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**A RESEARCH ON LONG-TERM EFFECTS OF STATE
RESETTLEMENT PROJECTS IN VERNACULAR SETTINGS
IN RURAL AREAS:
THE CASE OF YÜZÜNCÜ YIL, MUDURNU**

**A THESIS SUBMITTED TO THE GRADUATE SCHOOL OF
NATURAL AND APPLIED SCIENCES
OF
THE MIDDLE EAST TECHNICAL UNIVERSITY**

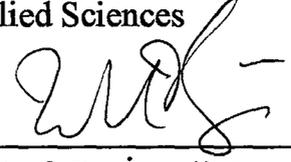
BY

GAMZE DEMİRÖZ

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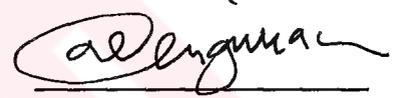
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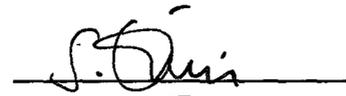
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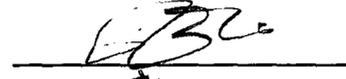
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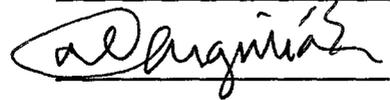
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ABSTRACT

A RESEARCH ON LONG-TERM EFFECTS OF STATE RESETTLEMENT PROJECTS IN VERNACULAR SETTINGS IN RURAL AREAS: THE CASE OF YÜZÜNCÜ YIL, MUDURNU

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In Turkey, what the governmental agencies design and build as 'resettlements' in rural areas have not been very successful from various points of views. Thus, the purpose of the study is to reach to a better understanding of resettlements, which are pursued through state resettlement and rehousing programs as well as to observe the physical and social factors which relate to housing and resettlement in rural areas. In doing so, the deficiencies of resettlement applications and the causes are explicitly exposed.

It is a fact that, resettlement applications act as agents -catalysts- of change in physical and social environments of rural communities where individuals are still strictly stuck to their traditions. The form of change is large in scale and the consequences are hazardous in most cases. It can be claimed that there are problems in design and production processes of

such applications. Consequently, resettlement applications turn out to become interruptions on communities' social and physical environments which are within the domain of 'culture'.

Another aspect that is introduced through state resettlement and rehousing programs is the rapid 'modernization' of the rural communities. Such applications are outside interventions which are realized by outside agencies and embed political decisions governmental regulations and technological assessment. Thus, they turn out to become advocates of 'modernization'. Through these interventions, rural communities are introduced with modernized way of living which do not really match with their local motives and traditional patterns.

The thesis concentrates on the relation of culture and resettlement and their impacts on each other as well as the impacts of 'modernization' on state resettlement and rehousing programs. Further developing the argument, the study focuses on the resettlement application that was applied under the name of Disaster Housing for two villages of Mudurnu.

Keywords: Resettlement, Culture, Continuity, Modernization

ÖZ

DEVLET TARAFINDAN UYGULANAN YENİDEN YERLEŞME PROJELERİNİN KIRSAL ALANLARDAKİ GELENEKSEL YERLEŞİMLERDE UZUN DÖNEMDE YARATTIĞI ETKİLER ÜZERİNE BİR ARAŞTIRMA: YÜZÜNCÜ YIL, MUDURNU ÖRNEĞİ

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Türkiye’de devlet kurumlarının kırsal alanlar için tasarlayıp uyguladığı yeniden yerleşme projeleri birçok yönden başarısızdır. Bu çalışmada amaçlanan, kurumlarca yönlendirilen ‘yeniden yerleşme’lerle ilgili detaylı ve daha iyi bir anlayışa ulaşmak ve bununla beraber kırsal alanlarda ‘konut’ ve ‘yeniden yerleşme’yle ilgili sosyal ve fiziksel faktörleri de incelemektir. Böylece, bu uygulamaların yetersizlikleri ve nedenleri açıkça ortaya konulmuş olacaktır.

Yeniden yerleşme projelerinin sosyal ve fiziksel çevrede ani değişikliklere neden olmaktadır. Ayrıca bilindiği gibi sosyal ve fiziksel çevre, kültürün önemli birer elemanıdır. Dolayısıyla, bu çevrelerde oluşan ani değişiklikler, halen geleneksel yaşam tarzı içinde olan kırsal toplulukların kültürlerini de etkilemektedir. Meydana gelen bu değişikliklerin ölçeği

büyük ve sonuçları da oldukça tehlikeli ve birçok örnekte olduğu gibi problemlidir. Bundan yola çıkarak, bu projelerin tasarım ve uygulama süreçlerinde ciddi problemler olduğu söylenebilir. Dolayısıyla, 'yeniden yerleşme' uygulamaları, kırsal toplulukların sosyal ve fiziksel çevrelerinde kesintiye yol açmaktadır.

Devlet kurumları tarafından uygulanan 'yeniden yerleşme' projelerinin beraberinde getirdiği bir başka öge de kırsal alanlarda hızlı modernleşmedir. Bu uygulamalar topluluklara dışarıdan yapılan müdahalelerdir ve içlerinde politik kararlar, yönetmelikler ve teknolojik yenilikleri barındırırlar. Bu uygulamalar, modernleşmenin temsilcileri olmaktadır ve böylece, kırsal topluluklar, özgün ve geleneksel motiflerine uygun olmayan 'modern' yaşam tarzıyla yaşamaya zorunlu bırakılmaktadır.

Bu tez, kültür, 'yeniden yerleşme' ve birbirleri üzerindeki etkileri ile modernleşmenin devlet tarafından uygulanan 'yeniden yerleşme' programları üzerindeki etkilerine yoğunlaşmaktadır. Buradaki tartışma 1983 yılında inşası tamamlanan ve afet konutları adı altında gerçekleştirilen Mudurnu'nun Yüzüncü Yıl yerleşimi üzerine kurulmaktadır.

Anahtar Kelimeler: Yeniden Yerleşme, Kültür, Süreklilik, Modernleşme



To My Whole Family

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CHAPTER 1

INTRODUCTION

It is a fact that there are various problems in resettlements which are invigorated through state resettlement and rehousing programs in rural areas. Furthermore, resettlements are the interventions pursued through 'institutes' and their fundamental aim is to provide individuals with better living conditions. The major problem lies in the fundamental purpose and manifolds: The intervention, only as a result of its purpose, can not be considered as all beneficial. Quite the contrary, it should be interpreted as interruptions on physical and social environment of rural communities.

Resettlements are the end products of political decisions, governmental regulations and technological assessment, and are designed by outside agencies which have no or very little knowledge about communities. Thus they do not really match with the local patterns and traditional motives. Rural settings are products of social, economic, physical and cultural factors which are specific to communities. They are not planned nor designed: simply developed according to basic needs of individuals. They are produced by the users due to their real life activities.

At this point, it is vital to realize to what extent are institutes able to understand the existing patterns and get involved in the context, to

perceive the cultural aspects and then be able to design appropriate projects? Consequently, resettlement projects are imposed on communities without questioning whether they are appropriate with the needs of communities.

This thesis is a step towards understanding and observing physical and cultural factors which relate to housing and resettlement in rural areas. The idea is to disclose deficiencies in resettlement applications and thus, to reach a reasonable perception of appropriate physical environments for the individuals who have been rehoused and also relocated.

In doing so, disaster housing project which has been applied for resetting two villages of Mudurnu, Bolu, in 1983, is taken as a basis for the research. The reason for the resetting is, as officially stated, the disasters taking place in the province. However, officially not stated, one reason for moving those villages to a new settlement is to provide them with infrastructure, to get the dispersed districts and the two villages together.

It has been almost 14 years since the new settlement Yüzüncü Yıl has been completed and the villagers have been accommodated in their new houses. Thus, long-term effects of disaster housing policies and state resettlement program have become apparent. During the construction of the new settlement, a research had been done by a group of tutors and students from Middle East Technical University in 1982. Thus, this current research is aimed to be a successor of the previous one and to justify or falsify the hypothesis which had been stated as a result of the site survey.¹ What is more, one other aim is to perceive the impacts and consequences of applications on social and physical environment.

¹ The details of the 1982 research will be given in the next chapters.

The research is presented mainly in two parts. The first part is the conceptual framework of the study. The subject is critically discussed in terms of culture and its essential influence on physical environment and house form. Through this, effects of resettlements on culture as well as physical and social environment are exposed. Deficiencies of the applications and their aftermath, attitudes of 'state' oriented policies which embed a distorted mode of 'modernism' are pursued within the framework of design and production policies. Thus, the first part seeks the answer of the following vital questions:

- Under which conditions do people resettle?
- What are the impacts of resettlement on culture and how resettlement is influenced by culture?
- How suitable are the permanent houses that are provided by the government for the accommodation of the people?
- Do the houses provided satisfy the needs of the occupiers?
- To what extent are the resettlement projects accepted by the people?
- What are the impacts of modernism in developing countries and how do they influence state resettlement and rehousing programs?

The second part of the study dwells on the case study. Answers of the above mentioned questions are tried to be provided with examples from the case study. In doing so, the specific application of Yüzüncü Yıl, its objectives and aftermath are examined. A concise but also thorough understanding and criticism of the first academic study are executed.

1.1. Foreword

Disaster is a severe, relatively sudden, and frequently unexpected disruption of normal structural arrangements within a social system or subsystem, resulting from a force, 'natural' or 'social', 'internal' to a system or 'external' to it, over which the system has no firm 'control' (Sjoberg, 1962, p.357).

It is a fact that disasters are inevitable in present times (Oliver, Aysan; 1987). There are probably no more disasters now than there were in the past but the rapidly increasing population of the world and urban concentrations have contributed to loss of life and property that is associated with 'fast impacts' of disasters --both social² and natural. It is another fact that the material and the spiritual damage caused by disasters is less in developed countries when compared with the Third World ones for various reasons. The less qualified constructions, unhealthy living conditions, concentrated population, economical disabilities in short; lead to great losses in such countries. In fact, the suddenness and the destructive property, as well as the time and/or the location of the event, makes the situation a disaster. They can never be prevented, thus cause material and spiritual harm on the environment and on people living within the territory; therefore they require external assistance (D'Souza, 1984). This external assistance is mostly provided by the government or private institutions in the form of immediate and long term help. Immediate help provides fast accommodation, food, heating, sanitary equipment etc. The character of long term help is rather different from the first one. It is the kind of support that is given to the victim community in order to re-establish itself, to get back to its former pattern, thus embeds

² Social disasters can also be defined as man-made disasters like wars, military defeat, destruction of one social group by another, etc.

cultural parameters as a result of the fact that disasters are more than physical interruptions but also interruptions of cultural life.

