Analysis of the secondary housing settlements based on user assessments

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Abstract

Construction of secondary housing settlements in Turkey began at the beginning of the 1980s, and it remains to increase rapidly. These settlements are being demanded by users despite inadequate infrastructure facilities, negative characteristics of the settlements and low construction qualities of the houses. From this viewpoint, the buoyant demand for the settlements, although it's negative characteristics, was determined as a subject that needs questioning. For this purpose, a case study was structured to obtain the user's assessments concerning with the characteristics of the secondary housing settlements. It has been conducted in Atakent town located on the Mersin-Silifke coastline in the East Mediterranean region of Turkey. The case study was realized with 350 subjects who are in the area for touristic activities, and the subjects were chosen by stratified sampling technique. In the context of the case study; users' assessments about settlements and houses had obtained, factors that affect owning a secondary house had determined, and users' expectations and preferences about secondary housing settlements had conceived. The results of the study will be able to contribute to the process of realizing the qualified secondary housing settlements and near surroundings through the obtained knowledge about user expectations and preferences.

Keywords: Coastal areas, secondary housing settlements, user assessment, user expectations, user preferences.

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İkincil konut yerleşmelerinin kullanıcı değerlendirmesine dayalı analizi

Özet

Türkiye'de 1980'li yıllarda başlayan ikincil konut yerleşmelerinin inşası günümüzde artan hızla devam etmektedir. Bu yerleşmeler her ne kadar altyapı olanaklarından yoksun, inşa kaliteleri düşük, yapısal yerleşme ve yakın çevre özellikleri olumsuz olsa da kullanıcılar tarafından talep görmektedirler. Bu noktadan hareketle olumsuz niteliklerine rağmen ikincil konutların talep görme nedenlerinin araştırılmasına ihtiyaç duyulmuştur. Bu amaçla; ikincil konut alanlarındaki kullanıcıların yerleşmeye ilişkin değerlendirmelerinin tespit edilmesine yönelik bir alan çalışması kurgulanmıştır. Çalışma; halen ikincil konut alanı olarak yüksek talep gören Mersin-Silifke sahilinde Atakent Beldesinde gerçekleştirilmiştir. 350 deneğin katıldığı çalışmada denekler tabakalı örneklem tekniği ile belirlenmiştir. Alan çalışması kapsamında deneklerin konut ve yerleşme hakkındaki değerlendirmeleri elde edilmiş, ikincil konut sahibi olmayı etkileyen faktörler belirlenmiş ve kullanıcıların ikincil konut alanlarına ilişkin beklenti ve tercihleri değerlendirilmeye çalışılmıştır. Çalışmada ulaşılan sonuçların daha nitelikli ikincil konut alanlarının ve yerleşmelerinin elde edilmesi sürecine katkıda bulunacağı düşünülmektedir.

Anahtar kelimeler: *Kıyı alanları, ikincil konut yerleşmeleri, kullanıcı değerlendirmesi, kullanıcı beklentisi, kullanıcı tercihi.*

1. Introduction

It is clear that, users essentially have a house to satisfy physical and psychological needs of him/her. However, psychological needs of the users could be seen much more effective than physical needs when the influencing factors on decision for having a secondary house are considered. Users are not having a secondary house with the primary concern about meeting the basic needs such as safety, sheltering etc.. A secondary house meets sheltering and safety needs inherently, but users have a secondary house mostly to satisfy socio-psychological needs such as vacation, recreation, socialization and etc. in general.

In the light of the mentioned it is presumed that; characteristics of secondary housing settlements should differ from urban life living environments' characteristics with its natural amenities and opportunities that enable benefiting from natural sources. It is requested that features of the secondary housing settlement, and it's near surrounding have to be in an expected way, because it has been owned optionally and predicted to contain opportunities for recreation. Tuan [1] makes a distinction between living places as "home places" and "chosen places". Based on this view, the permanent house is "home place" and accumulation of ordinary experiences produces deep feelings to home place. Attachments about "chosen place" may develop quickly as a result of extraordinary landscape [2]. The extraordinary landscape is a factor in choosing a place for mobile people. The other factor in choosing a place by mobile people is that they select places that are best suited for them. [2]. In this regard, secondary housing settlements can be seen as "chosen place" to live in for a period in a year. Besides the

landscape, other distinct and attractive natural characteristics of the environment can be determined as factors that affect having a second home. The first examples of secondary housing settlements in America were seen in the areas which have aesthetic beauty such as lakes, shores, beaches and mountainous regions. These regions could be identified as recreational areas with its opportunities [3]. In addition to this, some of the studies indicate that climatic factors are among the items which affect secondary housing ownership [4].

