which are defined as settlement areas in the municipality or adjacent area boundaries. The last legislative regulation has been realised in 1979. By the act numbered 7 / 749 the right has been given to the Council of Ministers as to form and plan new settlement areas. This law was put into execution to obstruct untidy improvements and to solve housing problems in the metropolitan fringe area.<sup>24</sup>

Briefly, The important legislative regulations related to urban land policies and planning have been realised in between 1960 – 1980. The law of Flat Ownership Rights, the law of Gecekondu and the law of Land Office all of which have been put into execution in 1960-1970, were not sufficient to solve urban land problems. During the same years, the Metropolitan Planning Bureaus have been established, but they were to be closed up in 1984. Between 1970-1980, the legislative regulations, which have



affected the physical development of metropolitan fringe areas and rural settlements, have been realised. By these legislative regulations, the possibilities of subdivision and construction have been provided for the unplanned settlements, both in or out of adjacent areas. These regulations were often implemented. Thus, plenty of subdivisions being not related to each other have been realised, and these areas have not been well equipped. The result has been the obstruction of the implementation of physical planning decisions and have created crucial problems.

The intention of governing cities has inclusively developed and the attempts for housing estates have increased in 1970's. This transformation could be particularly observed in the metropolitan fringe areas.

#### **4.3. LIBERAL ECONOMY PERIOD (POST-1980 PERIOD)**

The structural transformation policies have affected the policies, economy and social structure of Turkey, urbanisation, characteristics of zonal development with 24<sup>th</sup> of January decisions and coup d'état. As a result of these laws related to urbanisation and sectoral developments and implementations, public land has begun to take shape after 1980.

Until this period, there were more than one municipal organisations in metropolitan cities and planning authority was under control of the central government. In this period, legal and administrative structure of physical planning institutions have changed by several laws in Turkey.

With the 1982 constitution, ownership and inheritance rights could be limited by law for the benefit of public interest. The coasts have been under governmental control and with by law, the landless farmers turned out to be land-owners. At the same time, the agricultural lands, pastures and meadows were intended to be kept under control avoiding malfunctioning.<sup>31</sup>

In 1982, the Tourism Law numbered 2634 (Turizm Tesvik Yasası) and in 1983 the regulations related to the use of public land for tourism area (Kamu arazilerinin turizm yatırımlarına tahsisi hakkında yönetmelik, (28.4.1983), act numbered 18031) have both been put into execution. At the same year, the law of "Gecekondu" numbered 2805 and law numbered 6785 have been put into execution in 1983. With the alteration suggested by the Act numbered 3082, all kinds of production units belonging to private

enterprises could be subject to expropriation, but with their prices being paid. With the Coast Law numbered 3086 (27.11.1984), the state can obtain land.

In 1986, acts numbered 3290 and 3366 have been put into execution, and in this way, the regulation has been made in Act numbered 2981. Owing to all of these laws, most public land have passed on to private ownership. Thus, numbers of illegal constructions have been exempted and plenty public lands been privatised. At the same time the shared sale and subdivisions have increased, too.

The Tourism Law and exemption laws are important for the settlements in fringe areas, because there existed numbers of unlicensed constructions on the public lands and hence, all lands had to be sold to the invaders. So, the public lands have been transferred to private ownership. Naturally, the important opportunities have been missed as to regarded the future of cities.<sup>24</sup>

In 1984, the Act numbered 3030, the law related to the greater city municipalities, (Buyuksehir Belediyelerinin Yonetimi Hakkinda Kanun) have been put into execution. According to this law, the areas for public use can be transferred from public institutions to municipalities irrespective any charge.<sup>31</sup>

In this period, another important alteration has taken place in 1984. This is the Act numbered 95. With the new regulations proposed for the metropolitan central areas, the sub-provincial municipalities could be able to be arranged.

During those years, V<sup>th</sup> and VI<sup>th</sup> development plans have been prepared such that plenty of lands were to be allocated to housing estate projects in the metropolitan fringe area.

The structural alterations have been realised in the planning institutions in 1985. Development Act numbered 3194 was put into execution in 1985. The authorities pertaining to the preparation of plan, control, implementation and approvals have been transferred to local governments and then the Metropolitan Planning Bureaus have been closed. With this new law, "arrangement share" of 35% has been brought for social and technical infrastructure arrangements in the development area as to be without any charge. With this new law "arrangement share" has increased up to 35%. But, it still is regarded to be insufficient.

The other important dimension of the law is the prohibition of a shared sale. Because it affects the existing or planned land-ownership pattern and the changes in ownership process within the metropolitan fringe area. It is also beneficial for the implementation of physical planning decisions. But in the land market, the emergence



of shared sale has caused the illegal sale (certified sale) that in turn entailed the will to increase especially the construction of illegal housing this occurred. Because of the demand for smaller plots.<sup>24</sup>

The new law gave permission to the settlements which do not have any development plan for subdivision and construction in the metropolitan area or in the urban-rural fringe.

The different policies concerned to usage of public lands, have caused the sale of public lands to the owners of the dwelling being certificated by the new law (15.10.1989). As announced in the newspapers. An area of 2846ha has been put on sale and in return amounting up to 140000 land certificates. The researchists, local administrations and the profession chambers have reacted to such an implementation. The policies for public lands kept their continuousness in 1990's as to parallel the privatisation policies. National Real Estate directories put forward the sale of the treasury lands by means of newspaper advertisements since 1990 till today.<sup>24</sup>

Parallel to these policies a new alteration has been proposed in 1993. According to these decisions and legislative enforcement, the planning and implementation authority has been transferred from larger city municipalities to land office. By virtue of this new implementation, the land office has been authorised to prepare alterations of the existing plan and to prepare the development plan of real estates belonging to public enterprises and the treasury. But today all authority has been passed onto the municipalities completely.

First of all, the necessity for land and for the technical and social infrastructure have to be accomplished and the implementations programs have to be prepared. The consumption of the existing public land has an adverse effect on the development of cities. Most of the sold public land have been expropriated once again. For these expropriations, higher prices were to be paid. Most of the public lands have been utilised in this manner in the metropolitan urban fringes area. So, It can be revealed that it has affected every type transformation process directly.

As a result of the planning and urban land policies in our country and in metropolitan urban fringes, the sub-hypothesis concerned with the land-ownership transformation process and relationship between this process and land-use, is that physical planning in the metropolitan urban fringe and urban development areas have constituted a necessary basis for this study and this hypothesis will be explained further in the following chapter.

## CHAPTER V

### **THE LAND-OWNERSHIP TRANSFORMATION PROCESS IN METROPOLITAN FRINGE AREAS – SUB-HYPOTHESIS CONCERNING THE RELATIONSHIP BETWEEN LAND-USE, PHYSICAL PLANNING AND LAND-OWNERSHIP**

The aim of this study is to make a research on land-owner transformation process in metropolitan fringe areas. Relationship will be analysed between this transformation process, and the existing land-use pattern and planning process.

There are strong relationships between land-ownership pattern, land-use and physical planning. All three factors have been affected by the social and economic structure. In the metropolitanisation process, the fringe areas are subject to an incessant change due to time. These changes pertain to the social, economic and physical structure of the city. Some other kind of change on the other hand take place in the land-ownership pattern. Most lands have changed owners and been sold until today.

The sub-hypothesis has been fostered with respect to the general characteristics of the metropolitanisation process in cities, the change takeing place in the settlements which were located at the fringe areas, the researches held in Türkiye, the planning and urban land policies within the metropolitanisation process of Türkiye and the land-ownership transformation process,all in this part.

In this chapter, first of all the land-ownership will be discussed and the factors related to land-ownership will be determined and defined. Following this, the development process of land-ownership will be analysed.

#### **5.1. THE VARIABLES RELATED TO FORMATION AND DEFINATION OF LAND-OWNERSHIP PATTERN**

##### **5.1.1. THE LAND PHENOMENON**

The land cannot be produced. Land is unlike most other commodities involved in the production process, because it possesses a number of unusual and complex of which ones characteristics; the most important are outlined below.

1. Fixed Supply: In general, land is considered to have a fixed supply because no mor



land can be created. There are, however, important qualifications where reclamation lands can be added to the total stock, where greater intensity of use can increase the effective supply and where the amount available can locally be increased if land owners bring more to the market in case urban development is allowed to spread outwards onto agricultural or other land.

2. No cost of supply: In an absolute sense, land can be considered as a “gift of nature” with no cost of creation, except for rare cases of the reclamation of land from the sea. In reality, of course, there exist costs of providing for infrastructure, development, improvement and other inputs to be considered.
3. Unique / irreplaceable: Each plot of land is unique in terms of size, configuration, physical characteristics and location. For this reason, no plot can be exactly replaced by another.
4. Immobile: Land is permanent and cannot be moved, although a limited degree of flexibility can be achieved through the substitution of transport costs.
5. Permanence: Land is uniquely permanent. It may be altered or damaged and it may be subject to the law of diminishing returns for a particular form of development, but in the urban context it is generally indestructible.<sup>32</sup>

As a result of these basic characteristics, together with the legal, social and policy structures which different societies have developed, the use and ownership of land involves an enormously complex package of interests, rights and occupancy. Some of what happens to land depends upon the decisions and actions of the owners or occupiers, but much is also determined by the action taken by adjacent owners and the broader society. Finally, a number of unpredictable, non economic factors, including prestige, symbolism and social values need to be entered into the equation.<sup>32</sup>

The land is separated into two parts. One of them is urban and the other is agricultural (rural) land. The urban land is located in city and smaller town and it was arranged for construction and it has a social-economic and physical infrastructure. The urban land is subdivided and transferred into plots.

Land-ownership is important with regard to the an understanding of land-use and development, not least because of the vexed relationship between the private and public sectors and owing to the behaviour of land-owners, as they are profit maximisers, this profoundly affects the urban development pattern. The notion of land-ownership is not merely an issue of arcane legal debate; it has implications of great importance for urban development, which can be summarised as follows by Kivell;



1. The size and configuration of land holdings profoundly affect urban morphology.

The layout and scale of urban development owes much to the nature of original land-ownership boundaries, and the reconstruction of extensively damaged or blighted areas is often constrained by the original pattern of plot ownership.

2. The timing of land sales influence the nature of urban development. In particular, this may reflect the contemporary technology and economic driving forces together with architectural and planning styles. Railway era housing, for example, differs from that of the nineteenth century and is very different from its twentieth century counterpart.

3. Land-ownership confers power, indeed until the mid eighteenth century in England. It was the very cornerstone of power and the big land owners were the economic and political leaders of society.

4. Land-owners may exert considerable influence over urban planning policies, especially if they act in concert. This comes about through their decisions on whether, or when, to sell land and participate in different kinds of development.

Adams et. al. (1988) has identified an important distinction between active and passive land-ownership and the way in which this has affected development. In addition, land-owners have influence over the preparation and execution of land-use plans.

5. Land-ownership is an integral part of both national and local economies and it can be seen as a part of the relationship between the production sector and the consumption sector. The former sector views land as a commodity and comprises developers, together with formers and speculative owners, whose main interest is to maximise the exchange value of the land. The latter sector consists of those, who occupy land for a specific purpose, e.g. industrialists, retail and office companies, home owners and farmers whose main interest is to maximise the use value of the land.

6. Finally, a consideration of land-ownership is important for what it reveals about the nature of society, given that ownership is a social construct.<sup>32</sup>

Land-ownership is separated into two parts. One of them is private land-ownership, the other is public land-ownership. At the same time, the private land-ownership is further separated as private title deed and shared title deed plots.

The private property rights are limited by the exclusion of certain social groups from ownership, restrictions on the use and development of land according to planning or zoning laws, and taxation of land by the state.<sup>32</sup>



The structure of private ownership is complicated, because there are many different forms it may take and because, in the process of urban development, land may pass through many hands. The private land ownership has caused land speculation. The people buy land and have control over land, so the land value increases. For that reason, the lands are left as vacant. The source of the speculation is unearned income. The private land-ownership has caused a lot of problems;

1. The problems in terms of urban planning and urban development; the aim of the unearned income affects the development and growth direction of city, population density, and land-use as a negation. In this way, the implementation of planning decisions become very difficult and sometimes even impossible. Some of land has remained as vacant for unearned income and the land values have increased in time. Hence, the new urban services, especially the residential areas, are located around the city. In this way, the costs of the urban services and infrastructure increase.
2. The problems in terms of social and economic structure; The private land-ownership has effects in terms of the social and economic structure. The fertile agricultural land has been transferred into urban land. Besides private lands, the public lands have been transferred into urban land, too. The private land results in unbalanced income distribution within the society and than the class differentiation increases. The big landowners also have proliferated..
3. The political and ethnical problems; The classificational differentiation increase,<sup>33</sup> while the income distribution is not just! The people who cause the land speculation, are owners with higher incomes. In time, speculators have become influential in urban planning more than any other group. The land speculation has become valid for the existing area as well. Some areas have been transferred into the new usage or the number of stories then get increase for buildings. So the existing buildings get demolished in a short period of time. The increase of the land value also result in the use of the whole land. For this reason, infrastructure facilities remain in to be insufficient.<sup>34</sup>

If the results of the private land ownership by architecture organization in Ankara are classified it cab be monitored as follows;

1. The private land-ownership slows down the country's development,
2. The incomes are distributed in a manner as to oppose the,
3. The private land-ownership causes for improper allocation of resources,
4. It results in unsystematic urbanisation<sup>35</sup>

### 5.1.2. THE PLOT SUBDIVISIONS

One of the most important problems is subdivision. The subdivision may be defined as follows: Any land, or portion thereof, shown on the last preceding tax rolls as a unit or as contiguous units, which is divided for purposes of sale, either immediate or future, by any subdivider into more than one parcels within any one year shall be considered to be a subdivision and requires the filing of a map for the approval of the planning commission and the legislative body.<sup>36</sup>

The land value have especially, increased in the 19<sup>th</sup> century, during which the capitalism and urbanisation, have also risen up such that the big plots have been bought and divided into parts and then the plot parts have been sold again with the parcellation, causing land speculation to be augmented as well increased. This situation has increased later in 20<sup>th</sup> century in Turkey.<sup>37</sup>

### 5.1.3. SHARED SELLINGS

The other most important problem is shared-sale. The shared sale has caused many problems in time. The planning processes have particularly been affected by this sale, and by the Development Act numbered 3194, the shared sale has been prohibited except for some private conditions as follows;

- Those shared registration procedures of shared title deeds passing through inheritances,
- Those shares emerging as jointly owned parcels to be registered as a result of implementations depending on the reconstruction law, (Development Act numbered 3194),
- Those sharings as the resultant of rights to own flats in a single building depending on the Law of Flat Ownership,
- Those sharings subject to usages such as agriculture and animal husbandry, tourism, industry and ware housing,
- The sharings existing as the results of sales by means of executions through legislative obligations
- Sharings depending upon the jurisdiction of a court,



- Those sharings, which have to be registered without providing any possibility for further subdivision and emerging from sale as a priori events,<sup>38</sup>

Today, the fraudulent shared sale continue in the cities. Especially, in the last years the sale which is made by voucher has increased. One of the most stated reasons, is that these sales are unlicensed construction. These sales have occurred in the fringe areas and today, it continues on and for that reason, planning process is adversely affected by these sales.

#### 5.1.4. PUBLIC LANDS

Public land-ownership has traditionally been justified for reasons of “the common good” or “the public interest”. More specifically, a large number of individual advantages have been claimed for the taking of land into public ownership, especially during urban development. Effectively, these can be condensed on the three main arguments; planning efficiency, fiscal and social equity and the provision of services.<sup>502</sup>

The argument that public land ownership can be used to achieve financial and social equity can be put forward at a number of different levels. At the broadest level it can be advanced as a part of the process of wealth redistribution. The public land-ownership is not strictly necessary in order to recover enhanced land values for the community, this can be achieved through betterment levies or taxes. The other argument in favour of taking land into public ownership is that it is necessary in order to allow public bodies, especially local authorities, to perform their primary tasks of providing houses, schools, hospitals, roads and other community services.<sup>32</sup>

The public land-ownership is also important for collective use. Because the scarcity of land is less for these usages. This factor affects the land and dwelling needs of low income groups. Another important problem is privatisation. Today, plenty of land, which belong to public institutions, get privatised. The amnesty law is particularly important for privatisation. Since people have constructed their dwellings on public lands, these lands are privatised for these people by government. As a result of privatisation, plenty of plots have been sold by public institutions. By this way, the amount of public lands have decreased. On account of this, most of the privatised lands will in the future be expropriated again for public services.

## **5.2. THE SUB-HYPOTHESIS IN TERMS OF LAND-OWNERSHIP TRANSFORMATION PROCESS**

The research deals with the general characteristics of metropolitanisation process in Turkey and this process has been searched in the initial chapter. The changes taking place the settlements of fringe areas have been searched within this process, too. At the same time, urban land policies and the planning process will be considered and the result of these processes will be used in fostering sub-hypothesis;

In the first phases of the metropolitanisation process of larger cities in Turkey, those results can be observed in the fringe during Republican Period;

1. Public land potential is higher because the general characteristic of land policies and lower land demand;
2. Land-ownership is polarised due to the general characteristics of the agricultural structure of country;
3. The large plots have been subdivided and they have begun to sold in time. So, land market gets motivated;
4. Sale of the subdivided plots have increased. At the same time, the number of shared title deed plots have also increased before the Act numbered 3194;
5. As a result of these sales, the population has increased with immigration, but this increase is much more than the city centre ;
6. At the same time, land-ownership characteristics have changed and big land-ownership happened to be decrease and there the small land-ownership have increased.
7. The privatisation and expropriation have increased by the time.

## **5.3. THE SUB-HYPOTHESIS RELATED TO LAND-OWNERSHIP PATTERN, LAND-USE AND PHYSICAL PLANNING**

There exist relations between land-ownership, land-use and physical planning. Following are those hypotheses related to land-ownership, land-use and physical planning;

- Comprehensive planning phenomenon have occurred very late for metropolitan cities, and actions are not continual. Metropolitan city administration changes frequently. Owing to this, the physical development cannot be inspected in the fringe



areas. All of these areas have developed in an unexpected manner. For this reason, technical and social infrastructures are not sufficient in these areas.

- The village pattern have taken place in subdivided plots and were sold as to be shared. Because the small plots can be sold easily. This new pattern was valid in areas surrounding the existing pattern or developed settlement as leapfrog. Thus, there have been vacant areas between existing pattern and leapfrog developed areas.
- In the physical planning process, the rapid changing ownership has emerged as to accomd the speculative aims in the urban development areas of central city.
- The new and big land-owners accelerate physical planning process. Because they have begun to make localised development plans. The aim of this planning processes is based on speculative expectations.
- All public lands are especially, planned for purposes of collective services; on the other hand, the private lands are planned as residential areas, commerce etc. All of these areas are in high densities and only 35% of their lands are left for public uses.
- The existing pattern has been developed as out of order. The physical planning decisions had to be taken up with existing land-use and land-ownership pattern, which have occured a result of the subdivisions. So, higher costs had to be paid for the implementation of these development plans.
- The formed land-ownership pattern and land-use obstruct the development which is planned.

The transformation process in the fringe areas will be further investigated in a case study area of Ayrancılar Municipality.

## CHAPTER VI

### **ANALYSIS OF THE RELATIONS BETWEEN TRANSFORMATIONS IN LANDOWNERSHIP, LANDUSE AND PHYSICAL PLANNING PROCESS IN THE CASE STUDY AREA**

The questions which are tried to be answered in this study are summarised in the initial chapters. All these questions focus on the transformation of land-ownership pattern in the urban fringe area, with regard to land-use and physical planning processes. Hypotheses related to these problems and literature survey are also the subjects of the previous chapters.

In this chapter, these hypotheses will be tested via data provided by the case study area. The case study area is Municipality of Ayrancılar. It is located at the south of İzmir and within the boundaries of the sub-province of Torbalı.

Ayrancılar is the first urban settlement at the southern fringe of İzmir. At the west of the study area; there exist Adnan Menderes Airport, Tahtalı Dam protection basin boundary and Kısıkköy – Aegean industrial trade export center. Besides, in the area, there are new co-operative areas (Egekent 4, Üçpınar etc.) and small scale industrial estates and agricultural lands which have high fertility. At the same time, the area is located along the important transportation axes like highway, motor-way, railway and airport. The settlement still develops rapidly and includes a number of urban function on one hand and important agricultural, rural functions on the other.

At first, the study area will be analysed in relation to İzmir and then this will result in descriptions of all aspects.



## 6.1. SITE AND GENERAL CHARACTERISTICS OF THE CASE STUDY AREA IN İZMİR

İzmir is the biggest and the most important city of the Aegean Region. Being the third largest city of Turkey, commercial and industrial activities of İzmir are quite developed. The city controls most of the region.

Torbalı has faced an industrial development during the last few years, especially, as one of the main growth poles of Turkey. There appears global investments of tobacco and automotive industrial sectors in Torbalı. The increase in the level of urbanisation and developments in residential areas continue but the subprovince still depends on the central city in terms of its commercial facilities.

The boundary of the adjacent area of İzmir (İzmir mücavir alan sınırı) is located between İzmir-Torbalı and extends over Kısıkköy in the southern axis. Industries in small scales have developed, especially, in the south axis. There are small scale industrial locations in Ayrancılar, Kuşçuburun, Yazıbaşı, Kısıkköy and Torbalı. The distance of the industrial units to İzmir is 40km. Most of them are not organised. The area is still under construction in Torbalı.

During the last years, as housing estate areas have grown in Ayrancılar, Oğlananası, Develi, Tekeliköy and Pancar, these settlements have grown more rapidly.

İzmir-Torbalı axis has more important transportation facilities, like highway, railway, highway, or airway. At the same time, there are fertile agricultural lands around this area.

Ayrancılar takes place in the south of İzmir Metropolitan City and in between Torbalı-İzmir. It is located on the E-24 stateway. The distance of Ayrancılar to İzmir is 30 km and to Torbalı, 15 km. It is a municipality which depends on Torbalı. It is located along Denizli-Aydın-İzmir main-road. Tahtalı Dam protection boundary is at the east of Ayrancılar and that overlaps with the boundary. For this reason, it is the first settlement, which has the highest density in south. Especially, housing and industrial estates develop rapidly in this zone. At the same time, in this area, there are fertile agricultural lands. There also are important investments like Aegean Free Zone, Kısıkköy Aegean Industrial Trade Export Center, Menderes Airport, and Tahtalı Dam. The distance of Ayrancılar to İzmir is





Figure 6.1. THE LOCATION OF THE CASE STUDY AREA IN AEGEAN REGION



30 km and close to the airport and the Aegean Free Zone. The industrial constructions of the northern and eastern axes of İzmir have reached a saturation point. In Ayrancılar zone there exist sufficient raw-materials (for agricultural, textile etc. Industry) and it has infrastructural possibilities which are ready to serve for the new investments. For that reason, the area is attractive and the spatial development continues rapidly in this axis.

At last one can say that the area surrounding Ayrancılar settlement consists of small scale industrial units, industrial estates, wide agricultural areas, residential areas, an urbanised terrain and all kinds of transportation facilities with a complicated land-use, all together meant to be an important case for the country and metropolitan scales. This area also has a strategic importance as a result of the occurrence of different demands in different sectors.

Land speculation is very dense in Torbalı and Ayrancılar along the İzmir-Torbalı axis, because of the development of industry and the increase of population. In addition, the growth of co-operatives continue in a rapid manner as well. There are seven co operatives in Ayrancılar and the construction of these co-operatives continue. These co-operatives can be listed as Üçpınar, Egekent, Başakkent, Bahçelievler, Akşioğlu, Nebioğlu, İstikbal. Besides, there exist the establishment of new zones for co-operative areas. The growth of industry, and increase of housing estates both result in the depletion of agricultural land.

The initial settlement, take place at the core of Ayrancılar along the E-24 high-way. This settlement reaches Üçpınar co-operative area in west of the Ayrancılar. The Greeks used to live in this area, prior to the arrival of the Turkish population. The Turkish people have then come to this area and been located between Yoğurtçular and Demirci villages. In other words, located at Ayrancılar. The Turks who came from the Middle Asia, have started to work for the Greeks who have for many years been known as the rich farmers. But after the war, Greeks have been pulled out from this area such that these lands, which were left over, have all been distributed among the Turkish workers. The first Turkish settlement, in this area, had 47 houses. The government has distributed the agricultural lands to these people in a ratio of 5000m<sup>2</sup> per household. At the same time, there was an area of 45000m<sup>2</sup> belonging to a Greek farmer while the Greeks were pulled out from Ayrancılar. An area of 20000m<sup>2</sup> was given to Turkish and the remaining, 25000m<sup>2</sup> has been left to a Greek farm owner. ( This farm owner name is Fotyadis Loi and his wife's name is Katarin ). Because,

in this area, there was another a farm owner, but the government had not wanted the farm owner to live in this area. This farm owner had not wanted to leave Ayrancılar either. As the Greek named Fotyadis had made a compromise with the government, the other Greek had to leave Ayrancılar. For that reason the government has given 25000m<sup>2</sup> land to Fotyadis and then this Greek has dehydrated this area near the railway. He has guided the water towards Selçuk. He has used this land as agricultural field for 2-3 years and then has given the area to sugar factory. As 5000m<sup>2</sup> of land has been expropriated by the government this area was then given to treasury. Half of the remaining land was given to the Society for the Protection of Children. He has left the other half to his daughters.

The people who were settled in this area for many years have applied to the government in 1942 to get title deed. One year later, on the first of July, 1943, plots have been specified and land has been designated by the government for and then measurements have been completed. But people had to be tenures for the first ten years and after that, in 1954 the title deeds of the lands were to be given to these people. As the government has put an obstruction for sale of these lands the people have settled in the area. But the first registration has been made in 1968. Settlement registrations were not clear prior to 1968. The first registered title deed has taken place in 1968. During the following years, those who have come from Afyon, Denizli, and Konya have also settled as workers in this area and further, the new comers have been encountered from other provinces. These people also have expected lands from the government and gotten settled in this area. The Denizli-Aydın-İzmir axis has productive and fertile agricultural lands. On account of this, the people have come here as seasonal workers and then, they have stayed permanently. Because they have liked to live in this area. The reason of migration, very recently, is also the terror, especially for those who come from the eastern Anatolia.

Primarily, Ayrancılar used to be an olive growing area besides forestry. The area especially reaches the road in the north. State Water Works organisation have applied irrigation facilities for the area. Hence, the demand for these lands have shifted and they have been to be sold out of purpose. The government has expropriated and have sold those lands not being devoid of title deeds. The plots located at south of the area are the first ones surveyed before the initial registrations. This first surveying has been accomplished by plane but the informal registrations being kept by people, have proved to be quiet similar



to those new ones. (In other words 5000m<sup>2</sup> of area per capita was shared. The land towards the south of the area, still is used as a field.)

However, the development of industry at the area has caused the sudden increase of housings, which has ended with the depletion of agricultural lands. In particular, the industrial areas, have been built on the first and second degree of agricultural zones.. (demolished olive yards and peach gardens). As a first attempt, the development of industries on these lands have been prohibited but after a while, this policy has been left over. It is that area turned out to be an industrial center of Ayrancılar.

The rapid population growth in Ayrancılar has elevated increased the demand for housing estates. The population growth in Ayrancılar has continued rapidly since 1955 until today.

**Table 6.1.** Distribution of total population by years

YEARS	POPULATION OF AYRANCILAR	POPULATION OF TORBALI
1950	576	30309
1955	684	33772
1960	1020	37027
1965	1559	43762
1970	1679	50321
1975	2246	56122
1980	2616	56261
1985	3424	62963
1990	4474	711712
1997	6252	79726

The reason of rapid population increase is the assurance of cheap land and closeness to İzmir. Another factor is the abundance in work possibilities. There exist labour possibilities both in agricultural (there are big land-owners who need seasonal agricultural workers. In this way they plant and cut their lands) and industrial sectors. Infrastructure of this area is well established and their green areas and water is sufficient. So, there are new demands.

Ayrancılar has become a municipality in 1991. The first master plan has been prepared in 1992 and an area of 705 ha has been availed for development. This rate was

1806 ha in 1996. Furthermore, an area of has also been availed for development. The majority of the lands in the area have been provided for residential purposes. In 1992, there were 205 ha of residential area, but the area has reached 1198.6 ha in 1996. In other words, an area of 993.6 ha has been availed for further development as residential areas. On the other hand there is a demand to make the north eastern part of Ayrancilar available for development. These demands correspond to a housing development of triplex and duplex houses. Because, by this implementation policy more open spaces were intended to be kept due to lack of public budgeting possibilities are the land availability development. In 1992, the industrial area was functioning only on the north. In 1996 the south of the road has also been occupied. The very high land values be have turned out to constitute the main reason for such a shift. Especially those lands, which located near the road have had to confront the decrease of demand in this sense. The demand for industrial plots have goewn in the southern part of the area.

**Table 6.2.** Master Plan Proposals for Land Use (1991)

USAGES	HA	%
RESIDENTIAL AREAS	225,38	31,96
COMMERCIAL AREAS	14,87	2,11
EDUCATION FACILITIES	11,85	1,69
HEALTH INSTITUTIONS	2,1	0,3
MUNICIPALITY SERVICE AREA	4,08	0,58
RELIGIOUS FACILITIES	1,79	0,25
SOCIO-CULTURAL FACILITIES	2,06	0,29
URBAN WORKING AREAS	9,81	1,39
STORE AREAS	2,54	0,36
AFFORESTATION AREAS	3,12	0,44
MILITARY AREA	0,52	0,07
GREEN AREAS	48,01	6,82
TOURISM AREA	1,22	0,17
INDUSTRIAL AREAS	120,34	17,07
NATURAL CONSERVATION AREA	4,8	0,68
ROAD	252,59	35,82
<b>TOTAL</b>	<b>705,08</b>	<b>100</b>



**Table 6.3.** Master Plan Decisions (1996)

USAGES	HA	%
RESIDENTIAL AREAS	1198,6	66
COMMERCIAL AREAS	22,6	1
EDUCATION FACILITIES	96,7	6
HEALTH INSTITUTIONS	6,5	0,1
MUNICIPALITY SERVICE AREA	11	0,6
RELIGIOUS FACILITIES	2,5	0,1
SOCIO-CULTURAL FACILITIES	2,7	0,1
URBAN WORKING AREAS	3,1	0,1
STORE AREAS	9,8	0,5
AFFORESTATION AREAS	0,5	0,1
MILITARY AREA	1	0,1
GREEN AREAS	3,5	0,2
TOURISM AREA	6,3	0,3
INDUSTRIAL AREAS	128,5	7
NATURAL CONSERVATION AREA	13,7	0,8
ROAD	299	17
<b>TOTAL</b>	<b>1806</b>	<b>100</b>

In the existing pattern, an area of 727 hais occupied. These areas especially have become denser near the road and at the center of Ayrancılar. An area of 47 ha is semi-vacant, 1032 ha vacant.

**Table 6.4.** The Land use in 1998

LAND-USE	HA	%
FULL BUILDING BLOCK	727	40
SEMI-VACANT BUILDING BLOCKS	47	3
VACANT BUILDING BLOCKS	1032	57
<b>TOTAL</b>	<b>1806</b>	<b>100</b>

After 1954, the population has risen and this increase has continued on such that with the increase in population, the landownership transformation process has begun. The land-ownership changing, divisions have continued and sale of public lands have increased. This transformation also continues.