As being the external assistance, Disaster Housing, in a very general sense, is put up for relief purposes after any kind of disaster -- like earthquake, flood, landslide, fire, etc.-- by the governmental and private institutes. The classification of the post-disaster housing initiatives into 'emergency', 'temporary', 'permanent' shelters in their simplest form, is based on the expected duration of shelter and the expected length of occupancy by the user, and it is partly generated by extreme disparities in the housing condition of the different social groups (Kreimer, 1984).

Emergency Shelter: It is a shelter put up by the organizations for immediate relief purposes just after the disaster takes place. It consists of tents, plastic sheeting, plastic cardboard panels, etc. As Turan and Cengizkan explain (1984; 64), this type may offer weak selection or a forcefully imposed location for the site as a result of the conditions being lived. The contextual characteristics of this kind of shelter are totally different from the other two as a result of its fundamental aim that is to house people for a very short period just after the disaster takes place.³

Temporary Shelter: This is the intermediate stage of Disaster Housing that is built by the government after a short period of the disaster occurs, offering "better" living conditions than the first group of shelters but still conceived as temporary solutions, in order to evacuate the displaced

³ In fact in some cases, these shelters had to be used by the victims for longer periods; the hurricanes in the Dominican Republic in 1979 can be given as an example where the victims used the emergency shelters for one year and four months. (Kreimer, 1984). In Gediz earthquake in 1970, the polyurethane domes which were sent by the German Bayer Firm were used by the casualties for 8 years. They are still being used in various ways eventhough permanent houses were supplied by the government. (Özkan, 1983)

persons. These are mostly in the form of sheds without proper sanitary conditions and infrastructure. This type of shelter stands at a critical point where temporary shelter might turn out to be permanent housing.

Permanent Shelter/Housing: It is basically aimed to be a permanent solution after any kind of disasters, to provide housing individually which would fulfill the needs --social, cultural, traditional, sanitary, infrastructure etc.- of the inhabitants in relatively much longer period of time. As well as the other two types, permanent housing is a major element in the aid process.

While discussing disasters,

there is often a tendency to forget that disasters are more than events which cause death, injuries and destruction to property. In order to understand the problems that are involved, we must recognize that disasters are a human problem and that our study of disasters and their impact on housing must be viewed in the context of the society that builds and occupies the housing units. (Cuny, 1981, p.3)

A house, apart from its social dimensions, fundamentally aims to satisfy the basic and the most complicated needs of human beings; it is the central place of human existence⁴. In the case of housing, “giving meaning becomes particularly important as a result of the emotional, personal and symbolic connotation of the house and the primacy of these aspects in shaping its form as well as the important psycho-social consequences of the house” (Rapoport, 1982, p.22).

⁴ At this point it is important to remember Heidegger' ideas about today's houses and to stress that the "house", here, is considered as having the guarantee that dwelling occurs in it. According to his ideas, dwelling is the basic character of Being in keeping with which mortals exist. (Heidegger, 1951, p.147)

As stated by Rapoport (1969; 47), “building a house is a cultural phenomenon, its form and organization are greatly influenced by the cultural milieu to which it belongs.” What is more, house form is not simply the result of physical forces or any single causal factor, but is the consequence of a whole range of socio-cultural factors in their broadest terms. Thus, as a result of the inevitable emotional, social, cultural factors, that have impacts on the user can not be eliminated from the housing process by the institutions.

The above mentioned argument can be further developed for the concept of disaster housing. As Oliver and Aysan state (1987; 23) the cultural aspects of recovery after earthquakes have not been given the same attention as the engineering and practical considerations; in fact, they have been almost totally neglected. Disasters of any scale are the interruptions of communities’ cultural lives. The impacts may be sudden, immediate, devastating, traumatic and the most important, permanent. As Oliver and Aysan (1987; 12) assert a community affected by a disaster seeks to re-establish itself in a form as close as it can to its former pattern as fast as possible. Thus, a great deal of aid reaches to the victim community for the reformation of its equilibrium both socially and physically. Disaster houses are the most important form of aid for the victim community; however mostly imposed to individuals with no regard to their real life activities, physical and cultural factors. Thus, impacts of the emergency measures⁵ may be immediate but their effects may be felt over years, even decades.

⁵ These emergency measures include resettlement projects that are prepared by private or governmental agencies.

1.2. Concise Information about Resetting After Disasters

In search of the above mentioned vital questions, knowledge about the previous applications in the same field with different attitudes and approaches to the problem will be supplementary. In doing so, a literature survey on various attitudes of governments, organizations and victim cultures is as follows:

28 March 1970 Gediz/Turkey Earthquake and The Relief Program:

Damage: The earthquake of rated 7.3 on Richter scale. It destroyed the towns of Gediz and Akçaalan in Kütahya Province, Western Anatolia, demolished and damaged over 300 villages in the region, and nearly 70,000 people were affected (Oliver and Aysan, 1987, p.17).

Form of Aid: A large scale aid program was prepared and as a result, tents arrived at the region for the emergency stage. As temporary accommodation German Bayer firm sent polyurethane domes and the Austrian Government participated the program with prefabricated units. Furthermore, resettlement projects for Gediz and Akçaalan were designed and constructed.

Consequences: The rows of houses supplied by the government, even whole villages were still unoccupied after 12 years; some houses were used only as storage. Some houses had been occupied but extended and adapted so that they can hardly be recognized as the same. Temporary Bayer domes were still in use (though not as dwellings) while elsewhere, the Austrian prefabricated houses was empty. Quite the contrary of the non-adapted situation of the new constructions, the old town Gediz had been extensively used; it has been rebuilt and reoccupied, while many of

the damaged villages had been partially rebuilt. Oliver and Aysan (1987: 6) explain the failure of the application as:

Measures that are taken in a disaster relief and recovery program are based on policy decisions. These may already exist prior to a disaster, or may be taken or modified at the time of the event ... Decisions are taken without detailed knowledge of the cultures that are affected by a disaster.

23 December 1972 Managua/Nicaragua Earthquake:

Damage: The earthquake which had shocks up to 6.25 on the Richter scale destroyed 50,000 housing units and made over 1/2 of the population homeless (Davis, 1975, p.41).

Form of aid: i) Tents: The government decided to build 'tent cities' in various locations two in Managua and three in outlying towns. They were provided by military sources of U.S. and Nicaragua as well as The Red Cross and CARE. ii) Wooden Huts: The American Government made a donation of \$3 million to build temporary wooden houses. Unfortunately the occupation was low, even 11 months after the earthquake only %35 of these houses were used (Davis, 1975, p.42). iii) Igloos: The West German Red Cross donated spun polyurethane foam Igloos which were built on site by Bayer and costed 2,000 DM. for 500 units. These were slow in arriving and were not occupied until 5 months after the earthquake. iv) Extended Families: By using the benefits of rapid urbanization, 250,000 refugees easily found somewhere to stay in the emergency because they had very close family ties in rural areas. v) Squatter Housing: There has been a vast increase in squatter housing despite the efforts of the authorities; a very large percentage of these houses were built out of salvaged materials from the earthquake. vi) Permanent Housing Provision:

Several outside agencies offered to finance as loans or outright gifts, permanent low-income housing for the city. The proposals were as follows:

1. Stack Sack
2. Prefabricated Asbestos-Cement Housing
3. Prefabricated Housing from Columbia
4. World Bank Sites and Services Project
5. I.N.V.I

Consequences: i) The government, in placing their emphasis on the AID wooden hut project, misunderstood the social pattern of the displaced families, thus, huts were not convenient for them. ii) Emergency structures came very slowly. During the time it took to built temporary domes, permanent houses could and were being built by organizations. iii) In a situation with extreme housing deficits, all temporary housing becomes permanent. iv) Any housing, to be effective, must be culturally acceptable to Nicaraguans. Igloos and Prefabricated Asbestos-Cement Housing do not appear to fit to the context. v) Self-help housing provides the only viable solution for low cost housing. vi) Infiltration, rather than large complexes, may be a more sensible response to housing need. vii) Disasters can be used to deal with the continual problems of cities such as Managua. The worldwide interest, the pouring in of money and expertise, can be utilized to assist with the vast problems of housing, illiteracy, etc.

21 March 1976 Saighanchi/Afghanistan Earthquake:

Damage: The earthquake destroyed the village completely and the villagers were left huddled, shivering with cold, in old army tents or in the patched-up ruins of their houses.

Form of Aid: A self-help project, using newly devised system of earthquake-resistant housing which was financed by foreign agencies was offered. The project started in 1977 and was completed in 1979. The idea of the project was to combine the traditional skills and crafts with modern technology. Also, “the projects offered a building system and a model for village development which could be applied to other earthquake-prone areas of the country” (Sibtain, 1982, p.103). Thus, the international aid group provided the villagers with materials and basic training and let the villagers build their own houses according to their wish and needs.

Consequences: The result of the application is considered to be successful and a maximum rate of occupancy is achieved. As Sibtain declares (1982: 103) the governmental policy of earthquake relief is changed at the end of the application. “According to the new policy, provincial depots...will help the casualties to rebuild their houses using the Earthquake-resistant Building System. And if a subsequent earthquake destroys these homes, the villagers will know how to rebuild them. At last they will have become self-reliant.”

13 December 1982 Yemen Arab Republic Earthquake:

Damage: The earthquake which had a magnitude of 5.6 up to 6.0 on the Richter scale destroyed 15,000 houses and killed over 2,000 people (Aysan, 1984, p.52).

Form of aid and Consequences: Immediate aid was received from all the neighboring Arab countries and Western and non-Western governments. The victims took shelter in tents and in self-built structures. There existed

various tendencies among the victims on post-disaster construction (Aysan, 1984, p.55):

- Survivors moved to the nearest flat land to put up their tents.
- Wherever the topography permitted, villagers stayed as close as possible to their homes in order to protect them.
- Few villagers moved further from the original sites, closer to the road San'a to have access to the markets and to benefit more from the aid.
- In the less affected villages, survivors settled within the household territory and used the damaged houses during day time for storage, cooking and sheltering animals.
- For stronger houses, cement as bondage material and better quality of timber were used.
- There was very limited choice of building materials in the markets, therefore the most common way of building temporary shelter was to put up corrugated zinc sheds to be used as kitchen, storage, animal shed or living quarters.

Quite the contrary of policies applied in many other disaster-prone countries of providing prefabricated houses or blocks of flats to house the affected people, the Yemeni Government so far advocates the idea of 'self-help' in traditional construction.
(Aysan, 1984, p.60)

As a result Aysan points out (1984: 61) that "a few problems related to it so far have revealed that the application of 'self-help' or 'Intermediate Technologies' necessitate careful examination of various factors". There is always the danger of over-romanticizing the qualities of traditional buildings, there is always the danger of overlooking disadvantages of them.