Second home characteristically can be considered as a structure that encloses houses and apartments, camping and boats [4]. In Goodall's [5] view, a second home is a property owned or rented on a long lease, as the occasional residence of households that the owner usually lives elsewhere. Coppock [6] suggested that although ownership is implied as a criterion, it is not a necessity for defining second homes that are owned by those who use them or not. Second homes have a range of potential functions, as they may be rented on a long lease, and/or used for weekend, vacation and recreational purposes. Visser [7] defined second home as immobile and unserviced supplementary accommodation and classification of the second home was articulated in his study under four headings:
   a) comprised a private home often visited at the weekend and on holidays with the family and non-paying guests;
   b) intermittently served as commercial holiday homes, which were used as private holiday homes, but were let at high season to defray costs;
   c) intermittently comprised private holiday homes, often purchased for retirement, but meanwhile let as commercial holiday homes, apart from occasional family use;
   d) a service such as commercial holiday homes, owned as an investment and usually let and managed by an agent.

Second homes, which were privately owned and built at the seaside are generally used in the summer term in Turkey. For this reason these structures are named as "summer house" in Turkish. However, the term of ''second home'' also includes other forms of accommodation. In this paper, "secondary house" term will be used to denote houses, which were built at the seaside, used for second-home purposes for a term of a year, privately owned and whose owner lives elsewhere.

Secondary housing usage for recreational and touristic aims in the East Mediterranean coast of Turkey is a common phenomenon, and it is popular for domestic tourists since 1980s [8]. Secondary houses in Turkey are privately owned, built close to the sea and used for recreational or touristic purposes typically.

The subjected area, the Mersin Silifke coastline is appealing with its natural amenities for the construction of secondary housing settlements. The Mersin Silifke coastline is demanded by users with the intention of having a secondary house at a beautiful shore. On the other hand, the area is attractive to the contractors and the land holders because of the high rent value and high land-speculation profit. Considering the dwelling as an investment vehicle, the expense of having a vacation in a touristic facility, popularity of having a secondary house and accepting "having a secondary house" as a statue symbol [4], stimulating and getting easier to have a secondary house by organizations like cooperative societies are the main factors that increase demand for having a secondary house. Users also have a secondary house for taking the given advantages of natural and

climatic potential, and making activities diverse in comparison to the permanent living environment. Furthermore, high profit of land speculation from secondary housing settlements is the other reason which inflames construction of secondary housing settlements such as in research areas where it began at the end of 1980s and continues still. Land speculation profit, low purchasing power of the users and low expectations from the built environment can be defined as prominent factors and reasons that accelerate transforming coastal areas and building secondary housing settlements. Consequently, natural patterns of the coastal areas are occupied and deteriorated.

Limonlu Town is one of the 12 towns that placed on Mersin Silifke coastline. The building process can be seen in the pictures below which was taken in the 1980s (Figure 1a) and today (Figure 1b). Extending of the citrus gardens to the shore in the 1980s is seen in the first photograph, and occupation of the gardens by the recent secondary housing blocks can be seen in the latter photo. However, citrus gardens in the town were preserved by the Limonlu municipality and building construction activity was restricted in the area for the last few years. Nevertheless, the construction process and transformation is still continuing in other towns on the coastline and its effects on natural pattern can be monitored easily (Figure 2).
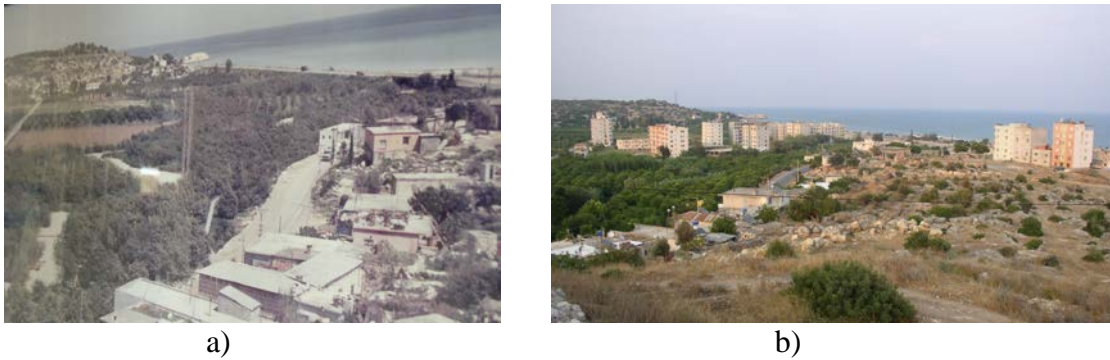

