



AN EXAMPLE FOR THE SUBURBAN SETTLEMENTS FORMED DEVELOPING CITIES BY INDUSTRIALIZATION: ADAPAZARI OTUZİKİ EVLER DISTRICT

Meryem HAYIR¹

Abstract

It is seen that because of its cosmopolite structure, Otuziki Evler district, which is located on the land between Çark Stream that carries the plenty water of Sapanca Lake to Sakarya River and the eastern foots of Hızır İlyas Hill that surrounded the Çark stream from the west, is related to the constitution of the suburban expansion due to industrialization. This area, where many people from different cultures live together, is extremely engrossing in reference to culture geography. In this district, where immigration from the Balkans and different areas of Turkey is at a remarkable level, people generally maintain the customs native to the regions where they come from. On the other hand, this area is preferred by people who live alone due to low rents. After the Marmara Earthquake in 1999, due to the hills being preferred as settlement areas, villa-style unconnected houses have been built on the hilly lands which lay on the western side of the Çark Stream valley. It is estimated that this situation will make this area a preference in the near future. This study was prepared with the data based on the area observations and local records.

Key Words: Adapazarı, Serdivan, Otuziki Evler, suburban, multiculturalism

Intruduction

The cities that grew mainly by means of agriculture before 1950, started to change due to the developments in Turkey and in the world after that date. The cities that rapidly became overpopulated by the immigrants coming from rural areas were faced with some problems such as illegally built shack houses. Adapazarı, being one of these cities, grew rapidly after Sakarya became the central town of the province in 1954. The city was especially affected and changed by the developments in the eastern hinder land of Istanbul.

Sakarya is naturally an agricultural area and due to industrialization after it become a province the population increased rapidly. Adapazarı had the highest increase in population which made it necessary to build new homes. Close to the industrial establishment incorporated in 1951, Carriage Industry Incorporated, (TÜVASAŞ) Otuzikievler, was built for the workers working for the corporation. They were built at the farthest end of the city near the Çark Stream which is the river-bed for Sapanca Lake. They were built as single-story, brick stacked houses now located on the north-east of the district and the district was named after they were built. The growth of the district started at that point along the river-bed and stretched to the south-west part of the area, but after the 1999 earthquake the growth changed its direction to the north-west plateau of the hills. Today the residential areas are about 3 km² and many buildings were destroyed in the 1999 earthquake. There were not many casualties compared to the destruction of the buildings. This is mainly because the residents were predominantly immigrants who were in their villages in August for the hazelnut harvest season during the earthquake.

In this study, after putting forward the structure and the growth of Otuzikievler District, the cultural background of the city will be emphasized. Lastly, the effects of the earthquake on the growth of the district will be studied.

¹ Sakarya University, Department of Geography, Serdivan- Adapazarı, Turkey.

Establishment and Development of Otuzikievler District

It took its name from the thirty two single-story buildings constructed for workers who worked for (TÜVAŞAŞ) in 1960, in a place where the Serdivan river intersects the Çark Stream. These lands had been used for agriculture up to this date. Depending on TÜVAŞAŞ and other constructed industrial factories, this district spread from the back of these buildings up to the valley. In 1971-1972, 24 Evler (24 Houses) were settled on the slopes of the valley by the cooperative. Moreover, two-story Ceylan Evler was constructed by the agricultural department and three-story Yıldız Blocks were built by YSE in 1974. In addition to these houses, Arkent Resident, which has thirteen buildings with three-stories each with two flats, was constructed. Except for these sites, many unplanned buildings were raised in the vicinity. This destroyed the views and unhealthy places were created. The buildings were constructed as multiple-story buildings in contrast to the first buildings so they were damaged more by the 1999 earthquake.