In this study, respectively, private and public land-ownership and selling, changing of ownership will take place as transformation dimensions within threedecades. The relationship of this transformation process will be studied and the impact of land-ownership transformations will be investigated.



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In this study, respectively, private and public land-ownership and selling, changing of ownership will take place as transformation dimensions within threedecades. The relationship of this transformation process will be studied and the impact of land-ownership transformations will be investigated.

AYRANCILAR MUNICIPALITY (PLOT SIZE)	1960 m <sup>2</sup>	1970 m <sup>2</sup>	1975 m <sup>2</sup>	1980 m <sup>2</sup>	1985 m <sup>2</sup>	1990 m <sup>2</sup>
PRIVATE TITLE DEED PLOT SIZE	1500	1500	1500	1500	1500	1500

**Table 6.5.** Distribution of plot numbers and plot size in Ayrancilar

AYRANCILAR MUNICIPALITY ( PLOT SIZE)	1968	1970	1975	1980	1985	1990	1995	1998
	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>	m <sup>2</sup>
PRIVATE TITLE DEED PLOT SIZE	5298116	7154379	7534143	7454568	6773135	6511656	7135903	7145141
SHARED TITLE DEED PLOT SIZE	552874	887692	1340892	1421974	2111487	2310429	2361958	2448666
PUBLIC LAND PLOT SIZE	385059	896753	4763924	4785000	4826095	4738495	4454259	4974409
TOTAL	6236049	8938824	13638959	13661542	13710717	13560580	13952120	14568216

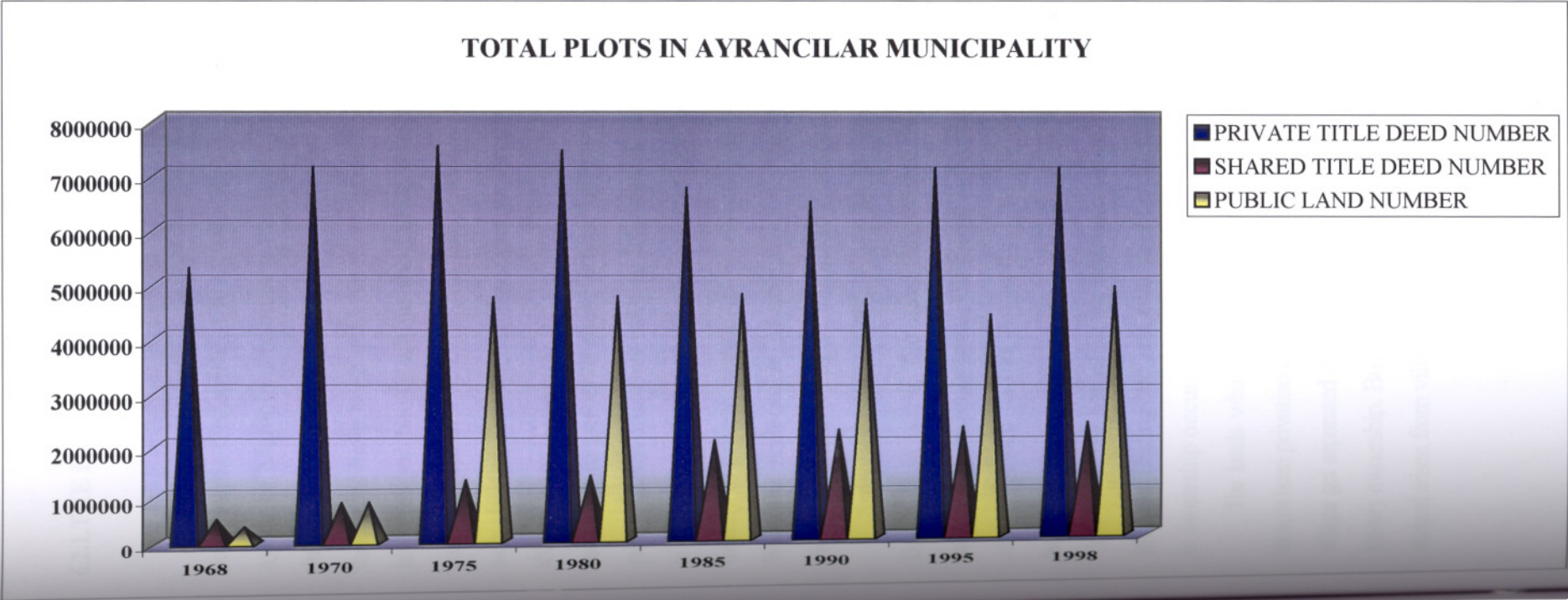
AYRANCILAR MUNICIPALITY ( PLOT NUMBERS)	1968	1970	1975	1980	1985	1990	1995	1998
	number	number	number	number	number	number	number	number
PRIVATE TITLE DEED PLOT NUMBER	646	803	956	873	854	927	2138	2704
SHARED TITLE DEED PLOT NUMBER	52	81	114	118	162	209	368	322
PUBLIC LAND PLOT NUMBER	24	143	674	675	720	644	722	843
TOTAL	712	1027	1744	1666	1736	1780	3228	3869



Table 6.5. Distribution of plot size in terms of years in Ayrañcilar Municipality

TOTAL PLOTS IN AYRANCILAR MUNICIPALITY (M<sup>2</sup>)

AYRANCILAR MUNICIPALITY	TOTAL AREA (M <sup>2</sup> )							
	1968	1970	1975	1980	1985	1990	1995	1998
PRIVATE TITLE DEED NUMBER	5298116	7154379	7534143	7454568	6773135	6511656	7135903	7145141
SHARED TITLE DEED NUMBER	552874	887692	1340892	1421974	2111487	2310429	2361958	2448666
PUBLIC LAND NUMBER	385059	896753	4763924	4785000	4826095	4738495	4454259	4974409
TOTAL	6236049	8938824	13638959	13661542	13710717	13560580	13952120	14568216



### 6.2.1.THE LANDS BELONGING TO PUBLIC POSSES

The first settlement in Ayrancılar was along the road to İzmir and the development was towards the north of area, that is, the center of Ayrancılar Municipality. Within the Ayrancılar Municipal boundary the lands on the north of the road belong to the Treasury, State Forest Organization and village councils (Ayrancılar, Yazıbaşı, Yoğurtçular). In time, these areas have been sold. In these sales, some lands have been privatised and some lands have changed hands within the public ownership. Most of the lands being given to other public institutions belonged to the Treasury and most lands which have not been privatised were also the Treasury lands. Prior to the privatisation of treasury lands, the ownership has shifted from Treasury to Ayrancılar Municipality. As the Ayrancılar Municipality has succeeded to perceive these lands, after a while they have been the sellers being sold to private hands. For that reason, in general, the people apply to the Ayrancılar Municipality to buy lands. However, there are some other lands, which have been directly sold by the treasury to private people. But, Ayrancılar Municipality has mediated, for these areas too. While the Ayrancılar Municipality is devoid of any money gotten from Treasury, the income of the sold lands belongs to Ayrancılar Municipality.

Especially, these sales were much more in number between years 1986 and 1997. During these years, the most important reason for the sale has been the construction of unlicensed buildings until 1985 and then these buildings have gotten construction permits after 1985, due to the Amnesty Law no:2981, 3290, 3366. After these years, privatised lands have increased, because of the buildings constructed on treasury and village lands. Until 1996, the act of sale has gone on rapidly. After this year, the treasury has stopped land sale. During the last two years neither any treasury land has been sold nor any change in ownership occurred as claimed. But, the sale is expected to begin again.

The lands which belong to Ayrancılar, Yazıbaşı and Yoğurtçular have been shared among them or been privatised, in 1990. These areas have passed from village council to treasury. As, these villages get separated from each other, the areas which belong to them have been passed over to treasury ownership. But, the treasury later has given the lands back to the villages, as a result of the demand arisen from villages.



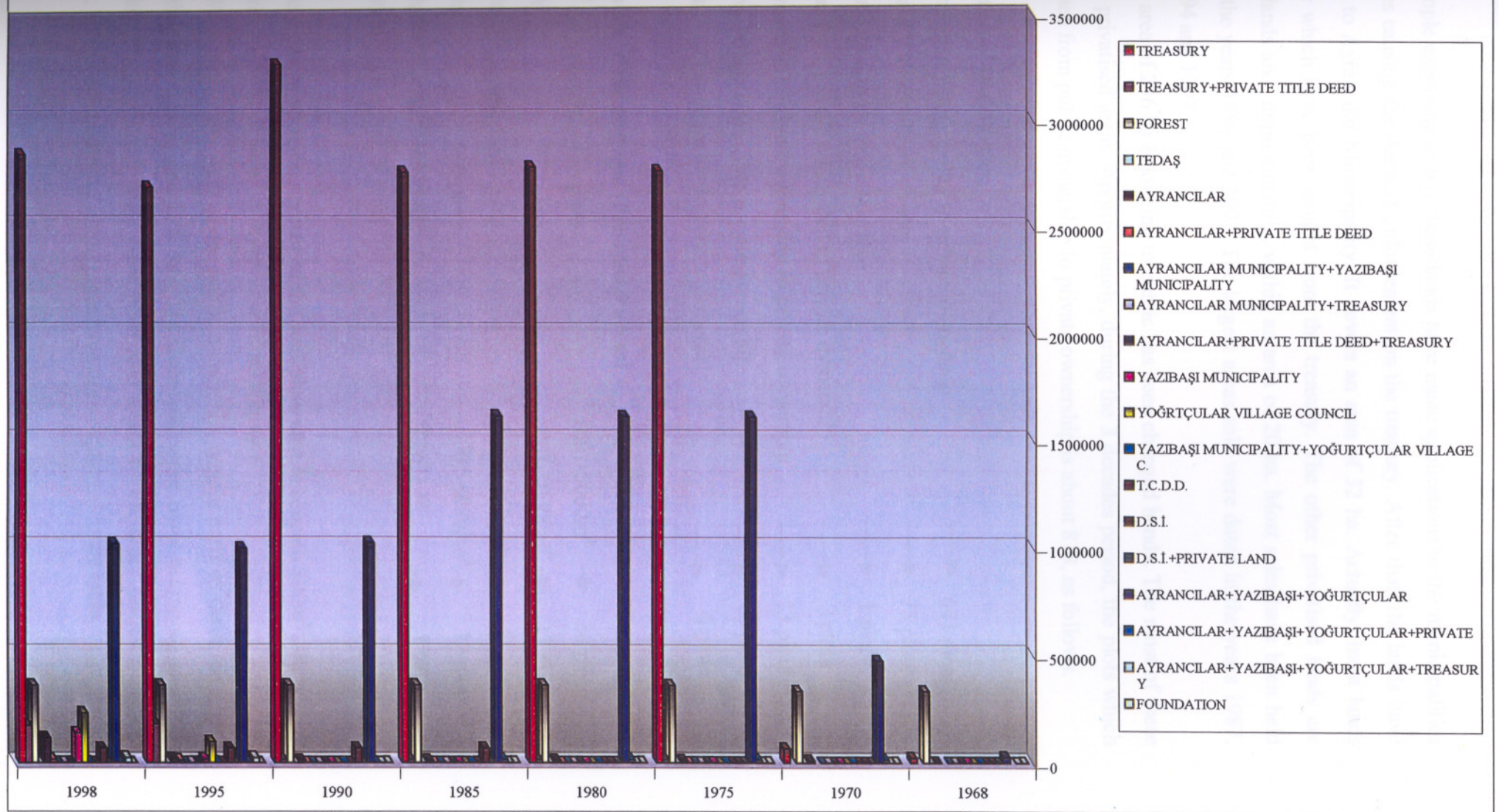
**Table 6.6.** Distribution of the land-ownership and plot size in terms of years

**PUBLIC LAND-OWNERSHIP**

LANDOWNERSHIP	TOTAL AREA (m <sup>2</sup> )							
	1998	1995	1990	1985	1980	1975	1970	1968
TREASURY	2835115	2680934	3267837	2751325	2777125	2759805	65865	23555
TREASURY+PRIVATE TITLE DEED	172004	180723	14000	14000	14000	14000		
FOREST	359098	359098	359098	359098	359098	359098	333098	333098
TEDAŞ	16	-	-	-	-	-	-	-
AYRANCILAR	114280	18054	10373	10373	10373	9524	9865	1095
AYRANCILAR+PRIVATE TITLE DEED	15466	12399	96	96	96	138		
AYRANCILAR MUNICIPALITY+YAZIBAŞI MUNICIPALITY	867	-	-	-	-	-	-	-
AYRANCILAR MUNICIPALITY+TREASURY	1951	1043	-	-	-	-	-	-
AYRANCILAR+PRIVATE TITLE DEED+TREASURY	701	1615	-	-	-	-	-	-
YAZIBAŞI MUNICIPALITY	136668	15851	-	-	-	-	-	-
YOĞURTÇULAR VILLAGE COUNCIL	229716	97739	-	-	-	-	-	-
YAZIBAŞI MUNICIPALITY+YOĞURTÇULAR VILLAGE COUNCIL	2695	2695	-	-	-	-	-	-
T.C.D.D.	40	40	40	40	40	40	-	-
D.S.İ.	66128	66128	66128	65028	-	-	-	-
D.S.İ.+PRIVATE LAND	52	-	-	-	-	-	-	-
AYRANCILAR+YAZIBAŞI+YOĞURTÇULAR	1014032	992360	1018612	1611324	1609457	1606508	473114	26500
AYRANCILAR+YAZIBAŞI+YOĞURTÇULAR+PRIVATE	1500	1500	1500	14000	14000	14000	14000	
AYRANCILAR+YAZIBAŞI+YOĞURTÇULAR+TREASURY	24080	24080	-	-	-	-	-	-
FOUNDATION	-	-	811	811	811	811	811	811
TOTAL (M <sup>2</sup> )	4974409	4454259	4738495	4826095	4785000	4763924	896753	385059



# PUBLIC LANDS





People expecting to buy these lands have made applications to the municipalities or villages causing the demand enforcement on the treasury. After that, the lands have belonged to Ayrancılar Municipality. It covers an area of 32 ha. Actually, most lands are those which have been bought from the treasury. The other privatised lands are treasury lands and approximately, within an area of 20 ha. Most sales have been held between the years 1990 and 1997. The largest areas sold were dated in the years 1987, 1990, 1994 and 1997.

An area of 236 ha belonging to public has been changed hands. The most of these areas are privatised areas. Approximately, during the 3 decades period, the plots which have passed from public ownership to private ownership is about 818, as follows.

#### **Distribution of these areas:**

From Ayrancılar Municipality to private ownership	→ 641 plots
From treasury to private ownership	→ 75 plots
From foundation to private ownership	→ 1 plots
From treasury + private ownership to private ownership	→ 2 plots
From Ayrancılar + private ownership to private ownership	→ 13 plots
From three village council to private ownership	→ 80 plots
From Yazıbaşı Municipality to private ownership	→ 6 plots

#### **Distribution of the plot size (Privatised areas)**

0-100m <sup>2</sup>	→ 11 plots	1001-5000m <sup>2</sup>	→ 30 plots
101-200m <sup>2</sup>	→ 72 plots	5001-10000m <sup>2</sup>	→ 17 plots
201-300m <sup>2</sup>	→ 320 plots	10001-15000m <sup>2</sup>	→ 11 plots
301-400m <sup>2</sup>	→ 180 plots	15001-50000m <sup>2</sup>	→ 12 plots
401-500m <sup>2</sup>	→ 63 plots	50001- +	→ 1 plots
501-1000m <sup>2</sup>	→ 9 plots		

As it can be seen, 60 percent of the sold plots area is beneath 300m<sup>2</sup>. 78 percent of the privatised plots belong to Ayrancılar Municipality.

While these plots were under public ownership, certain parts of them have been sold as they were sub divided into lots, but there still were plots belonging to public ownership. But privatised lands have been sold again to the other people or public utilities. The characteristics of these plots have been explained in the table.

Table 6. 7. The sale in the public lands

SALES YEARS	3V.C. ⇨ P.L. (m <sup>2</sup> )	3V.C. ⇨ T.L. (m <sup>2</sup> )	3V.C. ⇨ A.M. (m <sup>2</sup> )	T.L. ⇨ A.M. (m <sup>2</sup> )	A.M. ⇨ P.L. (m <sup>2</sup> )	T.L. ⇨ P.L. (m <sup>2</sup> )	A.M. ⇨ T.L. (m <sup>2</sup> )	Y.M. ⇨ P.L. (m <sup>2</sup> )	T.L.+P. (m <sup>2</sup> )
1971									
1973		117700							
1974		99160							
1978	9700	2300							
1986	73507								
1987	298296		17000						
1990		419662							
1991									
1993					84797	2994			971
1994				177377	172539	21180	1333	85239	
1995				225	1445	163538			
1996	30200			8230	14029				
1997	66000		108379	6841	44808	14648			479
1998									
TOTAL	477703	638822	125379	192673	317618	202360	1333	85239	1450

3V.C. ⇨ 3 Village Council (Ayrancılar, Yazıbaşı, Yoğurtçular)

P.L. ⇨ Private Land

T.L. ⇨ Treasury Land

A.M. ⇨ Ayrancılar Municipality

Y.M. ⇨ Yazıbaşı Municipality

Y.G. ⇨ Yoğurtçular Municipality

F. ⇨ Forest

F.N.L. ⇨ Foundation Land



T.L.+P.L.⇨P.L. (m <sup>2</sup> )	A.M.+P.L.⇨ P.L. (m <sup>2</sup> )	3V.C. ⇨F. (m <sup>2</sup> )	T.L. ⇨A.M.+P.L. (m <sup>2</sup> )	3V.C. ⇨Y.M. (m <sup>2</sup> )	3V.C. ⇨Y.G.M. (m <sup>2</sup> )	3V.C. ⇨Y.M.+A.M. (m <sup>2</sup> )	FN.L. ⇨P.L. (m <sup>2</sup> )	TOTAL (m <sup>2</sup> )
	156							156
		40100						157800
								99160
	42							12042
								73507
								315296
								419662
							217	217
971			331					89093
	3856							461524
	2091							167299
								52459
479	1232		454	126843	131977	867		502528
1450	7377	40100	785	126843	131977	867	217	2350743

FAIR YUKSEK TEKNOLO

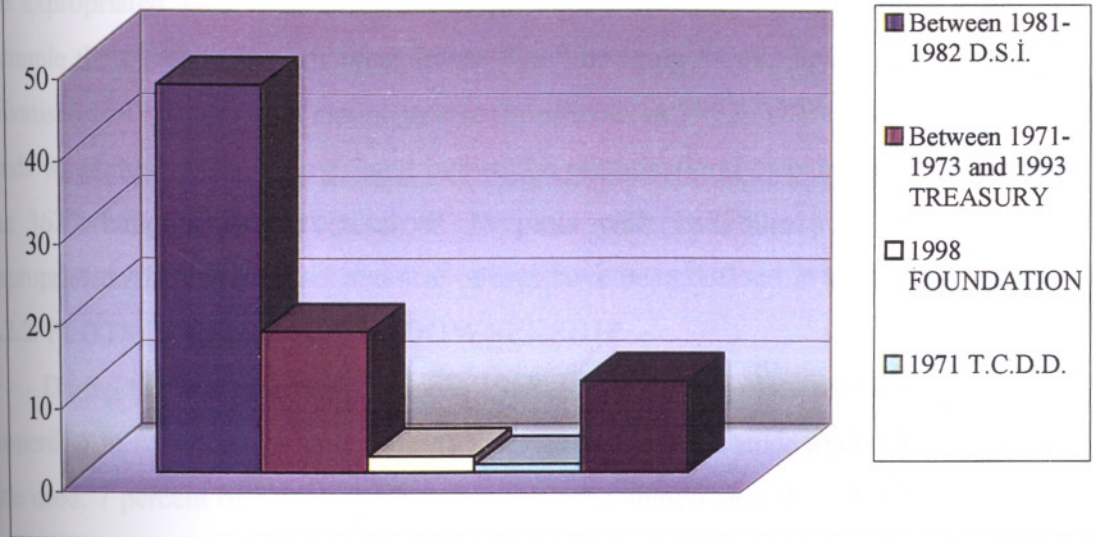
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**Table 6.8.** The expropriations

YEARS	PUBLIC UTILITIES	NUMBER	M2
Between 1981-1982	D.S.İ.	47	67347
Between 1971-1973 and 1993	TREASURY	17	114076
1998	FOUNDATION	2	919
1971	T.C.D.D.	1	40
1976 and 1993	AYRANCILAR MUNICIPALITY	11	6398
TOTAL		78	188780

**THE EXPROPRIATIONS**





Most of public lands have been privatised between 1986 and 1990, and during this period the old plots have primarily been owned by the treasury, but after that, have passed over to Ayrancılar Municipality and then the municipality have sold these areas to individuals as to accord the amnesty law. As people constructed their houses on public lands, they owe thanks to the amnesty law as it has saved them from losing their plots. At this time, it was only possible for people to buy those lands on which their buildings were located, but after that the sales have increased again, especially after 1990. But by the same period of time, people also have started to demand for the lands even on which their houses were not existing at all. But the aim was profit. They have bought and then sold the plots, or have used them for other purposes; and as a result, several plots were being bought by the same single person availing only one person to buy many plots.

There are lands of big public enterprises within the boundaries of Ayrancılar Municipality. This land amount has increased until 1990. However; most lands have been privatised. (especially, after the 1985). Because, until 1990, all lands in the registration border, had not registered to the register of title deeds. The title deed registration has been completed in 1990. Furthermore, sold lands have been subdivided and privatised. The lands which have been transferred into public ownership were big areas.

Besides, there are privatised lands which have been expropriated before. A part of the expropriated land, had firstly been privatised and then again expropriated. For example the 2<sup>nd</sup> and 5<sup>nd</sup> plots were in the 222<sup>nd</sup> building block. These plots have been privatised in 1986 and then again been expropriated in 1993. There also are privatised lands which have been expropriated before the privatisation. For example, 9<sup>nd</sup> Plot is in the 362<sup>nd</sup> building block. A total of 78 plots with 188780m<sup>2</sup> in area has been expropriated. All of these sales and size of area have been defined in table 6.7.

#### **6.2.2. PLOTS IN PRIVATE LANDOWNERSHIP**

During the first cadastral survey in 1968, 93 percent of plots were in private land-ownership in Ayrancılar Municipality. 85 percent of private landownership was private title deed, 7 percent of private land-ownership was shared title deed. Total private land was 584.6 ha. Private lands were more in amount than public owned lands, Since all plots have not been registered in the cadastral survey. But after this year, private lands take place in Ayrancılar Municipality. The ratio of largeness of shared and private title deed have changed in time. Between the years 1968-1975, there was an increase in the

shared and private title deed lands. But, between the years 1980-1990 there was a decrease in the private title deed land, however, shared title deed lands have increased. Private title deed lands between 1968-1975 were 753.4ha, while the shared title deed lands were 134ha. Between 1980-1990 private title deed lands were 651.1ha, and shared title deed lands were 231ha. Between 1995-1998, the size of shared title deed lands has increased and became 244.8 ha. In the same years, there has been an increase in private title deed lands. In 1998, private title deed lands were 682.2ha, and co-operative lands were 32.2ha in area. Between 1971-1998, the expropriations have made both private title deed land and also shared title deed.

Characteristics and the change of the private and shared title deeds lands in time will be considered in an order.

#### 6.2.2.1. PRIVATE TITLE DEED PLOTS IN THE PRIVATE LAND-OWNERSHIP

By the first cadastral survey in 1968, it was understood that the number of private title deed lands were 646, number of shared title deed lands were 52 and public lands were 24. There were a total of 712 plots. In 1998 number of private title deed land 2704, number of shared title deed lands were 322 and public land were 843 and so there were total 3869 plots.

In the first cadastral survey, 131 plot of 646 private title deed plots (21%) were below the 1000m<sup>2</sup>. In the 1998, 1923 plot of the 2704 private title deed plots (71%) were below the 1000m<sup>2</sup>. This rate increased in time.

These parcellations have been realised before the first cadastral survey. But it is not possible to specify in which year these events took place. These parcellations are grid in shape and it became very regular. Especially, south of the area (south of the road) have very big lands. At the same time, parcellation is more well-arranged. Because, first parcellation had been constituted by people. For that reason, lands divided more regular, and then this parcellation operation was made from the air and they were used in registering the title deeds. This parcellation is same with the parcellation of the people. The great part of the private title deed lands are in south of the area. In the north of the area, most lands belong to public land-ownership. Most these areas belong to treasury and forest administration.



In the cadastral survey, independent plot numbers have been given to these plots. At the same year there were 646 private title deed plots, however the plots which belong to 376 persons occur in the deed. In other words; There were plots which have larger subdivisions and then some of the plots were bought. In time, plots section became small. Sometimes, it was possible to meet with plots which were less than 200m<sup>2</sup>. Especially, during the privatisation years, this operation increased. Plots were divided into small parts and sold. These plots were sold again by the time, they changed ownership continuously, and they were sold so many times. Actually, we know these sales were before the first cadastral survey (1968). But they do not have any information related to the dates and buyers. All these details were provided the state's deed administration.

Especially, after 1980 plots which are below 1000m<sup>2</sup> were started to increase. The most plots were larger in size, and these have been divided into small parts and then were sold. People who have big plots, in time, had divided into small parts their plots and sold or people who inherited a such plots, shared them causing the co-existence of so smaller plots became. And then these plots changed ownership. As for the plot number was 134 in 1968, this number is 1923 in 1998. There are effects of the expropriation for subdivisions, Many small plots expropriated and then small plots increased.

#### **The Number of Ownership And Distribution of The Land Size In The Private Title Deed Lands,**

In the first cadastral survey year, total private title deed plot size was 584,6 ha. But in this year, parcelations were not completed all plots in cadastral survey boarder. This operation was completed in 1990.

Landowner numbers of these plots, plot size which constitute the owner of these lands, changing in time will be explained in this section.

In the Ayrancılar Municipality, if the lands which is the private title deed plots, are searched, those data will be seen in 1968. There are 529,8 ha private title deed plots in total and this area belong to 367 different persons. But 54 percent of this area covered by plots below the 10000m<sup>2</sup> each. The plot size which is below the 10000m<sup>2</sup> is 91 ha. This was 17 percent of the private title deed lands. In other words, land size which constitutes 54 percent of land owners were the owner of 83 percent of the rest.

Number of the landowners having parcels above the 10000m<sup>2</sup> is 152 and 292 ha.

Number of the landowners who have plots above the 50000m<sup>2</sup> is 10 and 63 ha. This size constitutes 12 percent of the land which has private title deed. Number of the landowner which has above the 10000m<sup>2</sup> is 5 and 83 ha. This size constitute 16 percent of private title deed land. In other words, 28 percent of the area belong to the 15 person.

The cadastral survey in 1968 does not give absolute result. Because, the majority of the plot were not determined yet.

In 1970, especially, the number and sizes of the plots decreased in the first group. Because, in that year only the plots above 10000m<sup>2</sup> were surveyed.

At the same time, only one person which has plot below the 10000m<sup>2</sup> bought plots which are below the 10000m<sup>2</sup>, and so plot size increased above the 10000m<sup>2</sup>. In this year, number of the landowners who has plot below the 10000m<sup>2</sup> is 193. As for person number which has plot above the 10000m<sup>2</sup> was 197. Plot size which belong to 16 person was above 50000m<sup>2</sup>. Plot size of 9 person was above 100000m<sup>2</sup>, and so there were decrease in plots which are below the 10000m<sup>2</sup>. In this year, landowner number was 415, in 1971 was 431, in 1980 was 445, in 1985 was 456, in 1990 was 503, in 1995 was 1106 and in 1998 was 1322. Especially, after 1990 there is an increase in the plot numbers. The most important reason of this increase is the increase of parcellation which ended up with the sub-division of lands. After 1990, there is an increase of plots which are below the 500m<sup>2</sup>. Consequently, in 1998 there are 1125 plots below the 10000m<sup>2</sup>. The rate of land-ownership is 85% in total. Number of landowners increased by 900 person and plot size increased by 92 ha. In other words, approximately, there are 1000m<sup>2</sup> land for each person. The new cadastral survey affect this rate. But plot size is 25 percent of the total. Thus, the rate of the landowners were increased but the land size were not increased as a parallel to land-owners. There is also an increase in the amount of plot size. Plot size used to increase until 1985. Because the privatisation and determination of the plot were not settled. But in the 1985, there happened a decrease in plot sizes. Because, expropriations were especially more in 1982. After 1990 there is an increase again. Because, the plots determined and privatised plots have increased in 1990. Especially, there were an increase in plot numbers below the 10000m<sup>2</sup>. Because, during these years, plots had been sub-divided and were sold.

In 1968, 529 ha area were raised 682 ha area in 1998. The most important effect of this increase was on the landowners who had plots below the 10000m<sup>2</sup>. There is an increase of 91 ha increase. Because privatised land, is generally below the 10000m<sup>2</sup>. Approximately, 110 ha area privatised or landowners which have greater lands have sub-divided and sold their lands.

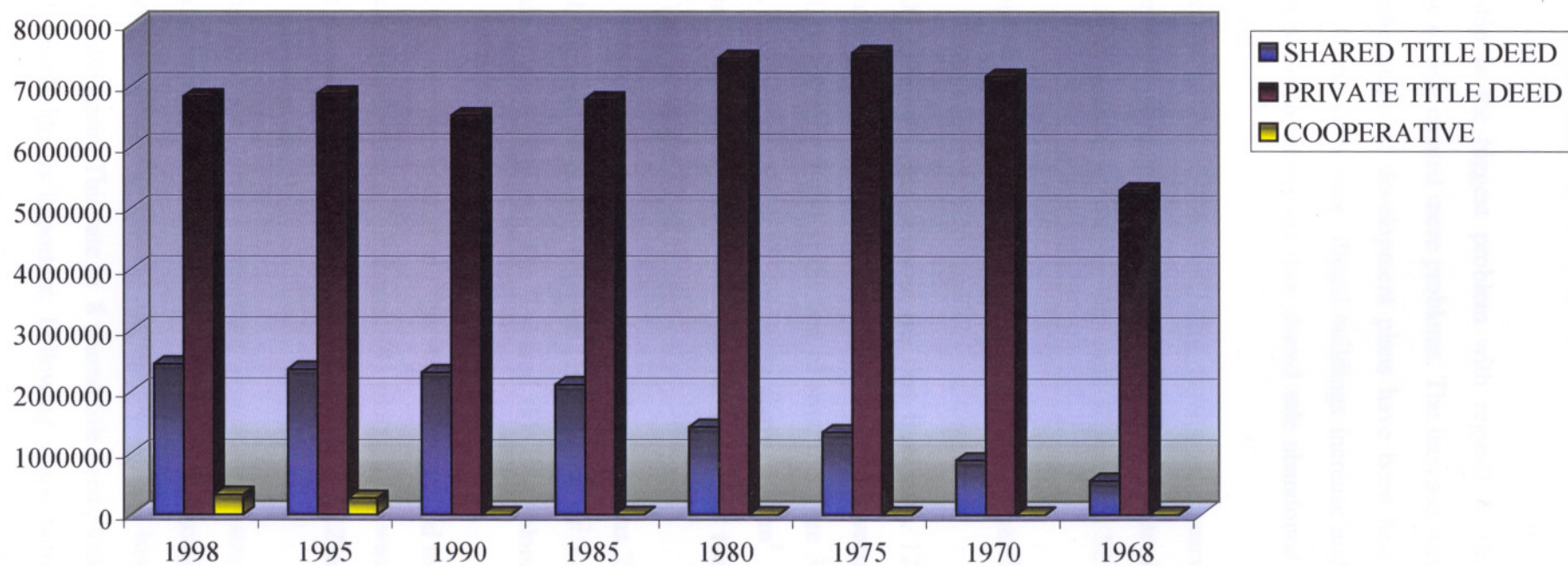
In all of these examples, there are land speculations on vacant plots which had been subject to parcellation.