CHAPTER 2

CULTURE AND RESETTLEMENT

Culture is one of the most important aspects which has to be taken into consideration in design and production process of resettlement applications within the framework of state rehousing and resettlement programs. It is essential that resetting has serious impacts on culture, which is a major dimension of the identity of communities especially in rural areas where people are still strictly stuck to their local traditions. It may be hazardous for communities' cultural life in case of performing weak relations or may be desirable and adopted easily as a result of being harmonious with local patterns. Thus, important point is how these two concepts are interrelated; how these two can be in harmony so that neither would be an obstacle for the other.

It is important to realize that, in case of resettling, communities expect to re-establish themselves in a form that is close to their indigenous pattern. No matter for what reason resetting is inevitable, it is doubtful that measures of culture are taken into consideration during design and production process. Thus, resettlement projects turn out to become interruptions of communities' cultural lives. Lack of detailed knowledge on culture and its factors is one of the reasons of misapplication of resettlements.

2.1. Culture

'Culture' is defined by Hsia, (1988: 301) through 4 key elements:

1. Culture refers to beliefs and perceptions, values and norms, customs and behaviors of a group and society.
2. Culture is used to indicate that cognitions, feelings and behaviors are shared among a group of people in a common way.
3. Culture implies that these shared beliefs, values and styles of behavior are passed on others, especially children and that the socialization and education of new members of the culture help to preserve a consensus from one generation to the next.
4. Culture appears in objects and in the physical environment.

Culture is the identity of a community. It is the expression of humankind in society and an altered form of social reproduction. Culture is shared by all the members of the community, thus exposed in the form of languages, dialects, beliefs, laws, customs, religion, values which make one society distinct from another. "Differences between cultures are also evident in clothing or artifacts and tools that are employed in work and domestic life" (Oliver, Aysan, 1987, p. 10). It is stated by Rapoport (1969: 46) that people with different attitudes and backgrounds respond to varied physical environments. These responses differ from place to place as a result of changes and differences in the interplay of social, cultural, ritual, economical and physical factors. These factors and responses may change gradually in the same place through time and even the place may change. However, these factors are the major elements in the formation of housing and settlement. This can be further developed by the ideas of Oliver and Aysan (1987: 11):

Cultural values may have profound bearing upon the ways in which dwellings are designed, built, used and passed on to subsequent generations and may influence attitudes to land use, settlements and building.

Among above mentioned key elements, the last one is important to explain the coexistence of cultural and physical factors within the context of environment. Physical factors play a major role in the shaping of culture. As Hsia states (1988: 301) the physical environment is a real object and can be divided into the natural environment and the built environment and has different scales. While talking about culture, it is important to point out that culture is influenced by natural environment, however, it influences built environment; house form and settlement form.

It is a fact that socio-cultural and socio-economic factors of rural communities play a major role on physical environment. “Socio-cultural schemata are primary determinants of form even on those scales in turn affect the images and schemata that mediate between environments and people” (Rapoport, 1982, p.28). As Aysan discusses (1980: 30)

in any society, the cultural and physical environment is the outcome of a multitude of factors. A certain factor tends to be the dominant one determining the role of other subordinate factors and their specific combination that shapes up the environment of a particular region.

Though in some cases,

this dominance may lie in cultural factors conditioned by the tradition of the community; on others, the climate, or the available materials, or the economy of that specific region may be the underlying determinant to which all the others are related. But in all of them, it is their interaction which finally determines the form of the house. (Aysan, 1980, p. 30)

It is a fact that if merely climate is considered to be the major factor in house form, there possibly could have appeared the same type of dwellings in North China and Normandy for example. It is another fact that if merely material is vital for house form, there possibly could have constructed same type of dwellings in Safranbolu and Germany. Thus, architecture is the act of space arrangement with respect to the real and basic needs of communities and these basic needs are shaped through socio-cultural and socio-economic factors.

The house is often a significant indicator of the ways in which spaces are respected and utilized within a building: the degree of privacy or security that the dwelling affords, the numbers of people that occupy it, their domestic relationship and responsibilities to each other, and so on. (Oliver, Aysan, 1987, p.10)

What is more, production patterns of a community which is a sub-group of socio-economic factors, is another element in house and settlement formation. House, as well as settlement should correspond to the requirements of production patterns of the community. The requirements of a community which deals with agriculture is rather different than the fishing communities. Oliver and Aysan's argument (1987: 10) would best further develop the discussion:

“Byres and stables, granaries and barns, mills and workshops all indicate the type of occupations which may be pursued. Each will be given land in an arrangement that is most appropriate to the successful functioning of its activities. These will obviously differ between pastoralists and agriculturalists, between mountain dwellers and fishing communities, or between sedentary peoples and nomads.” (Oliver, Aysan, 1987, p.10)

2.2. Resettlement

Resettlement is the act of planning the settlement and its substructure and mostly pursued within the framework of state resettlement and rehousing programs or through activities of private organizations. Resettlements are basically designed for:

- Recovery purposes after any kind of disasters in order to re-establish themselves.
- Utilization purposes to provide higher standards of living.
- Economic purposes to supply more comfortable working conditions.

As Taraklı argues (1975: 2) the arrangement must be over-all and must take into consideration all different elements of communities' development such as:

- production patterns
- industrial and financing activities,
- physical and demographic conditions,
- political situation, etc.

Besides the activities of development of communities, during the arrangement, historical tradition and cultural and religious ties must be fully respected. In doing so, a special effort is needed to adapt them to the altered environmental conditions as well as technological development. Thus, as Taraklı defines (1975: 3) people may continue the family (despite having changed place of residence) and through the emotional ties of the community, the new settlement would be adopted easily.

Furthermore, study of the plan for settlements and sub-structures is developed in two clearly separate phases (Taraklı, 1975, p.6):

1. Investigation of the situation and pin-pointing the distribution of zones employed in homogenous activities; zones of work, zones of residence, zones of tourism, etc.
2. Technical drafting of the plan for settlements and the plan for sub-structures.

In doing so, the demographic, cultural and economic features of communities need to be taken into consideration. Information related to the population, features of the rural houses, public building structures, road network, rural electificators, market equipment, etc. is acquired. Thus, as Taraklı defines (1975: 6), an exhaustive definition of the dwellings' true characteristics would be permitted.

There exist two aspects of resettlement which are important in the course of the current argument and have impacts on both social and physical environments.

2.2.1. Relocation

Relocation is one of the elements of resettlement and rehousing programs through which communities are moved to new sites for settling and are introduced to new conditions like topography, orientation, climate, vegetation, etc. It is stated by Bayülke (1984: 17) that usually relocation involves villages of a few hundreds of houses moved to a few kilometers

away from the old locations; though relocation is carried out for small inhabited places.⁶

In case of disasters, for safety reasons, it is necessary to relocate the affected population either partially or totally on new sites during recovery studies. What is more, “if old locations of villages do not have sufficient land for the construction of new houses required as a result of destruction in a natural disaster then relocation to a new site is required” (Bayülke, 1984, p.17).

In case of utilization purposes, it is also necessary to relocate communities to supply them with utilities like sewer system, water, electricity, road system, etc. Provisions of such utilities are difficult to apply on the existing settings in rural areas as a result of inabilities in infrastructure.

As Bayülke claims (1984: 19)

the land of the new site would probably belong to the state or local government or it may be common property of the village. It is generally preferred not to pay for the land since funds available for reconstruction is always insufficient of limited.

Besides, flat or gentle slope lands are preferred because they are easy to handle: excavations for foundations and utility lines would be easy; transportation of construction materials would be done without any difficulty. However, it should be noted that “flat area or gentle slope is highly susceptible to cold winds and hot sun” (Bayülke, 1984, p.19).

⁶ In Turkey, the largest relocation project has been realized in Gediz after 1970 earthquake, though it can be considered as an exception because of its scale.

It is another fact that orientation and vegetation of the chosen site are not considered so much as the topography. Though sites facing to south are preferable but not compulsory. For excavation purposes, sites without vegetation are preferred.⁷

2.2.2. Reconstruction

Reconstruction is another element of resettlement and rehousing programs; it is a supplement to relocation and the policy to provide new housing for communities which are moved to new sites (Oliver, Aysan, p.32). Through reconstruction new scales are introduced: a new settlement, new houses, social buildings, activity areas, road network, infrastructure as well as utilities.

No matter what the reason for resettlement is, reconstruction is essential. The fundamental aim is to provide each living unit with basic services, for example, kitchen, bathroom, latrine and basic accommodations. Thus, in doing so, new concepts are reconciled in design and production process: standardization of buildings and construction methods as well as materials used is required.

It is a fact that standardization of houses has various advantages: they are quick and practical to be constructed, easy to be controlled during the construction. It is stated by Bayülke (1984: 19) that in resettlement projects, acceptance of the new settlement by the individuals is closely

⁷ It is a very strong belief of the author is that most of the trees are destroyed during the excavation on the site. It is a bit difficult to believe that the contractors will show respect to natural environment. Hence, it is important to underline that traditional settlements are in harmony with nature but do not destroy it.

related to duration of the construction. Standardization is also desirable as a result of being more economic. Resettlement projects are supported by the government: “loans to finance reconstruction of housing and repayment is done with low interest over a long time”. (Oliver , Aysan 1987, p.35)

The economic inabilities are also reflected on construction materials and methods. Commonly, reinforced concrete structures with brick infill and plaster on the facade are desired to be used.⁸

2.3 Impacts of Resettlements on Culture

It is stated earlier that culture is one of the ‘*a priori*’ aspects for resettlement applications and should be taken into consideration. However, it is a fact that resettlement and rehousing programs do not fully satisfy cultural requirements and do not pay enough attention on communities’ value system. To be sure, the impacts of resettlement projects are immediate but their effects are felt over years, even decades.

Resettlements are imposed on indigenous communities in rural areas without considering their real life needs and activities; they embed political decisions, governmental regulations and institutional appraisal. Oliver’s argument would best explain the failure of resettlement programs in general, though stressing on specific case of relief programs, especially permanent housing, after disasters:

⁸The convenience of the construction techniques and materials to the regional properties of the communities will be dwelled on later.