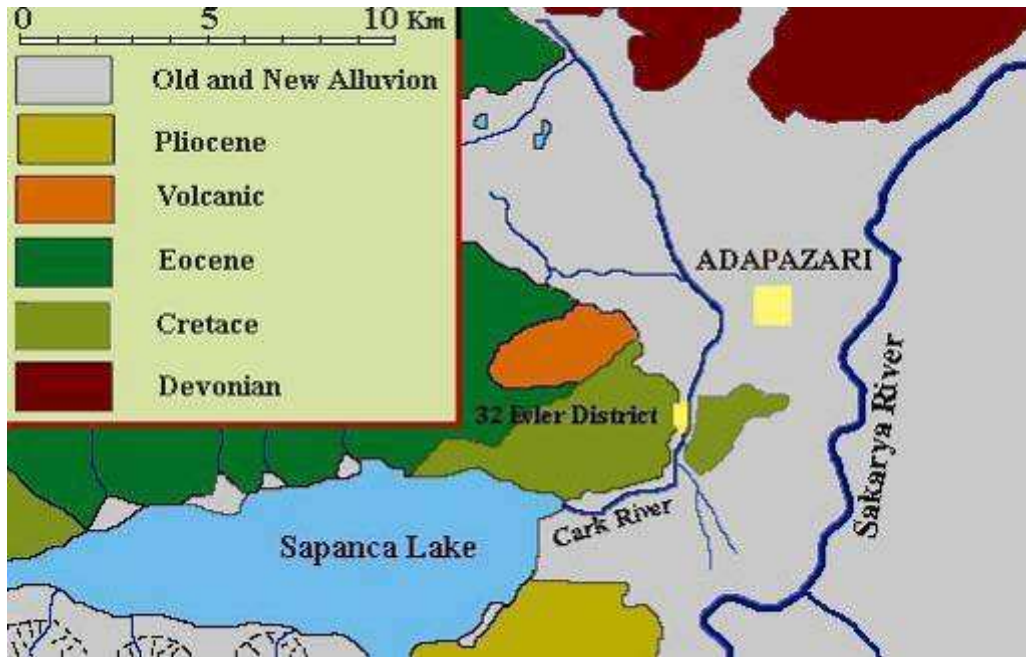


Fig 1: Geology and Location Map
After: Bilgin 1984, modified from Map 2

After the 1999 earthquake, the tendency to move to the hill top areas caused new houses to be built on the western skirts of the plateau and in 2003 the construction of three-story houses named the 21 Houses Residence was completed. The value of these three-story houses are around 350.000-400.000 YTL. The construction of Tandoğan Houses, which consist of six blocks of four flats, were partially completed and the construction is still under way.

This residential area, which belonged to a low-income group until the last earthquake now has a more different appearance than before and was constructed toward the Hızır İlyas hill. It now attracts high-income families. The fact that the new connection road, which connects the E-5 highway to Adapazarı and Sakarya University, is about to be finished plays an important part in the development of the district.

The rapid increase in population of the Otuziki Evler District since the 1980's caused it to separate from the Bahçelievler District in 1996 and become an independent district. Its

population was 6320 at the time. The borders of the district were Maltepe in the east, Bahçelievler in the north, Kemalpaşa in the west, and Beşköprü districts in the south. Today 6750 people live in the district. One of the important troubles is the high voltage lines that pass through Otuziki Evler district. Although there is not any scientific survey on this subject, it is suggested that the sickening rate among children is extremely high.

We are going to study the development of Otuzikievler District in different periods.