a)   b)

Figure 1. a) Limonlu Town, at the beginnings of 1980s, and b) Limonlu Town, today.

Figure 2. Dense and high building structures among citrus gardens at shore in Ayaş Town on Mersin Silifke coastline.

It is thought that; unification of natural and cultural values with built environment could not be obtained positively after alteration and transformation process of the area. Unfortunately, natural characteristics of the shores are destructed under high densities of the buildings. This kind of development is the main problem of many coastal towns in Turkey. Intensive usage and higher building densities also resulted in infrastructure problems in these areas. Exclusively with the aim of managing the increased traffic density in the summer term; the main road across the coastline is widened. This operation also demolished natural pattern as seen in Figure 3. The other infrastructure problem is the lack of the sewerage system. The findings of a study that performed in 2000 which focused on environmental effects of secondary housing settlements on the Mersin Silifke coastline pointed out that none of the towns on the coastline have a sewerage system [9]. Organizing of the sewerage system has newly begun in 12 towns on the Mersin-Silifke coastline. Meanwhile there is not a sewage disposal system or domestic wastewater treatment in many of the settlements in recent conditions. Draining of sewages to the watercourses and then to the sea generates malodor and visual pollution. This situation is a severe threat to nature and public health also. A study conducted in the area in 1997 stressed that; creation of road networks on the coastal line, touristic facilities, summer houses and other constructions constitute an artificial barrier, and effects of these conditions will be much more in the long-term for the natural development in the coastal system [10].

In the light of the mentioned problems that were connected with development of coastal areas can be considered under the three headings:
- Influences of coastal developments on the natural aura,
- Construction of secondary housing settlements in coastal zones,
- Effects of secondary housing settlements' characteristics on user's behavior.

This paper focuses on the intersection point of these headings given above. This point will be identified with the help of users' assessments considering recent conditions of secondary housing settlements. With this purpose an evaluation that comprises visual evaluation of the environment by secondary housing users at the Atakent town on the Mersin-Silifke coastline will be realized. Current conditions of the case area will be detected and user assessments will be obtained through the evaluation phase of the study. With the results of the study it is aimed to acquire a limited generalization about user preferences and expectations pertinent with secondary housing settlements. Additionally; characteristics of proper coexistence of natural and man-made environment will be trying to reveal for the secondary housing developments with the help of the results of the study.

2. The case study

The case study was performed in Atakent town on the Mersin Silifke coastline where the secondary housing complexes' varieties are many and construction of the settlements was started at the end of the 1980s. At the first step of the case study, general characteristics of the Atakent town were analyzed. Atakent town is 60 km. far from Mersin city and it has 16 km. length and fully sand shore. According to a 2014 census data, the native population of the town is 6100. However, population of the town, according to municipality data, reaches nearly 35000 in summer. It is seen that the population of the town in summer is much more than native population. The

increase of the town's population in each summer term effects town's characteristics, and this condition creates many environmental and planning problems like planning of the capacity of infrastructures. Development process of the town from 1990 to today can be monitored on the figures that were given below (Figure 4-6).

Figure 4. Atakent town in mid of 1990s view from hills to the sea.

Figure 5. Atakent town in the end of 1990s view from east side.

Figure 6. Atakent town in present, view from hills to the sea.