**Table 6.9.** Distribution of the private land-ownership and plot size in terms of years

LANDOWNERSHIP	PRIVATE LANDOWNERSHIP TOTAL AREA (M <sup>2</sup> )							
	1998	1995	1990	1985	1980	1975	1970	1968
SHARED TITLE DEED	2448666	2361958	2310429	2111487	1421974	1340892	887692	552874
PRIVATE TITLE DEED	6822981	6868609	6511656	6773135	7454568	7534143	7154379	5298116
COOPERATIVE	322160	267294	-	-	-	-	-	-
TOTAL (M <sup>2</sup> )	9593807	9497861	8822085	8884622	8876542	8875035	8042071	5850990

### PRIVATE LANDS



#### 6.2.2.2. SHARED TITLE DEED PLOTS IN PRIVATE TITLE DEED

Shared title deed land-ownership is the biggest problem with regards to the planning practice. Especially, increase of sale created more problems. The increase was more in the big cities. Many, implementation of development plans have been have been faced with enormous problems. At the same time, illegal buildings increase and then development act numbered 3194 put onto action and then shared sale abandoned. Today existing shared title deed plots sell.

In Ayrancılar Municipality, there were shared sale. Especially, between the years 1980-1990 these sale increased more within the registration boarder, the size of shared title deed plot was 58,5 ha in 1968. The number of shared title deed plots were 52. Shared title deed plots have 9% share in 623 ha in the registration border of village.

By the end of first registration year, distribution of the shared title deed plots were such as it is in table 6.10.

- 20 plots were between ( $10000-25000m^2$ ) and were in the first front row. 12 plots were between ( $1001-5000m^2$ ) and in the second row. There were 9 plots between ( $501-1000m^2$ ) and 18 plots were ( $5001-10001m^2$ ) and at the end of row, there are 3 plots between ( $25001-50000m^2$ ). So, most shared title deed plots were above  $5000m^2$ . The other part was below the  $5000m^2$  but most of these plots which are below the  $5000m^2$  were between ( $1001-5000m^2$ ) and it has got 12 plots.
- The number of shareholders; 44% of shared title deed plots (23 plots) has 2 shareholder. The most of the 2 shared title deed plots were between ( $10001-25000m^2$ ). In other words, 39% of shared title deed plots (9 plots). The 2 shared title deed plots covered 30,4 ha. area.
- At the same year (1968), total 52 plots were shared and this share rate reached to 8. 79% of these shared title deed plots were between 2-5 shares. (41 plots). 21% was between 6-8 shares but a share rate of shared plots is not clear. There were 55.2ha shared plots in 1968. Only, names of inheritors are clear.
- In the shared title deed, average plot size is very interesting. Average plot size of 2 shared title deeds was  $13206m^2$  and 3 shared title deed plot was  $11290m^2$ , 4 shared title deed plot was  $10900m^2$ , 5 shared title deed was  $4656m^2$ . In the plots which has above the 5 share, average plot size increase again. This rate in 8 shared title deed plots reach  $10750m^2$ . Also, the number of shareholder is important. Following years, both



rate of share and size of plot increased. Registration survey completed in 1990. And then shared title deed plot number became 209 in 1990. There were increase in number of shared title deed plots in 1995. It has got 368 plots. In 1998, this number decreased. It was 322. Because cadastral survey did not completed after 1985 and private title deed plots change owners way of inheritance and so it was shared (At the same year, sale of shared plots banned). From 1968 (the first cadastral survey) to 1998, 2 shared title deed plots increased. 3 and 4 shared title deed plots increased, too. In 1975, Number of share rate reached 15. In 1985, this rate became 22. In spite of increase in the rate of share, plot size was  $1000\text{m}^2$ . Namely,  $45\text{m}^2$  per person.

- The changing of sharing rate; in 1968, 2 shared title deed plots had most shares. In the second row there were 8 plots which has got 4 shared title deed. In 1970, 2 shared title deed plots were in the first row, too and 4 shared title deed plots were second row like in 1968. In 1975, there were same positions. However, 3-6 and 8 shared title deed plots were important and they were in third row. In 1980 and 1985, 2 shared title deed plots were in the first row, too, but in 1985, 3 shared title deed plots were in front of the 4 shared title deed plots. 7 shared title deed plot had important position, too. In 1990 and 1995, 8 shared title deed plots were in fourth row but in 1995, 6 shared title deed plots in front rows and had got most plots. In the same year, there was increase in the 14 shared title deed plots. Until 1995, there were only one 14 shared title deed plots but after the 1995 and following years, this number became 15. Most these plots changed owners by means of inheritance.

- Size of plots; Between 1968 and 1970, plots which has areas between ( $10000\text{-}25001\text{m}^2$ ) were in the first row but in 1975, the plots which are between ( $1001\text{-}5000$ ) were in first row. In 1985-1990 and 1995, the plots that are between ( $10000\text{-}25001\text{m}^2$ ) were in first row but in 1998, the plots which are between ( $0\text{-}500\text{m}^2$ ) were in the first row showing tremendous difference. This number was 209. The most important reason of increase; the big land-ownership sold their plots which shared small lots. These sale increased after the 1990 and rate of plot size was below the  $500\text{m}^2$ . There were not plot which are between ( $0\text{-}500\text{m}^2$ ) until 1975. The plot numbers which are between ( $0\text{-}500\text{m}^2$ ) were 5 in 1975 and it was 4 in 1980. There were increase in plot numbers which are between ( $0\text{-}500\text{m}^2$ ) in 1990. It was 12. There were a big jump between 1990 and 1995. The plot numbers reached 152 in 1995. There was a large increase in five years.

**Table 6.10.** The Distribution of The Size and Shareholder Numbers of Shared Title Deed Plots and The Alteration of Them in Terms of Years in Ayrancilar Municipality

PLOT SIZE	1968									
	NUMBER OF SHAREHOLDER									TOTAL PLOT
	2	3	4	5	6	7	8	9	10	
0-500	-	-	-	-	-	-	-	-	-	-
501-1000	3	-	-	3	1	2	-	-	-	9
1001-5000	4	1	4	2	-	-	1	-	-	12
5001-10000	4	-	1	-	2	1	-	-	-	8
10001-25000	9	3	3	1	-	1	3	-	-	20
25001-50000	3	-	-	-	-	-	-	-	-	3
50001-100000	-	-	-	-	-	-	-	-	-	-
100001+	-	-	-	-	-	-	-	-	-	-
TOTAL PLOT NUMBER	23	4	8	6	3	4	4	-	-	52
TOTAL PLOT AREA (M2)	303743	45161	87200	27940	15640	30190	43000	-	-	552874
AVERAGE PLOT SIZE	13206,2	11290,3	10900	4656,7	5213,3	7547,5	10750	-	-	10632

PLOT SIZE	1970									
	NUMBER OF SHAREHOLDER									TOTAL PLOT
	2	3	4	5	6	7	8	9	10	
0-500	-	-	-	-	-	-	-	-	-	-
501-1000	8	1	-	2	1	2	-	-	-	14
1001-5000	9	4	2	3	2	-	-	1	-	21
5001-10000	8	-	3	2	1	3	-	-	-	17
10001-25000	10	4	4	1	-	1	4	-	-	24
25001-50000	4	-	-	-	-	-	-	-	-	4
50001-100000	-	-	-	-	-	-	-	-	-	-
100001+	-	-	1	-	-	-	-	-	-	1
TOTAL PLOT NUMBER	39	9	10	8	4	6	4	1	-	81
TOTAL PLOT AREA (M2)	405261	80461	235000	40624	15656	37990	68000	4700	-	887692
AVERAGE PLOT SIZE	10391,3	8940,11	23500	5078	3914	6331,7	17000	4700	-	10959.16

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Table 6.10. (con)

PLOT SIZE	1975											
	NUMBER OF SHAREHOLDER											TOTAL PLOT
	2	3	4	5	6	7	8	9	10	13	15	
0-500	3	1	-	-	1	-	-	-	-	-	-	5
501-1000	8	-	-	1	2	1	2	-	-	-	-	14
1001-5000	16	2	6	2	5	2	4	1	1	-	-	39
5001-10000	8	2	2	1	1	3	-	1	-	1	-	19
10001-25000	10	5	4	1	1	2	4	-	-	-	1	28
25001-50000	4	-	1	-	-	1	-	-	-	-	-	6
50001-100000	-	-	1	-	-	-	-	-	-	-	-	1
100001-+	1	-	1	-	-	-	-	-	-	-	-	2
TOTAL PLOT NUMBER	50	10	15	5	10	9	10	2	1	1	1	114
TOTAL PLOT AREA (M2)	653073	88629	313000	29104	32730	100258	83790	14700	2700	7508	15400	1340892
AVERAGE PLOT SIZE	13061,4	8862,9	20866,6	5820,8	3273	11139,7	8379	7350	2700	7508	15400	11762,2

PLOT SIZE	1980									
	NUMBER OF SHAREHOLDER									TOTAL PLOT
	2	3	4	5	6	7	8	9	10	
0-500	2	1	-	-	1	-	-	-	-	4
501-1000	9	1	-	2	2	1	-	-	-	15
1001-5000	14	6	7	2	5	2	3	1	-	40
5001-10000	9	1	3	2	1	3	-	2	-	21
10001-25000	13	6	5	2	1	1	2	-	-	30
25001-50000	2	-	1	-	-	1	-	-	-	4
50001-100000	-	-	2	-	-	-	-	-	-	2
100001-+	1	-	1	-	-	-	-	-	-	2
TOTAL PLOT NUMBER	50	15	19	8	10	8	5	3	-	118
TOTAL PLOT AREA (M2)	617305	121599	428778	58104	32730	82590	41168	39700	-	1421974
AVERAGE PLOT SIZE	12346,1	8106,6	22567,2	7263	3273	10323,7	8233,6	13233,3	-	12050,6

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İZMİR YÜKSEK TEKNOLOJİ ENSTİTÜSÜ  
REKTÖRLÜĞÜ  
Kütüphane ve Dokümantasyon Dairesi

Table 6.10. (con)

PLOT SIZE	1985															TOTAL PLOT
	NUMBER OF SHAREHOLDER															
	2	3	4	5	6	7	8	9	11	12	13	14	16	17	22	
0-500	3	1	-	-	-	1	2	-	-	-	-	-	-	-	-	7
501-1000	11	1	-	-	1	1	1	1	-	-	-	-	-	-	1	17
1001-5000	15	11	3	2	5	3	3	1	-	-	-	-	1	-	-	44
5001-10000	13	4	3	1	1	3	-	-	-	-	2	-	-	-	-	27
10001-25000	18	8	8	3	3	3	4	3	-	1	1	1	-	-	-	53
25001-50000	2	3	-	-	-	1	1	-	1	-	-	-	-	1	-	9
50001-100000	-	-	1	-	1	1	-	-	-	-	-	-	-	-	-	3
100001+	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	2
TOTAL PLOT NUMBER	63	28	16	6	11	13	11	5	1	1	3	1	1	1	1	162
TOTAL PLOT AREA (M2)	732652	285862	402384	60704	118016	158067	101869	95000	38000	20000	36780	17653	3500	40000	1000	2111487
AVERAGE PLOT SIZE	11629	10209	25149	10117	10729	12159	9260,8	19000	38000	20000	12260	17653	3500	40000	1000	13033,8

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Table 6.10. (con)

PLOT SIZE	1990															TOTAL PLOT
	NUMBER OF SHAREHOLDER															
	2	3	4	5	6	7	8	9	12	13	14	16	17	21	22	
0-500	6	2	-	2	-	-	2	-	-	-	-	-	-	-	-	12
501-1000	10	7	-	-	1	-	-	3	-	-	-	-	-	-	1	22
1001-5000	17	11	5	5	8	4	5	2	1	-	-	1	-	-	-	60
5001-10000	18	3	3	3	1	2	2	3	-	2	-	-	-	-	-	35
10001-25000	22	11	8	4	5	1	6	1	1	-	1	-	-	-	-	62
25001-50000	4	4	1	1	-	1	2	-	-	-	-	-	1	-	-	14
50001-100000	1	-	1	-	1	-	-	-	-	-	-	-	-	-	-	3
100001+	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	1
TOTAL PLOT NUMBER	78	38	19	15	16	8	17	9	2	2	1	1	1	1	1	209
TOTAL PLOT AREA (M2)	752936	381171	419568	127060	147620	66977	194274	97270	25000	33900	17653	3500	40000	2500	1000	2310429
AVERAGE PLOT SIZE	9653	10030,8	22082,5	8470,6	9226,2	8372,1	11427,8	10807,7	12500	16950	17653	3500	40000	2500	1000	11054.68

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Table 6.10. (con)

PLOT SIZE	1995														
	NUMBER OF SHAREHOLDER														TOTAL PLOT
	2	3	4	5	6	7	8	9	10	11	12	14	17	22	
0-500	76	13	22	-	17	-	4	2	3	2	-	13	-	-	152
501-1000	17	13	3	3	1	-	-	3	-	-	-	1	-	1	42
1001-5000	22	12	5	3	6	2	2	2	1	-	-	-	1	-	56
5001-10000	18	5	4	6	-	1	-	1	-	-	-	1	-	-	36
10001-25000	25	15	9	4	5	2	2	1	-	-	1	-	-	-	64
25001-50000	3	2	5	-	-	1	1	2	-	-	-	-	-	-	14
50001-100000	-	-	2	-	1	-	-	-	-	-	-	-	-	-	3
100001+	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1
TOTAL PLOT NUMBER	161	60	51	16	30	6	9	11	4	2	1	15	1	1	368
TOTAL PLOT AREA (M2)	764753	385285	667932	129304	145002	67377	66264	95495	3433	687	20000	12926	2500	1000	2361958
AVERAGE PLOT SIZE	4752,2	6421,4	13096,7	8081,5	4833,4	11230	7362,6	8681,3	858,2	343,5	20000	861,7	2500	1000	6418,3

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**Table 6.10. (con)**

PLOT SIZE	1998												TOTAL PLOT
	NUMBER OF SHAREHOLDER												
	2	3	4	5	6	7	8	9	10	11	12	14	
0-500	79	16	8	-	2	1	1	2	-	-	-	-	109
501-1000	24	12	1	1	1	1	-	1	1	-	-	-	42
1001-5000	23	11	4	1	5	2	-	2	-	1	-	-	49
5001-10000	23	7	3	3	-	1	1	-	-	-	-	1	39
10001-25000	27	13	9	3	4	1	2	1	-	-	2	-	62
25001-50000	5	2	4	1	1	1	1	2	-	-	-	-	17
50001-100000	-	-	2	-	1	-	-	-	-	-	-	-	3
100001-+	-	-	1	-	-	-	-	-	-	-	-	-	1
TOTAL PLOT NUMBER	181	61	32	9	14	7	5	8	1	1	2	1	322
TOTAL PLOT AREA (M2)	902490	397577	621200	106877	162416	52182	72229	84797	698	2250	38200	7750	2448666
AVERAGE PLOT SIZE	4986,1	6517,6	19412,5	11875	1601,1	7454,5	14445,8	10599,6	698	2250	19100	7750	7604,5

### 6.2.2.3. SHARED TITLE DEED PLOTS IN PUBLIC LANDOWNERSHIP

There are also many shared title deed plots in public land-ownership. These shared title deed plots belong to public ownership. At the same time, there are common ownership between public land-ownership of different institutions and private land-ownership. This kind of the land-ownership increased after 1990 but rate of share decreased. Before the 1990s, there were more shared title deed plot but then these plots were shared by land-ownership and number of shared title deed plots were decreased. The kind of the land-ownership in public land-ownership were distributed as follows;

- Plots number which belong to common sharings of three village council (Ayrancılar, Yazıbaşı, Yoğurtçular) increased until 1980. Following years Ayrancılar and Yazıbaşı became municipalities. In 1968 plot number was 2 but in 1970 was 110 and in 1975 was 189. Basic reason of this big difference is that; there were no registration of plots in 1968 at all. The plot numbers were 187 in 1980 and 1985 but in 1990, this number decreased and consequently plot numbers were 43. Because, shared title deed plots were shared by Ayrancılar, Yazıbaşı and Yoğurtçular such that their shared title deed plot numbers decreased. However, plot numbers which belong to each village increased. In 1998, plot numbers increased again. Because treasury gave their plots to Ayrancılar, Yazıbaşı and Yoğurtçular and then the municipalities privatised most these plots.

Between 1970 and 1985, the number of plot size which is between (0-1000m<sup>2</sup>) was more. In 1970, this number was 52 but in 1975 and 1980 this number reached at 64. In 1985 plot numbers which are between (0-1000m<sup>2</sup>) was 63 but in 1990 and 1995 there had been a decrease in plot numbers. The plot numbers were 4 but there had been an increase in plot numbers in 1998. This number was 15. The plot numbers which are between (10001-25000) were also quiet. There were 16 plots in 1975 but in 1980 there were 39 plots. This number reached to 40 in 1985. There were 12 plots in 1990, 1995 and 1998. Despite this decrease, at the same years, plot numbers which are between (10001-25000) were more than the others. Average plot size was 4321m<sup>2</sup> in 1970. But this rate increased in 1975-1980 and 1985. It was between 8578-8616 but it increased since 1990 and it was 24844 and then in 1995, there was decrease in this rate. It was 23627 and in 1998 was 16355. Plot size increase has in spite of a decrease in plot numbers. So, average plot size increased, too. After 1990, there were plots which are



- above 100000m<sup>2</sup>. Plot number 1452 is the last plot which registered to title and is the biggest plot in the municipality boarder. Thus, average plot size increased. In the shared public title deed plots; Plots which belong to 3 village council has the biggest share. (Table 6.11.)

**Table 6.11.** The Distribution of The Size and Shareholder Numbers of Shared Title Deed Plots and The Alteration of Them in Terms of Years in public lands in Ayrançılar Municipality

<b>AYRANCILAR-YAZIBAŞI-YOĞURTÇULAR</b>								
<b>PLOT SIZE (M<sup>2</sup>)</b>	<b>1968</b>	<b>1970</b>	<b>1975</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1995</b>	<b>1998</b>
<b>0-1000</b>	-	52	64	64	63	4	4	15
<b>1001-2500</b>	-	21	29	28	29	4	5	7
<b>2501-5000</b>	-	7	11	11	11	3	2	6
<b>5001-7500</b>	-	7	15	15	15	5	4	8
<b>7501-10000</b>	-	5	15	14	14	5	5	5
<b>10001-25000</b>	2	16	39	39	40	12	12	12
<b>25001-50000</b>	-	2	14	14	13	9	8	7
<b>50001-100000</b>	-	-	2	2	2	-	1	1
<b>100001-+</b>	-	-	-	-	-	1	1	1
<b>TOTAL PLOT NUMBER</b>	<b>2</b>	<b>110</b>	<b>189</b>	<b>187</b>	<b>187</b>	<b>43</b>	<b>42</b>	<b>62</b>
<b>TOTAL PLOT AREA (M<sup>2</sup>)</b>	<b>26500</b>	<b>475414</b>	<b>1621357</b>	<b>1609357</b>	<b>1611324</b>	<b>1018612</b>	<b>992360</b>	<b>1014032</b>
<b>AVERAGE PLOT SIZE</b>	<b>13250</b>	<b>4321,9</b>	<b>8578,6</b>	<b>8606,7</b>	<b>8616,6</b>	<b>24844,1</b>	<b>23627,6</b>	<b>16355,3</b>

- The other shared public title deed plots are common ownership which are between treasury and private plots. In these plots, treasury has got collective ownership with people. The most important reason of this corporation; illegal buildings located in this area and then these buildings were exempted, so people were shared with treasury lands or treasury sold her lands to a certain extent. Even, sharing number reached 6. Until 1975 there were not shared title deed but since 1975, treasury lands were shared with private land from 1975 to 1995. The number of shareholder were 2 but after 1995 this number reached 6. But 2 shared title deed plots had many sharing. Between 1975 and 1995 there were only one 2 shared title deed plots and it was 14000m<sup>2</sup> but there was an awful decrease in this number in 1995. The plot number was 211. 158 plots were between 401-800m<sup>2</sup>. 32 plots were between 801-1200m<sup>2</sup> but there were only 2 plots which are above 10000m<sup>2</sup>. 16 size of three shared title deed plots were between 401-

800m<sup>2</sup> . There were 7 plots which are between 801-2000m<sup>2</sup>. There were 3 plots which are between 401-1200m<sup>2</sup> in 4 shared title deed plots. 5 and 6 shared title deed plots were between 0-800m<sup>2</sup>. In 1998 there were 186 two shared title deed plots and 25 three shared title deed plots. Both of them were between 401-1200m<sup>2</sup> . Size of the 4 shared title deed plots were between 401-1600m<sup>2</sup> . Average plot size were 769 in 1995 but in 1998 was 734. In 1995 plot numbers were 242 but in 1998 plot numbers were 217. Because the people acting as shareholders in these plots, bought the shares which has been belonging to treasury previously. So, shareholder and shared plot numbers were decreased. This demand continued but treasury has not sold any plots since 1997 but is going to sell again in future as a result of increasing pressures. Hence, treasury expropriated or transferred to municipalities their lands. (Table 6.12)

- Third shared public title deed plots are between Ayrancılar Municipality and the people. Until 1975 these plots were not sharing but since 1975, shared plots increased. In 1975, there were two plot and it was 138m<sup>2</sup> but in 1980-1985 and 1990 this number decreased to 1 and was 96m<sup>2</sup> . Allse plots were double shared. Total shared plot numbers reached 13 and it was distributed into 2 and 3 shared title deed plots. Two shared title deed plots were 10 and three shared title deed plots were 3. Plot size were between 0-2500m<sup>2</sup>. Average plot size were 953 in 1995 but in 1998 it was 766. (Table 6.13 )

- The other shared title deed plots are between Ayrancılar, Yazıbaşı, Yoğurtçular, and people. These public plots were shared with only one person. Thus, shareholder numbers are 4. In 1970-1975-1980 and 1985, there were 2 plots and total plot size 14000m<sup>2</sup> . In 1990, 1995 and 1998, the plot number was 1 and it was 1500m<sup>2</sup>. (Table 6.14.)

- The other kind of sharing are common land-ownership of treasury, Ayrancılar, and people, common land-ownership of treasury and Ayrancılar, common land-ownership of treasury, Yazıbaşı, Ayrancılar and Yoğurtçular and common land-ownership of Yazıbaşı and Yoğurtçular. In this kind of sharing occurred between 1995 and 1998. In this 1998, in addition to this kind of sharing; there are common land-ownership of treasury and foundation, common land-ownership of Ayrancılar and Yazıbaşı and common land-ownership of DSİ and private lands. The largest plot size is 24080m<sup>2</sup>. This belong to common land-ownership of Ayrancılar, Yazıbaşı, Yoğurtçular and Treasury. (Table 6. 15. )



The reason of increase in shared plots in 1995 and 1998 is the sale. Especially, Treasury expropriated a part of the their lands or gave to the other public administrations and a part of the share rate sold to people or gave the other utilities. This sale continued but first, plots divided into lots and then sold. The size of these plots are smaller but number of plots are quite large. Especially, Ayrancılar Municipality expropriated their lands. Besides their lands which were bought from the treasury were expropriated again. After 1990, co-operative areas grew rapidly but they are located on treasury or the municipal land. Now, the biggest co-operative in Ayrancılar is Egekent 4 and Üçpınar Bahçelievler co-operative and their lands were publicly owned during the past. The plots which belong to Egekent 4 were owned by the treasury during the past but in 1995 their land-ownership passed on to co-operatives. The plots which were publicly owned in Ayrancılar, Yazıbaşı and Yoğurtçular turned into co-operative land-ownership in 1994. Especially, today's co-operative areas of north and north-east Ayrancılar were under public ownership previously.

Still, there is a great pressure for these land to be sold. Shared title deed plots created big problems. Especially, the smaller lands, created problems in planning and implementation. There are many problems in common land-ownership of people and public utilities. The most of these plots are located at the core of Ayrancılar. Both people and public administrations can not use these plots. Owing to this, a social benefit cannot be figured out. Consequently, there are more sale in these areas which belong to common land-ownership of people and public utilities.

**Table 6.12.** The Distribution of The Size and Shareholder Numbers of Shared Title Deed Plots and The Alteration of Them in Terms of Years in public lands in Ayrancılar Municipality

TREASURY+PRIVATE LANDS																				
PLOT SIZE (M <sup>2</sup> )	1975		1980		1985		1990		1995						1998					
	NUM. OF SH.		NUM. OF SH.		NUM. OF SH.		NUM. OF SH.		NUMBER OF HAREHOLDER						NUMBER OF SHAREHOLDER					
	2	TOTAL	2	TOTAL	2	TOTAL	2	TOTAL	2	3	4	5	6	TOTAL	2	3	4	5	6	TOTAL
0-400	-	-	-	-	-	-	-	-	14	-	-	-	1	15	7	-	-	-	1	8
401-801	-	-	-	-	-	-	-	-	158	16	1	1	1	177	150	16	1	-	1	168
801-1200	-	-	-	-	-	-	-	-	32	7	2	-	-	41	24	6	1	1	-	32
1201-1600	-	-	-	-	-	-	-	-	3	2	-	-	-	5	3	2	1	-	-	6
1601-2000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2001-5000	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1	-	-	-	-	1
5001-10000	-	-	-	-	-	-	-	-	1	-	-	-	-	1	1	-	-	-	-	1
10001-+	1	1	1	1	1	1	1	1	2	-	-	-	-	2	-	1	-	-	-	1
TOTAL PLOT NUMBER	1	1	1	1	1	1	1	1	211	25	3	1	2	242	211	25	3	1	2	242
TOTAL PLOT AREA (M <sup>2</sup> )	14000	14000	14000	14000	14000	14000	14000	14000	162962	18539	3017	978	683	186179	162962	18539	3017	978	683	186179
AVERAGE PLOT SIZE	14000	14000	14000	14000	14000	14000	14000	14000	772,3	741,5	1005,6	978	341,5	769,3	772,3	741,5	1005,6	978	341,5	769,3



**Table 6.13.** The Distribution of The Size and Shareholder Numbers of Shared Title Deed Plots and The Alteration of Them in Terms of Years in public lands in Ayrancılar Municipality

AYRANCILAR+PRIVATE LANDS														
PLOT SIZE (M <sup>2</sup> )	1975		1980		1985		1990		1995			1998		
	NUM. OF SH.		NUM. OF SH.		NUM. OF SH.		NUM. OF SH.		NUMBER OF SHAREHOLDER			NUMBER OF SHAREHOLDER		
	2	TOTAL	2	TOTAL	2	TOTAL	2	TOTAL	2	3	TOTAL	2	3	TOTAL
0-300	2	2	1	1	1	1	1	1	1	-	1	1	-	1
301-600	-	-	-	-	-	-	-	-	2	1	3	4	1	5
601-900	-	-	-	-	-	-	-	-	3	-	3	3	-	3
901-1200	-	-	-	-	-	-	-	-	3	1	4	3	1	4
1201-2500	-	-	-	-	-	-	-	-	1	1	2	1	-	1
2501+	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL PLOT NUMBER	2	2	1	1	1	1	1	1	211	25	242	211	25	242
TOTAL PLOT AREA (M <sup>2</sup> )	14000	14000	14000	14000	14000	14000	14000	14000	162962	18539	186179	162962	18539	186179
AVERAGE PLOT SIZE	14000	14000	14000	14000	14000	14000	14000	14000	772,3	741,5	769,3	772,3	741,5	769,3

**Table 6.14.** The Distribution of The Size and Shareholder Numbers of Shared Title Deed Plots and The Alteration of Them in Terms of Years in public lands in Ayrancılar Municipality

AYRANCILAR+YAZIBAŞI+YOĞURTÇUKLAR+PRIVATE LANDS														
PLOT SIZE (M <sup>2</sup> )	1970		1975		1980		1985		1990		1995		1998	
	NUM. OF SH.		NUM. OF SH.		NUM. OF SH.		NUM. OF SH.		NUM. OF SH.		NUM. OF SH.		NUM. OF SH.	
	4	TOTAL	4	TOTAL	4	TOTAL	4	TOTAL	4	TOTAL	4	TOTAL	2	TOTAL
0-5000	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5001-15000	1	1	1	1	1	1	1	1	-	-	-	-	-	-
TOTAL PLOT NUMBER	2	2	2	2	2	2	2	2	1	1	1	1	1	1
TOTAL PLOT AREA (M <sup>2</sup> )	14000	14000	14000	14000	14000	14000	14000	14000	1500	1500	1500	1500	1500	1500
AVERAGE PLOT SIZE	7000	7000	7000	7000	7000	7000	7000	7000	1500	1500	1500	1500	1500	1500



**Table 6.15.** The Distribution of The Size and Shareholder Numbers of Shared Title Deed Plots and The Alteration of Them in Terms of Years in public lands in Ayrancılar Municipality

1995					1998						
PLOT SIZE (M2)	TREASURY+ AYRANCILAR+ PRIVATE LANDS	TREASURY+ AYRANCILAR	TREASURY+ AYRANCILAR+ YAZIBAŞI+ YOĞURTÇULAR	YAZIBAŞI+ YOĞURTÇULAR	TREASURY+ AYRANCILAR+ PRIVATE LANDS	TREASURY+ AYRANCILAR	TREASURY+ AYRANCILAR+ YAZIBAŞI+ YOĞURTÇULAR	YAZIBAŞI+ YOĞURTÇU- LAR	TREASURY+ FOUNDATION	AYRANCILAR + YAZIBAŞI	DSİ+ PRIVATE LANDS
0-5000	2	2	-	1	2	4	-	1	-	1	1
5001-10000	-	-	-	-	-	-	-	-	-	-	
10001-25000	-	-	1	-	-	-	1	-	1	-	
25001-50000	-	-	-	-	-	-	-	-	-	-	
TOTAL PLOT NUMBER	2	2	1	1	2	4	1	1	1	1	1
TOTAL PLOT AREA (M2)	1615	1043	24080	2695	1273	6692	24080	2695	12500	867	52
AVERAGE PLOT SIZE	807,5	521,5	24080	2695	636,5	1673	24080	2695	12500	867	52

### 6.2.3.PLOT DIVISION, SUBDIVISIONS, THEIR REASONS AND DIMENSIONS

In Ayrañlar Municipality boarder, the first plot number was 712 in 1968. (first registration year). (24 plots belong to public ownership, 698 plots belong to private ownership). However, in the last section of survey (march 1998), the plot numbers were 3869. 843 plots belong to public and 3026 plots belong to private title deed.