Photo 1: A view from Otuzikievler District

1950-1975 Workers Association Residence Period

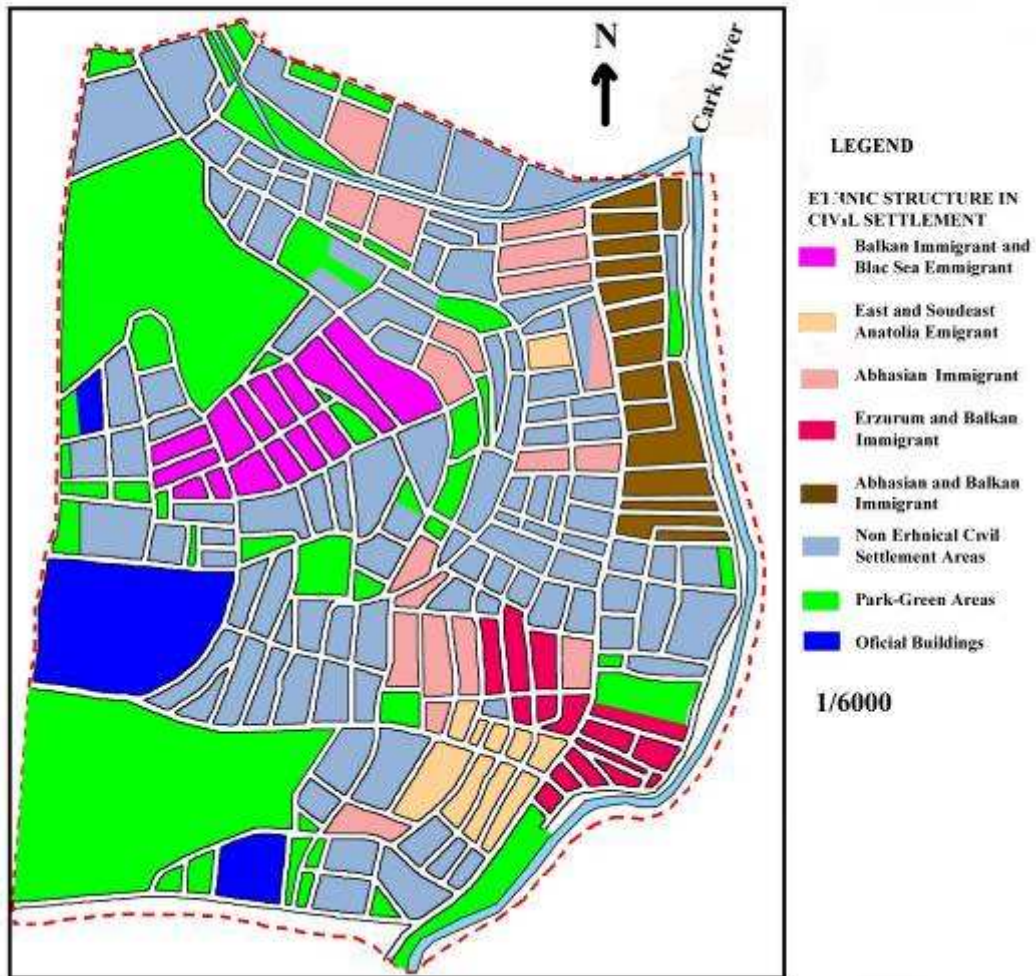
In our field of study, we have not come across any kind of residential sign. As a result of the interviews, it was determined that the agricultural areas located at the base of Beşköprü district, were used by some people who were called the land lords by the inhabitants of the district.

After 1954, the Akarsu family emigrated from Yugoslavia, initially settled in Kastamonu, then bought land and settled in the area with 4-5 families. This is the first family which settled in the southern part of the district on the skirts of the plateau located close to a water spring. Affected by their relatives already living at Adapazarı, the family also immigrated to this area.

The second family that settled in the district was the Bozkurt family who emigrated from Kosovo to Kayseri, and after visiting a few provinces, got settled in the now called Ziya Paşa Street in 1952. These two groups, who established the first settlements, were six families with a population of 45-50 people.

In 1951, with the establishment of TÜVAŞAŞ, the need for a new work force made the area attractive for settlement. Initially, houses were built in the Bahçelievler District by the factory for the workers.