As like other towns on the coastline, infrastructure works has newly begun and some of the settlements have sewage disposal system and remaining of the settlements drain sewage directly into the sea (Figure 7). The main road along the coastline which bound the Adana, Mersin and Antalya cities across to the Mediterranean coastline passes through in the center of Atakent Town. The highway divides the town and separates the coast and the settled area. Thus almost all the housing blocks are far from the seaside, so that there are a few settlements that have a private beach. This occasion became the advantage of the town that resulted in preserving the shore. In this way, occupying the seaside was prevented and preserved for public use. This is the positive effect of the highway, but on the other hand, it has a negative effect also. Reconstruction of the highway started in the mid-1990s and ended at the beginning of the 2000s. After reconstruction of highway, area became much more and easily accessible and effects of this phenomenon were seen on housing activity. Construction of the secondary housing in the area was increased rapidly after that.

Figure 7. The sewage drainage to the watercourse in the area.

The topography of the area rises up to the hills after a short plate that begins from the shore. First instance native residents of the area were settled on the hillside and plate was used for farming. After the 1990's early summer houses had started to build along the highway, the housing blocks occupied the plate, hinterland of town expanded and settlements are being built on the hillside today (Figure 8). There are many small pensions and two apart-motels in the town. The shore is used as a public beach and there is not an alternative recreation area such as an open space, playground, sport area or cultural and social center in the town.

Figure 8. View of the secondary housing settlements from the east side of the town.

The first secondary housing settlement was constructed in 1987 in the case area, but major growth is seen in the early 2000s. There are 138 secondary housing complexes with 4977 secondary houses in the area, and eleven secondary housing complexes are under recent construction. It is observed that, summer housing settlements in the area are actively demanded, although they are not well-qualified. The study highlights these observations, and it is aimed to determine the current situation through a case study.

2.1. The method of the case study

The 350 surveys were applied at 26 secondary housing complexes in the context of a case study. Subjects were selected by stratified sampling technique. The case study area was divided into sub areas and amount of blocks and houses were determined. Hereafter amount of subjects was determined according to the total amount of secondary houses of each sub area, and subjects were randomly selected from these sub areas. The case study survey was formed by five data groups and includes 16 questions. SPSS 16.0 package program was used for processing of the statistical data and frequency and cross tabulation analysis were conducted to interpret the results of the study.

The contents of the data groups are:

The first data group was shaped for collecting basic demographic and socioeconomic information of the subjects, including age, gender, education and monthly household income data.

The second data group was related to usage of outer space of the house. With the aim of determining outer space usage of the settlements; varieties of activities, activity places and the amount of time spent on the outside of the house was inquired.

The third data group contains questions related with inner space characteristics of the house besides characteristics of outer space of the house. In this manner, it is aimed to determine which factors are taking dominant role and affecting primarily in preference of the settlement and the house that owned.

The fourth data group includes questions about assessment of secondary house and its near environment. With this question group, it is aimed to obtain users' ideas about current conditions of the settlement. It is intended to obtain users' assessments about the near surroundings of the settlements by a question composed of a six degree semantic differential scale.

The fifth data group comprises the questions which were used for determining the users' preferences and inclinations independent from the conditions of the currently used secondary housing settlement. In this phase, it is asked to the subjects "if you can afford it, in which secondary housing settlement do you want to buy a house on this coastline, and why?" and then five colored photographs of different summer house settlements with distinct characteristics on the Mersin-Silifke coastline are shown to the subjects. It was requested to list the photographs from the most positive to the most negative, according to the characteristics of the settlement.

2.2. The results of the case study

2.2.1. Findings of the first data group

The results of the demographic analysis show that; the 80% of the interviewed subject were women, most of the subjects (43%) were graduated from high school, 27% of the subjects were graduated from primary school and 41% of the subjects were unemployed. The unemployed subject group consisted of the women, who have no professional skills and are dealing with the house works. According to the results; family income of the subjects are varied between 750 TL and 1750 TL. The rate of the subjects who were working for a low salary (750 TL-1000 TL) was 63%. According to the data; it can be said that the user group of this area belonged to the low socio-economic and socio-cultural class.