At the time of impact, the indigenous culture suffers stresses that change its state to a victim culture, and immediately afterwards it is subject to the additional straits of accepting the alien, but in itself untypical relief culture to direct the solution of its problems. It is therefore prone to a double trauma: the traumatic experience of the disaster and the trauma of having an external body assume responsibility for its welfare, and for its shelter, a humiliating experience which in itself can do irreparable damage to the cohesion of its social system. (Oliver, 1981, p.40)

Decisions on the formation of resettlements are taken without detailed information about the culture for which projects are prepared. Rich cultural and distinctive national identities are not adequately recognized in design process of the projects. Besides as Oliver and Aysan emphasize (1987: 13) that “failure to understand the traditional family structures can aggravate social problems and cause considerable stress.” At this point it is vital to ask: How can outside groups give effective assistance to re-establish local administration within affected areas? How can local needs be most effectively expressed to outside groups?

The following sequential five points highlight the impacts of resettlements on culture:

- *Culture seeks for continuity; resettlements are agents of interruptions:* It is a fact that culture is continuous, it is inherited from older generations. As stated before culture is passed on others, especially to young generations and thus, a consensus from one generation to the next is preserved. As Liangyong claims (1991: 7) “each generation must rework the definitions of the old symbols which it inherits from the generation before; it must reformulate the old concepts in terms of its own age.” Thus, culture is a living thing and consequently develops according to the necessities of the period.

However, resettlement projects are so quickly developed that the natural discourse of cultural continuity is interrupted. Through such applications new features as well as different value systems are introduced to the communities.

- *Resettlements are interruptions on physical environment which has impacts on culture:* Through resettlement projects, relocation and reconstruction are introduced to the communities, thus physical environments are completely changed; they are moved to new sites which have different physical layout like topography, orientation, vegetation. They are moved to new settlements through which different physical patterns are conveyed. They are moved into new houses which advocate new activities as well as different construction methods and materials. Curtis (1982: 359), cites Polacki's ideas:

Most architectural styles were the products of their own societies. Its religious values, climate, technology, social and political structures dictated the need and style of buildings. Shapes, proportions and decorations were symbolic and had meaning, often ending up with strict architectural orders. This 'internal stimulus' created cultures and architectural expressions that differed greatly from each other.

In rural areas, vernacular settlements are formed spontaneously. They are not designed by a professional nor planned according to any kind of regulation. They develop in time as a result of the needs and wishes of the villagers.

Customs and traditions usually slow down physical changes, but in resettlement projects, physical changes try to change the customs and traditions. (Aysan, 1980, p.49)

- *Resettlement projects and applications are interruptions of social lives of communities, thus act as catalysts of social change, agents of alterations:* It is a fact that when contact occurs between different cultures, social interaction and consequently, social change is inevitable. Though social change occurs spontaneously: “Spontaneous cultural change occurs continuously due to command contacts with new values, the emergence of new needs and the mobility of the old system to cope with the existing problems.” (Aysan, 1980, p.13) At this point, it is important to give a brief explanation on social change which is provoked by state resettlement and rehousing programs. Change occurs when a new idea has an effect. As Oliver points out (1981) if the relief programs, do not serve the basic needs of the society it may ultimately contribute to social disruption or change without the support of evolution within the deep structures of the social system. Social change defined by Rogers and Burdge (1972: 10) is “the process by which alterations occur in the structure and function of a social system.”⁹ It is important to point out the classifications of social change in order to be able to put forward the impacts of resetting explicitly. In doing so Rogers and Burge’s (1972: 11) classification will help the study to further develop. They classify *change* in 2 groups:

a) *Immanent change:* It occurs when members of a social system, with little or no external influence, create and develop a new idea and it spreads within the system. It is an innovative change with the support of the social system.

⁹ Process of social change is viewed in 3 sequential steps: Invention-Process by which new ideas are created or developed, Diffusion- New ideas are communicated to the members of social system, Consequences- The changes that occur within the social system as a result of the adoption or rejection of the innovation. (Rogers, Burdge, 1972, p.10)

b) Contact change: It occurs when sources external to the social system introduce a new idea. It is a 'between-system' change phenomenon. It may be either selective or directed, depending on whether the recognition of the need for change is internal or external. Contact change is examined under two categories: i) Selective Contact Change: In Rogers and Burdge's (1972: 11) terms, this type of change occurs "when members of a social system are exposed to external influences and adopt or reject a new idea from that source on the basis of their needs." It is a relatively relaxed action where the members of the social group are free to accept or reject, choose or interpret the new impacts. ii) Directed Contact change: Directed change in other words planned change, "is caused by outsiders who on their own or as representatives of change agencies, seek to introduce new ideas in order to achieve goals they have defined" (Rogers and Burdge, 1972, p.11). What is more the innovation and recognition of the need for the change originates outside the social system.

- *Resettlement projects lead alterations in socio-economic state of communities:* As a result of resettling, production patterns of communities change. Through projects of resettlement, new commercial activities and industries are introduced, thus new job opportunities are created, especially if resettlement is applied as a result of economic purposes.

As stated before, through resettlement, relocation occurs; thus it has impacts on socio-economic situation of communities:

1. In rural areas, traditional settings are rather close to their fields. Through relocation, villagers are moved to at least couple of kilometers or maybe more further; distance is prolonged. It is a

fact that “a ten kilometers trip cuts in half the work capacity of an average farm family.” (Taraklı, 1975, p.5)¹⁰ Thus, production pattern of the family starts to change.

2. Through relocation, villages are moved to places which are close to main roads to towns; a better communication is introduced with the places where better job opportunities exist. Thus, people would prefer working in the town, traveling there everyday but still living in the village, instead of dealing with their previous occupation.
- *Finally, resettlements create dissatisfaction and are not accepted easily in rural communities:* Cultural factors play a major role in satisfaction and acceptance. It is a fact that

the success or failure of any recovery program relies, in the final product, on its capacity to satisfy the cultural needs and requirements of the people who have been the victims of the catastrophe.” (Oliver, Aysan, 1987, p.12)

As Sibtain (1982: 1) argues according to his experience in the relief program and rebuilding of a village in Afghanistan, many such solutions have failed because the proposed earthquake resistant housing has been culturally unacceptable. They are not going to be satisfied with prefabricated tin sheds or concrete cubes if they have been used to living in housing with indigenous form compatible with their life style and the environment.

¹⁰ Example of an agricultural community is chosen as a result of the case of the study but the same argument can be developed for other communities. If a fishing community is relocated away from the sea, the work capacity would definitely decrease. It is a fact that , the longer distance to activity of production, the less efficiency, and work capacity.

However, the case has two sides: resettlements are not all rejected when other measures are taken into consideration. It is a fact that, if the house is provided with barns, storage facilities and conditions of payment are arranged in an advantageous way, then they are accepted.¹¹ It is claimed by Bayülke (1984: 22) that if the new location of settlement is close to the villagers' fields and to the newly provided agricultural lands or to the big town with higher job opportunities, acceptance is higher. However, acceptance does not always mean satisfaction.

¹¹ During the site survey of the current study, it was noted that eventhough people were complaining about the houses, they seemed to be satisfied with them. They told that they got a house cheaply no matter how inconvenient they were.

CHAPTER 3

IMPACTS OF MODERNIZATION IN STATE RESETTLEMENT PROGRAMS

Modernization is one of the '*a priori*' parameters that is introduced through state resettlement and rehousing programs and plays a major role in the changing face of physical and cultural environments, especially in rural settings of the developing countries.

Modernization, at the individual level, corresponds to development at the societal level. Modernization is the process by which individuals change from a traditional way of life to a more complex, technologically advanced, and rapidly changing way of life. (Roger and Burdge, 1972, p.404)

According to Curtis' argument (1982: 356) "Modern architecture was created in industrialized countries where a progressivist world view flourished temporarily, and where avant-garde cliques attempted to produce an authentic modern style appropriate to rapidly changing social conditions". This curious pattern was not repeated elsewhere, but its results were copied all around the world, and were often misapplied.

The 'advanced' nations had themselves invented the Industrial Revolution; and they had had over a century to adjust to the far-reaching social and cultural changes it brought with it. The rapidly developing Third World country of 1960's and 1970's could find

itself passing from a rural and agricultural economy to an urban and industrial one in the course of single generation. The tools (including buildings) with which this rapid change was achieved were imported ones. (Curtis, 1982, p.356)

The misapplication and misinterpretation of Modern Movement caused irreparable effects in the Third World countries like Turkey starting from post-war period. In Curtis' point of view, (1982: 356)

the dissemination of this degraded version of modern design occurred in a number of ways: through rapid economic development of a kind which fostered functions, technologies and urban circumstances in which some sort of modern architecture seemed either relevant or unavoidable; through continuing colonization, in which case images of modernity functioned as emblems of foreign economic or political control.

Furthermore, as it is an imported architecture for Third World countries, the endproducts are mostly like ill-fitting prosthesis¹² which do not really function and are alien to the context. The situation is even more crucial in case of rural settings where traditional way of life is still vital. At this point, Hassan Fathy's ideas of modernism would further develop the argument:

Modernity does not necessarily mean liveliness, and change is not always for the better... Tradition is not necessarily old fashioned and is not synonymous with stagnation... Tradition is the social analogy of personal habit, and in art has the same effect of releasing the artist from distracting and inessential decisions so that he can give his whole attention to the vital ones.
(Curtis, 1982, p.357)

¹² The concept of prosthesis in architecture is introduced by Mark Wigly. He further develops his argument as claiming that the concept of prosthesis is always already architectural and secondly architectural discourse is itself a prosthesis.

As Mümtaz states (1983: 269) “the loss of valuable traditional fabric and skills, and the pursuit of development show pieces and symbols of modernity are familiar enough in much of the Third World”. Besides, disregarding indigenous features of national architecture which reflect the cultural aspects, are quite customary. Thus, this new understanding which is a distorted version of modernism leading to rapid modernization, neglects cultural identity and regional reality, besides imposes its own features on traditional communities.¹³ At this point, it is important to note that, “the development of architecture has to be based on the regional reality. Since the buildings of habitats demand vast quantities of resources, the physical and social conditions of the locality must be taken into full account” (Liangyong, 1991, p.5).

However, the reality does not match with the ideal. The impacts of rapid modernization in Third World countries are so strong and influential that it is almost impossible to stop or at least slow down its rapid penetration.¹⁴ It is ironic that so many developing countries have been persuaded so easily to adapt the vulgar versions of Western architectural dress. This penetration goes so deep into the structure of the culture that ‘modernism’ is accepted as the state policy by most of the Third World countries. Thus, state rehousing and resettlement programs are further developed under the guidance of this adapted policy. New features in design layout, material

¹³ It is another discussion if local people are aware of this imposition and are complaining about it in case of resettlement. During the site survey for the current research in Yüzüncü Yıl (details are given in the coming chapters), it was noted that most of the villagers were happy with the new applications as they are provided with sewer system, running water and electricity in their houses, school for their children, etc.