Map 2: The plan of 32 Evler District and Ethnic Structure



Map 2: The plan of Otuzikievler District
Source: The reconstruction Plan of Serdivan Municipality and site studies

These houses did not meet the needs for housing, so in another area close to the factory, 32 more houses were built. When these houses were built in 1960, they were located near the borders of the district. When the Otuzikievler area grew and became a district, these houses were located to the northern part of the district on Emek, Zerafet, and Ihlamur streets. These areas which were used for agriculture, gradually turned into a residential area with the effect of industrialization.

In those years some land owners in Beşköprü, stated that they were negatively affected by industrialization with the following statement: "Factories are built, then we are left without shepherds".

Between the years of 1970 and 1975, three residential areas were built in the district. The first of these was 24 Evler Residence which was also constructed for the workers of the Carriage Factory by a cooperation system. This residence, which was constructed on land where Kerem Sümbül and Kılıç streets are located today, is different from other settlements that were located on a slope. During the same period, two-story Ceylan Evler Blocks were built by the Turkish Agricultural Institution, on Akay and Gazi streets, and three-story buildings each with four flats called Yıldız Blocks, were constructed on the Gazi Street by

YSE. As we look at the era between 1950-1975, the structures within the district were done according to a plan and were constructed as residential areas.



Photo 2: Yıldız and Ceylan Evler Residential area

Unplanned Growth Period (1975-1999)

The district maintained its planned growth until 1975 but the city faced problems such as illegal constructions especially after 1980 due to social and economical problems in Turkey. The most important factors for a developing economy were the need for a new workforce and immigration to the west due to terror attacks in the east. Therefore, the city rapidly grew towards the south. In this period most of the houses were built with no plan or control. The district was chosen due to the low value of the land at that period.

The construction at the base of the valley increased the value of the lands, and the hillside area of the district became popular for illegal construction. Settlements in the area called Hızır İlyas Hill, started after 1985. Due to insufficient ground services, the development was rather slow.

During that period, the only planned construction was Arkent Residence, the construction of which was started in 1987 and finished in 1993. These houses were built on the intersection of Beşköprü and Dost Street. They were 16 three-story buildings with two-flats each. No other structures were built up by the cooperation system until the 1999 earthquake.

Growth After the Earthquake

The Marmara earthquake on August 17, 1999, destroyed the Sakarya. There were 3891 casualties in the area and Otuzikievler District was also affected. The damage done by the earthquake to houses and offices can be seen in illustration-1. Eighteen out of 30 offices in the area at that time were damaged; only 4 offices were not damaged. Eighteen per cent of houses were heavily damaged and half of the 609 houses were damaged in some way or another.

Table1: House and workplace damage state in Otuzikievler District after 17 August, 1999

DEGREE OF DAMAGE	HOUSING		WORKPLACE	
	NUMBER	RATE (%)	NUMBER	RATE (%)
Heavily damaged	112	19	18	60
Middle damaged	68	11	6	20
Lightly damaged	161	26	2	7
Not damaged	268	44	4	13
Total	609	100	30	100

Source: Sakarya Governorship, 2000

As a result of the earthquake 10 lives were lost. The houses that were built during the uncontrolled and unplanned period were more affected by the earthquake. Especially, three or four-story buildings were either destroyed or heavily damaged, despite the fact that they were built recently. On the other hand, the houses that were built according to a plan, did not receive any damage, even through they were older. After the earthquake Hızıl İlyas Hill gained value since the soil is more rigid than the lands situated on both sides of the stream along the western part of the district.

The people who wanted to escape from the city centre and those who were considered well-off in Adapazarı bought land from the hill area and started to built detached houses. 21 residences which were constructed after the earthquake were also located on the hill area. The value of these houses was approximately 350,000-400,000 YTL as of 2007. This condition resulted in many people many people living in a limited area.