Approximately, during a period of 30 years, 3157 new plots emerged. One of the reason, there were many plots which were not registrated in 1968 (First cadastral survey year) and the other important reason is division.

The subdivisions, the reason of division, and usually in which years the divisions implemented, spatial characteristics and distribution of plots which divided into plots will be examined in this part of the thesis.

The registration of title deeds searched and classified and then the table 6.16. was formed. In this table, there are distribution of subdivisions in terms of plot size and reason of plot divisions.

During the search; subdivision, the reason of divisions are listed so;

- The divisions for sale; This kind of subdivisions were made for sale the plots to the people and then the new plots which are formed sold in a short time and now this sale continues.

This kind of divisions were made for sale and were showed as A in the table 6.16.

- The divisions which were made for sharing. In this case; generally, the land-owner died such that his land inherited the by relatives. The plot has to be shared. For that reason the new land-owners were shared the plot among themselves.

This kind of divisions were made for sharing and were showed as B in the table 6.16.

- The divisions for expropriation or sale of the lands which belong to village council or municipality. Generally, this lands shared among themselves or sold to people.

This kind of divisions were showed as C in the table 6.16.

- The divisions for sale of the lands which belong to treasury. The plots which divided into plots were sold to people. Because there was high demand for treasury lands.

This kind of division were showed as D in the table 6.16.

- The last divisions which is formed were made for expropriation. The public



utilities like DSI, TEDAŞ, TCCD, FOUNDATION expropriated a part of the lands and the other parts of lands were left to ownership.

This kind of division; had to be made for expropriation and was showed as E in the table 6.16.

Besides; in the table, the plot numbers of before subdivision and total area, the new plot numbers which became after the plot division and their plot size and their distribution were showed in the table 6.16., too.

At the same time there are divisions which were made after the 1968 but apart from this, there are plot division before 1968 (first cadastral survey), too. These subdivisions have a role in establishment of the urban pattern. Especially, an unique plot determined urban pattern of Ayrancılar Municipality. The number of this plot is not clear. Approximately, it's area was 160 ha, and was a farmland. This plot belong to Ayrancılar, Yoğurtçular and Hortuna (Yazıbaşı) village council. The land fixing made in 1943. This plot divided into 810 plots. The plot numbers of 151 plots were clear, the plot numbers of the rest of the plots were not clear. A part of 810 plots are sub-divided again. Allse plots registrated as private title deed plots. Apart from this, there was a plot which divided into 42 plot. The plot belong to a person but plot number is not clear. It was 600 (dönüm)s. It determined in 1940. Only, 11 plot numbers are clear. The other subdivisions resulted in 38 plots and they belong to a person, too. It was 42520m<sup>2</sup>.

These three subdivisions are the most important ones for Ayrancılar. Because, they caused the formation of urban pattern of Ayrancılar Municipality for today.

### **Characteristics of these plots;**

1. Subdivisions which result 810 plots: This plot had belong to Fotyadis who is a Greek farmer before the three village council has been established. Fotyadis was a rich farmer who reached to an agreement with government and consequently he caused removal of the another Greek farmer from Ayrancılar. (It was told at the beginning of the chapter). But after the 1943 the land has been passed to three village councils' ownership. The land has been sub-divided into 810 plots. The registration year of plot which has been passed to three village councils' ownership is 1943. (There are a document before first registration year, but many information missing. It is a very old information). The plot does not have a plot number. The division has been made for sales, Owing to this formed plots have been sold immediately.

Table: 6. 16. The distribution of divisions in terms of years, plot size and their reasons

DIVISION CONDITION		1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
A	0-250	--	--	--	--	--	--	--	--	1	--	--	--	--	--
	250-500	--	--	--	--	--	--	1	--	5	--	--	--	--	--
	500-1000	--	--	1	1	--	--	--	--	6	--	--	--	--	--
	1000-5000	--	--	1	1	4	6	2	2	2	--	1	--	--	--
	5000-10000	--	--	--	--	1	3	1	3	1	--	1	--	--	--
	10000-50000	--	--	2	--	1	2	2	2	--	--	--	--	--	--
	50000-100000	--	--	--	--	--	1	--	--	--	--	--	--	--	--
	100000+	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	TOTAL	0	0	4	2	6	12	6	7	15	0	2	0	0	0
B	0-250	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	250-500	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	500-1000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1000-5000	--	--	--	--	--	3	9	5	--	--	--	--	--	--
	5000-10000	--	--	--	--	--	--	2	1	--	--	--	--	--	--
	10000-50000	--	--	--	--	--	--	1	--	--	--	2	--	--	--
	50000-100000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	100000+	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	TOTAL	0	0	0	0	0	3	12	6	0	0	2	0	0	0
C	0-250	--	--	--	3	--	--	--	--	--	--	--	--	--	--
	250-500	--	--	--	1	--	--	--	--	--	--	--	--	--	--
	500-1000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1000-5000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	5000-10000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	10000-50000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	50000-100000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	100000+	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	TOTAL	0	0	0	4	0	0	0	0	0	0	0	0	0	0
D	0-250	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	250-500	--	--	--	--	--	--	--	--	--	--	--	--	--	1
	500-1000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	1000-5000	--	--	--	--	--	2	--	--	--	--	--	--	1	1
	5000-10000	--	--	--	--	2	--	--	--	--	--	--	--	--	--
	10000-50000	--	--	--	--	--	--	--	--	--	--	--	--	1	--
	50000-100000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	100000+	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	TOTAL	0	0	0	0	2	2	0	0	0	0	0	0	2	2
E	0-250	--	--	--	--	--	--	--	--	--	--	--	--	7	1
	250-500	--	--	--	--	--	--	--	--	--	--	--	--	3	3
	500-1000	--	--	--	--	--	--	--	--	--	--	--	--	8	3
	1000-5000	--	--	--	--	--	--	--	--	--	--	--	--	15	17
	5000-10000	--	--	--	--	--	--	--	--	--	--	--	--	10	7
	10000-50000	--	--	--	--	--	--	--	--	--	--	--	--	7	7
	50000-100000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	100000+	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	50	38
GENERAL TOTAL		0	0	4	6	8	17	18	13	15	0	4	0	2	40



1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	TOTAL
													2	28	62	12	22	2	129
			1				3			16			155	84	191	60	47	44	607
							3						24	15	14	5	7	3	79
			1				6	2					12	1	11	2	3		57
							4						7		9	6	4		40
														1	2	5	3		20
																			1
																			0
0	0	0	2	0	0	0	16	2	0	16	0	0	200	129	289	90	86	49	933
													15	6	6	5	16		48
													106	216	37	59	45	4	467
													34	11	14	5	15		79
										4			12	9	11	7	10		70
													2		5	2	6		18
															2		1		6
							1												1
							1												1
0	0	0	0	0	0	0	2	0	0	4	0	0	169	242	75	78	93	4	690
																			3
																			1
													1						1
													1						1
													2				2		4
													1						1
																			0
																			0
0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	2	0	11
													25	110		2	19		156
		1											76	221	4	7	12		321
													39	136	2	7			184
1		1								1			15	16			1		37
										1			1	2					6
1										2			3						6
																			0
																			0
2	0	2	0	0	0	0	0	0	0	0	0	0	159	485	6	16	32	0	710
	7	1	2		3		1										27	2	43
	3	3				1							1				31		39
	8	3											1				2	1	15
	15	17	1		5	1											2	1	42
	10	7				1													18
	7	7	2		3		1												20
							1												1
							1												1
0	50	38	5	0	11	3	4	0	0	0	0	0	2	0	0	0	62	4	179
2	50	40	7	0	11	3	22	2	0	24	0	0	535	856	370	184	273	57	2521

Table 6.17. The distribution of subdivisions in terms of years, plot size and their reasons

		1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984	19
Sub-divided plot numbers	A	4	19	17	31	18	24	-	-	1	-	1	6	1	-	-	1
	B	1	17	10	13	13	18	-	-	1	-	-	1	-	1	-	-
	C	-	-	-	1	-	2	-	-	-	-	-	-	-	-	-	-
	D	-	5	5	1	134	28	-	-	1	-	-	-	-	-	-	-
	E	1	3	-	-	-	1	-	-	-	-	-	1	-	3	-	2
	TOTAL	6	44	32	46	165	71	-	-	3	-	1	8	1	4	-	3
Sub-divided plot size	A	28406	114084	218946	280625	59875	133272	-	-	6181	-	10000	57254	418000	-	-	2160
	B	1459	139205	58760	128928	100174	141789	-	-	20000	-	-	316400	-	10000	-	-
	C	-	-	-	24342	-	29377	-	-	-	-	-	-	-	-	-	-
	D	-	15043	7599	2495	206365	133526	-	-	22700	-	-	-	-	-	-	-
	E	4626	31993	-	-	-	1030	-	-	-	-	-	206085	-	77000	-	23800
	TOTAL	34491	300325	285305	416390	366414	438994	-	-	48881	-	10000	579739	418000	87000	-	25980
Formed plot numbers	A	49	86	90	289	129	200	-	-	16	-	2	16	-	-	-	2
	B	4	93	78	75	242	169	-	-	4	-	-	2	-	-	-	-
	C	-	-	-	2	-	5	-	-	-	-	-	-	-	-	-	-
	D	-	32	16	6	485	159	-	-	4	-	-	-	-	-	-	-
	E	4	62	-	-	-	2	-	-	-	-	-	4	3	11	-	5
	TOTAL	57	273	184	370	856	535	-	-	24	-	2	22	3	11	-	7



1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968
	-	-	1	-	-	-	-	1	-	2	3	3	6	3	1	2	-	-
	1	-	-	-	-	-	-	1	-	-	1	3	1	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
	-	-	-	1	-	1	-	-	-	-	-	-	1	1	-	-	-	-
	3	-	2	15	22	-	-	-	-	-	-	-	-	-	-	-	-	-
	4	-	3	16	22	1	-	2	-	2	4	6	8	4	2	2	-	-
000	-	-	2160	-	-	-	-	10100	-	18725	83800	38325	80200	50100	4000	29600	-	-
	10000	-	-	-	-	-	-	48800	-	-	21000	64000	11400	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	690	-	-	-
	-	-	-	13700	-	20800	-	-	-	-	-	-	-	5000	-	-	-	-
	77000	-	23800	203800	241800	-	-	-	-	-	-	-	-	-	-	-	-	-
000	87000	-	25960	340800	241800	20800	-	58900	-	18725	84800	102325	91600	55100	4690	29600	-	-
	-	-	2	-	-	-	-	2	-	15	7	6	12	6	2	4	-	-
	-	-	-	-	-	-	-	2	-	-	6	12	3	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-	-	-
	-	-	-	2	-	2	-	-	-	-	-	-	2	2	-	-	-	-
	11	-	5	38	50	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	7	40	50	2	-	4	-	15	13	18	17	8	6	4	-	-

Thus, the plot divided into parts for privatisation. These subdivision, distribution of plot size, plot numbers (if there are) were given in the appendix 1

As it is seen, all of the newly established plots are above 1000m<sup>2</sup>. They are big plots.

$$1000-5000\text{m}^2 = 543$$

$$5001-10000\text{m}^2 = 109$$

$$10001-15000\text{m}^2 = 69$$

$$15001-20000\text{m}^2 = 42$$

$$20001-25000\text{m}^2 = 37$$

$$25001-30000\text{m}^2 = 10$$

As it is seen; a lot of plots are between 1000-5000m<sup>2</sup>. All these plots were sold to private people and then some of the buyers sold them again. The people bought more than one plots. So; the big plot owners were introduced. These sale are like that;

$$\text{The plots which were sold 1 times} = 217$$

$$\text{The plots which were sold 2 times} = 369$$

$$\text{The plots which were sold 3 times} = 196$$

$$\text{The plots which were sold 4 times} = 76$$

$$\text{The plots which were sold 5 times} = 35$$

$$\text{The plots which were sold 6 times} = 13$$

$$\text{The plots which were sold 7 times} = 1$$

$$\text{The plots which were sold 8 times} = 1$$

$$\text{TOTAL} = 908$$

There are a total 908 individual sale. All these plots, first, belonged to three village council (Ayrancılar, Yazıbaşı, Yoğurtçular). But after the subdivision these plots were sold to people. The reason of the this subdivision was the privatisation.

1. Subdivisions which result 42 plots: This plot, firstly, belong to Hasan Efendi and it was only one plot. It was 600000m<sup>2</sup>. But, then Hasan Efendi divided into 42 plots and sold all the plots which was formed. The first registration year is 1940. This plot division, some plot number are not clear. These subdivision and distribution of plot size, plot number is in the appendix 2.

As it is seen; all the plots are above 10000m<sup>2</sup>. This divisions has bigger area than farmer former divisions. Distribution of plot size are like that;

$$10000-20000\text{m}^2 = 11$$

$$20001-30000\text{m}^2 = 5$$



$$30001-40000\text{m}^2 = 4$$

$$40001-50000\text{m}^2 = 3$$

$$50001-60000\text{m}^2 = 7$$

$$60001-70000\text{m}^2 = 7$$

$$70001-80000\text{m}^2 = 2$$

$$80001-90000\text{m}^2 = 3$$

All these plots were sold to people, too and then these plots were sold again the others people. So, some people bought more than one plots. The plot sale like this shown in table;

The plots which were sold 1 times = 22

The plots which were sold 2 times = 24

The plots which were sold 3 times = 2

There are total of 48 sale. It is obvious that, this subdivision is especially made for sale. All these plots are sold to the private people.

2. Subdivisions which result 38 plots: The main plot belong to Ahmet Şükrü Postacıoğlu . The plot was divided into 38 plots. But all these plots belong to the same person. Most the plots being owned by him previously aimed to be subdivided with objective of sale. By the time, he sold some parts of his plots. Especially, after the first registration year. The sale increased. Plot size and its distribution are given in the following;

$$0-500\text{m}^2 = 13$$

$$501-1000\text{m}^2 = 20$$

$$1001-2500\text{m}^2 = 2$$

$$2501-5000\text{m}^2 = 3$$

As it is seen, the subdivisions are below the  $1000\text{m}^2$ . They are smaller than the other subdivisions. The plot land-owners sold his plots to people. This sales are so that;

The plots which were sold 1 times = 20

The plots which were sold 2 times = 18

Total 38 plot were then 38 times. The sales are not more in the following years.. (Especially, after the registration year). These sale increased. These subdivision and distribution of plot size, plot number is in the appendix 3.

All these sales were realised before the registration year. However, there are many subdivisions and sales. Especially, the first division caused the determination of

today's urban pattern in Ayrancılar. After the registration year (1968) division and sales increased. All these are shown in the (table 6. 16-17.)

Especially, the first division which is made before the registration year affected the urban pattern, directly. But, the plot numbers are not clearly understood. Thus, we cannot know which plot became after the division. Because, in the documents, there are no plot numbers. Only, some plot numbers are existing. As it is seen, total 890 plots were established after this three big subdivisions. Like this divisions there are also small divisions. Now, all the Ayrancılar land was re-established after the subdivisions. Especially, in the last years, the plot numbers which are smaller in size increased. In the table 6. 15. , there are plenty of small plots. Especially, after the 1990 small plots increased. There were 308 plots between 500-1000m<sup>2</sup> in 1993 and there were 521 plot between 500-1000m<sup>2</sup> in 1994 and there were 294 plot in 1995. At the same time, there are lots of plots below 250m<sup>2</sup>. For example in 1994, 154 plot became after the divisions, As it is seen 2496 plots became after the division between the years 1968 and 1998. During this time, 453 plots were subdivided and the new plots became. (Total 2496 plot). The plots which divided into parts are totally 4060439 m<sup>2</sup>. In these plots which are divided into parts, number of 771 plots are divided into the most plots. Total 69 parts and it was 26258m<sup>2</sup> , number of 1061 plots divided into 68 part and 27769m<sup>2</sup>, the number of 1477 plot divided into 59 part and it was 22000m<sup>2</sup>, the number of 916 plot divided into 46 part and it was 18122m<sup>2</sup>, the number of 1716 plot divided into 45 plot and it was 22090m<sup>2</sup> and the number of 1894 plot divided into 39 plot and it was 15364m<sup>2</sup>. In the following table there are the largest subdivision, the plots which were became after the division and plots size.

233 building

**Table 6.18.** The plot subdivisions which are the divided in the most plot, the plot numbers which were emerged after the subdivision and plot sizes

Subdivided plots	Subdivided plot size	Formed plot numbers
771	26258	69
1061	27769	68
1477	22000	59
1916	18122	46
1716	22090	45
678	16282	42
1894	15364	39
1717	15253	34
1213	30800	34
1108	19200	32
1185	10466	31



Table 6.18. (con.)

748	10608	30
689	10314	30
699	13530	30
692	11634	29
236 building block 1 plot	7016	28
697	6265	27
686	10200	24
1865	10175	24
1062	10384	24
691	9473	23
1283	7096	22
703	10000	21
340	8322	21
694	6519	20
113 building block 11 plot	7508	20
345	7282	20
1060	20716	21
131 building block 3 plot	6701	19
40 building block 1 plot	5869	19
690	7227	18
1407	10200	17
232 building block 1 plot	4604	17
116 building block 1 plot	11575	17
1571	7725	17
1194	8352	16
253 building block 1 plot	5791	16
1689	10225	16
239 building block 1 plot	5202	15
1284	26654	15
257	5551	15
1182	11832	14
418	7148	14
1216	4810	14
1305	88165	14
233 building block 3 plot	3135	14
1873	4982	13
110 building block 6 plot	5686	13
362	5464	13
352	8610	13
1428	3846	12
749	3920	12
1860	8304	12
1859	3700	11
235 building block 1 plot	3523	11
506	4764	11
1107	5200	11
133 building block 4 plot	1999	10
1106	3584	10
303	5078	10

In addition to divisions, there are unification. Total 322 plot were unified. There are interesting cases. Because some plots, first divided and then unified again. Besides, the plot divided again. For example, the number of 692 plot, firstly divided into 29 plots and then a part of these plots unified again and so the number of 1865 plot was became but after the unification this plot divided into 24 parts again. The number of 1916 plot, firstly, divided into 46 parts and then 18 plots of these 46 plots unified as 482 building block 15 plot again, 14 plots of these 46 plots unified as 483 building block 19 plot again and 14 plots of 46 plots unified as 484 building block 15 plots again.

In this case there is a cause the land speculation to be increased. Big land-ownership increased with these division and unification. So, the urban pattern was determined by big land-ownership. Now these division and unification continue. Especially, these division and unification are in the centre of Ayrancılar. There are big plots in the south and north of Ayrancılar, now. However, in the north of the area began to divide into small parts. These plots divided into parts and sold. Still, these division and sales continue. For that reason treasury and forest lands divide into parts and sell. Besides, The demand for land continue. So, the divisions continue by Ayrancılar Municipality. The divisions were made by big land-owners. These people, their lands divided into small parts and then were sold. Many plots which divided into parts are vacant, they sold these plots mostly.

Dimension of the land-market which occurred can be easily seen. If it is researched the relations between physical plan and land-ownership pattern it will be understood directly the relation of divisions and physical plan. If we look at the table, their results will appear easily.

- After the first registration year; The largest subdivision is formed by 69 plots. The

subdivision was made in 1994. It was  $26250\text{m}^2$  and it was shared. The division was made to remove share. After that, most these plots were sold. This plot was number of 771. The new plots which is formed are between  $250\text{-}500\text{m}^2$ . The plot size is so after the division.

$$250\text{-}500\text{m}^2=64$$

$$500\text{-}750\text{m}^2=5$$

As it is seen, especially, this subdivisions formed  $300\text{-}350\text{m}^2$  plots. A lot of plots have been sold but most this plots shared between land-ownership. So, the shared plot became private plot. The number of changing owners is so;



The plots which were sold 1 times =46

The plots which were sold 2 times =21

The plots which were sold 3 times =2

It was made total 69 sales. A part of this plots bought only one person but the person unified these plots again. A part of these plots unified again by person who bought the plots. The eight plots bought by a co-operative and these plots were unified.

- The second biggest subdivision was the number of 1061 plot. It was 27769m<sup>2</sup>.

The subdivision was made in 1993 and after the division 68 plot were formed. The plot is shared, for that reason the plot shared between shareholder. 6 shareholder shared 68 plot. 19 plots belong to only one person. This division was made to remove the share and after the division did not became sale. The size of all these plots are between 300-500m<sup>2</sup>.

- The third big subdivision; it was 22000m<sup>2</sup> and the plot number was 1477.
- The subdivision was made in 1997. Total 59 plot was formed. The plot

belong to treasury. Treasury subdivided the lands by the purpose of sale. The plot size and their distributions as follows;

0-250m<sup>2</sup>=28

250-500m<sup>2</sup>=28

500-750m<sup>2</sup>=2

750-+=1

It was formed after plot unification of 1475 plots. In this plot, there were no sales. Until today, treasury sold most their lands and now, the demand continue increasingly. For that reason this subdivision is made.

After the registration year; the subdivisions are not big. Thus, there are not big subdivision which belong to only one person or institution. But there are a lot of small subdivision and sales. Some land-ownership buy a lot of small plots and then they unify these plots and then they again divided the plots into parts and sell them.

Especially, public lands were divided into parts very much and were sold. The lands which is sold mostly, are treasury land. Especially, at centre of Ayrancılar. The details of the sale of publicly lands owned are explained at the beginning of chapter 6.

Big subdivisions were made during the last few years. For that reason all of them were not able to be sold. This study covers the period until 1998, and then, the sale, after these subdivisions are not known. These plots could have been sold in 1999.

Because, the demand was very high and for this reason the plots divided into plots. The other big subdivisions, their size and the plot numbers which are formed after subdivision are shown in the table 6.18.

The most important subdivision was made before the first registration year (1968). It was 1943. Total 810 plot. It determined urban pattern of Ayrancılar. Total 896 plots was formed before the first registration year.

Some of the other small divisions were made for expropriation. Especially, It was made definite route or point and definite wideness. With expropriation, total 78 plot was formed. It was in total 188780m<sup>2</sup>.

The divisions and land sale took up together. Because, they related each other. Now, land and plot sale will analysed again.



#### 6.2.4. GENERAL CHARACTERISTICS OF LAND AND PLOT SALE IN AYRANCILAR MUNICIPALITY

That method is used to research the land sale in case study area. First, characteristics of land sale seperated as follow.

- The sale of plots from private title deed to private title deed ,again
- The sale of plots from private title deed to shared title deed
- The sale of plots from shared title deed to private title deed
- The sale of plots from shared title deed to shared title deed, again

Took up separately and total. So, both it can be occurred the most sale in which characteristic and in the areas which have dense sale, formation of physical pattern will searched.

The data of land sale searched for each year, like subdivision. Between 1968-1998; both sale number and sale type and plot size which was sold taken up. At the same time, average plot size was definite. Besides, all of the municipalities, searched for a period of 30 year. How many time it was sold occurred. So, it can be understand which plots are subject to a demand at most which years and sizes are important in sale, besides which are effectual on the physical pattern, and which plots are sold in which years and which type of sale are important.

For that reason, shared and private title deed plot sale, and numbers showing the sale of plots were produced in five years period and illustrated on the maps. This data will be useful to understand the relationship of land sale, land use and the relationship of land sale and physical planning. These results are achieved at the end of the research study. (Table 6. 19, 20).

If we take numbers of sale we will see an increasing from 1968 to 1971. But after the year 1974 there is a decrease between 1971 – 1975. But after 1975 these sale continued in a inclining manner. Between 1976 and 1980 there is an increase again. Also between 1980 and 1983 there exist a decrease. However, after 1983 there is again a inclining continuation of sale. After the 1992, the sale increased incredibly. The sale, in 1996, decreased but after that it increased again. These sale were almost stopped in 1998. We can separate these sale into 5 periods. But the most important period is between 1992 – 1997. In this period, the land use was still incredibly changing. But, sold plot size and sold plot numbers are not changing parallel to each

Table 6.19 : The distribution of sold plots in terms of plot size and the numbers of changing landownership between 1968-19

Number of changing Landownership Plot Size (m <sup>2</sup> )	1 time	2 time	3 time	4 time	5 time	6 time	7 time	8 time	9 time	10 time	12 time	13 time	14 time	15 time	16 time	17 time
0-500m <sup>2</sup>	113	23	6	1	-	1	-	-	-	-	-	-	-	-	-	-
501-1000m <sup>2</sup>	81	45	26	12	5	5	-	1	1	-	-	-	-	-	-	-
1001-2500m <sup>2</sup>	42	17	4	11	7	3	3	1	-	-	1	-	1	-	-	-
2501-5000m <sup>2</sup>	65	33	15	6	6	2	2	2	-	1	-	1	-	-	1	1
5001-7500m <sup>2</sup>	43	18	8	4	1	1	2	-	2	1	1	-	-	1	-	1
7501-10000m <sup>2</sup>	34	20	10	2	1	-	-	-	-	2	-	-	-	-	-	-
10001-12500m <sup>2</sup>	27	9	5	-	1	-	-	1	2	-	-	1	-	-	1	-
12501-15000m <sup>2</sup>	21	13	6	1	3	3	1	-	2	1	-	-	-	-	-	-
15001-20000m <sup>2</sup>	21	13	4	2	1	-	4	-	1	-	1	-	-	-	-	-
20001-25000m <sup>2</sup>	10	6	4	1	1	2	-	1	-	-	-	-	1	-	-	1
25001-50000m <sup>2</sup>	8	3	1	1	5	2	-	2	1	-	1	-	-	-	-	-
50001-100000m <sup>2</sup>	2	1	1	-	1	-	-	-	-	-	-	-	-	-	1	-
100001-250000m <sup>2</sup>	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
250001-+m <sup>2</sup>	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-
TOTAL	467	201	91	41	32	20	12	8	9	5	4	2	2	1	3	3
SALE TOTAL	467	402	273	164	160	120	84	64	81	50	48	26	28	15	48	51



ip between 1968-1998 in Ayrancılar Municipality

15 time	16 time	17 time	18 time	19 time	20 time	23 time	24 time	26 time	28 time	29 time	30 time	31 time	33 time	34 time	36 time	41 time	42 time	47 time	56 time	70 time	71 time	137 time	total
-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	145
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	177
-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	91
-	1	1	1	-	1	-	-	-	-	-	-	1	1	-	-	-	1	-	-	-	-	-	140
1	-	1	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	86
-	-	-	-	-	-	2	1	1	1	-	-	-	-	-	-	-	-	-	1	-	-	-	75
-	1	-	1	-	-	-	-	2	-	1	1	-	-	1	-	-	-	-	-	-	-	-	53
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	51
-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	49
-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1	-	1	28
-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
1	3	3	3	2	2	3	1	4	1	1	1	1	2	1	1	1	1	1	1	1	1	1	931
15	48	51	54	38	40	69	24	104	28	29	30	31	66	34	36	41	42	47	56	70	71	137	3128

İZMİR YÜKSEK TEKNOLOJİ ENSTİTÜSÜ  
REKTÖRLÜĞÜ<sub>102</sub>  
Kütüphane ve Dokümantasyon Daire Bşk.

other. Some times, while number of sale were increasing the plot size intended to decrease.

If we take up total sale, we will see an area of 1543 ha. In total. This area is larger than the area within the village cadastral survey border. Some plots sold more than once. As an each sale counted as a new one, the total area that is sold increased to a total 3128 plots.

In 1998, those plots were subject to minimum one sale. In other words, 931 plots sold minimum once and 703 ha. area were subject to sale and total 931 plots sold in the 30 years period.

For a period 30 years, if the sale are separated according to their characteristics, both the sale number and sold plot size, the sale of a plot from private title deed to private title deed again can be located in the first row. In this respect, 585 ha. area of total 1543 ha. area (%38) and 1381 plot of sold 3128 plot (%44) are constituted these sale.

At the second row, the sale of a plots from shared title deed plots to private title deed plots are formed. (In these kinds of sale, basically, the land-ownership die and so the plot is shared, after that one of the share holder buy the whole plot, or another great land-ownership buy the whole plot. For that reason this kind of sale occurred). 415 ha area of total 1543 ha. area (%27) and 1170 plot of sold 3128 plot (%37) are constituted these sale.

At the third row, the sale of a plots from shared title deed to shared title deed again are emerged. In these sale, 402 ha. area of total 1543 ha. area (%26) and 352 plots of sold 3128 plot (%11) are constituted these sale.

At the end of the row, there exists the sale of plots from private title deeds to shared title deeds. These kind of sale are, generally, repeated sale of the shared title deed plots. Total 137 ha. area (%9) and 225 plots were subject to sale (%7).

The changing of these sale will be taken up again one by one.

### **1. The Sale of Plots from Private Title Deed to Private Title Deed Again**

In these kind of sale, the sale increased until 1971. But after the 1971, the sale decreased until 1975. There is an increase between 1977 and 1980, and, 1981 and 1984. But after 1984, these sale inclined until 1992, and after 1992 these sale increased incredibly. But in 1976 there are decreasing and then they increased again.