¹⁴ The study is not going to seek for an answer for how to stop or control rapid modernization in developing countries but at this point, while improving this thesis and stating hypothesis, one should always keep the question in mind: Is it ever possible to keep the traditional cultures as they are and encourage them to keep their indigenous form while the whole world is going through an era of high/rapid technological change?

selection, construction methods, etc. are introduced, even imposed on the local people.

Resettlement projects and applications in rural areas are pursued within the framework of state rehousing and resettlement programs. Thus, they are the agents of rapid modernization which is accepted as the state policy by the Third World countries. They embed impacts of production patterns, which involve political decisions, governmental regulations and technological assessment and do not really match with the traditional way of living. Furthermore, they are external interventions to local tradition. Design and production policies are interwoven with modern understanding and they are, as claimed by Tunali, “the distorted and unrealistic reflection of physical and cultural facts” (Balamir, 1979, p.54). However, these facts are imposed on individuals with no respect to their real life activities and needs. This can be further developed by the citation from Tunali: “The architectural theory expects the individual to fit into the designer’s model of living” (Balamir, 1979, p.54).

In fact, Sibtain (1982: 53) argues that, traditionally, a village is not planned; it simply develops according to the need and growth of population. Houses are built at different times without following any predetermined sequence or planning methods. This is the unrepeatable quality of a village and thus, the fundamental difference with the planned settlements in rural areas. ‘Institutes’ very often fail to reproduce the existing patterns in planning for new settlements. However, in state resettlement and rehousing policies, there is usually a tendency to neglect the context which embeds local values and patterns,. Thus, such projects act as catalyst for change in the physical and social environment. Fathy further develops the argument by refusing to accept the myths of progress

and claims that in most Third World circumstances, the peasant could build better for himself than any other architect or professional (Curtis, 1982, p.358).

The rural people solve the problem of the design of their shelter and community buildings in an enormous variety of socially appropriate ways without professional assistance; on the other hand shelter designed for them by outside agencies often fail to respond to people's real needs and is frequently rejected. (Spence, 1981, p.111)

There are basic problems that the institutions are stuck with in case of resettlement and rehousing. Among all, failure to comprehend the magnitude or the complexities involved in providing housing in a developing society and lack of sophistication in dealing with housing in a resetting is rather important. It is important to have a clear understanding of the building process where resettlement and new housing is going to be applied. It is a fact that,

most indigenous settlements can be perceived as mature examples that have undergone various alterations in the course of time and in the search for perfection until finally coming to their own most elaborate form. (Aysan, 1980, p.31)

Thus, it is almost impossible that an organization can go into a society and provide structure which fits their definition of shelter or a house without participating the process which local houses are provided. As Pader (1988: 251) argues "space itself may be primordially given, but the organization, use and meaning of space is a product of social translation, transformation and experience." However, such organizations are quick to develop ways to provide housing units, but very slow to estimate their impacts on the communities and on the building process. (Cuny, 1981). It would be rather

beneficial for the study to mention Oliver's argument (1984: 29) on etic-emic duality:

It is a fact that the objective observer can not really be subjective participant as well; he/she can not be in 'two cultures' at once. This problem has been identified as the 'etic' and the 'emic' duality: ... the 'etic' activity; is understanding the structures and systems of a specific society, the 'emic' activity is the experience of these societies from within.

Thus, 'institutes' are mostly in an 'etic' activity thus, do not thoroughly understand the structures and systems of the communities.¹⁵ "They have objectivity but not the internal understanding of the community to meet the local problems." (Oliver, 1984, p.28)

It is a fact that 'institutes' interpret the meaning of a dwelling in its very basic and simplest form. In these terms, house is a container and its main purpose is to shelter and protect its occupants and contents from animal and human enemies and those natural forces known as the weather. 'Institutes' should also realize that providing a house is more than providing just a shelter; a house is more than something that one adjusts himself/herself to. It is an essential extension of the family, social value, religion, etc. Besides,

it is wrong and pointless to force upon people a system of housing that is distasteful to them and which is unrelated to local architecture and cultural norms. It is far better to offer a system that will be familiar and acceptable, while at the same time being modern, safe, capable of maintenance and, when necessary, of restoration. The house form, therefore, has to be a product of the combination of traditional skills and crafts with modern technology. (Sibtain, 1982, p.3)

¹⁵ Immediately a questions comes into mind: Can one be the observer and the observed at the same time?

Curtis' (1982: 364) argument would best explain the situation: "The major element of the architectural crisis of developing nations arose from a failure to establish an architectural language suitable to both modern and traditional tasks".

It is another fact that modernism has various advantages. It technologically brings better conditions in most aspects. Through technological assessment which is defined as "the cracks of light from the big society shine into the villagers' social and physical isolation" by Rodger and Burdge (1972: 404), traditional individuals begin to enter the modern world. But they also point out (1972: 404) the disadvantages of modernization: "Undoubtedly many people in less-developed nations want improved technology, higher levels of living, and the other trappings of a more modern life style. But with modernization also comes pain, conflict, and relative disadvantage." It can be said that individuals in rural settings

"often appear to prefer shelters that follow the rectangular plans and pitched roof types of Western forms.... The reasons may be various: they may indicate the tendency of victim cultures to imitate the artifacts of the relief culture on whom they depend; they may appear to be 'urban' and 'modern' and hence relate to the assumed values of Western culture and its apparent roots in urbanization." (Oliver, 1981, p.41)¹⁶

¹⁶ During the site survey in Yüzüncü Yıl, some villagers declared that they wish to buy an apartment with a balcony in a block in Mudurnu. They think that they are getting 'modern' and thus prestigious in the village.

3.1. Design Policies

3.1.1. Loss of Communication and Participation

One of the important products of state rehousing and resettlement program in which 'modernism' is integrated in design process, is the loss of communication of user and designer as well as user participation; thus causes conflicts on physical environment and cultural life.

First of all, locals have no word in definition of their physical environments; design process is controlled by the designer. It is a fact that as Sanoff states (1988: 39) "design and planning decisions are by nature biased and depend on the values of the decision makers".¹⁷ However, decision makers mostly fail to understand the local motives and values of house form as well as "the superimposed layer of inventions from the earliest nomadic forms, through villages and towns, to later imperial and even colonial frameworks" (Curtis, 1986, p.24). Thus, they merely reproduce existing patterns in planning of a new settlement, but do not try to understand the relationships and contexts of such values and patterns. Decision makers commonly think that their ideas are sufficient enough to provide the villagers with dwellings but it is another fact that expert decisions of the professionals are not necessarily better than 'lay decisions' of the locals.

Instead of authoritarian approaches that give no credit to individuals, housing process must be directed towards self-governing systems. The case in Afghanistan which is explained in introduction, is a good example

¹⁷ It should be questioned if the real decision maker is the architect or not. In governmental applications the regulations are so strict that the identity of architects are lost somehow. This will be explained more in production policies section.

for self-help method. The process must be saved from the hegemony of the professionals and the local people should be integrated in the design process.

3.1.2. Disregarding Traditional Systems

As explained in the previous part, designers and agencies produce projects of resettlement and housing without including the users in design process. Thus, this leads to miss important features related to the community. Among all, disregarding traditional systems from design process is rather important. Projects of resettlement and housing are pursued through state resettlement and rehousing programs without regarding the indigenous life styles of the individuals living in the territory. These life styles are defined by Plihal as “the popular acceptance of values, customs, beliefs and attitudes, all of which affect the taste orientations of people towards architectural environment” (Balamir, 197, p.55). It is important to state that tastes are the reflections of traditions; they are local phenomenon and have impacts on the vernacular architecture. However, through resettlement programs, tastes of rural settings are disregarded. These programs are the end products of a universal value system which embeds impacts of modern assessment. As a result, most of the cultures today, become almost identical in life styles as well as their architecture. Consequently, houses that are neither dependents of the environment, nor the regional culture spread through Third World countries. As Davis argues (1981: 17), there is a widespread ignorance by state agencies of local cultural values. In addition, there is evidence of intervenors assuming that their own culture and housing are superior to local forms of shelter.

Assumptions are made that these cultural values are irrelevant in the aftermath of resettlement applications.

In fact, as Curtis asserts (1986: 27)

when the vernacular is in a healthy state, it certainly does not need the interference of architects, for its tradition is a living one in which there is a happy consensus between user and builder, past and present, mind and hand.

Further developing the argument it is important to emphasize that “the physical reality that the major proportion of our ‘Globe’ is shaped up by indigenous and local building practices, rather than through ‘institutionalized’ attempts of professional architects (Aysan, 1980, p.29).

As a result of the interference of the professionals, traditions of the region are disregarded. Thus, lack of identity and disappearance of vernacular life (also vernacular architecture) may appear and consequently indigenous culture changes. However, even though they are affected by the new settlements and house types, local people try to adapt them to their real needs. No matter how the houses are designed, in most cases some alterations occur. Balamir’s example (1979: 75) would best explain the situation: In some new settlements, the cattle have been accommodated inside the houses.

3.2. Production Policies

3.2.1. Building Regulations

One of the outcomes of production policies which advocate ‘modernism’ through state resettlement and rehousing programs is the building regulations.¹⁸ It is further developed by Taylor that “the needs of the user is ‘rationalized’ by governments into mandatory standards and accommodations” (Balamir, 1979, p.50). Both design and production as well as construction of settlements and houses are described in this mandatory set of rules without considering the local necessities and needs.¹⁹ What is more, these rules are not arranged according to regions but rather they cover a wide range of decisions. Thus, same policies are applied to different regions even though the contextual needs are rather different from each other.

It was earlier stated in loss of communication and participation that user is completely disregarded from the design process of his/her own dwelling. In fact, the architect is also neglected from the process by the regulations, which are set by the ‘government’.

In Turkey, in case of resetting after disasters, there exists a mandatory which was prepared by Afet İşleri Genel Müdürlüğü according to the Turkish law of 7269 of 15.5.1956 which was modified by the 4th subject of law 1051. Through the mandatory, decisions that are needed be taken in case of disasters are described.

¹⁸ It is a fact that building regulations are also influential in design policies to a certain extend. The sets of rules are obliged to be applied in design process.

¹⁹ See Appendix A.

3.2.2. Technology Imported

Technology is one of the elements of modernism which has impacts on all aspects of life as well as construction techniques. Besides, it is rather desirable as well as alien to developing countries, especially rural communities. Through rapid modernization, new technologies -also high technology- are introduced to traditional communities.