In this process economic value of the house was compared with the usage term in a year. Housing rates are changing between 50000 TL-150000 TL in the area and 43% of the house prices are between 50000 TL-75000 TL. The results of the usage term of the house in a year are 31% for three months, 26% for one month, 20% for two months and 13% for six months. Considering the income of the subjects and usage term of houses in a year, it can be said that housing prices are considerably higher and using it for a few months in a year is not efficient. These houses are smaller and less comfortable than an average primary house. The results reveal the unearned income value from secondary house clearly. On the other hand, these houses are inactive at least for nine months and that the condition of houses has to be considered for national economy also.

2.2.2. Findings of the second data group

It is known that varieties of the outdoor activities and the amount of the time spent in the near surroundings of the house are affected from the quality and characteristics of the environment. It is presumed, that subjects could spend much more time during the day in the outdoor environment of secondary housing settlements. However, results are contrary to this assumption. The findings of this group of data revealed that most of the subjects (67%) spent 2-4 hours in the outdoor environment. The rest of the findings about the amount of time spent, are 5-6 hours (21%) and 7-10 hours (3%). Findings show that subjects do not spend much time on the outside of the house.

Leisure activities of the subjects have been inquired, and according to the answers; walking at the shore (98%), swimming (83%), spending time by looking around (58%), spending time with friends (47%), and playing sports (7%) are found to be the main activities that subjects made. In the light of these findings, it can be said that, physical quality of outdoor environment is quite low, and it is not proper to make different leisure activities except the basic ones like swimming and walking. Because of that, users are not able to spend much time in the outdoor environment. Addition to these inferences, it is determined that, near surroundings of the many housing blocks and gardens were neglected and disordered. Furthermore, most of the gardens are not well maintained and many of the blocks do not have an adequate sized garden. It is objected that some of the gardens are used for growing vegetables. It is thought that these conditions are constraining usage of the garden by the residents. According to these findings, it is obvious that suitable arrangement of the near surroundings of the housing blocks was needed for supporting the outdoor activities.

2.2.3. Findings of the third data group
Users' preferences and assessments about current conditions of the settlement are tried to obtain in this data group. It is asked about the subjects "why they prefer the coast". Ranges of answers of this question are calm sea (72%), close to a city where they live (25%) and aesthetic beauty of the environment (6%). In addition to this 23% of the subjects answered this question by marking "other" option. Answers of this group are particularly remarkable because of; answers are not directly related with environmental characteristics. Noticeable answers to this question are "coincidence" (25%), "advice" (12%), and "good people living in" (36%).

Answers of the question about factors that affects housing preference were; affordable purchasing price of housing (53%), acquaintance people in near surrounding (41%), and calm sea (26%). Very few of the subjects considered the concepts like view (5%), closeness to the beach (4%), having a garden (3%) while choosing the house. As like above 22% of subjects marked "other" option for this question. Answers of the subjects who marked "other" option as; coincidence (21%), construction quality is high (7%), being cooperative member (7%), and nice people living in the building block (6%). According to the findings, subjects are not concerned with the quality and characteristics of the house and near surrounding of the blocks primarily. Subjects are belonging to a low socio-economic group, and for this reason purchasing price of the house is found as the fundamental determinant of users' preference. The social environment is also identified as another affective factor in preference of housing for this subject group. These findings can be considered as a result of social life habits of the low socio-economic and low socio-cultural group that subjects belong.

2.2.4. Findings of the fourth data group
The unpleasant and negative characteristics of the settlements were asked to the subjects. Frequency distribution of the answers was given in the Table 1.

The neglected characteristics and cluttered look of the environment were emphasized as the main problems of the area by subjects. Moreover, subjects complained about hot climate with no breeze and high building density. Sea breeze blows quite cool and changes the air temperature in coastal areas. Nevertheless, building blocks, which were built on the coastline like a wall as a result of wrong decisions about localization and building forms are restraining sea breeze. Noise, crowding, lack of view are also

reported complaints by the subjects. But the less important unpleasant characteristics of the environment were pointed out as; inadequacy of garden, lack of social intercourse and distance of the house from the seaside. According to the findings less than half of the subjects are concerned with conditions of environment. These results can be accepted as a demonstration of the subject groups' point of view to the environment and secondary housing settlements.