Table 6.20. The Sale and Their Distribution in Terms of Years and Sale Types

SALE	From Private Tit. D. Plots To Private Tit. D. Plots			From Private Tit. D. Plots to Shared Tit. D. Plots			From Shared Tit. D. Plots to	
YEARS	Plot m <sup>2</sup>	Plot Number	Average Plot Size	Plot m <sup>2</sup>	Plot Number	Average Plot Size	Plot m <sup>2</sup>	Plot Number
1968	84334	13	6487,2	-	-	-	29600	3
1969	92539	22	4206,3	6480	3	2160	27000	5
1970	302989	43	7046,2	104444	12	8703,6	72500	8
1971	312385	44	7099,6	59119	5	11823,8	105260	20
1972	261824	39	6713,4	29102	6	4850,3	55865	9
1973	140009	28	5000,3	-	-	-	94200	10
1974	100580	20	5029,3	21361	4	5340,2	79305	14
1975	103483	22	4703,7	6720	2	3360	50653	7
1976	111701	26	4296,1	28156	3	9385,3	36260	8
1977	72494	13	6041,1	37600	3	12533,3	24465	5
1978	137692	15	9179,4	46300	6	7716,6	101409	9
1979	98250	24	4093,7	34400	4	8600	9700	1
1980	197430	31	6368,7	28892	6	4815,3	197484	20
1981	154737	14	11052,6	50804	6	8434	98321	13
1982	77933	17	4584,2	40037	6	6672,8	11670	4
1983	140836	25	5633,4	63354	6	10559	257053	10
1984	214001	36	5944,4	522	1	522	51866	8
1985	104962	30	3498,7	253967	7	36281	107848	14
1986	219464	15	14630,9	1000	1	1000	91380	11
1987	360032	31	11613,9	5000	1	5000	192139	16
1988	59039	19	3107,3	5000	1	5000	107445	13
1989	89942	18	4996,7	1000	1	1000	82181	9
1990	362530	46	7881	49275	6	8212,5	86452	22
1991	226077	42	5382,7	11000	1	11000	30449	9
1992	407303	48	8485,4	44393	4	11098,2	112843	17
1993	201675	47	4290,9	29603	10	2960,3	163472	146
1994	352828	111	3178,6	86167	27	3191,3	187861	212
1995	304519	170	1791,2	77506	33	2348,6	315988	249
1996	395451	157	2518,7	172752	26	6644,3	148229	100
1997	286917	194	1478,9	117093	33	3548,2	1099150	176
1998	18413	21	876,8	404	1	404	15315	22
TOTAL	5852360	1381	4237,7	1368958	225	6271,3	4149417	1170



From Shared Tit. D. Plots to Private Tit. D. Plots			From Shared Tit. D. Plots to Shared Tit. D. Plots			TOTAL AREA	TOTAL PLOT NUMBER	AVERAGE PLOT SIZE
Plot m <sup>2</sup>	Plot Number	Average Plot Size	Plot m <sup>2</sup>	Plot Number	Average Plot Size			
29600	3	9866,6	18000	2	9000	131934	18	7329,6
27000	5	5400	35000	2	17500	161019	32	5031,8
72500	8	9062,5	23000	1	23000	805922	64	12592,5
105280	20	5263	57040	9	6337,7	533804	78	6843,6
55865	9	6207,2	8720	2	4360	355511	56	6348,6
94200	10	9420	72080	6	12015	306299	44	6931,3
79305	14	5664,6	-	-	-	201246	38	5295,9
50653	7	7236,1	57100	4	14275	217956	35	6227,3
36280	8	8043,3	32708	4	8177	208825	41	5093,2
24465	5	4893	38000	2	19000	172559	23	7502,5
101409	9	11267,6	-	-	-	285401	30	9513,3
9700	1	9700	50800	4	12650	192950	33	5846,9
197484	20	9874,2	97591	9	10843,4	521397	66	7899,9
98321	13	7563,1	47161	5	9432,2	350823	38	9232,1
11670	4	2917,5	30200	2	15100	159840	29	5511,7
257053	10	25705,3	73291	7	10470,1	534534	48	11136,1
51866	8	6483,2	160537	11	14594,2	428926	56	7623,6
107848	14	7703	277047	18	15391,5	743824	69	10780
91380	11	8307,2	127548	6	21258	439392	33	13314,9
192139	16	12008,6	157283	14	12822	736679	62	11881,9
107445	13	8265	253910	13	19531,5	425394	46	9247,6
82181	9	9131,2	225945	16	15063	399068	44	9069,7
86452	22	3929,6	358854	8	44606,7	855111	82	10428,1
30449	9	3383,2	125227	7	17889,5	392753	59	6656,8
112843	17	6637,8	140777	13	10829	705316	82	8601,4
163472	146	1119,6	302725	31	9765,3	697475	234	1293,6
187861	212	886,1	229559	45	5101,3	856415	395	2168,1
315988	249	1269	613826	35	17537,8	1311839	487	2693,7
148229	100	1482,2	111069	25	4442,7	827501	308	2686,6
1099150	176	6245,1	278257	48	5797	1781417	451	3949,9
15315	22	696,1	1239	3	413	35371	47	752,5
4149417	1170	3546,5	4024529	352	11433,3	15437363	3128	4935,2



Until March 1998, the sale numbers were 21. The reason of increase after 1992 is the completion of cadastral surveys in 1990. Most of the plots were sold between 1982 and 1997. The sale during this period is above one hundred. It was reached 1006 plots in total and with a ratio of %73. Highest number of sale is in 1995. The average plot size were between  $4000\text{m}^2$  and  $7000\text{m}^2$ , until 1978. In 1978, this number reached to  $9000\text{m}^2$ . This number raise above  $10000\text{m}^2$  in 1981, 1986, 1987. After 1993 the average plot size got used to be changing between  $800 - 4000\text{m}^2$ . These figure decreased to a level between  $800\text{m}^2 - 2000\text{m}^2$  after 1994. If we look for the sold plot size, we can see how they change in yearly basis. Plot size differs from sale number, during the same years, plot number increase while , plot size decreases. Especially, after 1990, in terms of the character of change the plot numbers increased but plot size decreased and total sold land – size decreased. So, average plot size decreased too.

The reason for such an appearance during the last years, is that most of the plots subdivided and sold. So, the sold plot numbers increased as the but plot size decreased. In 1998, these numbers decreased a lot. As this research study continued only until March 1998, this figure faced with a decrease.

## 1. The Sale of Plots from Private Title Deed to Shared Title Deed

In the general framework this type of sale bears the minimum importance. In a time period of 30 years. Between the years 1968 and 1993, the sold plot numbers change between 1 and 9 with a negligible importance. But, in 1970, this number was 12. After the 1993, the sale numbers increased, in 1968 and 1973 there were not any sale. After 1993, plot numbers changed from 26 and to 33 and the most of sale are during these years. Total 119 plots were sold between 1994 and 1997 (%53) with and an area of 45 ha. area (%33). As appears that the sale numbers are quit higher where as land sizes are small. As a result of, this average plot size decreased. The land size which were sold in 1970, 1996 and 1997 were maximum. They were more than hundred – thousand.

Total land sold were 136,8 ha. (%9), and the total numbers sold were 225. (%17). Minimum average plot size was  $404\text{ m}^2$  in 1998 and it was 522 in 1984. Maximum average plot size was 11823,8 in 1971 and it was 12533 in 1977.

## **2. The Sale of Plots from Shared Title Deeds to Private Title Deeds**

It is the most very common sale type of and is in the second row. The reason of this kind of sale is the inheritance. The real land-ownership being died the plot was subdivided. So, the plot is shared. After this sharing, another shareholder buys the whole plots or another great land-ownership buys all of these plots. So, these kind of sale were emerged.

This kind of sale inclined hilly until 1998. It increased until 1971 and after this year it decreased again. Particularly, after 1992 sale numbers increased. All of the sale were above a hundred. The plot numbers were 922 (%79). As it is seen, most of the sale were between 1992 and 1998. The maximum sale was in 1995 and it was 249. It formed %21 of the all sale. The most important reason of this sale were the subdivision of 771. plot, 672. plot, 1480. and 743. plot, and all of these plots were sold again.

The maximum land size sold appears in the years 1993, 1995 and 1997. It was 110 ha. in 1997, 31 ha. in 1995 and 26 ha. in 1983. Minimum land size which were sold were in 1998 and 1979. In 1998, it was 15315, in 1979, it was 9700. Total plot area which were sold 415 ha. (%27) and total plot number is 1170 (%37).

The plot size sold were 202 ha. in area (%50). In this type of sale, average plot size change from  $1000\text{ m}^2$  to  $10.000\text{ m}^2$ , but only in 1978, 1983 and 1987, this numbers were above  $10.000\text{ m}^2$ . In 1978, it was 11267 it was 25705 ha. in 1983 and it was 12008 in 1987.

All of these sale become dense after 1992 like the other sale type. Because of the completion of 1990's cadastral survey boarder, the sale type increased.

## **3. The Sale of the Plots from Shared Title Deed to Shared Title Deeds**

This kind of sale type created problems every time. Particularly, the most of the problems occurred in the planning process emerged from this type of sale. Basically, the sale of the plot from private title deed to shared title deed can also be termed as a sale type, and there exists the same kind of problems.

This sale type located in the third row. Total 402 ha. area (%26) and total 352 plot (%11) sold between 1968 and 1998. These sale inclines until 1998. Again, the most of the sale were between 1992 and 1998, total 200 plot (%57) and total 167,7 ha. (%42) were sold. Average plot size, generally were above  $10.000\text{ m}^2$ .



This number increased to 21.258 m<sup>2</sup> in 1986. In 1996, 1997, 1994, 1993, 1976, 1972 and in 1968, average plot size were between 4000 and 10.000 m<sup>2</sup>. The sale numbers change between 1 and 46 between the years of 1968 and 1998. Although the shared sale was prohibited, in 1985, the shared sale continued in a different manner. Even, these sale increased because, the new legislation did not put an obstruction to the sale of existing shared title deed plots. Also, one or more of the shareholders transferred their shares to another people or to shareholders. So, shared sale increased.

All of the sale type and their rate were given and now the relationship of sale and plot size and numbers will be searched.

#### 6.2.4.1. THE RELATIONSHIP OF SALE NUMBER AND PLOT SIZE

In this level of the study research, changing of land-ownership and size of this plots were determined and classified. If we look at the table 6.17 – 18, we can fix the followings.

During the 30 years period, total 931 plots were subject to sale process. This values, %24 of the plot numbers which were in 1998, and total sale number were 3128. In other words, average sale number for a plot was 3,4.

%19 of the sold plots (178) were between 500 – 1000 m<sup>2</sup> and total sale number were 405 and %13 of the total sale number (3128) located at this interval the most of the sold plots were realised in these interval. The most of the sale number were realised between 2500m<sup>2</sup>-5000m<sup>2</sup> and 405 sale number were realised and the total 137 plots were sold .

In the second row, there are plots which are between 0 –500 m<sup>2</sup>, 145 plots were in the sale process, on the other hand, the rate of plots between 501m<sup>2</sup> – 1000 m<sup>2</sup> are in the second row in terms of its total sale (405).

Briefly, %59 of the plots which are in the sale process are below 5000 m<sup>2</sup> and %44 of total sale numbers are below 5000 m<sup>2</sup>.

467 of total 931 plots were sold only once, 201 plots sold twice, 91 plots sold three times, 41 plots sold four times, 32 plots sold five times and 20 plots sold six times.

At the end it this research, study by looking at 1968 and 1998's sale, one can say that;

Especially, subdivision of plots by their land-owners resulted with a great land speculation. This subdivisions changed the existing pattern. Particularly, during the last

years, the division increased and plot size became smaller. After the completion of cadastral surveys, this rate became smaller than before 1990's. In this land speculation, plots sold three or five times like it is in case of the shares.

However, the lands which have belonged to the treasury and village were subdivided and sold and these sale still continue. As these sale were not prohibited, the land market is put on the stage again.

By means of this subdivision process, the plots which were between 0 – 1000m<sup>2</sup> were sold at most.

Now, still the sale of shared title deed plots continue. Because, the law permits the sale of existing shares.

After all by the end of this research study process of change in land-ownership pattern in Ayrancılar Municipality, and the basic characteristics of this change can be explained as follows;

In Ayrancılar Municipality, public land-ownership exists more than private land-ownership. Especially, the plots which belong to treasury and village are in the majority. These plots were sold to people in a time span , but still, the importance of public land-ownership sustains. Today a land with an area of 497 ha. Is under public land-ownership (%34), and %88 of the total publicly owned land (i.e. 436 ha.) belong to the village and treasury.

In Ayrancılar Municipality, there are small and large plots. The small plots locate in the centre of the area. The larger ones are located in the southern part of the area and its fringe and these area still cultivated. Before the 1968, the land in Ayrancılar Municipality shared by 40 households and during the following years, these plots were sold gradually. Totally 3875 plots of land were in the market and in a period of 30 years 3128 sale processes were realised and the population was 6252 in the 1997.

Especially, the amnesty law, after 1980 played an important role as most of the illegal buildings were located in the treasury land at the centre of Ayrancılar Municipality. After 1980, all of these buildings were exempted. And today, these sale and the related demand still continue. For a long time, the sale which are from treasury or village to people had been continuing. But in 1995 the sale were stopped from treasury. However, the demand increased incredibly. For that reason, after 1998, the sale were started again. But plots of villages were sold continuously and this sale still goes on . Increase in the housing co-operatives the caused the acceleration of the



demand for new sale. Because of its location, Ayrancılar Municipality was in a fast development as a result of this land speculation increased.

At the same time, there exists the ownership of big lands. There are 5 big landowner and all of them have plots which are above the 100.000 m<sup>2</sup>. A total of 80ha. belong these owners. these people own %12 of the total private lands.

#### 6.2.4.2. SPATIAL CHARACTERISTICS OF LAND AND PLOT SALE

Ayrancılar Municipality has an important location because of its close proximity to İzmir. At the same time, Adnan Menderes Airport, Aegean Free Zone, Aegean Industrial Trade Export Centre in Kısık are near the Ayrancılar Municipality. There are also small scale industrial units, housing co-operative areas and agricultural lands Its importance is increasing because of the transportation possibilities as well. Ayrancılar cadastral survey boarder reach railway in the south. In the west, this boarder reaches to Gazimir. In the its north and west, there are Yoğurtçular and Yazıbaşı villages.

In 1998, there were a total of 925,1 ha in area of 3026 private and shared title deed plots in Ayrancılar Municipality. Between 1968 – 1970, there were 3128 sale process and total 1543, 7 ha. area changed its owners. Briefly, sold plot size is bigger than private and shared title deed plot size in 30 years period. If we look at the tables and maps, we will see how those are determined.

Between 1968 – 1970, most of the sale have private characteristics. (They were sold from private title deed plots to private deed plots). During this period, total 114 sale processes were realised. As it is known, the first settlement in Ayrancılar is in the centre and expanding along the highway. In this area, there were many treasury lands. Almost, all of this area belong to treasury. But after the war, a part of this area distributed. But and then a lot of people came the Ayrancılar and they were located of this area. Especially, they have chosen the centre of Ayrancılar to be located. But these areas belong to treasury. In other words, they were located illegally. They continued to be located in this are. During these years, people sold only their lands. (These areas were given by government after the war, to a total of 40 households. These people sold their lands to their relatives or to the other people. They used these land as fields.

The other part of area is between railway and state way. Because these areas divided into small parts before 1968. This area belong to a Greek citizen. This man

divided his land to sell and this division is the biggest subdivision. This is the first sold area. The other big subdivision was explained in part of the plot subdivisions. All of these subdivisions were made for sale. The first sale were in the south of the area. The area belonging to a Greek citizen has been subdivided, and prior the sale. This marshy area was dried and the flow of the water was in the direction its owner. The land fertile and this was the main reason for the increase in the demand. To cultivate the land was the main intention during the first sale.

However, those lands laying at the northern and eastern terrains of Ayrancılar were still not sold, As these lands were owned by the treasury and forestry. Basically yet there were not any demand for these lands as the area was under populated. During these years, the plots larger in size were sold. The most of these plots were between 1000-10000m<sup>2</sup>. Some of these plots were above 10000m<sup>2</sup> area and one of these being.

Briefly to say in those years, the sale were still in minimum. But after then the sale were increased continuously.

Between 1971-1975, there were 251 sale process. 153 of these sale were from one private title deed to another.

By these years, the sale of public lands began to increase. The most of the sold plots were between 1000-10000m<sup>2</sup> and especially they were between 1000-5000m<sup>2</sup>. However, by the time sold plots were reached to a point above 10000m<sup>2</sup>. The plots which were above 10000m<sup>2</sup> were laying between highway and the railroad. In other words, in the south of Ayrancılar. But, there were also such plots in the centre. It was possible to see land-ownership in these years. The people bought and sold a great number of plots. In these years, the sale were among the villagers or to the immigrants. The settlement began to spread and in these years, sale of shared title deed plots increased.

Between 1976-1980 the sale process was fewer than before 1976 and total sale processes were 193. But the sold area was wider. In these years those sale of private title deed plots were also quite higher. However, sale of shared title deed plots were also increased. There existed 41 sale processes in total. The sold plot size were above 1000m<sup>2</sup>. However, sometimes this rate decreased below the 1000m<sup>2</sup>. But, still this number is in the minority. In these years, sold plots around 10000m<sup>2</sup> were quite frequent. The sale of public lands to people reached to a highest figure. Especially, the sale of plots from treasury and villages to people is more than the sale to other public organisation.



In those years, expropriated areas also increased. These expropriation were realised by the treasury, for instance Ayrancılar Municipality and T.C.D.D. The expropriation which was made by T.C.D.D. were in the south of Ayrancılar. The other expropriation was made in the centre and along the highway. At the same time, privatised areas were also increased.

Between 1981 and 1985, the sale began to increase again. Total sale processes were 240, and like the others, in these period, sale of the private title deed plots to private owners again were in the first row; and shared sale also were increased. 69 shared sale processes were realised. The sold plot size increased the most of the sale were in the south and centre of Ayrancılar Municipality.

During this period, there was a much more increase. Particularly, in this period, DSI, expropriated 47 plots with an area of 6,7 ha. In the expropriations. These areas were in the west and in here a drainage canal was constructed.

In these areas, sold plots generally were also between 1000 – 10.000 m<sup>2</sup>, and there were plots which are above 10.000 m<sup>2</sup>.

Between 1986 – 1990, the sale processes continued with an increase. Total 267 sale processes existed and the sale to private people were in the first row. In these years, although the shared sale was banned, these kinds of sale in continued, As the law did not ban the sale of the existing shared title deed plots. This sale did not decreased and, total of 68 a shared sale were occurred.

In this period, total 285 ha. area were sold, , and sold plot size were generally above 1000 m<sup>2</sup>, but they were greater plots.

Between 1986 – 1990, the sale of the public lands increased. Because there was an increasing demand, and today, this demand sustains. Especially, sale of the treasury and village lands increased. The growing increased towards the north and south. Particularly, in the centre of Ayrancılar and along the highway, treasury lands decreased. Most of the time those plots bought from public administrations sold again. In this period, the sale of the public lands increased, one of the reasons of sale and especially in the centre of the Ayrancılar, is that the unlicensed buildings being exempted. So, treasury lands which were in the centre and along the way sold to people.

The most dense sale processes were between 1991-1995. In total there were 1257 sale processes existed. Another reason for these sale is that, the cadastral survey being completed in 1990.

The most of the sale had different peculiarities. In this period, shared sale were maximum. Because, the plots which were shared divided into smaller parts and all these parts registered again as individual shares. There were a total 206 sale processes between 1991 – 1995 and the sold plot size decreased to 1000 m<sup>2</sup>. Subdivisions increased and most of the divisions were realised during these years. As it can be seen in the table 6.18, most of the subdivision were between 1991 – 1995. The sale increased in this period. The sold area reached to highest size between 1991 – 1995. Total 395 ha. area were sold.

Another important sale type were the public land sale. Especially, in these years, the sale of plots which were realised from public to private title deeds increased very much. In all these sale, the maximum were in the treasury lands. In the second row, there were sale of the plots which were from Ayrancılar Municipality to private hands. The public land, approximately, 61 ha. in total area was privatised. In these years, a lot of plot privatised. At the same time, there were also expropriated areas, and particularly, a lot of plots were expropriated by Ayrancılar Municipality and treasury. But, these expropriated areas, privatised at the following years.

The last period were between 1996 – 1998. In this period, there were a lot of sale, too. A total of 806 sale processes were realised in 3 years. The sale type which were sold at most were those which has special characteristics. However, shared sale were quiet much. There were 109 shared sale processes, the sold area was not small and a total of 213 ha. area were sold. At the same time, in this period, bigger subdivisions continued. However, a lot of plots which were divided and sold were bought again by some big landowners. So, the big landowners occurred, but, in the following years, some of these areas sold again. In the new sale, plots were divided into more small parts and sometimes this rate decreased below the 250 m<sup>2</sup>.

In this period, there were big landowners. In 1998, for example, there were totally 7 big landowners and all their lands were above 100.000 m<sup>2</sup> in size. These people divided their plots for sale or bought a lot of plots. These big plots located along the highway and in the centre of the Ayrancılar. The big landowners are in the south of Ayrancılar.

In Ayrancılar Municipality, a total of 3128 sale processes occurred and most of these sale are along the highway and in the centre. The big landowners, generally located towards west. Because İzmir is at the west of area. In other words, development of the village is towards west. But, last year, this development began to reach towards



west, north and south. Industrial areas especially located in the south of Ayrancılar. On the other hand, along the highway there are small scale industrial units and commercial areas. There is a transformation in the land uses; agricultural lands have been transferred to industrial, commercial or residential areas. Co-operative areas located generally in along the highway at the west side and especially, the sale processes were realised in those areas. Public lands in these areas were sold to people. Particularly, the lands of Ayrancılar Municipality and the treasury were sold more than others. The most of the lands of Ayrancılar Municipality and other village council sold to co-operative areas.

At the last years, the development reached to north and south of the area. In the south, industrial areas developed, whereas in the north residential and commercial areas developed. These developments reached to the protection zones of Tahtalı Dam. In the south and east, the development reached to other villages.

In Ayrancılar Municipality, small plots are in the centre and along the highway. The bigger plots locate in the south and north of the area and most of these lands are agricultural fields. The sale process increased in that area and the most important reason for this was the excessive demand for industrial establishments and housing co-operatives and today this situation still goes on.

#### **6.2.4.3. THE RELATIONSHIP OF THE LAND AND PLOT SALE AND THE POPULATION IN AYRANCILAR MUNICIPALITY**

Ayrancılar Municipality which is at the south aies of İzmir, now reached to the city boarders. The population of this settlement were below 1000 before 1960. But after that, the population increased and it had continued to increase until 1997, and in 1997, the total population of all municipalities and villages was 6252. On the other hand, the population of Ayrancılar is more than those of other settlements. After 1990, there were even more increase in Ayrancılar Municipality.

**Table 6.21.** The distribution of the population in terms of years in Ayrancılar

Years	Population
1950	576
1955	684
1960	1020
1965	1559
1970	1679
1975	2246
1980	2616
1985	3424
1990	4474
1997	6252

Reference: D.I.E. General Population Count Results

In this part, the relationships of population increase, number of sale and sold plot sizes are going to be analysed.

The population increased with sale. However, sold plot size decreased because big plots divided into parts. This rate after 1990's decreased even below 500m<sup>2</sup>.

If it can be search the table 6.20. it will be seen the changes in a five years periods in terms of plot sizes, settling numbers and population increases.

Between 1950 – 1970, the population was increased to 1103. Between 1968 – 1970, there were 114 sale processes. There were plot sale before 1968 and big subdivisions were made before the 1968. The subdivision which had highest parts were realised before 1968. A total of 810 plots occurred, but plot numbers of these subdivisions were not clear. Because, in those years the registrations were not completed. Between 1968 – 1970 a total of 109 ha. area was sold. The most of these sold plots were those plots which occurred by means of largest subdivisions. Between 1965 – 1970, the population increased by 120 people.

Between 1970 – 1975, the population increased by 567 people. In these years, increase of population is more than between 1965 – 1970. Approximately the population increased 5 times. In these years, sale numbers were 251 and sold area were 159 ha. The people located in the centre of Ayrancılar and along the highway. The people who immigrated to Ayrancılar, generally, came from Konya, Denizli, Aydın etc. Because, the south of the area (next to the railway) belong to a Greek farmer. So, the people were located in the other areas.



Between 1975-1980, the population increased by 370 people. The increasing of the population is less than as it is before 1975. At the same time, the sale number were 193. As it is seen, sale number decreased as, the increase of population were less. In these years, shared sale began to increase and sold plots started to be used as residential areas.

Between 1980-1985, the population increased by 808 people. As it is seen, increase of the population were more than the former years. At the same time, sale numbers were also increased. A total of 240 sale were occurred. Shared sale increased between 1980-1985, too. In these years sale of the public lands increased and the location demand for Ayrancılar increased. The people who came for working located in the areas and so, the shared sale were increased.

Between 1985-1990 the population increased by 1050 people. This increase was more than former increases. As the unlicensed buildings exempted in this period, the plots in the center were sold to people by treasury and Ayrancılar Municipality. The, sale of treasury lands were more than the other types of public lands, as, most of the lands in Ayrancılar belong to treasury that is affecting the treasury sale in turn. When treasury began to sell its lands, this had also caused increase of the demand and immigration. In these years, housing co-operatives and industrial areas were also increased. Co-operatives were located in the west and along the highway. The industrial areas are located in south. As the land prices in these areas are less than the others.

Between 1990-1997, the population increased by 1778 people and now continue to increase. Between 1990-1995 the number of sale were 1257. As it is seen, there was an incredible increase during these years and 395 ha were sold. Between 1995-1998 there was a total of 2063 sale. The most of the sale of land in 30 years period, occurred between 1990-1998. In these years, plots divided into smaller parts.

The smaller subdivisions occurred in the center and along the highway. Now, the subdivisions still continue. In a 8 years' period the sale of public lands were in the maximum level. In this period, there were a lot of shared sale. Because, one or more of the shareholder sold their shares to another person. But as the other shareholders did not sell their shares, shared plot preserved their shared characteristics. Sold plots during this period were smaller than the previous years.

**Table 6.22.** Increase of Population, Sale Numbers and Total Plot Size In 5 years' Period In Ayrancılar Municipality

YEARS	POPULATION	THE INCREASE OF POPULATION	SALE NUMBER	TOTAL LAND SIZE IN THE PERIODS
1965	1559	120	114	190,7 Ha
1970	1679	567	251	161,2
1975	2246	370	193	137,8 Ha
1980	2616	808	240	221,2 Ha
1985	3424	1050	267	285,4 Ha
1990	4474	1778	2063	660,4 Ha
1997	6252			

As it is seen, Despite, there were parallelism between increasing of the population and sale, they do not affect so much each other. The most important characteristic is small private plots. The small division of the plots increased sale. The first years, sold plots were above the 1000m<sup>2</sup> , 5000m<sup>2</sup> or 10000m<sup>2</sup>. But following years, this rate decreased below the 1000, even 500m<sup>2</sup>. The one of the most important reason is physical planning process.

### 6.2.5. THE RELATIONSHIPS BETWEEN LANDOWNERSHIP TRANSFORMATION PROCESS AND EXISTING SPATIAL PATTERN

In Ayrancılar Municipality, the first urban settlements were in the centre and along the highway, and the sprawl was towards north ( in the centre) .

The area along the highway and its surroundings encountered residential development. At the same time in this area, there are also small industrial and commercial areas. Housing co-operatives were generally, developed towards İzmir. Egekent 4 and Üçpınar, Bahçelievler Co-operatives which are the biggest ones developed along the highway in the west. Industrial areas were located in the south state-highway and this development continues. As the land price in this area is less than the others. Especially, the land speculations caused the increase of prices. Along the highway and in its surroundings land price is higher. These areas initially owned by the



treasury, but with the amnesty law, treasury had to sold its lands. In these areas, detached and low rise houses developed. But today, the co-operatives and high-rise buildings began to be located in the area. They were located especially, in the west, and towards İzmir. These lands are either within the boarder of Ayrancılar Municipality or the other village councils. At the same time, co-operatives began to be located in rear areas. The land of these co-operatives were first bought by the people from Ayrancılar Municipality or the other village councils and municipalities (Yazıbaşı Municipality or Yoğurtçular Village Council). But after that, these lands were bought by the co-operatives. During the years, between 1990-1998, number of sale increased.

There are smaller plots along the state-highway and in the centre. Because, most of the subdivisions were realised in this area and all of these plots were subdivided and sold. That of course affected the increase of the land price. For that reason, all these lands, generally developed as residential or commercial areas. In this area, there are people who own more than one plot and this affected the development. Most of the big landowners sold their plots by subdividing them several times. In the centre of most of the area owned by the people or they are shared with treasury.

The north of the area is under the ownership of the Forestry Administration. But these areas also began to be sold. Treasury lands, generally, were located in the north of the area. In the west, the area between state-highway and railroad belong to two municipalities and a village council. (Ayrancılar and Yazıbaşı Municipality and Yoğurtçular Village Council). But during the following years, all of these area was shared among these three administrations but after that they have sold their lands to the co-operatives. The most of sale were those lands laying next to the state-highway. In the south of the area there are still some vacant lands which are also started to be sold.. However, these areas, generally, were sold to industrial establishments. Because, such investments are ready to pay more for the lands. Besides this shared lands are kept vacant for a while. As it is seen, the most of the plot which are located in the centre subdivided into small parts and sold. Because, the initial settlement is located in this area and this area growth rapidly. The sale process in this area more than the other areas. Especially, location of illegal buildings which are on the Treasury lands and exemption of these buildings increased demand for these areas, because Treasury sold most of their lands. For that reason, a lot of public land have been sold. Besides Treasury lands the municipal lands have been sold, too. Especially, in the north, the land which belong to three village council subdivided into small parts and sold. In this

area, the housing co-operative are located and became areas are big plots, these lands has high floor area ratio. In the south area which are located south of the main-road, the industrial areas were located in these areas. Because the big lands are located in this area and land value is less than the first industrial area. Because of land speculation. In the first industrial area, the lands subdivided into small parts and sold. Today, sale of the public lands, increasing of the housing areas, subdivision of the lands result of the existing pattern, because existing pattern affected land-ownership structure. The lands which are in the centre of the area are small and they developed as a housing and commerce area and public services area are insufficient. Because of lack of big and vacant lands. The other areas which were located surrounding of the centre are big and they developed as a housing co-operative and industrial area. All these events affected the physical planning process. The land-ownership transformation process has of course affected the physical planning. Physical planning, the land-ownership transformation process and the existing pattern has mutual effects on each others.

#### **6.2.6. THE RELATIONSHIPS BETWEEN LAND-OWNERSHIP TRANSFORMATION PROCESS, LAND-USE AND PHYSICAL PLANNING IN AYRANCILAR MUNICIPALITY**

Ayrancilar Municipality was a village within the sub-provincial boundary of Torbalı in 1968, that is during the first cadastral surveys. In 1968, the population of Ayrancilar were 1559. During which all of planning authority was under the Ministry of Reconstruction and Resettlement. However, there were not any planning activity until 1991. Ayrancilar has been turned out to be a municipality in 1991. Until that any planning activity were not introduced for Ayrancilar.

But as it is known, the first big subdivision made before 1968. A total of 812 plots were established. But it is not possible to identify where these plots were located. Because, in these years the plots had not been registrated to title deeds yet, in other words, during these years the plots did not have plot numbers or places. But according to a report which was prepared the oldest man in the municipality, these plots were in the south of the Ayrancilar and close to the railroad. The other big subdivisions were along the state-highway.

After 1968, the subdivisions were made, but most of these subdivisions were after 1992. Because, Ayrancilar being nominated as a municipality in 1991. It was



approved to be so in 1992. The population reached to 4474 in 1990, with an increase of 2795 people between 1970-1990. In the plan, residential areas were more than the total of the other areas. Residential areas were in the first row. Total 225 ha of land spared for residential areas. This area is approximately, 32% of total planned area. Another large area is spared for industries and this covers on area of 120 ha in total (17%). The largest area provided is for the roads and within an area 252 ha. This area was 35.8% of the total. If it is looked at the plan, it will be seen whole area along the highway planned for commercial activity. In the plan, lands of the co-operatives in the west (Üçpınar, Bahçelievler etc.) planned as are proposed residential areas.

In this plan (1996), the differences from the previous one (1992) were the natural conservation and tourism areas. Because in this plan, these areas were larger than they were in the other.

The important difference in this plan was the location of industrial areas. The industrial areas were located next to the highway in the north-east of Ayrançılar. Today, there are also some small scale industrial units next to the way. In this plan residential areas were not suitable for the high-rise buildings. All these master plan decisions were listed in the table 6.21.