In the transactions between industrialized countries and developing nations there were also collisions in the ways buildings were designed and constructed...The resultant forms were immediately at odds with centuries-old traditions of craftsmanship in which methods had been evolved to handle local materials. The practical logic behind regional style was undermined, and the delicate details and institutions of handicraft were replaced by tatty industrial building components. (Curtis, 1982, p.357)

Thus, new construction techniques bring new materials in the field of construction as well, no matter how convenient they are to the context of the community. In projects of resettlement and rehousing in developing countries, new production techniques, current construction materials are being introduced to the indigenous culture within the framework of the rapid modernization. However, these are easily accepted and adapted by local people, as technology is considered as a sign of modernization which means Europeanization, Westernization; it means prestige. This technology, mostly interferes with the local way of building.²⁰ For instance, construction of reinforced concrete houses in a village where the traditional material is wood is a good example how rapid modernization

²⁰ Most probably, villagers do not interpret this interference of the new technology with the traditional way of building as they think that new technology is prestigious and thus, they are getting close to urban way of living.

takes place and consequently affects the life patterns of a community. Thus, Curtis further develops the argument:

Fathy discovered that concrete-frame housing schemes were liable to be far more expensive in terms of money, transport costs, and salaries, than local, traditional, self-build methods, and that they were at odds with non-Western ways of life. (Curtis, 198, p.357).

However, technological assessment has various advantages as well. Nobody can have any objection to provide villagers sewer system, running water, electricity, etc. in their houses. Various elements of new technology such as washing machines, color televisions, telephone, are being introduced to the villagers.²¹ However, the important point is to what extent communities would let technology penetrate into all aspects of their lives.

3.2.3. Standardization and Repetition

One of the policies of state resettlement and rehousing programs is standardization and repetition of designs. In so doing, it is encouraged by the policy that dwelling and resettlement designs should be standard and repeating. It has various advantages for the state itself. Such applications are quick to be constructed, easy to be controlled during the construction.²² They are also preferred as a result of being more economic than designing and constructing different dwellings for each individual

²¹ During the site survey, the impacts of technology have been observed. In the old village, there exists a common place for washing the clothes etc. But, through new architecture, all villagers have bathrooms which are big enough for the washing activity. Thus, in the new settlement, the common space for washing is neglected; and the activity which is a cultural phenomenon is disregarded.

²² See 2.2.2 Reconstruction

family. This can be illustrated by an example from Turkey: İmar İskan Bakanlı₁ prepares projects of housing for disaster relief and other rehousing purposes. According to the climatic map, Turkey is divided into 4 different regions, and for those regions 12 different house types have been designed.²³ In case of applications, the climatically appropriate type is chosen and a site planning by repeating the same house type is prepared.

On the other hand, it has various disadvantages for the individuals of traditional settings. It is also advocated by such projects to neglect topography, orientation, context in general, in design process. Thus, as a result of the repetition of standard houses in rural areas, uniformity within the framework of rich context appears. "Nature knows no uniformity, but seeks ever greater variety. Uniformity may therefore be seen as unnatural in the sense that it is an artificial phenomenon" (Habraken, 1972, p.21). In this way, the settlements which are the endproducts of this design policy can be considered as unnatural because they are the examples of artificial way of housing. The identical character of the resettlement obscures 'self-expression' of the individuals through construction. Identity of the individual is neglected; lack of variation and standardization of individuals is advocated. Thus, the same kind of life styles are exposed on the villagers. But in most cases, villagers tend to alter the state provided houses according to their tastes and needs. Thus, the property of being identical creates lack of fair orientation. As all houses are the same, there exist no landmark houses so that nobody can address his/her location.²⁴

²³ See Appendix A.

²⁴ During the field study, the lack of orientation and addressing has been experienced. Even the villagers were unable to describe the house of the Muhtar.

CHAPTER 4

METHODOLOGICAL DESCRIPTION OF THE PROBLEMATIC AND THE CASE STUDY

4.1 Brief Description of 1982 Study

As stated before, an academic study titled as ‘An Ecological Study of Three Housing Types in a Rural Environment Prone To Disaster’, was conducted by a group of tutors and students from METU as a term project in 1982.

The study focuses on new settlements built under the name of ‘disaster housing’ and claims that “there are points not considered at all or points treated very superficially in design parameters.” (Turan, Cengizkan, 1984, p.65) The subject is considered to be “a housing problem in a particular rural area with specific environmental factors such as earthquake and flood to be considered in the overall design criteria in addition to other design parameters that need to be treated with care in the conception of any new housing settlement” (Turan, Cengizkan, 1984, p.65).

In doing so, the study promotes a careful examination of the present housing environment in the region, needs and daily activities of users related to the dwellings. This leads to a better understanding of the

housing phenomenon and inhabitants' relation to their environment. This comprehension highly depends on a realistic explanation of the phenomenon and focusing on its parts without losing the sight of its totality. Thus, healthier designed environments can be built.

The main purpose of the study was to first understand the nature of building in the region and the housing environments in both technical and socio-cultural levels and then to focus on new design proposals. Throughout the project, a research for a correct method of approach which goes down to parts but also handles the totality of the phenomena had been intended. Another purpose was to point out the conflict between the real needs of the villagers and what the professionals (the institutes in this case) designed for them. In doing so the study examines thoroughly the traditional way of living and the traditional dwellings as well as the new settlement. As Turan and Cengizkan state that the study focuses on

the lack of methodology in the analysis and evaluation of a housing environment as well as setting the correct design parameters for a new settlement within the above mentioned environmental context. (Turan, Cengizkan, 1984, p.66)

Disaster housing application which is within the framework of state resettlement and rehousing program, covers two neighboring villages, Kurtlar and Bostancılar and their dispersed districts.

The site chosen for the study is in an earthquake prone area where also there are infrequent but strong floods which can wash away some of the livestock without any serious damage to the houses and people. Both of these disaster types, officially stated, have been the main reasons to relocate two villages on a new site. Not officially stated but one more reason of prime importance in the decision to relocate the villages is the scattered physical layout of the villages. (Turan, Cengizkan, 1984, p.65)

The research aims to reveal attitudes of the villagers towards their vernacular settings and 'institutionalized architectural products which are maintained for them to move in. In doing so, the researchers come up with some vital statements that further develop their argument (Turan, Cengizkan, 1984, p.67):

- What the governmental agencies design and build as 'disaster housing' has not been very successful from numerous points of views.
- Those, having little or no choice but end up living in them find it necessary to change the 'finished product' physically for adaptation purposes and to create more 'livable' environments.
- The traditionally built housing environments seem to be more satisfactory in spite of their various weaknesses.

Thus, the above mentioned statements lead to provocative questions for the study to be pursued (Turan, Cengizkan, 1984, p.68):

- Has the vernacular architecture been studied sufficiently to form clues for future designs?
- Has the process in the formulation of the 'vernacular' and 'neo-vernacular' architecture been understood well?
- In spite of their structural deficiencies (if they are weak structurally), what makes the housing environments provided by the 'vernacular' architecture more preferable to those offered by the professionally designed ones?

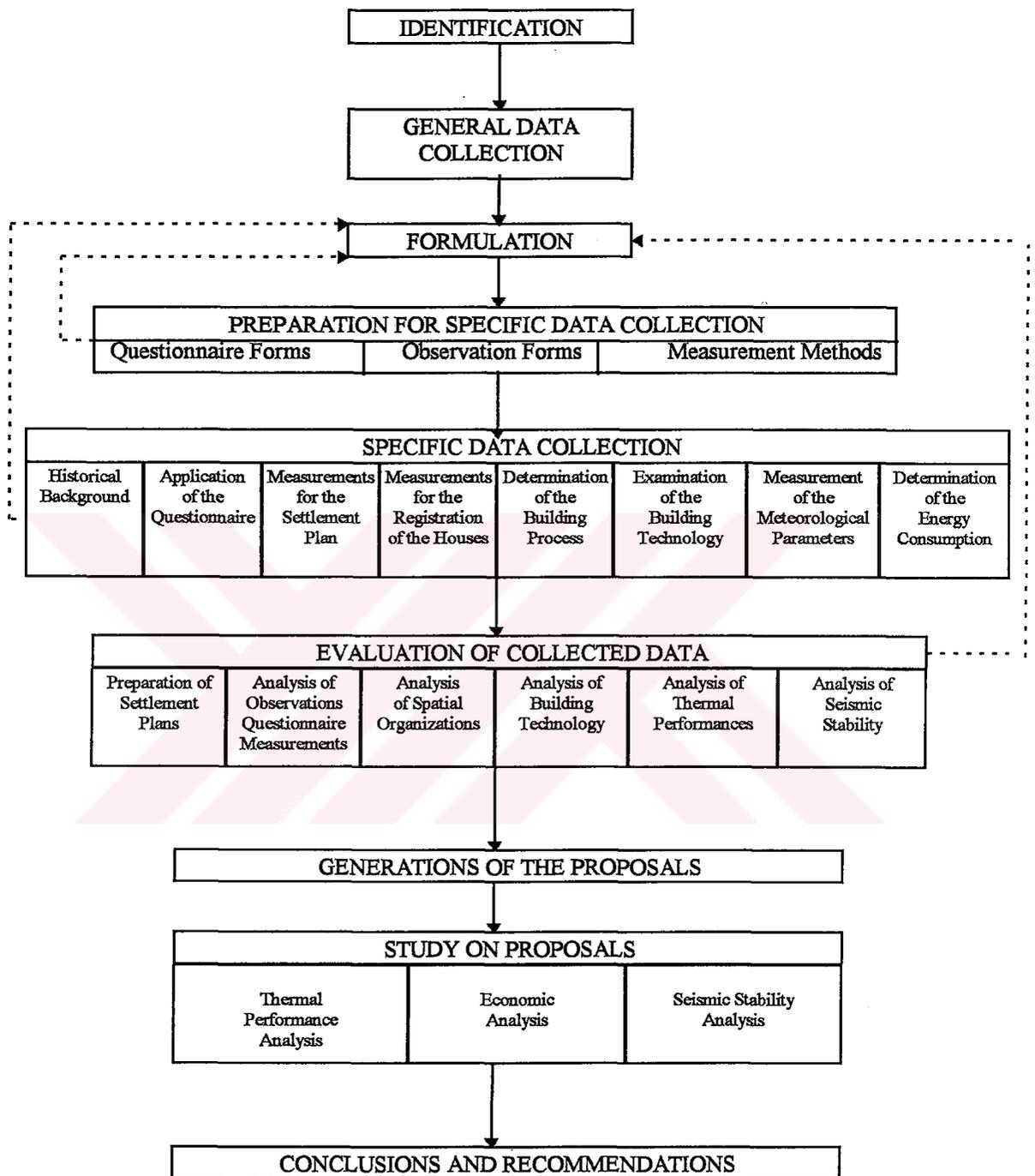


Figure 4.1. Flowchart of 1982 Study (Turan, Cengizkan, 1984)

- What are the people's attitudes towards the built and the natural environments in these different settings?
- How are these housing environments built?
- What are the interconnections between everyday living and spatial organization? ²⁵

The questions above led the study to below mentioned aspects that are rather important for the current study as well (tentative hypothesis related to these aspects are given in Appendix B):

- Environmental adaptation (more specifically, energy utilization of the individual buildings as well as the energy balance of the settlement)
- Environmental adaptation (more specifically, life condition and the mode of production)
- Bureaucratic constraints
- Building structure, construction and technology
- Socio-economic structure and the built environment
- Beliefs
- Health standards (Turan, Cengizkan, 1984, p.70)

Finally, the study sets forward the comparative results regarding the performance of the vernacular and institutional examples: (Turan, Cengizkan, 1984, pp. 119-125)

1. Provision of social amenities at the new settlement is decisive about moving into the disaster houses.
2. Complaints about the inadequacy of number of rooms, absence of kitchen, bathroom, and guestroom are decisive in moving also, as well

²⁵ These questions are divided into three contextual categories. See Appendix B.

as houses' dissimilarity to modern houses and their lack of sewage system.