Table 1. Unpleasant and negative characteristics of the settlements.

Unpleasant and negative characteristics of the settlements	Value (%)
Environment is not clean and not well kept	45
Climate is hot and no breeze	40
High building density	40
Noisy	33
Lack of view	31
Crowding	23
Buildings are very close to each other	21
The garden is small	20
Rough roads	11
Lack of the playground	11
Lack of the sewerage system	9
Inadequacy of garden	4
Lack of social intercourse	3
Far from sea side	2

In this phase, semantic differential technique was used to determine subjects' opinions and meanings about characteristics of the environment. Semantic differential technique has been used in several studies as an alternative method for capturing key features of the evaluative dimensions of the object's meaning [11]. The semantic differential scale used in this study has six degrees and 16 adjective pairs in opposite meaning are placed either end on the scale. Values of degrees on the scale change between "+3" and "-3". Neutral or "0" value consciously was not used to prevent subject's over-reliance on the neutral response (neither agreed, nor disagreed). The strength of opinion increases at the either end of the scale. Subjects are asked to mark a proper value on the scale for each adjective pair, which was thought appropriate for the characteristics of the settlement. The dispersions of percentage degrees of the adjective pairs are given in Table 2 and the highest ones are marked on it.

Assessments of the subjects are dispersing between quite positive (+1) and negative (-2) values. There is not a high value on +3, +2 and -3 degrees. According to the findings; characteristics of the settlement were judged quite positive with seven adjective pairs, quite negative with five adjective pairs and negative with four adjective pairs. It is seen that characteristics of the settlement was evaluated mostly in negative way. The most positive valued characteristics of the settlement are quite "gives will to live" (%69), quite "beautiful" (%57), quite "pleasant" (%53) and quite "attractive" (%53). The most negative valued characteristics of the settlement are "monotonous" (%58), quite "boring" (%52) and quite "depressing" (%46). Subjects evaluated that settlement gives the will to live, beautiful, pleasant and, also monotonous, boring and depressing concurrently. It is thought that, incongruity between judgments of the users is depending on feeling of belonging. Previous studies show that feeling of belonging is a

factor which affects the judgments of the people. People generally express the environmental characteristics in a positive way where they feel belong [12].

Table 2. Percentage distributions of the adjective pairs.

positive	+3 (very positive)	+2 (positive)	+1 (quite positive)	-1 (quite negative)	-2 (negative)	-3 (very negative)	negative
Varied	3	4	21	14	**58**	0	Monotonous
Unusual	1	9	20	31	**37**	2	Common
Pleasent	7	19	**53**	7	11	3	Unpleasent
Beautiful	4	19	**57**	10	6	4	Ugly
Interesting	0	9	20	**52**	17	3	Boring
High scenic value	3	6	**43**	15	26	7	Low scenic value
Natural	1	6	34	13	**43**	3	Artificial
Atractive	1	4	**53**	29	13	0	Unattractive
Green	1	1	**32**	26	29	1	Deserted
Exhilarating	3	10	24	**46**	16	1	Depressing
Uncrowded	1	10	29	**34**	13	13	Crowded
Not dense	1	4	14	**42**	31	7	Dense
Ordered	0	3	**43**	20	25	9	Disordered
Gives will to live	0	4	**69**	20	6	1	Not gives will to live
Mysterious	0	3	14	41	**42**	0	Obvious
Clean	1	1	30	**36**	26	6	Dirty

2.2.5. Findings of the fifth data group

The answers to the question of "if you can afford it, which secondary housing settlement do you prefer in this coast?" are grouped in three; "current settlement (52%)", "settlement A (%28)" and "settlement B (%20)". There are many settlements on the coast line and subjects expressed solely two specific settlements except currently used. In that case, it is needed to know why these settlements are preferred particularly by subjects. For this aim cross tabulation analysis was conducted. According to the results of cross tabulation analysis; reasons of preferring the current settlement are "habits" (53%), "neighbors are good people" (%21), "beautiful view" (9%), "house is spacious" (8%), and "peacefulness of the settlement" (6%). Subjects, who preferred Settlement A, declared the reasons of their preferences as; "settlement is close to the sea and it has a private beach" (%58), "houses are two storied" (32%) and, "houses have private garden" (10%) (Figure 9a). The reasons of choosing Settlement B are; "aqua park" (47%), "social facilities" (23%), "closeness to the sea" (15%) and, houses are spacious (15%) (Figure 9b).