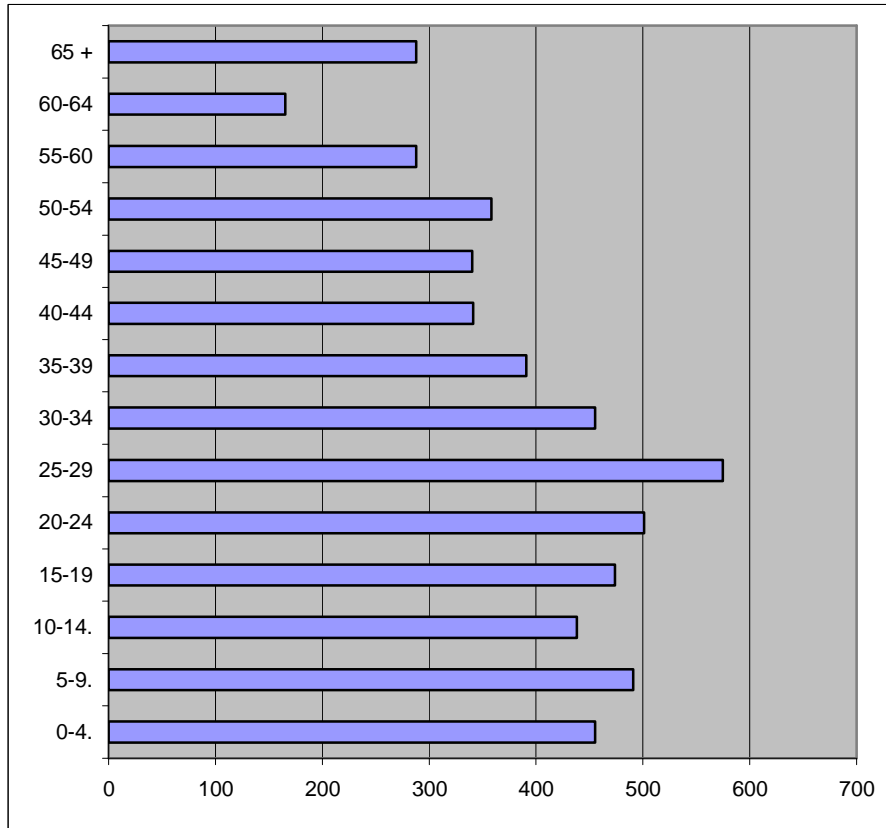
Photo 3: Yirmibirevler Residence and in front "Gecekondu" type Houses and a damaged Street

Effects of Earthquake on Otuzikievler

Otuzikievler District is situated near the Çark Stream in the east which drains the water from Lake Sapanca and on the eastern skirts of Hızır İlyas Hill which is an extension of the Kocaeli Plateau in the west and on Beşkoprü Valley. This valley base used to be the river

bed of the Sakarya River so it has rather flexible soil due to sweepings from the hill and alluvial materials carried by the river. However, the area where Hızır İlyas Hill was situated was formed during the upper Cretaceous Era, thus, the soil has stronger formations of marl, sandstone, and limestone (Bilgin, 1984). Therefore the hill area was more preferred for settlement after the earthquake compared to the valley base.

The 1999 earthquake has affected this district and Adapazarı negatively. The buildings that had three-stories or more and were constructed on an alluvial soil valley base were especially destroyed or heavily damaged. Not many lives were lost compared to the destruction the earthquake caused. This is mainly because, as we mentioned before, most of the houses were unoccupied at the time. Despite the fact that many buildings were heavily damaged, only ten lives were lost.



Graph 1: Distribution of Otuzikievler Populations According to Age Groups

Source: House determination filling card of rural health center

Because of the earthquake, the census in 2000 came down to 6024 people. According to the General Census results of 2000, there were 3200 women and 2824 men. Today the district has regained the people lost by the earthquake. The registered number of people in the district has reached 6750. According to a rural health center, the total population is 5662. Out of the total population, 2807 are men and 2755 are women. An important aspect of the population is that it is settled on the valley base and the on the outskirts of the hill. The most important reason for an increase in the population was the rents and house costs being cheaper than other residential areas. We can easily say this for the part of the city that grew before the 1999 earthquake.