3. The wealth of the family is also decisive in moving to the new settlement.
4. The vernacular house has the potential to shelter more than one family providing their privacy while the disaster house does not.
5. The vernacular house has enough storage capacity while the disaster house does not.
6. Construction materials and the functional use of the vernacular house exhibit a better thermal performance than the disaster house.
7. The vernacular settlement takes environmental factors such as wind, sun, and snow, into consideration; whereas the disaster houses are open to the prevailing wind and lack fair orientation.
8. The vernacular house allows seasonal changes in using rooms while the disaster house does not.
9. Although limited, in the vernacular settlement there is a possibility of choice of the site, while in the case of the settlement, as the buildings are already built and a fairly restrictive settlement plan is applied there is no choice.
10. The choice of the site of the house and settlement as a whole is dependent on the proximity to the fields in the vernacular settlements.
11. As there is no choice in the new settlement, it is found that they will use their present houses that are nearer to the fields in summers and the disaster houses in winters.
12. Natural sanitation system in the vernacular settlement is cyclic in ecological terms. However, the built sewage system in the new settlement being accumulative, it will somehow disturb the immediate ecological balance and cyclic use as fertilizer can not continue.

13. The behavioral network inside the disaster houses is not congruent with their present way of life. Their life in the future may be exposed to unconscious stresses owing to this.

However, the results should be considered as conclusive hypothesis and thus, they need to be justified. It is important to consider the time context of the research. The field study was executed during the construction of the 'institutional' houses and the new settlement; besides villagers were not been accommodated in them yet. Except for the technical data, the behavioral observations which are done by the researchers are assumptions. Thus, as Turan and Cengizkan state (1984: 66) an analysis and a comparative study seems to be quite promising in this respect and the test of such a method and hypothesis need a rather long time span, for the true test is the actual utilization of space in time.

However, an attempt for search of a healthy way of approach to the problem may provide the future designers with some realistic tools as well as initiating a discussion among the researchers for better means of analysis. What really is needed, at least partially, for healthier designed housing environments is a better comprehension of the housing phenomenon and the inhabitants' relation to that environment. (Turan, Cengizkan, 1984, p.66)

4.2. Methodology

The current case study is intended to be developed within a three partite system which is introduced by Schneekloth and Shibley (1983: 136) in their study 'Practice of Placemaking'.

4.2.1. Confirmation: Appreciation of Context

In its very general meaning, it is the subject analysis stage of the problematic. The term is described by Schneekloth and Shibley, (1993: 137) as “the act of looking at the context of the work with an appreciative attitude in order to understand what is and what has been historically taking place. “In order to evaluate a work or to make judgments about any form of intervention, one must understand and confirm what it is” (Schneekloth, Shibley, 1993, p.137).

The aim of the current study is introduced as: to understand physical and cultural factors which relate to housing and resettlement in rural areas. The idea is to disclose deficiencies in resettlement applications. In doing so, the purpose is to observe the evolution of rural settings in time after resettlement projects are realized in the region. It is important for the further development of the current study to learn how such applications affect local people and their physical and social environments. How much have the new settlements been accepted and adopted; how much have they been misused and changed? These are other questions that are to be pursued throughout the research.

There are three contexts that need to be confirmed for the study to pursue:

It is important to confirm the old villages Kurtlar, Bostancılar and the new settlement, Yüzüncü Yıl: to know and understand time, place and cultural reality of the region, especially old villages Kurtlar and Bostancılar and new settlement Yüzüncü Yıl. The current study aims to understand the indigenous patterns of old villages in order to be able to judge the new settlement which has been realized under the guidance of government. In doing so, the study which had been executed by Turan and Cengizkan with a group of students from METU in 1982, is going to be considered as the main guide. Furthermore, site survey in the region, both in old and new settlements, is another tool to confirm the context. Conversations with local people and applied questionnaires support the confirmation as well.

It is important to confirm 1982 study: to understand and review the study itself thoroughly. As explained in the previous section, 1982 study focuses on new settlements in rural areas and their missing points which are not considered at all or treated very superficially in design parameters. Current study is proposed to be the successor and thus, in order to confirm the context, it is important to understand the hypothesis, problematics and consequences that are pursued through the previous study.²⁶

It is important to confirm the institutional decisions which led to the realization of Yüzüncü Yıl: to comprehend the institutional decisions that played a great role in planning process of the specific case Yüzüncü Yıl. The application is a part of ‘state resettlement and rehousing program’ and

²⁶ See 4.1 Brief Description of 1982 Study and Appendix B again for detailed information about the previous study.

thus, governmental regulations that were valid during the design and construction process of the new settlement are important for the further development of the research. However, the case is not so promising in getting information about the state decisions of the above mentioned application from the related 'institutes' of the government.²⁷

4.2.2. Interrogation: The Conduct of Critical Attitude

Interrogation is the second step of the study following confirmation of context which is the act of examining the context by asking questions, by problematizing the place through a disciplined and critical perspective. It is the stage of being critical upon the problematic; it is to ask 'how it should have been done' in accordance with the real goals after clear and complete understanding of the context.

The process of confirmation and interrogation is the foundation of a collaborative dialogue which affirms meanings from a perspective which reveals their structure and inequalities.
(Schneekloth, Shibley, 1993, p.138)

There are two contexts that need to be interrogated through the conduct of critical attitude:

It is important to interrogate 1982 study: to have a critical attitude towards the previous research. 1982 study is the only written document of what has been taking place in the region during the resettlement

²⁷ It is pathetic for the current study to learn that, the archives of Köy İşleri Genel Md. have been damaged as a result of flood after the autumn rains and since then nobody dared to clean them. Thus, the files in which there exist decisions of the application of Yüzüncü Yıl, are still in mud and rain water and most probably destroyed by rats.

application, thus, it is rather important for further development of the current study; consequently, it is taken for granted. However, it is also important to have a critical standing upon what is being conveyed through the study; to realize its deficiencies and disagreed arguments have to be exposed.

The study is prosperous. It observes and puts forward the time context of the old villages; a brief but also detailed documentation is accomplished. Social and physical contexts are exposed successfully; local traditions, values, kinship as well as rituals are revealed. Thus, everyday life in the region is documented. What is more, it focuses on housing in the region and closely examines space organization, construction techniques and thermal performance of the traditional dwellings. Then, a comparative study is performed with disaster houses which are realized in the region through the state resettlement program. Last but not least, it presents hypothesis on disaster houses which were still under construction during the site survey.²⁸

There are lacking parts. 1982 study claims to be a research on housing environments but there exists little knowledge about settlement scale. It is vital to state that to understand settlement pattern of the villages is as important as to know house form in the region. It concentrates on the way traditional dwellings are constructed, their thermal performance, and their comparison with the new houses that are built under name of disaster housing. Thus, a comparison on settlement scale is missing. This might be a conscious attitude; however, settlement scale is believed to play an important role in house form. The way a village is formed, how dwellings

²⁸ It is a fact that most of the hypothesis which were set by the study are justified in time. They are stated Chapter 5.

come together, its reasons, cause-effect relations are the subjects that should have been pursued within the framework of housing environments.

Moreover, while discussing house form, 1982 study fails not to mention the importance of production patterns of the community. Thus, it is one of the major elements which is significant on house form.²⁹ It is earlier stated that socio-cultural and socio-economic factors of communities of rural settings play a major role on physical environment especially on house form. House, as well as settlement should correspond to the requirements of production patterns of the community. It is another fact that as production patterns of local people of Kurtlar and Bostancılar have not been taken into consideration, patterns are not reflected on the three dwelling proposals for the new settlement.

As mentioned before, traditionally, a village and a traditional dwelling are not especially designed, they develop simultaneously according to the needs of the community and its population growth. However, 1982 study exposes three dwelling proposals which are suggested to be prototypes for the new settlement. These proposals are sensitive on local motives and their efficiency is much better than the 'institutional' ones. However, the 1982 study group also fails to apply the same kind of logic. Prototype housing do not exist in indigenous patterns of traditional villages.³⁰

It is also important to be able to receive information about the governmental regulations that played the major role in the realization of Yüzüncü Yıl throughout the study. The new settlement is the product of a

²⁹ See Chapter 2, Culture and Resettlement

³⁰ Here, the term 'prototype house' is used to indicate identical houses. Prototypes do exist in traditional villages but houses are never identical because all are built by different people in different periods.(Houses may have same type of layout plans., iç sofalı, karmıyank, etc.)

set of rules and regulations which are different than the indigenous pattern of the old villages, thus, have impacts on house form.

It is important to interrogate the new settlement, Yüzüncü Yıl: to operate our own value systems and to reach to a critical understanding of the new settlement within the framework of the purpose of the current study. In this part, the present situation, both social and physical, of Yüzüncü Yıl is needed to be handled in order to be able to end up with a critical evaluation. In doing so, methods like questionnaires, observations, dialogue, etc. are applied to achieve a better understanding of the whereabouts.³¹ Through further developing this stage, it would be possible to ask the important question ‘how Yüzüncü Yıl settlement should have been handled in order to fit into the environment properly and satisfy the needs of villagers?’ This is dwelled on in the next chapter in which field survey is discussed extensively.