The results reveal reasons of preferences and in this way, highlighting the desired characteristics of the secondary housing settlement for this subject group. The answers which are not seen as essential factors affect the environmental quality - like "habits" and "neighbors are good people" - were excluded with the aim of crystallizing the demanded characteristics of secondary housing settlements. Closeness to the sea and having a private beach, having social and leisure facilities, garden, view and peacefulness of the settlement, low rise housing blocks and spaciousness of house are determined as the main factors that affect preferences. It is thought that evaluation of preferences in this way also maintains remarkable data about user's expectations on secondary housing settlements.

a)   b)

Figure 9. a) View from settlement A, and b) View from settlement B.

In order to define the preferences considering secondary houses and near surroundings, six images with different environmental characteristics were used (Figure 10-11). The images comprised of five color photographs of secondary housing settlements in different characteristics and a color photograph of a large garden in which no housing block was seen. The characteristics of the images of secondary houses are detached houses with well-kept gardens, low-rise housing blocks with gardens, low-rise housing blocks with no garden, low-rise high-density housing blocks, and high-rise high-density housing blocks.

It is asked to the subjects to put these images in order from the most preferred (the most positive) to the least preferred (the most negative). When the answers were analyzed, it was seen that the results emerged in the expected way. The first and the most preferred image (70%) was the photograph of a detached secondary housing settlement which had a tidy and well-kept garden (Figure 10a).

The second most preferred image (53%) was the photograph of a large garden in which no housing block was seen (Figure 10b). Preference of this image, although there is not secondary housing block seen on it, was found remarkable. It is thought that this preference was a reaction to the unqualified character of the surroundings that the present secondary housing settlements are placed in.

a)   b)

Figure 10. a) The most preferred image, and b) The second preferred image.

The third (56%), fourth (49%) and fifth (49%) preferences of the subjects were low-rise houses, and it is thought that the near surrounding quality of these houses affected the

rating order of them (Figure 11a, b and c). As a matter of fact, the near surroundings of these three settlements were neglected and the settlement which was preferred on fifth order (53%) did not have a garden. The sixth and the least preferred housing settlement was the sample where high and mass constructed buildings were seen (Figure 11d). The interesting aspect of these results is that the secondary housing settlements with low-rising blocks whether their surroundings were quite ignored, their gardens were neglected and did not have any garden at all, were preferred instead of the secondary housing settlements structured by high-rising building blocks although having a garden.

a)   b)

c)   d)

Figure 11. a) The third preference of the subjects, b) The fourth preference of the subjects, c) The fifth preference of the subjects, and d) The least preferred image.

According to this finding, it is obvious that low-rise structuring is preferred against the high and mass structuring, despite low quality of the surroundings. The subjects preferred low-rise structuring instead of high-rise mass structuring, although the near surroundings were unqualified. It is seen that order of the preferences is consistent with the answers given to the question "if you can afford it, which secondary housing settlement do you prefer in this coast?". The results show that subjects preferred low-rise settlement that had a well-kept garden and, the most preferred settlement is the Site A, which was structured by low-rise, detached houses with a garden. This preference of subjects is in line with the answers of the previous question about preference of the characteristics of the building complex. However, the results about the preferences regarding to the amenities of the settlement indicated that a secondary housing settlement (Settlement B) could be preferred just because of having an aqua park and social facilities, although it was high-rise and highly massive structured. These findings show that users need facilities where they can spend quality time, socialize with others and participate in activities in the settlement.

There are many secondary housing complexes that show similar building characteristic to the Site B on the Mersin Silifke coastline. These building complexes are high and dense structured and blocks rising up to 22 stores. There are large swimming pools and social facilities at the center of all these building complexes. Contractors achieve high profits by selling these low construction quality houses for relatively appropriate prices. These settlements seem quite appealing to this group of users that belongs to low income and low socio-cultural group, whose maximum expectations from owning a secondary house are a swimming pool and opportunity of swimming at the sea.