Main Road and Street System

The district stretched towards from the north to south as a result of the topography. On the east to west part there is not a main street because the land is not suitable. When looked from a bird's eye view, uniform grid-type residential structure can be seen. Beşköprü Street

parallel to the Çark River is the busiest street in the district. Almost all offices in the vicinity are located on this street. Another property of the street is that it connects Sedirvan Street to Beş Köprü and the E-5 highway. Lastly, due to the problems of expropriation caused by the landowners, the route of the connection road was changed to the south west part of the district. This situation has caused advantages as well as disadvantages. The settlement has already been affected by the noise of the railway and to a degree was free of noise by not letting connection routes to pass through the district. However, this was not good news for the enterprises in the area. All of the east to west streets in the valley base vertically intersect the Beşköprü Street. As you go up hill, due to unsuitable land, the symmetry of the residential area is lost. The present streets have a 5-6 m width. In some places, as in Baykal Street, the residential plan was not followed and the streets were narrowed by the houses built on the areas that normally belonged to the street. There is not pavement and the lighting in the street is inadequate. The residents built 1-1.5 m high walls around their homes. This is a cultural reflection of the traditional and oriental city model.

The transportation in the district is maintained by buses and minibuses. However, the transportation on the sloppy parts of Akarsu Street can be a problem when it snows.

The streets in the district are mostly covered by Asphalt. Beşköprü Street on the other hand is covered by cobblestone pavement. Some streets that were nearly constructed are still stabilized. There are still no streets on the upper parts of the areas between Pehlivan Street and Akarsu Street. This area is expected to become densely populated in a short time since the connected road built between E-5-Campus-Sedirvan will go through that part of the district.

Due to the physical location of the district, no industrial institutions were established in the area. However, as mentioned above, there are many industrial establishments around the district. Following the changes Beşköprü Street went through after the earthquake and after the E-5 highway opened to the public, the settlement became very popular.



Photo 4: A Private Villa in Sirma Street



Photo 5: Restricted structures Baysal Street

Economical activities

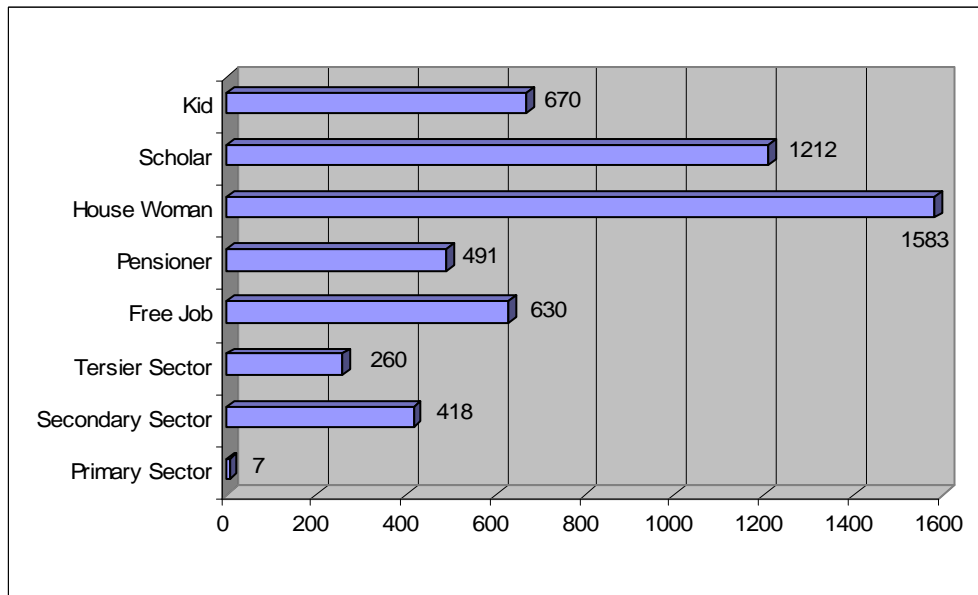
Due to the physical location of the district, no large scale industrial corporation was established in the district borders. However, as mentioned above, many large-scale industrial foundations were established very near to the district. Especially, the settlement

has become more attractive after the changes that were seen in the Beşköprü district following the earthquake and the connecting way to the E-5 high-way was put into service.