**Table 6.23. Master Plan Decisions (1991) (1/5000)**

USAGES	HA	%
RESIDENTIAL AREAS	225,38	31,96
COMMERCIAL AREAS	14,87	2,11
EDUCATION FACILITIES	11,85	1,69
HEALTH INSTITUTIONS	2,1	0,3
MUNICIPALITY SERVICE AREA	4,08	0,58
RELIGIOUS FACILITIES	1,79	0,25
SOCIO-CULTURAL FACILITIES	2,06	0,29
URBAN WORKING AREAS	9,81	1,39
STORE AREAS	2,54	0,36
AFFORESTATION AREAS	3,12	0,44
MILITARY AREA	0,52	0,07
GREEN AREAS	48,01	6,82
TOURISM AREA	1,22	0,17
INDUSTRIAL AREAS	120,34	17,07
NATURAL CONSERVATION AREA	4,8	0,68
ROAD	252,59	35,82
<b>TOTAL</b>	<b>705,08</b>	<b>100</b>

In 1992 and during following years (1993,1994,1995,1996) the subdivisions and the sale increased. The biggest sale which was consisted of 137 sale were between 1994-1997 and in these years there were 1257 sale in total. The sold lands were 396 ha in total area and the most of these sale were in private title deed characteristic. Although, the sale increased, the plot sizes subject to subdivisions were decreased. Before 90's, the plot sizes were above 1000m<sup>2</sup> but in 90's the plot size decreased below the 1000m<sup>2</sup>. The sale of public lands continue too, but especially, privatisation is more than expropriation. Especially, the demand is more for treasury lands. Because, the treasury lands locate in the area which has the highest demand in land-market. These areas were along the state-highway and its surroundings.



If it is looked at the construction permits, it will be seen, that most of the unlicensed buildings were in these areas and all of these building located on the treasury lands. But, in 1985, all of the buildings licensed with amnesty law numbered 2981. The building permissions increased after the 1991 and all of the construction permits were given after 1992 except 1985. Because in 1985 the construction permits were given to people with amnesty law numbered 2981. All of the construction permits were given in the appendix 2 in terms of years.

The other master plan was prepared in 1996. In this plan, the most of the lands were in residential areas. A total area of 1198.6 ha provided for residential uses. There were a total area of 973 ha increase between two plans. The most important reason for this increase was the co-operative areas. Because, especially after the 1994, co-operative areas increased. Üçpınar, Egekent etc co-operatives has taken theirs licenses in 1994 and they had a total area of 27.7 ha. The other important areas were the industrial areas and a total area of 128.5 ha (7%) was spared for such uses. In this plan natural conservation and tourism areas were less than the former plan and roads has also covered the largest area. The commercial areas also were less than the previous plan. If it is searched the area it will be seen that 40% of the area were filled with building blocks. 3% of the area were semi-vacant and 57% of the area were vacant in 1998. However, constructed area continue to increase, fast.

**Table 6.24. Land-use in 1998**

LAND-USE	HA	%
FILLED BUILDING BLOCK	727	40
SEMI-VACANT BUILDING BLOCKS	47	3
VACANT BUILDING BLOCKS	1032	57
TOTAL	1806	100

If it is looked at the plan it will be seen the important difference. Because, industrial areas were located in different lands. They were in the south-west. Because, in their former location, there appeared a land-market which had higher land price. For that reason, the factory owners did not sell the land for their building. So, the location of industrial areas changed and located in south-west. In this plan, these land uses had more area than previous one. The other reason for the location of industrial areas were the small plots. In the centre and along the highway, all of the plots are very small and

price of each of them was very high. So, it was very difficult to buy the plots in the centre. But, in the south land price was less than the other areas, for that reason industries were located in these areas.

In this plan, if it is looked at the order of construction, it will be seen the difference for the whole area. Such that; In west, floor area ratio was 1 below the state-highway. Because, this area was also planned for housing co-operatives, these areas were covered by the building blocks and was planned as high-rised. But, in these areas there are different construction densities; for example, in some building blocks, floor area ratio was 0.20/0.80 or 0.25/0.30. Because, in this area, there were such buildings which were on the lands not planned for housing co-operatives. The areas owned by the people and in industrial areas, floor area ratio was 0.40. The most important difference was in the center of Ayrancılar and along the highway, that all of this area being the oldest urban settlement had a floor area ratio that was given according to the existing pattern. Most of this area developed as B-3, A-3 or B-5. The others building blocks in the surrounding of the oldest settlement were not very different. In this area floor area ratio were 0.25/0.75, 0.30/0.90, 0.30/0.60.

The area which has highest density is Egekent 4 co-operative areas. The floor area ratio is 0.25/2. The working areas and in the other public areas ( green areas, education areas etc.) floor area ratio is 1. As it is seen, the lands next to the state-highway has more dense construction conditions. The development continue toward east, south and north. In the west, the development boarder reached to Tahtalı Dam Conservation Boarder, for that reason development had to continue towards the other directions.

In this plan, the big lands which belong to 2 municipalities and a village, sold to people or co-operative areas and all of these areas developed as residential areas. In the south of the area, the big lands planned as industrial areas because of contemporary land prices and plot sizes. The development of commercial areas were proposed along the highway. The lands of big landowners, generally, were in industrial areas or in the areas which are out of the plan boundaries. At the same time, still, there are lands of big landowners along the highway.



**Table 6.25. Master Plan Decisions (1996) (1/5000)**

USAGES	HA	%
RESIDENTIAL AREAS	1198,6	66
COMMERCIAL AREAS	22,6	1
EDUCATION FACILITIES	96,7	6
HEALTH INSTITUTIONS	6,5	0,1
MUNICIPALITY SERVICE AREA	11	0,6
RELIGIOUS FACILITIES	2,5	0,1
SOCIO-CULTURAL FACILITIES	2,7	0,1
URBAN WORKING AREAS	3,1	0,1
STORE AREAS	9,8	0,5
AFFORESTATION AREAS	0,5	0,1
MILITARY AREA	1	0,1
GREEN AREAS	3,5	0,2
TOURISM AREA	6,3	0,3
INDUSTRIAL AREAS	128,5	7
NATURAL CONSERVATION AREA	13,7	0,8
ROAD	299	17
<b>TOTAL</b>	<b>1806</b>	<b>100</b>

As it is known, after 1996, the subdivisions and sale continued to increase. In 3 years time a total of 806 sale processes were occurred and approximately a total of 296 ha in area have been sold and now there are in total 5 big landowners and they own the lands above 100000m<sup>2</sup>. The most of the sale which is below 500m<sup>2</sup> made also after 1996, too. The most of the construction permits were given after 1994.

As it is seen, the sale and the subdivisions affected the developing process of physical planning and land-use. All of the construction orders were determined in terms of this sale and subdivisions. The rapid increase in land market, affected the developing process. The co-operative area played an important a part in the development process. Especially, in the west, privatisation of the lands of two municipalities and the village council in 1991 has also affected this development. Because, after the amnesty law, privatisation increased. Especially, treasury had sold its lands to people, in the centre

and along the highway, and today all of these plots are smaller size. So, all of these lands planned as residential or commercial areas and most of the vacant lands were shared areas. At the same time, there are shared plots with treasury in the centre and along the highway and the other public areas (green areas, education areas etc), generally, belong to public administrations (i.e. municipality, treasury). As most of the planning process, in Ayrancilar Municipality, transformation process of land-ownership pattern affected by sale, directed the physical planning process.

### **6.3. GENERAL EVALUATION OF FINDINGS BELONGING TO AYRANCILAR MUNICIPALITY**

In Ayrancilar Municipality, the transformation process of land-ownership pattern determined by spatial patterns and physical planning processes between 1968-1998 were tried to be analysed. After this research it can be said these results.

Within the cadastral survey boarder of Ayrancilar Municipality, there were 1454.8 ha area and 3875 plots in 1998. These plots, were first establishment before 1968 and this plot belong to a Greek farmer. The other big landowner which had subdivided their lands were the two farmers before 1968. The subdivisions continued until 1998 and today still continues but these subdivisions are fewer than first ones. However, after 1990 during registration processes were completed, the subdivision numbers increased but size of plots decreased. Before the 1968, 812 plots in total were constituted by the Greek farmer and a total 80 plots were constituted by two big farmer.

After 1968 subdivisions were made, but in 60's and 70's, the subdivisions which belong big landowners were not quiet lot. Most of the landowners subdivided and sold their lands. But these plots did not divided so much. These subdivision were occurred along the highway and its surroundings. Most of these sale belong to treasury, in other words, treasury sold their lands to people in the 60's, 70's and 80's. These sale also continued in 90's. Between 1968-1975, 365 sale processes were occurred and approximately, 270 ha of area in total had changed the owners. In the 1968 there were a total of 5 big landowners. This number increased to 9 in 1970 and 1975. Thus, this area 82.2 ha in 1968 and 16807 ha in 1970 and 163.1 ha in 1975.

In 1980, the number of big landowners increased to 10 and they owned 172.5 ha area. This number was 9 in 1985 (total 156.8 ha area). In 1990, this number decreased to 4 and a total of 60.9 ha in area but in 1995 this number increased again to 6 people



and a total of 94.2 ha area. In 1998, this number decreased to 5 and having an area of 80ha area. As it is seen, the big landowner number increased in 1980 and it has decreased in 1990. But after 1990, this number increased again. Because, in 1990 the cadastral surveys completed and most of the landowners were registered. At the same time, after 1990, the sale of treasury and municipality lands increased, for that reason, this number was also increased. As the land market were owned by these people. In 1998 the big land-owner numbers decreased to 5 again. In 1997 the sale of treasury lands were stopped but the other sale began again as a result of the demand. The other important sale were in the south-west. Because, this area belong to 3 village council (Ayrancılar, Yazıbaşı and Yoğurtçular) before 1990 and after 1990 all of this area shared between 2 municipalities (Ayrancılar and Yazıbaşı) and a village (Yoğurtçular). After this shares, the land sale to people have increased. The most of these areas sold to housing co-operative.

In 1998, a total of 3128 sale processes turned out to be reality and a total of 1543.7 ha area changed their owners. This number is more than the total plot area in 1998 (1454.8 ha). The most of the sale realised after 1990 with a total of 2063 sale. The most important reason of these sale, in 1992, the first master plan being prepared for Ayrancılar and the population increased. Between 1970-1997, the population increased 4573 people.

The existing urban pattern is in the center and along the highway and the most of the subdivisions and sale were made in these areas. At the same time, in this area, the demand is very high for the shared lands with treasury.

The land-use affected physical planning process in Ayrancılar Municipality, In the center the buildings which are in the area unlicensed development exempted by means of amnesty law numbered 2981. So, all of this area developed as low-rise, detached house or contiguous building. The areas of municipality, generally sold to people. In these areas construction order are very dense.  $E=1$  or  $0.25/2$ . Because, in the other areas there are complex land-ownership pattern, for that reason as an exception of the existing pattern, the construction order increased as the industrial areas located on vacant lands and big plots. Residential and commercial areas all developed along the highway.

The most important problems are in the center and along the highway consisting shared plots with treasury and the other peoples. Because, most of the people expect to

buy lands from treasury. Now, forestry areas are also going to be planned for residential areas.

In the area, the sale of public lands determines important problems for physical planning. The most of the public lands were already sold or continue to be sold. For that reason, the areas, for the other usages (education, green areas etc) will not be left over and as a result there will be a conurbation with the surroundings areas and public services for all those settlements expected to be provided by mutually. Sometime, a settlement benefit from the public services of the other settlement. Because of lack of their public services.

As a result of these interaction became poor areas. Especially, sale of the public lands increased this negative results. Because, there are insufficient lands for public services. At the same time, most of the public lands sold to co-operative areas and so the density increased in this area. For that reason, the public services are not provided. Because, these areas are insufficient for this area. At the same time, with the amnesty law, a lot of public lands privatised. These areas developed as a housing area and subdivided into small parts after that sold again. For that reason most of the big landowners subdivided into parts and sold. Besides the private lands, treasury lands subdivided into parts and privatised. Because of amnesty law. A lot of illegal building had been located in the treasury land and Treasury privatised their land with amnesty law numbered 2981. The rest of the treasury lands in these areas are insufficient for public services. Because, these areas are small for public services areas. As a result of this development, there are dense building in the Ayrancılar Municipality. The floor area ratio increased to 3 and 5. These areas are existing areas and they are located in the centre of the area. In the co-operative areas, this ratio increased to 1 and 2. As it is seen, Ayrancılar Municipality has very dense construction conditions. Besides these construction conditions, the public services are very low. Because of privatisation and subdivisions of public lands. The shared sale increased this negative conditions. The big land-owners increased land speculation. Because, they subdivided their lands and keep these lands. After the increase of land value sold their lands. For that reason, the land speculation increased in this area. In the Ayrancılar Municipality plot size decreased after the subdivision. So, it is impossible to provide big scale public services area. All of these negative developments are as a result of interaction of existing pattern, land-ownership, and physical planning.



## CHAPTER VII

### GENERAL EVALUATION AND CONCLUSION

The two main hypotheses have been explained in chapter two. One of them is the relationship between land-ownership pattern, land-use and physical planning. The other hypothesis is that the structural alterations will occur in settlements of the metropolitan fringe area, and in time these alterations will impinge upon the expansion and development of larger-cities. There are transformations of land-ownership pattern in these structural alterations.

For this reason, the researches related to the transformation process of land-ownership pattern has been considered elaborately in the case study area and then the relationship pertaining to this transformation process, the existing land-use and physical planning have been searched in a period of 3 decades.

The diagnosis regarding the land-ownership pattern, land-use and physical planning explained for the case study area in the chapter VI. As a result of this research, alterations occurred in the population structure, land-ownership pattern and spatial structure of settlements in metropolitan fringe areas. This transformation process has been affected by the physical planning actions and planning structure and this has also affected the planning process. As a result of this interaction, there have emerged problems in existing development and spatial pattern and there still are many costs that are to be covered in the future.

Question of whether the existing transformation process or the interaction type and level of interaction defines whole relations differentiating according to location of settlements, are bound to be answered. The dimension of this differentiation and the determinations in terms of the common criteria, which take place in the transformation process and whole relations will all be considered in this part.

After the general evaluation of the case study area, the transformation process and all relations which have been the subject to the research will be suggested for the future investigations, because of the existing public interest and healthy environment.

## **7.1.GENERAL EVALUATIONS OF LAND-OWNERSHIP TRANSFORMATION PROCESS**

A total of 3869 registered plots and an area of 1454,8ha in 1998 and land-ownership transformations during the last 3 decades have all been searched in the case study area of Ayrancılar Municipality, which is located in the south of the Izmir. As a result of this research, the findings related to this transformation process will be, first, defined primarily for “public lands” within the whole area.

### **7.1.1. THE DETERMINATIONS RELATED TO TRANSFORMATION PROCESS OF PUBLIC LAND-OWNERSHIP**

The land potential belonging to public is quite much. In the first registration year, there were 38,5 ha and 24 plots. This rate is rather low, because, all plots could have been registered in this year. In 1998, there was an area of 497ha and 843 plots in public ownership.

In time, there have been many sale from public lands to private title deed lands. Especially after the amnesty law numbered 2891, the treasury lands have been transferred to individuals. Because, there were a lot of unlicensed construction in the treasury land and after the amnesty law, all of these lands have been exempted and transferred to individuals. At the same time, public lands have also been sold to individuals.

In Ayrancılar Municipality, an area of 32 ha belonging to Ayrancılar Municipality has been privatised and 20ha of treasury land has also been privatised in a period of 3 decades. Approximately, 109,3 ha of public lands have been privatised in this period. At the same time, there also have been sales from public lands to public lands again. A total 126 ha public lands have been sold to other public institutions again. Thus, an area of 236 ha have changed owner, in public lands. Most of these sales have been realised between years 1990 and 1997. The biggest areas have been sold in the years 1987, 1990, 1994 and 1997.

Besides the privatisation of public lands, there also are expropriations of private lands. Even the lands, which have been privatised, have been expropriated once again. Some public institutions had to be located at Ayrancılar Municipality due to their need for larger public lands. For this reason, expropriations have been realised in this area.



These public institutions are D.S.I. , treasury, foundation, T.C.D.D., Ayrancılar Municipality. Between 1981-1982, an area of 6,7 has been expropriated by D.S.I.. Between 1971-1973 and in 1993, 11,4 ha area has been expropriated by treasury, In 1976 and 1993, an area of 6398m<sup>2</sup> area has been expropriated by Ayrancılar Municipality and in 1971 and 1998, 959m<sup>2</sup> by the foundation and by T.C.D.D. Thus, total 18,8 ha has been expropriated in Ayrancılar Municipality.

As it can be seen, the public lands are not used as a result of well determined planning policies and co-ordination in İzmir metropolitan fringe areas.

The lands, which have been transferred from public land-ownership to private ownership have important positions within the trade market. Privatised lands, which have been obtained from treasury lands in accordance to the amnesty law numbered 2891 have used to change owners, especially after 1985. The treasury lands have continued to be private plots after this year, and this rate has increased after 1990 and these lands have been subdivided into smaller parts again and they were sold. But, the Treasury has stopped the sales of their lands in 1997. However, the demand for buying treasury land is still too high. On account of this, the sales of treasury lands have been expected to begin again in Ayrancılar Municipality. Often the bought lands sold again most times. A total of 818 plots have been transferred from public ownership to private ownership. 641 of the total plots, which have been privatised, belong to Ayrancılar Municipality and 75 of the total plots belong to treasury. The privatised lands belonging to Ayrancılar Municipality are more than the treasury lands. Because most of the lands belonging to Ayrancılar Municipality had previously belonged to treasury, but the treasury has transferred their lands to Ayrancılar Municipality and then the municipality has then privatised these lands. Besides, there also are sales from public ownership to public ownership. A total 619 plot have been transferred. Most of these plots have been transferred from treasury lands to Ayrancılar Municipality.

Most people have bought their lands from public ownership for speculative purposes. Although they are not in need of these plots, they insist on buying others in Ayrancılar Municipality. They generally are big land-owners.

The public land-ownership has displayed a transformation characteristic during the last 3 decades in such a manner as explained. If a different politic had been developed for public lands, the potential and type of development in the south axis of İzmir would have been different, as well.

At this stage, the findings related to physical planning decisions of public land for the next 10 year, will be considered within the relationship between land-ownership, land-use and physical planning.

#### **7.1.2. THE FINDINGS RELATED TO TRANSFORMATION PROCESS OF PRIVATE LAND-OWNERSHIP**

There is a total of 925 ha of area including 3026 plots in the case study area in 1998. It can be revealed that this information indicates a transformation process of private land-ownership for a period of 3 decades.

During the 30 years during the of this transformation process, the sizes of the private lands have fluctuated. The plot sizes have increased until 1980, but this rate has declined by the year 1985 and then has risen up again until 1998. At the same time, plot numbers also seem to be appeared fluctuated. But, especially after 1990, the plot numbers have increased so much. Because, Ayrançılar has become a municipality in 1991 and in accordance with this, land speculation and sales have also been subject to an increase after 1990. For this reason, the lands have been subdivided to be sold. The reason of the uneven change of plot sizes and plot numbers is that the registration was not complete until 1990, and that in 1990, the registration of all plots have been completed. The plot sizes were 584 ha in 1968 increasing up to 924 ha in 1998.

In Ayrançılar Municipality the biggest subdivision has been made before the first registration year. The 810 plots could be obtained from this subdivision. The land belongs to a big landowner, who is a Greek farmer. The attained plots are above  $1000\text{m}^2$  in size. These plots first passed to three village councils and then been subdivided into smaller parts. The other important subdivisions have been obtained from 42 plots. Previously, these plots were belonging to a big landowner and this owner had subdivided this plot into 42 parts. After this, he has begun to sell these plots. These plots were above  $10000\text{m}^2$  in size. The other subdivision has been realised for 38 plots. This plot belonged to another big landowner, who has subdivided his plots smaller parts and begun to sell them all. The resultant plots were above  $1000\text{m}^2$  in size.

After the first registration year, there have been big subdivisions. The biggest subdivision consisted of 69 plots. This has been realised in 1994 and had an area of  $26250\text{m}^2$ . This plot was shared before the subdivision. The aim of this subdivision was to remove the share. Another big subdivision has resulted in 68 plots and the land had



an area of 27769 m<sup>2</sup> in total. It was realised in 1993 a shared plot. These plots have then been subdivided into smaller parts to remove the shares. The third big subdivision has been made in 1997 forming 59 plots in an area of 22000m<sup>2</sup>. The subdivided plot size was generally between 0-500m<sup>2</sup> and the width of the roads between 5-7m in the subdivided area. These are very narrow and they are not common usage areas.

In addition to these subdivisions, there also has been unification. A total of 322 plots have been unified in the Ayrancilar Municipality. Some of these unified plots, had been subdivided into smaller parts prior to unification. This unification has been explained in the chapter VI.

The shared title deed plots numbers and sizes have both increased continuously since 1968. At the same time, the shareholder numbers have increased until 1995. In 1968, the shared title deed plots were 52, the number increasing up to 322 in 1998, and the plot sizes were 55,3 in 1968, reaching 242,8 ha in 1998.

Plot size and plot numbers of private title deed plots have fluctuated the process. The plot size have increased until 1975, but after this year, this rate has declined down until 1990 and then risen up again in 1990, because the registration of all plots were completed in 1990. But after the year 1990, the plot size has decreased again. In 1968, the plot size of private title deed plots were 529,8 ha in area, but in 1998 reaching a level of 682,2 ha. The plot numbers of private title deed plots display the same character, too. The number has increased until 1975, declining down until 1985, and after the 1975 declining more until 1985. After 1985, this number has risen more and more. The plot numbers were 646 in 1968, but 2704 in 1998. The 22% (153,2 ha) of the private title deed plots corresponding to an area of 682,2ha belonged to only 15 people in Ayrancilar Municipality. These 15 people constitute 0,5% of the total landowners. As it can be seen, there is a big increase in the land-ownership. The increase of land-ownership in smaller plots can be notified for the last 3 decades. In 1990, all plot registrations have been completed with the land size of private lands as 882 ha and plot numbers as 1136 and in the 1998, the land size of private land are 959 and plot numbers are 3026. The land size has increased 77 ha, but the plot numbers have increased to reach 1890 plots.

In 3 decades, a total of 3128 sales have been realised in the Ayrancilar Municipality and a total of 1543,7 ha area has changed owners in these sales. Increase the plot numbers of private land-ownership can be searched, it can be seen that the number of plots is 3026. Thus the sale process was 1,1 multiple of the total plot

numbers in 1998. In accordance, the land on which 230000 people can live have been sold until 1998. In 1998, total 6252 people have settled at Ayrancilar Municipality. (assumed to be 150 person/ha in gross density). Most of these areas are vacant today. If the money, which has been used for this land trade could have been used for another productive sector, plenty of public services or interest would be achieved in the development process.

After the 1991, (Ayrancilar has become a municipality in this year), the sale processes has increased. Most of these sale have been realised between 1991-1998. The most important reason of these sales are the subdivisions. The subdivision has also increased between these years and the subdivided plot numbers were very small. In general, they were between 0-500m<sup>2</sup>. Another important reason of the sale is the master plan which has been prepared for Ayrancilar Municipality in 1991 and 1995. First, the most of the sold plots have been privatised by treasury and the municipality. These plots, had primarily privatised by treasury and municipality and then have been sold again to individuals. Most of these areas were located at the centre of Ayrancilar and along the highway. The other reason of sale was that the shared sale, has been banned by the development act numbered 3194. Owing to this, most shared title deed plots were sold to individuals.

In the study area 50% of all sold plots were bought for resale, again. 3128 sales have been realised on account of 2505 plots and 467 of these plots have been sold for only once. The remaining 464 plots have been sold for minimum two times or over.

Most of the sale, have been realised at the centre of Ayrancilar and along the highway. Most of the sales, were from private title deed plots to private title deed plots in Ayrancilar Municipality. The 44% of the total sales were of this type. (1381 plot). In the second row, there are sale types in the from of shared title deed plots to private title deed plots. The 37% of the total sales then have been sold from shared title deed plots to private title deed plots. (1170).

In 3 decades period, the findings related to the transformation process of land-ownership pattern has been explained in Ayrancilar Municipality and now the findings, for the existing and developing land-use, planning institution and physical planning process will be explained in the following part.



### 7.1.3. GENERAL EVALUATIONS OF RELATIONSHIPS BETWEEN PHYSICAL PLANNING PROCESS, EXISTING AND DEVELOPING LAND-USE STRUCTURE AND LAND-OWNERSHIP TRANSFORMATION PROCESS

In the sixth part, three different periods have emerged in the research in terms of all of relationships considered. These periods:

- The period until the first registration year (1968)
- The period between 1968-1990
- The period after 1990

1. The period until the first registration year (1968): Until 1968, Ayrancılar Municipality has been a very small village. This area had belonged to Greeks, but after the War been transferred to Turks. There were very big plots before 1968 in Ayrancılar. The population was very low. It was 1559 in 1965 and they were allocated along the highway. All of the lands were used as agricultural lands and during those years, the immigration to Ayrancılar from other cities or settlements had increased. All villages then depended on Development Act numbered 6785 and Village act numbered 442.<sup>1</sup> Considerations referring to these years, will set forth the following findings; In 1968, there were 712 plots and 698 of these plots belonged to private title deed plots. In these years, the biggest subdivision has emerged in Ayrancılar Municipality. As a result of the biggest subdivision; there have emerged 810 plots all belonging to a Greek farmer. After that this plot has been transferred to three villages and these villages have been further subdivided into smaller plots to be sold in Ayrancılar. All of these parts were above 1000m<sup>2</sup>. Thus, they were big plots. As a result of the other two big subdivisions 42 plots and 38 plots have emerged. After the second subdivision has created 42 plots all above 1000m<sup>2</sup>. A total 994 sales have been realised before 1968.

In these years, the plot size generally were between 0-50000m<sup>2</sup>. The subdivisions and sales, generally took place in the along the way and centre. The big plots were located generally at the south of the area. The reason of plot subdivision, in those years, was the increase of their attractiveness for location. Because, then, there were an abundance of places (Most of them not being registered.) for location. But, there were a few people or family in the settlement and all of them were working in the agricultural sector.

2. The period is between 1968-1990: During these years, no plans were prepared for Ayrancılar, and it still was a village depending on Torbalı.

In these years, the sales have been increased both for private or shared title deed plots. The population had increased up to 2795 people. The total of number sales was 1065 between 1968-1990 in Ayrancilar Municipality. The number was 18 in 1968, reaching 82 in 1990.

The area has also increased between these years. The area has grown towards to Izmir and the northern direction of the area. These years, most of the dwellings were located on treasury lands as unlicensed construction. All unlicensed constructions have been exempted by the Amnesty law numbered 2981 in 1985. So, these exemptions have accelerated the development process and land demand from treasury. On account of this, the land speculation has been favoured in these years. Especially, the lands were located at the north of the road. At those years, lands were subdivided into smaller plots for dwellings. All those lands, which had unlicensed construction, have been privatised in 1985. Thus, the land-ownership transformation process from public lands to private lands has increasingly been realised between these years. 107,7 ha in area have been transferred from public lands to public or private lands. An area of approximately, 18 ha has been area expropriated between 1968-1990 and most of these areas had been privatised prior to expropriation.

During these years, the land-use of the area also have changed. The industrial units have begun to be located at in Ayrancilar. They were located along the highway and then they have chosen different areas on the south. The other land-uses have also increased in the area. The commercial units and other social facilities have increased in the area, too. In these years, the development of housing estates can be monitored, as well. During these years, the unlicensed construction, subdivisions and shared sale, all of which are illegal, were not taken under control. For this reason, the separation type in the area, have been determined by subdivided plots and shared sales. The villages or other settlements which have been located near the area, have developed as leapfrog, in the vacant lands some times of private or other times of public ownership. The plots bought from individuals or from the public institutions can even belong to only one person.

In Ayrancilar Municipality; the number of shared plots type have increased between 1968-1998. In these years, there were shared public lands, too. Some of the lands have been shared in between other public institutions, or private peoples. Especially the treasury lands and village lands have been shared by people or other institutions. There were 497,4 ha of shared public lands in 1998.



1990 This period, there was an uncontrolled and untidy development in the area due to the lack of technique and social infrastructure being the by-product the rapid development process. One of the most important things is that, the plan has not been yet prepared for Ayrancılar, and the developed housing areas were first detached and had only one or two floor. But after the rapid development, the apartment houses began to be located in those areas. So, the area has developed lacking any public services. Because, most public lands have been privatised and been shared by private lands. For this reason, the Ayrancılar Municipality has developed very densely. There especially are a very dense pattern of buildings in the centre of the area. This are has increased up to 5. In the other areas, in the north and along the way, particularly the co-operative areas have developed. These areas are very dense and they do not have sufficient public services. These areas also, affect the other ones. The shared plots have adversely affected the developments taking place in the area. Most private plots, especially those in the centre, have been shared by public lands and are very small. But, still the sale of these public lands continue, because the demand for these lands are too much. For this reason, small plots form a very dense area in the centre. Because, instead of the detached houses, apartment houses take place. The co-operative areas have especially caused these dense constructions. After the formation of these dense construction conditions, poor areas have emerged. Because the public services insufficient for thew entire area. But these negative conditions have particularly been increased after the year 1990, during which all registration of plots have been completed. Co-operative areas have increased after 1990, too.

3. 1990 and after that: In 1985, structural alterations have begun to take place in planning institutions. The Development Act numbered 3194 has also been put into execution. Planning authorities have been transferred from central administrations to local administrations and the larger-city municipality and sub-provinces municipalities, all have been founded according to the Municipalities Act numbered 3030. Ayrancılar village has become a municipality in 1991. Thus, its first plan has been made in 1992.

The Ayrancılar Municipality has gone through a rapid development process with the first plan. According to this plan, total area of 705 area has been planned. 225 ha of this area has been allocated to residential areas and 120 ha area to industrial areas. The roads occupied an area of 252 ha. The remaining area (108 ha) was allocated to the other uses. The second master plan has been prepared in 1996 for Ayrancılar. By this plan, the amount of planned areas were increased. The total planned was 1806 ha in



1996. 1198 ha area of 1806 ha to be residential areas. Industrial areas were 128 ha. The roads had covered an area of 299 ha. 289 ha were allocated to the other uses. The land-ownership pattern has affected the physical plans. All private lands have been allocated to housing, commerce and industrial areas and public lands to public services (education area, socio-cultural facilities, green areas etc.). The big public lands have been sold to co-operatives, where the floor area ratio is kept rather very high. The centre of Ayrancılar Municipality has developed as a housing and commerce area. The sales have been maximum in this area, such that the land values also have risen up. Owing to this, the industrial areas were preferred to be located on the south of the main road and on the big plots, because, the land values are less than the other areas, and because, the demand in the centre and along the way is more than the other areas. At the same time, in these areas, the plot size is small and some plots shared. For this reason, public areas were not allocated to any activities. For example, there are not sufficient areas for education, green, social etc. Areas, because the plot size is small and public lands have decreased in this areas. Because of privatisation and amnesty law. In the centre and along the way, the floor ratio area has increased to 3 and 5. Thus, in the first settlement, the floor area ratio are high. Because all of the areas have been filled. As it can be seen in the plan, public lands have been allocated to common usage areas, and private lands to housing and commerce areas. Big lands have been allocated to housing co-operative areas and industrial areas. The land speculation has determined the location of these uses.

**When** If the land-use of the year 1998 is examined it can be understood that there exists a lot of vacant areas in Ayrancılar Municipality. There were 727 ha of land-filled building blocks, 47 ha of semi-vacant building blocks and 1032 ha of vacant building blocks. Thus, 57% of the area still was vacant in the 1998.