3. Discussion and conclusion

In this research conducted in Atakent town on the Mersin-Silifke coastline, physical characteristics of the case area were revealed, users' assessments about existing settlements' conditions were determined and their expectations regarding the secondary housing settlements were specified. During the study, it is noted that the building complexes constructed for the low income group of users are built in the majority of the coastline. It is also observed that dense and high structuring is common, outdoor quality is insufficient and the relationship between the house and outdoor is quite lower than the expected level in these building complexes.

While the user characteristics were examined in the case study area, it is found that the majority of the users belonged to low income and low socio-cultural group. It is a known fact that users purchase houses in parallel with their income level. The primary concern of owning a secondary house for this user group is meeting the basic needs for them while having a holiday with the family in a cheap way. It is thought that the main reason for owning a secondary house for this user group is to spend holidays at low costs. This group of user, purchases the second home in parallel with their economic conditions, and for this reason, does not demand or expect higher levels of construction and environmental quality. Large and tidy gardens, pools, indoor and outdoor social spaces, low-rise and low-dense structuring are presented as the quality elements that increase the purchasing price of the secondary houses. In addition to this, the fact that these quality elements cause additional costs such as maintenance costs during the using period of the houses which are sold for relatively higher prices than the purchase power of the user. These economic conditions restrict the user demands and the user does not make demands of the environment having these qualities. As a consequence, the physical environment is shaped in line with the limited and modest demands of the user in terms of the supply and demand cycle.

According to the findings regarding to the user preferences obtained in the research, it was seen that the quality of the near surrounding has not had a primary importance in secondary house preferences of the users belongs to low income group. It was found in the research that the most important factors that affected secondary housing preferences of the users of low income group were economic and social environment conditions. From this standpoint, it might be argued that the structuring alternatives that can appeal to different socio-economic and socio-cultural groups are crucial in order to be able to increase the environmental quality level of the region.

It is thought that the policies developed by municipal authorities are also crucial for the configuration of the region. Especially the planning decisions taken by the municipal

authorities affect the physical configuration of the region. The municipal authorities in the Mersin-Silifke coast do not have long-term planning targets. Building characteristics in some towns are quite similar to city centers in terms of intensity and height of the building, which damages the harmony between the structural characteristics of the towns and natural fabric. For this reason, it is thought that the long-term planning decisions regarding towns' physical development should be regarded as priority and intense and high structuring should be prevented. In addition, the physical fabric of the towns, in the present conditions, only comprises of house blocks. It is obviously seen that there are not any social and cultural spaces, open spaces are not regulated and urban facilities are not adequate in these towns. Besides, it is clear that deficiencies of infrastructure such as sewer system and roads should be remedied as soon as possible.

The natural and historical beauties of the region are just as impressive as the other popular holiday resorts of Turkey. However, wrong policies, profit-oriented structuring and the user profile to which the settlements appeal unfortunately seal the town's doom. As the result of the case study and observations conducted in other towns at the coast, it was inferred that tourism should be diversified in the region and especially qualified secondary housing settlements should be supported. In addition to these, it is thought that qualified touristic investments that will keep the town alive in summer and winter are needed in order to be able to develop and diversify tourism in the town. Thousands of houses remain inactive through off-season for this reason; it is needed to establish activities and facilities that will attract tourists during the off-season. In this way extension of tourism during the year might be provided rather than summer term and therefore, inactivity of settlements in most part of the year might be prevented.

It is thought that achieved results of the study are not peculiar to the case study area. It can be said that the results reflect the problems of secondary housing settlements in other towns on Mediterranean coastal line of the country which were in same conditions. In conclusion, unavoidable future problems can be encountered in the coastal settlements of similar characteristics in our country or in the world unless the present planning and structuring conditions change. Coastal settlement areas and coasts are limited. However, when the balance between the economic value that will be obtained from these areas, and user requirements and needs is established, reaching to the sustainable environments can be possible. Future-oriented secondary housing settlements can be built by establishing the harmony between natural and manmade formations through compatible planning decisions, instead of giving priority to the profit that will be obtained from the coasts.

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