Beside the small-scale business establishments, there are two important foundations that serve as middle scale. These are the Veil-Guipure Factory and the Plastic Window Woodwork-Glass Atelier. These could be called middle scale industrial establishments since they have twenty workers. Except for these, the other workplaces in the district are grocery stores, coffeehouses, barber, etc., which service district residents.

Table 2: Distribution of commercial operations in Otuzikievler District

Operational Sort	Number	Operational Sort	Number
Grocery- Market	12	Tailor	1
Café	8	Halk Ekmek Seller	1
Internet Cafe	4	Bakery	1
Barber	4	Tekel Seller	1
Butcher	2	Pharmacy	1
Hardware Dealer	2	Restaurant	1
Coal Dealer	2	Muffin House	1
Plumber	2	Tube end Water Seller	1
Sundries - Glassware	2	Carpenter	1
Furniture Shop	1	Total	48

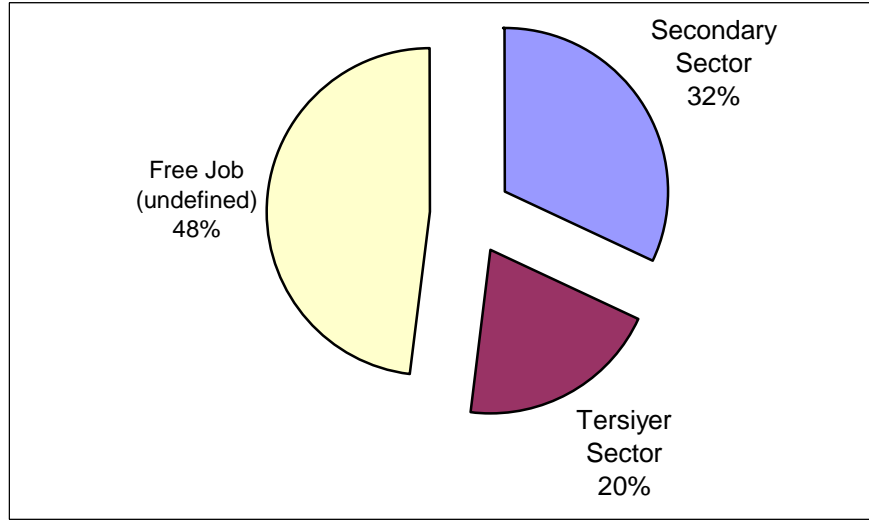


Graph 2: Economical activities and positions of people stay in Otuzikievler

Source: House determination filling card of rural health center

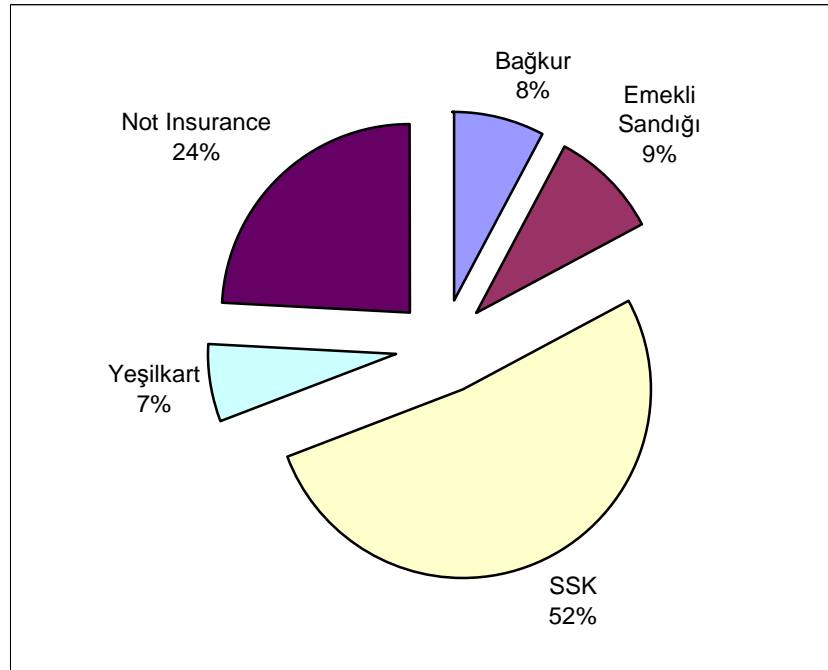
Most of the people who live in this district work in the factories located in Adapazari. Initially, the collective houses in the settlement were built for workers. Now the rate of retired people is relatively high. Nine per cent of the total population is retired. Approximately half of the people who work describe themselves as free job members, even though half of these people are unemployed. The unemployment ratio in the district is approximately 25%. In this settlement, where the laboring women ratio is extremely low, 1583 woman, which constitute 30% of the total population, described themselves as "house women". Unemployment is very common among women. In some parts of the settlement developed after the

earthquake, many people who have different jobs such as academics, doctors, and lawyers settled down. These people differentiated and enriched the cultural structure of the settlement.



Graph 3: Distribution of the working people in otuzikievler according to economical activity brunches.

Source: House determination filling card of rural health center



Graph 4: The Social Security Systems that people live in Otuzikievler were bounded.

Source: House determination filling card of rural health center

This district has very few social areas that were shown in table 3. Because the district is very close to the city center, many services are provided from the city center. Most of the residents in this area have low income, so the individual investments are very restricted.