**The** The population has increased up to 6252 in 1997. Today this increase continues in Ayrancılar. The land speculation has increased as a result of the master plan and the choices being presented to the area. Hence, the subdivisions sales have increased more rapidly. The subdivided plot sizes have decreased during these years. They were between generally 0-500m<sup>2</sup> in size. There even were plots below 100m<sup>2</sup>. The big plot owners have subdivided their lands and have begun to sell these smaller lands. In those years, there were many subdivisions for public lands as well. The public administrations have subdivided and privatised their lands. Especially, the demand is more along the way that has the highest land value, than the other areas. Most of these



areas belong to treasury. The value of these lands have increased, as they have turned out to be building plots.

Most of the subdivisions have been located along the highway and in the centre of Ayrancılar. These subdivisions have expanded towards the north and south of the area. In that year, a total of 364 plots were subdivided into smaller part and so, 2275 new plots were established in Ayrancılar between 1991-1998. After the first registration year, the biggest plot subdivision has been made between 1991-1998. In these years, 7 plots were subdivided into smaller parts, which were the biggest subdivisions, and a total of 480 plots have been attained between 1991 and 1998.

The sale number has increased between 1991-1998 in Ayrancılar Municipality. The total sale number was 1910 in these years and most of them were private sales (925 plots). The sale from shared to private title deed plots have increased, as the shared sale were banned in 1985 with the development act numbered 3194. These type of sales were in the second row among all sales and 660 ha have been sold between the years 1991-1998.

In these years, the housing co-operative areas were located in the Ayrancılar. 32,2 ha area have been allocated to co-operatives. The most important co-operative belongs to Egekent 4. It has been located along the highway towards the west of the area. It is one of the nearest co-operatives to İzmir. The other important one is Üçpınar housing co-operative. This housing co-operative area has been located at the area opposite to the Egekent 4. Most of the construction of these co-operative areas have been completed. There also are different co-operative areas other than these. Especially, after 1990 co-operative areas have developed in Ayrancılar Municipality. Most of them have become expropriated plots and the initial owner of these areas were treasury or municipality. But after being privatised, these areas have been bought by co-operatives. The co-operative areas, were particularly located at the public lands. The co-operative areas, being located towards the south of the area, oreviously belonged to three village councils. Then, they have been sold to co-operative areas. The lands which belong to Egekent 4 also belonged to Treasury and today, the municipal lands still are being sold to co-operative areas, too. As it can be seen, the co-operative areas, all take place on public lands.

At the same time, there can be observed a piecemeal planning approach in Ayrancılar Municipality. These plans have been prepared by some big land-owners. In

this way, the speed of physical planning process has increased. These planned areas have particularly been located on south of the area between big lands.

If one is to only look at the physical plan, it can be possible to distinguish between the public and private lands. It is not necessary to make cadastral survey in order to distinguish private and public lands, because, in general, public lands have often been left for common usage areas e.g. social or educational facilities, green areas, sport area etc. The private lands have been left for residential, industrial areas, parking area, small green area and roads etc. On account of this, the public lands are to be diagnostic for location of urban and zonal services.

In the master plan, the common usage areas are a few, and most of them have not been availed for development. Some public lands have been planned as residential areas or other uses, too causing, land speculation to increase in these areas, and some big landowners to receive unearned incomes. In the master plan, there are high construction ratios. Especially, in the co-operative areas, the floor area ratio has increased up to 2. Egekent 4 has the highest floor area ratio. Here it is 2 and in the other co-operative areas, the floor area ratio is 1. The floor area ratio is different in the whole area. This ratio decreases down to 0,50. If floor area ratio is taken as 0,80 on the average, the construction right will be 958 ha of area for Ayrancılar Municipality. Thus, approximately, 300000 people can live in this area. Therefore, the land speculation can said to be increased in the area and big land-owners then can receive high unearned incomes. In other ways, after the master plan the new common usage areas will be needed by all inhabitants of in the areas. So, the municipality will have to expropriate new areas for services. For that reason, this rapid urbanisation will not be for the benefit of the public.

The existing land-ownership pattern and land-use, both influence the physical planning in the determination of the density decisions. In the area, the density proposals have been determined as to accord the existing settlement patterns along the highway and at the centre. Then the other areas have been affected by the existing pattern, too. The new density proposals were determined according to existing pattern. This existing pattern has affected the road, common usage areas and the other areas, too. Whereas the roads in the existing pattern are very narrow, the common usage areas are quite less. Most of the area have been allocated to residential and industrial areas. Even some of the existing public lands have been allocated residential areas in the master plan.



The existing land-ownership pattern and land-use both affect the implementation of planning decisions, directly. The unplanned existing area obstructs the construction of social and infrastructure facilities. For this reason, the high costs are to be paid for the social and infrastructure services. At the same time, the shared plots obstruct the implementation of the plan.

In vacant areas, there emerge different interactions. For example, the co-operative areas, firstly have been located in these areas. These areas were bought from individuals. The co-operative areas have increased in Ayrancılar resulting in a piecemeal plan to be prepared for these areas. So, the other plots have also been subject to arise in number, because, for these piecemeal plans, the infrastructure services have not been effectively prepared. So, the other plots will benefit from the infrastructure services of co-operative areas. These piecemeal plans out of the 1992 plans 1996 plans were included in these areas.

As it can be seen, the land-ownership pattern affects the implementation of plan, the expansion direction of the settlement and the social and infrastructure services.

In this part, a transformation process has been explained within the result of the researches. This transformation process is the transformation process of the settlements near the larger-cities and the metropolitan fringe areas. The suggestions will be introduced in the following parts as a result of this research, both for this settlement and for the others, which will have to face such transformation process.

## 7.2. THE CONCLUSION AND SUGGESTIONS

The finding of this research emerge as a result of the type of urbanisation, planning policies and institutional structure of our country, which are tested by means of data provided in the case study area of Ayrancılar Municipality. An relationships have been analysed in this research.

After the rapid population increase in Izmir, some people have begun to settle in the fringe area. As a result of development, most of the villages in the fringe area have become municipalities.

After the act numbered 3030, most of the physical planning authorities have been transferred to municipalities. For this reason, the development of the settlements in the fringe, could not be controlled. So, the people which work in the larger-city or around of the city have begun to settle in these settlements or villages. The laws, which

were put into execution have given permission to subdivisions and shared sales and they have gotten out of control. The atmosphere is to be quite appropriate for sellers. The trade tax is very low and in a short time, bought lands can be sold higher prices than the first price.

In this period, the population increase has been low in the municipality being analysed. However, the subdivisions and the sale were high. Especially, in the lands which belonged to treasury and municipality, the subdivision and sales were more than other lands. At the same time shared sales have increased during these years. The treasury and municipality land have, begun to be sold after the amnesty law numbered 2981. Especially, the co-operative areas have chosen the treasury and municipal lands for settling on the vacant areas. In this way, such attempts have formed a new attractive area in the fringe areas. In these areas the dwelling sector takes the first in row. The attractiveness of the fringe area has caused the population of larger-city to totally increase. The village land market then is activated, because of the banned shared sales. So, the sale of private title deed plots and big plots have increased. The new and big landowners have accelerated the physical planning process in this new land market and the piecemeal plans have begun to be prepared in vacant areas for location. In the produced physical plans, the evidence of the land-ownership in both the location of land-use types and the density proposals, can be seen. The existing land-ownership pattern and land-use have affected the physical planning decisions, at the same time, the physical planning decisions affect the existing pattern. As a result of this interaction, social and economic costs have been raised in the area.

Some negative effects have been found in the transformation process of the case study area. If the area had been planned in accordance with appropriate land and housing policies, this negation could have been prevented. Today, the cost of the results of these processes still have to be paid. These negations as follows;

- The lack of data related to public lands stock,
- The lack of sensitive, consisted policies related to the usage of public lands and extravagant consumption of public lands,
- In the fringe area, the spatial development not being directed within the village and the lack of both technical and social infrastructures. Thus, the formation of unhealthy environment,



- Formation of too small subdivisions caused narrow roads and so, physical planning decisions not being implemented,
- Formation of complex land-ownership and implementation of physical planning decisions becoming more difficult.
- The untidy spatial pattern, of subdivided and shared plots, increasing the cost of the implementation of the physical planning decisions which have been produced,
- The vacant areas being subject to unearned income within the urban development areas, first being transferred to a few land owners as a result of the urban development. The public both leaving their land stocks for common usage area and it expropriates the large areas for social and technical infrastructure. Thus, great costs to be paid.

The trade process has been made for speculative expectations. For this reason, the monetary sources, which can be transferred to productive sectors, are used for speculative expectations.

The suggestions, which were to provide solutions for the problems have to be considered in relation with the concepts of administration, politic, planning and implementation. Some suggestions pertaining to the management of the metropolitan city and urban land policies will be given in the next part.

The surrounding settlements of the metropolitan city and the areas between these settlements, both appear to be subject to very dense developments and intense property movement. Henceforth, the settlements have been affected by the urban developments in the fringe areas. First of all, the larger-city and the settlements surrounding the city have to be considered holistically and the development has to be controlled.

The whole of settlements reliant on the to larger-city in terms of daily labour force, have to be defined for the boundary of adjacent areas (mücavir saha sınırı) and the municipalities have to be studied together with the larger-city municipality, and within co-ordination. Thus, such areas should be included within a management hierarchy.

Whole master plans, in a hierarchical administrative structure have to be prepared by the larger-city municipality and local development plans have to be prepared by sub-provincial municipalities such that it has to be comply with the master plan decisions and be controlled by the larger-city. At the same time, the land policies

have been determined for these lands which appear to be available for urban development around the larger-city.

The land policies, of urban development have as well been realised in the area. According to the adopted regulations, subdivisions have been permitted to take place in these areas and these subdivisions could avail for the formation of small plots and of the narrow roads to pass by in these plots. There have not been left any lands to be used for common usages except for the roads and thus, all public lands have been left for common usages. Only the "arrangement share" of 35% of the private lands can be left for common use areas as. If these areas are above 35%, further exceptions are to be taken in the area. But as it is known, this rate is very low for development areas of high density. In Ayrancilar Municipality, the floor area ratio is different and high. For example, in the same region, the ratio is 2-1-0,80-0,50 etc. As it can be seen, there were areas very high density in Ayrancilar. If the floor ratio area is 1 the net population density will be 400 person/ha. So, approximately, 45% of development area has to be left for common usage areas and it has to belong to public land-ownership. In brief, all public lands within planned areas have been left for common usage areas and there still is a necessity for land in a ratio of 12%. For this reason, the new expropriation will have to be made by public and the cost of the technical and social infrastructure will have to be undertaken by public. For example, a person who has bought 10000m<sup>2</sup> can construct 100 dwellings and he can receive great amounts of unearned income, however, the public will be under big costs. Whereas the costs are to be shared in between public and private landowners, the landowners, who have settled at high density areas, get to more desertion and those who have settled at low density areas less desertion. In brief, depending on to density of the settlement the common usage areas have to be left vacant by landowners, irrespective of any charge for public in the development areas.

The different density zones and desertion rates have to be determined by the plans. The desertion rate of every plot and its density zone have to be registered in title deeds. Then, everybody can be informed about the construction rate of plots. In this way, land speculation can be prevented. So, public lands can benefit from different services. For example, an area needed for such activities like the city parks, sports complex or university can be provided in urban or regional scales. As these areas cannot be provided with desertions, co-operative areas have to be provided for the first dwellings, the lands can be rented by the lower income groups for construction of their dwelling. The lands, which are allocated to the common uses can be sold such that the



public lands stock can be kept for future. First of all, the entire inventory of public land stock has to be prepared.

According to these land policies being suggested in the first place, the sensitive plan has to be prepared for the existing pattern and basic infrastructure problems have to be encountered. For the new coming population who are the settle in the area in the future, the lands have to be provided according the to planning policies and physical planning; and the treasury and municipality lands can be rented to the low income groups for construction of their dwelling. The land-ownership should be kept in public hands for a long time span. If the settlement unites with the larger-city, these lands will be used as residential areas where sufficiently planned urban areas can be achieved.

For the realization of all these suggestions, alterations in legal and institutional structure are necessity. Furthermore, the following can be suggested for the direction of development in fringe areas.

Existing boundaries of adjacent areas have to be searched again considering the current and potential developments. They should even be expanded. The subdivisions, which were made according to regulations, have to be banned in the boundaries of adjacent area. First of all, the plan has to be prepared for the solution of technical, and social infrastructure of the existing pattern and direction of development. The development plans have to be implemented one by one. Arrangements related to the 18<sup>th</sup> Item of the planning stage for the development areas have to be accomplished and these boundaries have to be indicated on the plans.

The inventory has to be prepared for all public lands and the policies have to be produced for use of these lands for longer times in the whole city, and the sale of public lands have to be prohibited.

Certainly, some advers effects identified, can be decreased by a definite rate. The alterations related to institutions have to be realised to achieve radical solutions. Settlements which surround the central city affect the metropolitan development.

Consequently, the metropolitan cities affect the settlement within their surrounding and in turn the settlements affect the metropolitan cities, too. Only, some settlements of the fringe area are located in place of the first villages in the fringe area. Thus, the transformation process of these villages have to be well understood and controlled.

In this study; although the transformation process of social structure is one of the most important factors it cannot be analysed in the case study area, because of lack of

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In this study; although the transformation process of social structure is one of the most important factors it cannot be analysed in the case study area, because of lack of



time and capacity. Owing to this, the social structure has to be searched in detail in order to understand the process.

At the same time, the transformation process of the spatial structure cannot be searched, as well. Although the spatial transformation in the area since 1968 is well-known, any data for spatial transformation could not be found. Only, the existing pattern has been searched in this study and for the current time. After these studies, if new researches are to be made, new data will be necessary for the future studies.

Identifications of sellers and buyers and their manners have to be searched such that some data can be considered for the direction of the market. But due to lack of time it was not possible to reach to those people.

As the taxations are important to establish new land policies, the characteristics of the real estate and trade taxes are also important and they have to be searched since the beginning till today. They have to be searched for the obstructions in question or for decrease the land speculation, but these subjects could not be searched, because of the lack of the same reasons.

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**Table App.1.:** The Subdivision which result 810 Plots

PLOT NUMBER	PLOT SIZE	LAND-OWNERSHIP
891	25000	Mehmet Keskin
443	2500	Mehmet Keskin
443	2500	Mehmet Keskin
1325	5000	Mehmet Keskin
1245	1000	Mehmet Keskin
1010	25000	Mustafa Keskin
489	2500	Mustafa Keskin
316	1000	Mustafa Keskin
?	25000	Mustafa Güler
?	2500	Mustafa Güler
?	1000	Mustafa Güler
?	30000	Ferdi Balcı
?	1000	Ferdi Balcı
?	25000	Ferdi Balcı
445	7500	Mustafa Aşkın
?	1000	Mustafa Aşkın
?	5000	Mehmet Ateş
?	15000	Mehmet Ateş
?	1000	Mehmet Ateş
1103	25000	Osman Akpınar
?	2500	Osman Akpınar
1105	25000	Ahmet Evran
501	2500	Ahmet Evran
?	1000	Ahmet Evran
?	25000	Halil Avcı
1168	5000	Halil Avcı
?	1000	Halil Avcı
?	25000	İbrahim Sever
?	1000	İbrahim Sever
?	25000	Mecit Aşkın
524	2500	Mecit Aşkın
1806	1000	Mecit Aşkın
?	10000	Ahmet Aşkın
?	10000	Ahmet Aşkın
?	10000	İsmail Uysal
?	2500	İsmail Uysal
?	1000	İsmail Uysal
?	5000	Şayeste Güler
?	7500	Şayeste Güler
?	2500	Şayeste Güler
1044	15000	Mehmet Özer
393	2500	Mehmet Özer
?	1000	Mehmet Özer
?	5000	Mehmet Yıldırım
1294	2500	Mehmet Yıldırım

?	10000	Abdullah Taşkın
?	2500	Abdullah Taşkın
?	5000	Veli Şen
?	5000	Veli Şen
601	5625	Mehmet Çelebi
1060	25000	İsmail Tek
430	2500	İsmail Tek
759	10000	Ahmet Tek
?	2500	Ahmet Tek
941	11752	Süleyman Yıldırım
?	2500	Süleyman Yıldırım
528-529	10000	Süleyman Yıldırım
801	10000	Ali Özcan
673	15000	Ahmet Yenginer
?	5000	Ahmet Yenginer
682	15000	Mehmet Emin Özcan
1302	2500	Mehmet Emin Özcan
1041	25000	Mustafa Kutlu
?	2500	Mustafa Kutlu
?	7500	Mehmet Ay
542	5000	Mehmet Ay
?	15000	Ali Ersöz
?	2500	Ali Ersöz
?	1000	Ali Ersöz
?	15000	Ali Aktopa
?	2500	Ali Aktopa
?	1000	Ali Aktopa
?	5000	Ali Bozdağ
?	1000	Ali Bozdağ
?	10000	Ali Karadana
?	1000	Ali Karadana
?	20000	Ali Karadeniz
?	2500	Ali Karadeniz
?	1000	Ali Karadeniz
959	15000	Ömer Keskin
443	2500	Ömer Keskin
1277	1000	Ömer Keskin
1039	10000	Ahmet Tomba
1248	5000	Ahmet Tomba
?	1000	Ahmet Tomba
?	20000	Ali Dilsiz
?	5000	Ali Dilsiz
?	1000	Ali Dilsiz
?	10000	Ali Kor
?	1000	Ali Kor
?	20000	Hamza Yaman
?	2500	Hamza Yaman
?	1000	Hamza Yaman



687	8967	Mehmet Öncül
1106	15000	Mehmet Öncül
555	5000	Mehmet Öncül
937	1000	Mehmet Öncül
?	30000	Hafize Güler
?	2500	Hafize Güler
?	1000	Hafize Güler
?	9120	Hüseyin Tumba
?	2500	Hüseyin Tumba
?	1000	Hüseyin Tumba
?	15000	Abdül Kozan
1588	1000	Abdül Kozan
?	5000	Hüseyin Çelebi
?	27500	Hüseyin Çelebi
?	1000	Hüseyin Çelebi
?	5000	Abdül Bozdağ
?	5000	Abdül Bozdağ
?	1000	Abdül Bozdağ
243	26500	İbrahim Bozdağ
560	10000	İbrahim Bozdağ
?	1000	İbrahim Bozdağ
?	15000	Osman Doğan
?	2500	Osman Doğan
?	1000	Osman Doğan
?	27674	Osman Savaş
?	2500	Osman Savaş
?	1000	Osman Savaş
742	12000	Mehmet Karadana
?	5000	Mehmet Karadana
1439	1000	Mehmet Karadana
909	10000	Şevket Keskin
499	2500	Şevket Keskin
?	1000	Şevket Keskin
770	13120	Abdül Kozan
920	30000	Şevket Bulut
?	5000	Şevket Bulut
?	5000	Şevket Bulut
?	1000	Şevket Bulut
?	7500	Zekeriya Akyıldız
?	20000	Zekeriya Akyıldız
1458	1000	Zekeriya Akyıldız
?	10000	Abdullah Avcı
726-744	2500	Abdullah Avcı
?	1000	Abdullah Avcı
?	20000	Hasan Tomguç
?	1000	Hasan Tomguç
?	5000	Mehmet Sarıkaya
?	5000	Mehmet Sarıkaya

?	1000	Mehmet Sarıkaya
1029	15000	Mustafa Filiz
?	2500	Mustafa Filiz
?	1000	Mustafa Filiz
?	20000	Hüseyin Küçük
1581	2500	Hüseyin Küçük
?	1000	Hüseyin Küçük
?	25000	Hamza Alsan
?	2500	Hamza Alsan
?	1000	Hamza Alsan
?	20000	Ali Ulaş
?	2500	Ali Ulaş
?	11500	Hayri Cansever
?	2500	Hayri Cansever
?	1000	Hayri Cansever
?	5000	Halil Sakızlı
?	15000	Halil Sakızlı
?	2500	Halil Sakızlı
?	1000	Halil Sakızlı
?	5000	Ali Savran
?	1000	Ali Savran
703	5000	Ali Savran
830	10000	Mehmet Taban
1263	1000	Mehmet Taban
?	15000	Halil Candan
?	5000	Halil Candan
?	1000	Halil Candan
?	20000	Mehmet Ali Doğan
?	1000	Mehmet Ali Doğan
?	20000	Mustafa Ak
?	2500	Mustafa Ak
?	1000	Mystafa Ak
?	20000	Nuri Kılıçasar
?	5000	Nuri Kılıçasar
?	1000	Nuri Kılıçasar
?	10000	Bekir Yurga
?	5000	Bekir Yurga
?	1000	Bekir Yurga
?	15000	Fatma Arkan
?	2500	Fatma Arkan
?	1000	Fatma Arkan
?	2500	Bekir Taraç
?	5000	Bekir Taraç
?	5000	Bekir Taraç
?	5000	Bekir Taraç
?	1000	Bekir Taraç
866	15000	Mehmet Çelebi
1057	10000	Ayşe Çelebi



		Mehmet Çelebi
675	2500	Mehmet Çelebi
?	5000	Kazım Altaş
?	20000	Kazım Altaş
?	2500	Kazım Altaş
?	1000	Kazım Altaş
?	1000	Mehmet Sezer
?	1000	Mehmet Sezer
?	20000	Ahmet Yaman
?	2500	Ahmet Yaman
?	1000	Ahmet Yaman
?	25000	Mehmet Avcı
?	2500	Mehmet Avcı
?	1000	Mehmet Avcı
?	25000	Hamit Aşkın
?	2500	Hamit Aşkın
?	1000	Hamit Aşkın
?	25000	İbrahim Yavuz
430	2500	İbrahim Yavuz
?	15000	Bekir Taşkın
?	2500	Feyzullah Ünal
?	25000	Feyzullah Ünal
?	1000	Feyzullah Ünal
?	25000	Hasan Büker
?	1000	Hasan Büker
?	8170	Ayşa Filiz
?	1000	Ayşa Filiz
?	20000	Mehmet Ali Salman
578	2500	Mehmet Ali Salman
?	1000	Mehmet Ali Salman
?	10000	Mehmet Kor
?	1000	Mehmet Kor
?	10000	Emine Çevik
?	2560	Emine Çevik
?	1000	Emine Çevik
?	15000	Sefer Özkaya
?	2500	Sefer Özkaya
?	1000	Sefer Özkaya
?	15000	Zülfişah Kayhan
?	5000	Zülfişah Kayhan
525	2500	Zülfişah Kayhan
493	7500	Zülfişah Kayhan
1391	1000	Zülfişah Kayhan
?	10000	Aziz Hancı
?	2500	Aziz Hancı
?	1000	Aziz Hancı
?	10000	Fatma Kan
?	5000	Fatma Kan

?	5000	Fatma Kan
?	1000	Fatma Kan
?	10000	İbrahim Şencan
?	1000	İbrahim Şencan
769-773	25000	Süleyman Yavuz
563	2500	Süleyman Yavuz
?	1000	Süleyman Yavuz
?	25000	Mehmet Deveci
?	2500	Mehmet Deveci
?	20000	Rıza Gök
?	2500	Rıza Gök
?	5000	Salih Can
?	1000	Salih Can
?	2500	Salih Can
?	15000	Hamit Sülün
?	1000	Hamit Sülün
?	10000	Ahmet Celal Tona
440	2500	Ahmet Celal Tona
?	1000	Ahmet Celal Tona
?	10000	Mehmet Heydar
?	2500	Mehmet Heydar
?	1000	Mehmet Heydar
1048	5000	Vehbi
?	1000	Vehbi
?	10000	Mehmet Deveci
?	2500	Mehmet Deveci
?	1000	Mehmet Deveci
?	25000	Ahmet Çolar
?	2500	Ahmet Çolar
?	1000	Ahmet Çolar
?	20000	Osman Derici
?	2500	Osman Derici
?	1000	Osman Derici
?	20000	Hasan Karagün
?	2500	Hasan Karagün
857	20000	Ahmet Toy
497	2500	Ahmet Toy
?	1000	Ahmet Toy
854	10000	Destan Ünal
1259	1000	Destan Ünal
?	5000	Destan Ünal
?	15000	Turgut Torkan
?	1000	Turgut Torkan
?	2500	Turgut Torkan
?	5000	Ali Osman Balcı
?	2500	Ali Osman Balcı
?	1000	Ali Osman Balcı
?	15000	Mehmet Şen



?	2500	Mehmet Şen
?	1000	Mehmet Şen
?	5000	Ali Ay
?	5000	Ali Ay
?	2500	Ali Ay
?	1000	Ali Ay
?	10000	Hüseyin Filiz
?	2500	Hüseyin Filiz
?	1000	Hüseyin Filiz
?	5000	Mustafa Hilmi Duman
?	10000	Mustafa Hilmi Duman
?	2500	Mustafa Hilmi Duman
?	1000	Mustafa Hilmi Duman
?	5000	Adil Alkan
?	5000	Adil Alkan
?	1000	Adil Alkan
?	10000	Mehmet Karadana
?	2500	Mehmet Karadana
?	1000	Mehmet Karadana
?	10000	Süleyman Karadana
566	2500	Süleyman Karadana
?	1000	Süleyman Karadana
?	15000	Süleyman Coşkun
?	8000	Hasan Yavuz
?	2500	Hasan Yavuz
?	1000	Hasan Duman
?	5000	Hasan Duman
?	10000	Hasan Duman
696	9136	Hasan Duman
?	10000	Cemal Türk
?	5000	Cemal Türk
?	1000	Cemal Türk
?	10000	Ahmet Karakuz
?	10000	Ahmet Karakuz
?	5000	Ahmet Karakuz
?	1000	Ahmet Karakuz
?	15000	Ahmet Gürsel
?	2500	Ahmet Gürsel
?	1000	Ahmet Gürsel
?	5000	Salih Gökner
?	15000	Salih Gökner
?	5000	Salih Gökner
?	25000	Salih Gökner
?	1000	Salih Gökner
?	25000	Bayram Memili
?	1000	Bayram Memili
?	1000	Ahmet Girgin
?	5000	Ahmet Girgin

?	15000	Ahmet Girgin
?	1000	İsmail Özer
?	10000	İsmail Özer
?	1000	Sadık Erdoğan
?	2500	Sadık Erdoğan
?	15000	Sadık Erdoğan
?	2500	İbrahim Saltabaş
?	15000	İbrahim Saltabaş
?	1000	İbrahim Saltabaş
?	25000	Muharrem Ceylan
?	1000	Muharrem Ceylan
?	2500	Muharrem Ceylan
?	1000	İbrahim Kahraman
?	10000	İbrahim Kahraman
?	15000	İbrahim Sak
?	2500	İbrahim Sak
?	1000	İbrahim Sak
?	10000	Yusuf Karadeniz
574-587	2500	Yusuf Karadeniz
?	1000	Yusuf Karadeniz
?	10000	Mehmet Top
?	2500	Mehmet Top
?	15000	Ahmet Özdamar
?	5000	Ahmet Özdamar
?	5000	Ahmet Özdamar
?	1000	Ahmet Özdamar
?	10000	Reşal Özöksey
?	10000	Reşal Özöksey
?	2500	Reşal Özöksey
?	1000	Reşal Özöksey
?	1000	Mehmet Taşkaya
?	1000	Mehmet Taşkaya
?	25000	Hasan Koparan
?	2500	Hasan Koparan
?	1000	Hasan Koparan
876	15000	Mehmet Arı
?	2500	Mehmet Arı
1247	1000	Mehmet Arı
?	17500	Osman Ögüt
?	2500	Osman Ögüt
?	1000	Osman Ögüt
?	10000	Ali Osman Baler
?	15000	Kemal Görgülü
?	5000	Kemal Görgülü
?	1000	Kemal Görgülü
?	5000	Hasan Basri Duman
502-577	5000	Hasan Basri Duman
1255	1000	Hasan Basri Duman



900	20000	Mehmet Ali Sng
?	5000	Mehmet Ali Sng
?	1000	Mehmet Ali Sng
?	5000	Mustafa DoĖan
?	2500	Mustafa DoĖan
?	1000	Mustafa DoĖan
?	1000	Cemal Glten ve ocukları
?	2500	Cemal Glten ve ocukları
?	25000	Cemal Glten ve ocukları
694-699	25000	İbrahim ve Hidayet Glten
544	2500	İbrahim ve Hidayet Glten
938	1000	İbrahim ve Hidayet Glten
1501	2500	Mehmet Ay
?	1000	Meryem Gzel
?	5000	Meryem Gzel
?	10000	Meryem Gzel
?	1000	Hseyin Tng
?	20000	Hseyin Tng
426	2500	Hseyin Tng
1025	15000	Hseyin Pınar
?	1000	Hseyin Pınar
987	10000	Hseyin Yavuz
730	2500	Hseyin Yavuz
?	1000	Hseyin Yavuz
?	20000	Hasan Orak
564	2500	Mustafa Filiz
?	1000	Mustafa Filiz
?	20000	Mustafa Filiz
?	1000	Nuran Fidan
?	2500	Nuran Fidan
?	5000	Nuran Fidan
444	25000	Mehmet Sevin
881	15000	Mehmet Sevin
?	1000	Cafer Diner
?	10000	İsmail Kor
?	1000	İsmail Kor
?	10000	Hseyin Karadana
?	2500	Hseyin Karadana
?	1000	Hseyin Karadana
?	25000	Raziye akır ve Evlatları
?	2500	Raziye akır ve Evlatları
?	1000	Raziye akır ve Evlatları
?	10000	Abdl Karadana
733	2500	Abdl Karadana
?	1000	Abdl Karadana
?	5000	Mehmet Akın
?	5000	Mehmet Akın
?	2500	Mehmet Akın

?	1000	Mehmet Akın
1131	20000	Arif Dinçer
?	2500	Arif Dinçer
?	1000	Arif Dinçer
?	5000	Şükrü Ak
?	5000	Şükrü Ak
?	1000	Şükrü Ak
963	10000	Fehmi Ek
1175	5000	Fehmi Ek
?	1000	Fehmi Ek
?	15000	Cemal Turan
?	15000	Mehmet Ünal
?	2500	Mehmet Ünal
?	1000	Mehmet Ünal
962	20000	Habibe Cinkılıç
?	2500	Habibe Cinkılıç
?	1000	Habibe Cinkılıç
?	5000	Raşit Öz
?	1000	Raşit Öz
?	5000	Mustafa Oba
434	2500	Mustafa Oba
?	1000	Mustafa Oba
815	10000	Kadir Saltabaş
?	1000	Kadir Saltabaş
?	25000	Mustafa Sonkan
?	2500	Mustafa Sonkan
?	1000	Mustafa Sonkan
?	10000	Hasan Gönülal
?	5000	Hasan Gönülal
?	1000	Hasan Gönülal
764	14187	Aziz Taşkafa
488	2500	Aziz Taşkafa
1511	1000	Aziz Taşkafa
?	10000	Yaşar Özden
?	9222	Yaşar Özden
?	1000	Yaşar Özden
867	25000	Mehmet Yılmaz
?	2500	Mehmet Yılmaz
?	1000	Mehmet Yılmaz
886	10000	Ali Demir
1239	1000	Ali Demir
?	20000	Lütfi Ekren
576	2500	Lütfi Ekren
?	1000	Lütfi Ekren
?	5000	Hatice Savaş
?	10000	Hatice Savaş
?	1000	Hatice Savaş
?	10000	Zülfü Şimşir



?	1000	Zülfü Şimşir
?	15000	Mustafa Taban
?	1000	Mustafa Taban
?	30000	Ali Karacaer
?	2500	Ali Karacaer
?	1000	Ali Karacaer
847	10000	Nuh Durak
?	5000	Nuh Durak
?	1000	Nuh Durak
?	5000	Rasim Demir
?	5000	Rasim Demir
?	5000	Rasim Demir
?	5000	Rasim Demir
?	10000	Rasim Demir
?	2500	Rasim Demir
?	2500	Rasim Demir
?	1000	Rasim Demir
848	10000	Bekir Demirbilen
554	7500	Bekir Demirbilen
779	1000	Bekir Demirbilen
?	25000	İsmail Yel
?	2500	İsmail Yel
?	1000	İsmail Yel
?	5000	Sefer Sülün
?	1000	Sefer Sülün
?	10000	Yahya Ulu
?	2500	Yahya Ulu
?	1000	Yahya Ulu
?	1000	İbrahim Taşkaya
?	5000	İbrahim Taşkaya
?	1000	İbrahim Taşkaya
?	9113	Ceriye Kan ve Evlatları
?	15000	Ceriye Kan ve Evlatları
?	2500	Ceriye Kan ve Evlatları
?	1000	Ceriye Kan ve Evlatları
?	10000	Veli Daya
?	2500	Veli Daya
?	1000	Veli Daya
?	30000	Abit Çakar
?	5000	Abit Çakar
?	1000	Abit Çakar
?	10000	Mehmet Can
?	2500	Mehmet Can
?	1000	Mehmet Can
?	25000	Raşit Güler
?	2500	Raşit Güler
?	1000	Raşit Güler
?	25000	Yusuf Kaymak
?	2500	Yusuf Kaymak

?	1000	Yusuf Kaymak
?	10000	Fatma Haner
?	1000	Fatma Haner
?	10000	Hasan Balcı
?	1000	Hasan Balcı
?	5000	Süleyman Sert
377-382	7500	Süleyman Sert
?	1000	Süleyman Sert
?	20000	Ahmet Hamdi Karaman
?	1000	Ahmet Hamdi Karaman
1080	15000	Abdullah Yılmaz
?	2500	Abdullah Yılmaz
?	1000	Abdullah Yılmaz
?	10000	Destan Ceylan
?	2500	Destan Ceylan
?	5000	Destan Ceylan
?	1000	Destan Ceylan
700	5000	Kazım Yamanlar
714	2500	Kazım Yamanlar
?	1000	Kazım Yamanlar
?	15000	Hatice Aykal ve Evlatları
?	5000	Hatice Aykal ve Evlatları
?	1000	Hayrettin Eğer
?	1000	Hatice Aykal ve Evlatları
893	5000	Abdullah Yılmaz
?	15000	Abdullah Yılmaz
499	5000	Abdullah Yılmaz
?	5000	Abdullah Yılmaz
?	1000	Abdullah Yılmaz
?	20000	Abdurrahman Güler
?	2500	Abdurrahman Güler
?	1000	Abdurrahman Güler
?	5000	Mehmet Ali Demir
?	5000	Mehmet Ali Demir
?	5000	Mehmet Ali Demir
?	1000	Mehmet Ali Demir
?	1000	Burhanettin Öner
?	15000	Ahmet Coşkun
?	2500	Ahmet Coşkun
?	1000	Ahmet Coşkun
?	5000	Mustafa Güdücü
?	2500	Mustafa Güdücü
?	1000	Mustafa Güdücü
?	1000	Abdurrahman Keskin
1580	2500	Abdurrahman Keskin
?	1000	Abdurrahman Keskin
?	10000	Ali Kayahan
?	2500	Ali Kayahan



?	1000	Ali Kayahan
?	5000	Davut Akçan
?	2500	Davut Akçan
?	1000	Davut Akçan
?	10000	Hasan Boran
?	2500	Hasan Boran
?	1000	Hasan Boran
?	5000	Rabia Pehlivan
?	5000	Rabia Pehlivan
?	5000	Rabia Pehlivan
?	1000	Rabia Pehlivan
?	10000	Süleyman Şahin
?	1000	Süleyman Şahin
?	2500	Mehmet,Hüseyin,Halil, Makbule Filiz
?	1000	Mehmet,Hüseyin,Halil, Makbule Filiz
?	26250	Mustafa Akın
?	2500	Mustafa Akın
?	1000	Mustafa Akın
?	20000	Ahmet Ege, Karısı ve Evlatları
?	2500	Ahmet Ege, Karısı ve Evlatları
?	1000	Ahmet Ege, Karısı ve Evlatları
?	15000	Ahmet Ay
?	1000	Ahmet Ay
?	15000	Halil Gençtürk
?	1000	Halil Gençtürk
?	5000	Ayşe Baylan
?	1000	Ayşe Baylan
?	5000	Osman Özdemir
?	1000	Osman Özdemir
?	5000	Yaşa Turan
?	2500	Yaşa Turan
1436	1000	Yaşa Turan
?	15000	Ahmet Ertunç
?	2500	Ahmet Ertunç
?	1000	Ahmet Ertunç
?	15000	Ömer Özdamar
?	1000	Ömer Özdamar
?	14125	Müslüm Gülden
?	5000	Müslüm Gülden
?	1000	Müslüm Gülden
1115	5000	Kamil Meydan
?	2500	Kamil Meydan
?	1000	Kamil Meydan
?	15000	Bekir Baki Türe
?	2500	Bekir Baki Türe
?	15000	Halil Yıldırım
1313	2500	Halil Yıldırım
?	1000	Halil Yıldırım

?	10000	Zeynep Sevim
?	1000	Zeynep Sevim
?	10000	Adil Demirtaş
?	20000	Adil Demirtaş
1173	5000	Adil Demirtaş
1134	5000	Hamit Yaman
?	2500	Hamit Yaman
?	1000	Hamit Yaman
698	5000	Halil Yılmaz
923	10000	Halil Yılmaz
?	2500	Halil Yılmaz
?	1000	Halil Yılmaz
?	25000	Emin Çalışkan
?	10000	Emin Çalışkan
?	1000	Emin Çalışkan
?	15000	Ahmet Uysal
?	1000	Ahmet Uysal
?	5000	Ahmet Uysal
?	11500	Akide Şen
?	5000	Akide Şen
?	1000	Akide Şen
?	1000	Cemal Turan
?	20000	Mumin Süzer
?	1000	Mumin Süzer
?	1000	Ahmet Yıldırım
?	2500	Ahmet Yıldırım
?	10000	Ahmet Yıldırım
859	10000	Halil İbrahim Tonguç
?	2500	Halil İbrahim Tonguç
?	1000	Halil İbrahim Tonguç
?	10000	Hüseyin Güdücü
?	2500	Hüseyin Güdücü
?	1000	Hüseyin Güdücü
?	10000	Cevriye Usta
?	15000	Ayşe Özçetin
?	1000	Ayşe Özçetin
?	1000	Ali Candan
?	1000	Mehmet Boran
?	5000	Naile Görgülü
?	5000	Emine Gözdan ve Evlatları
?	1000	Emine Gözdan ve Evlatları
?	10000	Emine Gözdan ve Evlatları
?	20000	Salih Turan
?	2500	Salih Turan
?	1000	Salih Turan
?	2500	Cevriye Usta
?	1000	Cevriye Usta
1323	5000	Mustafa Ateş



?	5000	Mustafa Ateş
1465	1000	Mustafa Ateş
?	10000	Esmehan Aşkın
?	2500	Esmehan Aşkın
?	15000	Esmehan Aşkın
?	2500	Esmehan Aşkın
?	5000	Hamidiye Yavuz
?	1000	Hamidiye Yavuz
?	15000	Mehmet Bozdağ
?	5000	Mehmet Bozdağ
?	1000	Mehmet Bozdağ
?	20000	Kadir Ekren
?	10000	Mehmet Ali Akdoğan
?	5000	Mehmet Ali Akdoğan
?	1000	Mehmet Ali Akdoğan
1413	10000	Mustafa Akdoğan
?	2500	Mustafa Akdoğan
?	1000	Mustafa Akdoğan
1006	10000	Sadık Alkan
?	5000	Sadık Alkan
?	5000	Sadık Alkan
?	1000	Sadık Alkan
?	15000	Ahmet Batmaz
?	2500	Ahmet Batmaz
?	1000	Ahmet Batmaz
880	20000	Hamza Altan
?	1000	Hamza Altan
?	2500	Şerife Seçkin
1537	5000	Şerife Seçkin
?	10000	Hisseli
?	1000	Hisseli
?	10000	Mahmut Yazar
?	5000	Mahmut Yazar
?	2500	Mahmut Yazar
1004	15000	Kezban Ayata
681	2500	Kezban Ayata
?	1000	Kezban Ayata
?	1000	İbrahim Ekici
?	15000	Mustafa Akdeniz
492	2500	Mustafa Akdeniz
965	5000	Abdül Çakır
?	15000	Hisseli
?	2500	Hisseli
?	1000	Hisseli
914	20000	Muharrem Erbatmaz
?	1000	Muharrem Erbatmaz
?	20000	Hisseli
?	1000	Hisseli



LANDOWNERSHIP TRANSFORMATION PROCESS  
IN AYRANCILAR-TORBALI SCALE:1/6000 (1998)



1998 (MARCH)

LEGEND

PRIVATE LANDOWNERSHIP

INDEPENDENT TITLE DEED

SHARED TITLE DEED

COOPERATIVE LAND

PUBLIC LANDOWNERSHIP

TREASURY LAND

AYRANCILAR MUNICIPALITY

YAZIRASI MUNICIPALITY

YAZIRASI VILLAGE

AYRANCILAR MUNICIPALITY-TREASURY

MUNICIPALITY-YAZIRASI VILLAGE

TREASURY-PRIVATE LAND

TREASURY-AYRANCILAR MUNICIPALITY

FOUNDATION LAND

AYRANCILAR MUNICIPALITY-PRIVATE LAND

TREASURY-AYRANCILAR MUNICIPALITY-PRIVATE LAND

AYRANCILAR MUNICIPALITY-YAZIRASI

MUNICIPALITY-YAZIRASI VILLAGE-TREASURY

THE STATE WATER SUPPLY ADMINISTRATION (DSİ)

THE TURKISH REPUBLIC STATE RAILWAYS (TCDD)

AYRANCILAR MUNICIPALITY-TREASURY

MUNICIPALITY-YAZIRASI VILLAGE-PRIVATE

LAND

FOREST (JORNAL VE TENCİLE GAYRI TARIHİ SAHİPLERİN KAPATILDIĞI)

ÇP04 NERLİHAN KARATAS

LANDOWNERSHIP TRANSFORMATION PROCESS  
IN AYRANCILAR-TORBALI SCALE:1/6000 (1995)



LEGEND

PRIVATE LANDOWNERSHIP

INDEPENDENT TITLE DEED

SHARED TITLE DEED

PUBLIC LANDOWNERSHIP

TREASURY LAND

AYRANCILAR MUNICIPALITY

YAZIRASI MUNICIPALITY

YAZIRASI VILLAGE

AYRANCILAR MUNICIPALITY-TREASURY

MUNICIPALITY-YAZIRASI VILLAGE

TREASURY-PRIVATE LAND

TREASURY-AYRANCILAR MUNICIPALITY

COOPERATIVE LAND

AYRANCILAR-PRIVATE LAND

TREASURY-AYRANCILAR-PRIVATE

LAND

YAZIRASI-YAZIRASI

TREASURY-AYRANCILAR-YAZIRASI

THE STATE WATER SUPPLY

ADMINISTRATION (DSİ)

TCDD (THE TURKISH REPUBLIC STATE

RAILWAYS)

FOREST (JORNAL VE TENCİLE GAYRI

TARIHİ SAHİPLERİN KAPATILDIĞI)

AYRANCILAR-YAZIRASI

YAZIRASI-PRIVATE LAND

FOUNDATION LAND



LANDOWNERSHIP TRANSFORMATION PROCESS  
IN AYRANCILAR-TORBALI SCALE:1/6000 (1990)



LEGEND

- PRIVATE LANDOWNERSHIP
- INDEPENDENT TITLE DEED
  - SHARED TITLE DEED
- PUBLIC LANDOWNERSHIP
- TREASURY LAND
  - AYRANCILAR MUNICIPALITY
  - YAZIBASH MUNICIPALITY
  - YOGURTCLAR MUNICIPALITY
  - AYRANCILAR-YAZIBASH-YOGURTCLAR
  - TREASURY-PRIVATE LAND
  - TREASURY-AYRANCILAR MUNICIPALITY
  - COOPERATIVE LAND
  - AYRANCILAR-PRIVATE LAND
  - TREASURY-AYRANCILAR-PRIVATE LAND
  - YAZIBASH-YOGURTCLAR
  - TREASURY-AYRANCILAR-YAZIBASH-YOGURTCLAR
  - THE STATE WATER SUPPLY ADMINISTRATION (DSİ)
  - TCDD (THE TURKISH REPUBLIC STATE RAILWAYS)
  - FOREST GORMAN VE TENCİLE GAYRI TAMI (OLD GÜNDÜZAN RAPATILDI)
  - AYRANCILAR-YAZIBASH-YOGURTCLAR-PRIVATE LAND
  - FOUNDATION LAND



LANDOWNERSHIP TRANSFORMATION PROCESS  
IN AYRANCILAR-TORBALI SCALE:1/6000 (1985)



LEGEND

- PRIVATE LANDOWNERSHIP
- INDEPENDENT TITLE DEED
  - SHARED TITLE DEED
- PUBLIC LANDOWNERSHIP
- TREASURY LAND
  - AYRANCILAR MUNICIPALITY
  - YAZIBASH MUNICIPALITY
  - YOGURTCLAR MUNICIPALITY
  - AYRANCILAR-YAZIBASH-YOGURTCLAR
  - TREASURY-PRIVATE LAND
  - TREASURY-AYRANCILAR MUNICIPALITY
  - COOPERATIVE LAND
  - AYRANCILAR-PRIVATE LAND
  - TREASURY-AYRANCILAR-PRIVATE LAND
  - YAZIBASH-YOGURTCLAR
  - TREASURY-AYRANCILAR-YAZIBASH-YOGURTCLAR
  - THE STATE WATER SUPPLY ADMINISTRATION (DSİ)
  - TCDD (THE TURKISH REPUBLIC STATE RAILWAYS)
  - FOREST GORMAN VE TENCİLE GAYRI TAMI (OLD GÜNDÜZAN RAPATILDI)
  - AYRANCILAR-YAZIBASH-YOGURTCLAR-PRIVATE LAND
  - FOUNDATION LAND





LANDOWNERSHIP TRANSFORMATION PROCESS  
IN AYRANCILAR-TORBALI SCALE:1/6000 (1970)



LEGEND

- PRIVATE LANDOWNERSHIP
- INDEPENDENT TITLE DEED
  - SHARED TITLE DEED
- PUBLIC LANDOWNERSHIP
- TREASURY LAND
  - AYRANCILAR MUNICIPALITY
  - YAZIRASI MUNICIPALITY
  - YOGURTÇULAR MUNICIPALITY
  - AYRANCILAR-YAZIRASI-YOGURTÇULAR
  - TREASURY-PRIVATE LAND
  - TREASURY-AYRANCILAR MUNICIPALITY
  - COOPERATIVE LAND
  - AYRANCILAR-PRIVATE LAND
  - TREASURY-AYRANCILAR-PRIVATE LAND
  - YAZIRASI-YOGURTÇULAR
  - TREASURY-AYRANCILAR-YAZIRASI-YOGURTÇULAR
  - THE STATE WATER SUPPLY ADMINISTRATION (DSİ)
  - ICDD (THE TURKISH REPUBLIC STATE SAUKATIN)
  - FOREST GORMAN VE TENCİLE GAYRI TANI OLDUKUNAN KAPATILDI
  - AYRANCILAR-YAZIRASI-YOGURTÇULAR-PRIVATE LAND
  - FOUNDATION LAND



LANDOWNERSHIP TRANSFORMATION PROCESS  
IN AYRANCILAR-TORBALI SCALE:1/6000 (1968)



LEGEND

- PRIVATE LANDOWNERSHIP
- INDEPENDENT TITLE DEED
  - SHARED TITLE DEED
- PUBLIC LANDOWNERSHIP
- TREASURY LAND
  - AYRANCILAR MUNICIPALITY
  - YAZIRASI MUNICIPALITY
  - YOGURTÇULAR MUNICIPALITY
  - AYRANCILAR-YAZIRASI-YOGURTÇULAR
  - TREASURY-PRIVATE LAND
  - TREASURY-AYRANCILAR MUNICIPALITY
  - COOPERATIVE LAND
  - AYRANCILAR-PRIVATE LAND
  - TREASURY-AYRANCILAR-PRIVATE LAND
  - YAZIRASI-YOGURTÇULAR
  - TREASURY-AYRANCILAR-YAZIRASI-YOGURTÇULAR
  - THE STATE WATER SUPPLY ADMINISTRATION (DSİ)
  - ICDD (THE TURKISH REPUBLIC STATE SAUKATIN)
  - FOREST GORMAN VE TENCİLE GAYRI TANI OLDUKUNAN KAPATILDI
  - AYRANCILAR-YAZIRASI-YOGURTÇULAR-PRIVATE LAND
  - FOUNDATION LAND





LAND QUALITY SCALE:1/25000



LEGEND

- 1. and 2. CLASS
- 3. and 4. CLASS
- 5. and 6. CLASS
- 7. and 8. CLASS



ÇİĞİR NESLİHAN KARATAY

GEOLOGIC STRUCTURE SCALE:1/25000



LEGEND

- NEOGEN
- KUVATLENİR
- MİNASOLİT

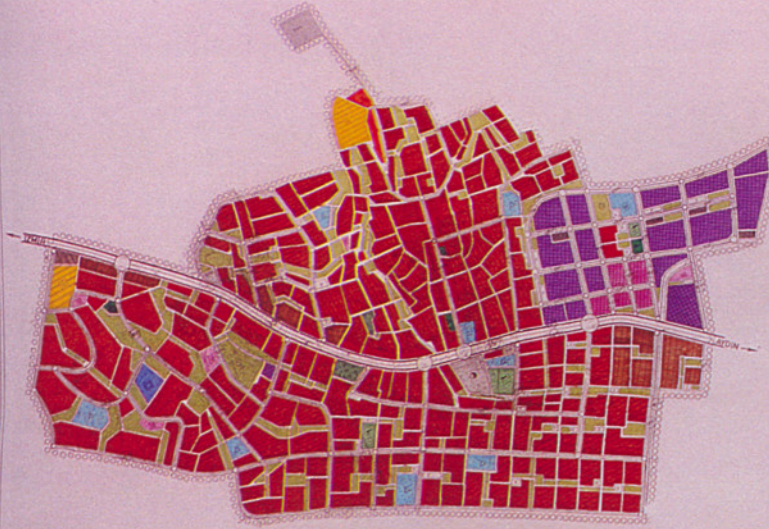


ÇİĞİR NESLİHAN KARATAY



# AYRANCILAR MASTER PLAN SCALE 1/5000

1992



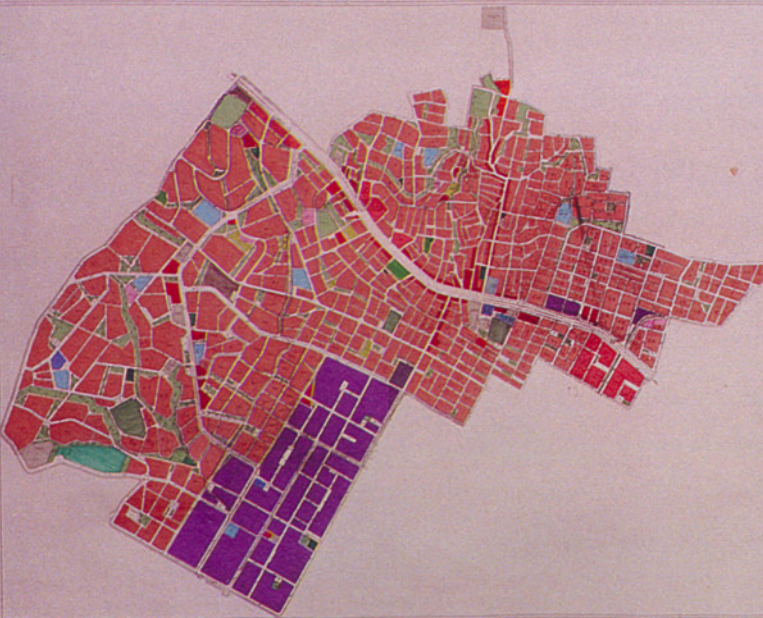
## LEGEND

- RESIDENTIAL AREA
- ADMINISTRATION CENTERS
- OFFICIAL FACILITY AREA
- MILITARY AREA
- COMMERCE AREA
- INDUSTRIAL AREA
- SMALL INDUSTRIAL AREA
- STORE AREA
- URBAN WORKING AREA
- TOURISM AREA
- NATURAL CONSERVATION AREA
- GREEN AREA
- AFFORESTATION AREA
- PRIMARY SCHOOL
- SECONDARY SCHOOL
- VOCATIONAL SCHOOL
- CULTURAL FACILITIES AREA
- HEALTH FACILITIES AREA
- RELIGIOUS FACILITIES AREA
- CLOSED AND OPEN NEIGHBORHOOD SPORT AREA
- GENERAL PARKING AREA
- TERMINAL
- FUEL OIL STATION

CP004 NESLİHAN KARATAŞ

# AYRANCILAR MASTER PLAN SCALE 1/5000

1996



## LEGEND

- RESIDENTIAL AREA
- MUNICIPALITY SERVICE AREA
- COMMERCE AREA
- INDUSTRIAL AREA
- MILITARY AREA
- URBAN WORKING AREA
- TOURISM AREA
- GREEN AREA - PARK
- CHILD PLAY AREA
- AFFORESTATION AREA
- PRIMARY SCHOOL
- HIGH SCHOOL
- SOCIO-CULTURAL FACILITIES
- SANITARY FACILITIES AREA
- RELIGIOUS FACILITIES AREA
- CLOSED AND OPEN NEIGHBORHOOD SPORT AREA

CP004 NESLİHAN KARATAŞ

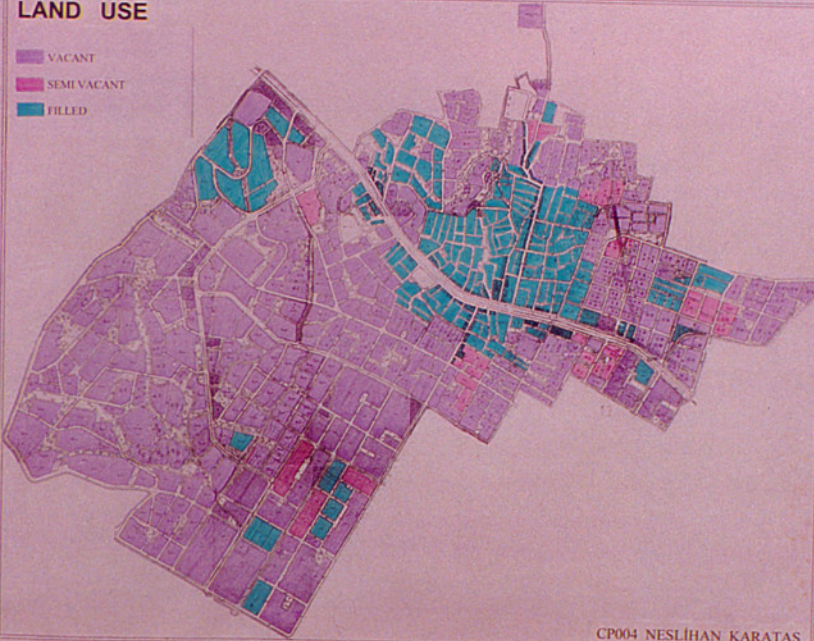


# AYRANCILAR MASTER PLAN SCALE:1/3000



## LAND USE

- VACANT
- SEMI VACANT
- FILLED



CP004 NESLIHAN KARATAŞ

# AYRANCILAR MASTER PLAN SCALE:1/3000



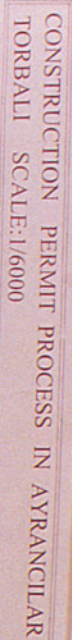
## LEGEND

- 0.40 - 0.75 FLOOR RATIO AREA
- 0.76 - 1.00 FLOOR RATIO AREA
- 1.01 - 1.50 FLOOR RATIO AREA
- 1.51 - 2.00 FLOOR RATIO AREA
- 2.01 + FLOOR RATIO AREA
- THE PLOTS WHICH ARE BELONG TO BIG LAND-OWNERS
- PRIVATE LANDS
- COOPERATIVE AREAS
- TREASURY LANDS
- AYRANCILAR MUNICIPALITY
- YAZIBASI MUNICIPALITY
- YOGURTÇULAR VILLAGE COUNCIL
- DSİ



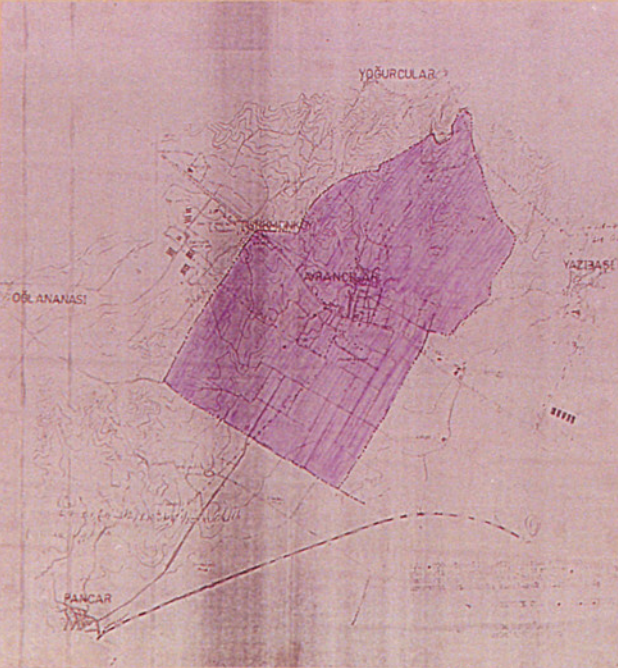
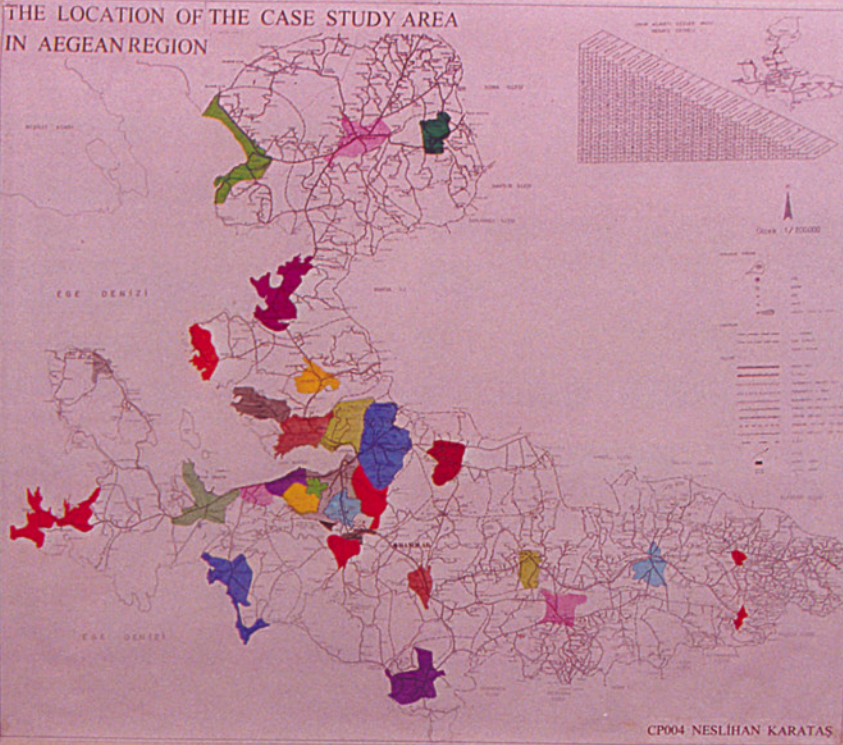


## CP004 NESLİHAN KARATAŞ





THE LOCATION OF THE CASE STUDY AREA  
IN AEGEAN REGION





## PHOTOGRAPHS FROM THE SITE



A. GENERAL VIEW FROM AYRANCILAR



B. GENERAL VIEW FROM AYRANCILAR



C. GENERAL VIEW FROM AYRANCILAR



D. VIEW FROM THE VILLAGE



E. VIEW FROM THE VILLAGE



F. VIEW FROM THE VILLAGE



G. VIEW FROM THE VILLAGE



H. VIEW FROM THE VILLAGE



I. VIEW FROM THE VILLAGE



J. AYRANCILAR ÇÖPLÜK BİNA KOOPERATİFİ



K. BAĞCIÖLÜ BİNA KOOPERATİFİ



L. BAĞCIÖLÜ BİNA KOOPERATİFİ



M. AYRANCILAR ÇÖPLÜK BİNA KOOPERATİFİ



N. AYRANCILAR ÇÖPLÜK BİNA KOOPERATİFİ



O. VIEW FROM THE VILLAGE



P. BAĞCIÖLÜ BİNA KOOPERATİFİ



Q. VIEW FROM THE VILLAGE



R. VIEW FROM THE VILLAGE



S. VIEW FROM THE VILLAGE



T. VIEW FROM THE VILLAGE



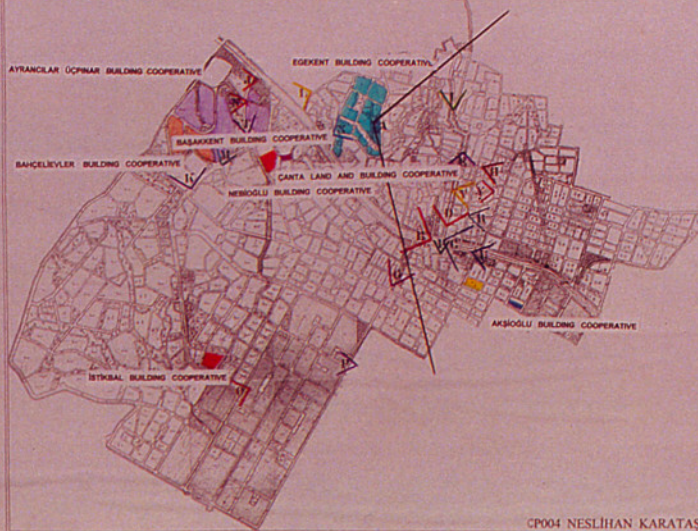
U. VIEW FROM THE VILLAGE

CP004 NESLİHAN KARATAŞ

## AYRANCILAR MASTER PLAN SCALE: 1/10000



### PHOTOGRAPHS FROM THE SITE



CP004 NESLİHAN KARATAŞ