Results

Otuzikievler was transformed from agriculture land into a settlement area after 1950. During this transformation, we can see 3 distinct periods: (1) The collective houses period



that developed between 1950 and 1975 which can be called a planned period. In this period, collective houses were built for the people who work for various establishments. (2) The unplanned period was developed between the years 1975 and 1999. In this period, many illegal buildings were built in the surrounding area of previously constructed buildings. (3) The period of unconnected houses with gardens were mostly constructed on Hızır İlyas Hills, because of trends intended to escape from the plains after the earthquake. These distinct trends in structuring have formed the cultural structure of the settlement.

Table 3: Social Life Areas

Social Life Area	Number
Primary School	2
Mosque	3
Sanitary House	1
Kids Park	2
Basketball Field	1
Walkway	2.5 km

Most of the people who live in this district work in the factories in Adapazarı. Initially, the collective houses in the settlement were built for workers. Now the percentage of retired people is relatively high. Approximately half of the people who work, actively describe themselves as free job members, despite half of these people being unemployed. The labor ratio is very low among women in this district. Also, the unemployment ratio is very high.

Otuzikievler District is a minimized status of large cities due to its cosmopolitan population structure. Many people who have different cultures and income levels live together in this area. It is possible to find people from almost every city in our country, although some cities are dominant. However, the basis of the district is the families which emigrated from the Balkans. In this district, where many people live together from all over the Balkans such as Macedonia, Kosovo, Greece, Albania, Bulgaria, and Bosnia-Herzegovina, many people from different parts of Anatolia live here as well. Beside the people from the various counties of Sakarya, there are many people from Adana, Kocaeli, Bitlis Mardin, Bingöl, Erzurum, Trabzon, Samsun, Çorum, Kayseri, Nevşehir, Sivas and Kastamonu. Because of its structure type, it can be defined as a suburban settlement developing through industrialization.

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