4.2.3. Framing Action: Process of Inclusion and Exclusion

As Schneekloth and Shibley (1983: 136) define, after reaching to a better level of knowledge about the subject, it is the stage how the study would be handled, from which points of views the problems would be analyzed. It involves the process of shaping attention, of deciding what and whom to include and exclude. It is the stage of limiting the subject by certain keywords, parameters and variables. After confirmation and interrogation

³¹The methods for confirmation and interrogation were applied during the site survey . Appendix C is the questionnaire that was applied to the villagers firstly in 1982 by the students of METU while people were still living in their old/traditional houses and the new settlement was still under construction and secondly in September 1994 by the author while most of the villagers were living in the new settlement for more than 10 years. Appendix E is an evidence for understanding the context of the village, its past, its people, etc. by conversation method.

of the contexts as well as the current argument, it is the stage of promoting the framework of the study: how the problematic of the study would be handled, which aspects would be exposed.³² This stage will also be the platform of forming the current hypothesis as well as testifying the old ones that were stated in the previous study.

While talking about current hypothesis, alienation should be underlined as a result that it is reinvigorated through state resettlement and rehousing programs in rural areas and besides, is the upper argument which is advocated by the current study. As Balamir defines (1979: 44) the term alienation is used extensively in theoretical and empirical work related to sociology, psychology and philosophy to describe every conceivable aspect of cultural fragmentation and social isolation. In these terms, Turan explains that “alienation is that phenomenon known as the state of man becoming a subordinate to any kind of designed product in the environment” (Balamir, 1979, p.45).

In case of alienation felt due to the misdesigned environment, Balamir claims that (1979: 45) “the individual is found to go under environmental stress. The alien nature of the environment causes either passive acceptance or revolt upon the users.” It is a fact that, though the architect can be seen as someone who combats environmental alienation, in such applications he/she is the one who introduces stress to the community through designed environments.³³ There are various reasons leading to alienation. One reason for alienation, implying the designed environment

³² This part also covers Chapter 5, Field Study.

³³ The role of the professional is somewhat different in ‘institutionalized’ applications. His/her own character is not reflected on the work itself but rather regulations play a major role in shaping of the work. Thus, the professional is alienated from his/her own work.

is conducted by the lack of users' participation in design and production.³⁴ Design process is conducted by a group of professionals who are outside the community and have no experience of the indigenous patterns and rituals of the local culture. At this point it is necessary to ask the questions which are stated by Ortecho: (1990: 176)

- Do we really think that we are capable of understanding people's needs and motivations?
- Are we ready to listen to them? Are we trying to speak for them or are we trying to enable them to speak for themselves?
- Are we able to follow the dynamics of cultural behavior in our changing societies?
- How can we, ... realize that we ought to teach people how to improve their residential conditions? But also that we ought to learn from them in order to acknowledge their community identity?

The case of Yüzüncü Yıl is a good example for such an application which leads to alienation to different contexts:

- Alienation of villagers to Yüzüncü Yıl,
- Alienation of designers to the project and the context of the region.

As mentioned above, lack of experience of the context of community ended up with a new settlement which has no connection with the original settings, thus, an abrupt change of both physical and social environment has occurred; the continuity of the environment has disappeared. It can be claimed that the above mentioned questions were not taken into

³⁴ See Chapter 3, Impacts of Modernization in State Resettlement Programs again for more information.

consideration by the intervening group.³⁵ Thus, the settlement they have designed is alien to its own physical and social context. This has impacts on the local people: even the villagers are alien to the new settlement; they are alien to themselves, to their traditions, values as a result of this inconvenient application and its impacts on the region.

1982 study was criticized in the previous part as three housing types were proposed for the new settlement. The argument is still valid but when alienation as a result of lack of experience is considered, it can be said that the study is rather successful. First of all, the group has spent some time in the old villages and tried to experience and understand the local way of living, which embeds physical and social phenomenon. Thus, proposed houses are rather successful in fulfilling the local needs of the villagers when compared to the institutionally provided disaster houses.

³⁵ It is another argument if the intervening group ever thought about these questions and cared about them.

CHAPTER 5

FIELD STUDY

5.1. Context of the old villages

In order to be able to reflect the transformations and modifications that have undergone in the course of time, as a result of resettlement of traditional villages, general features of Kurtlar and Bostancılar as well as Yüzüncü Yıl have to be underlined. As Aysan claims (1980: 34) “the physical environment can not possibly be abstracted from the corresponding life pattern, culture, environmental responses, and prevailing relations of production.” Thus, it is important not to focus only on buildings as isolated objects, but rather try to grasp other measures that are significant on the physical environment.

As stated before, 1982 study is the most important document for the current study to understand the context of the old villages, especially when the local people were still living in their traditional dwellings. Thus, the information about social and physical environment which are exposed in the study will be advocated here as well as the modifications which took place until now.

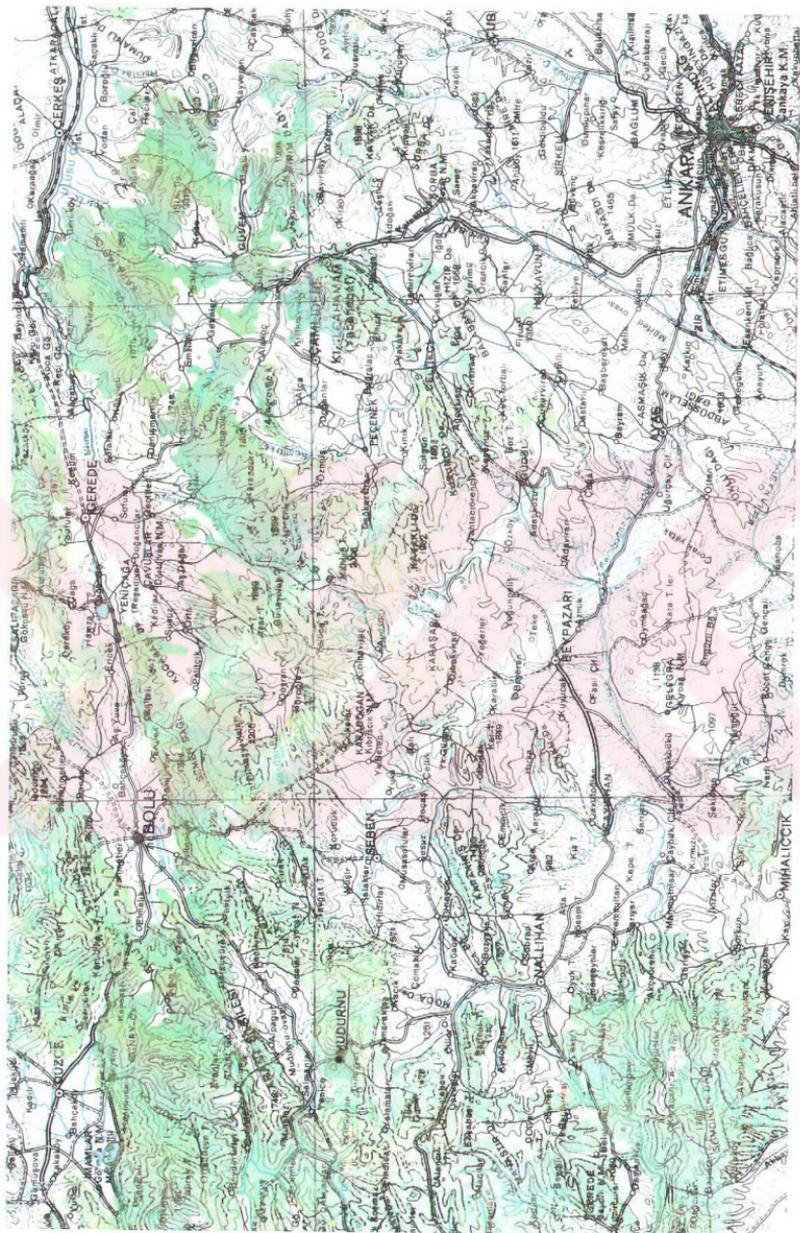


Figure 5.1. The geographical location of Mudurnu 1/800,000

Kurtlar and Bostancılar are located 13 km. from sub-province Mudurnu, 50 km. South-west of Bolu. It takes two and a half hours walking, or one hour by tractor, a little bit more than half an hour by car to reach Mudurnu from the villages. The total population of 2 central villages and 7 districts during the application of the resettlement project was 99 families, 536 people (Turan, Cengizkan, 1984, p.74).³⁶

5.1.1. Social Environment

Kurtlar and Bostancılar are supported by an economy based on agriculture and animal husbandry. Most of the villagers are farmers, mainly cultivating sugar beet, wheat, and potatoes. Recently a new source of income is poultry at a large scale.³⁷ Villagers keep livestock (cattle, sheep, goats) but not for commercial purposes; the products are primarily used for daily needs.

Local people make their own bread in the ovens called ‘Tandır’ once a week. They grow fruit and vegetables to meet their own needs. They prepare food to be used in the winter and store in rooms called ‘ardiye’ or in cupboards. They keep flour in large wooden chests and call the room where these chests are kept as ‘unluk’. They provide some of their needs from the market set up in Mudurnu on Sundays. (Turan, Cengizkan, 1984, p.80)

As Turan and Cengizkan expose (1984: 81) daily activities of the villagers change in pattern due to seasonal changes. During winter months, men are engaged in care of animals. In their free hours they gather in one of the houses to chat or play games. Besides, villagers have difficulties in

³⁶ Detailed information about the old villages is given in Appendix C.

³⁷ Mudurnu Tavukçuluk is one of the most important economy and source of income for the villagers of the province.

meeting other people living in any of the dispersed districts of the village, especially during winter time.³⁸ Few villagers go for hunting. On Fridays, all males go to mosque which also a social activity; the gathering all in one place. However, due to the work on the field, this activity can not be carried in summers regularly. Most of the villagers, except very old and young, go to the fields early in the mornings and return late in the evening in summer time. Women are also concerned with the care of the animals as well as house work. Women frequently visit each other, for chatting or helping with the housework. Washing activity and getting water from the fountain are the social activities of women where they all come together. Children usually give a hand to the elders working on the fields or are busy with the care of the animals in the summer; during winter time, they either attend to school or idle around.

In 1982 study Turan and Cengizkan (1984: 81) point out the traditions also: Marriage ceremonies are one of the most important rituals of the village. People get together in the house of the bridegroom or in a large house. A fire is set on the village square to dance around. Religious days are intensively celebrated in the villages. On these days men gather in the common rooms of each district sequentially. From every house food is sent to this group of 50-100 persons. Also, villagers visit each other at homes on these days. During Ramazan (religious fasting days), people invite each other for 'iftar' (the meal at the end of the fasting day). However, fasting is not common among villagers during summer months, since they work hard in the fields. The celebration of 'sünnet' (circumcision) is not intensively carried out in the villages.

³⁸ This piece of knowledge is obtained during the site survey of the current research while talking about the advantages of the new settlement.

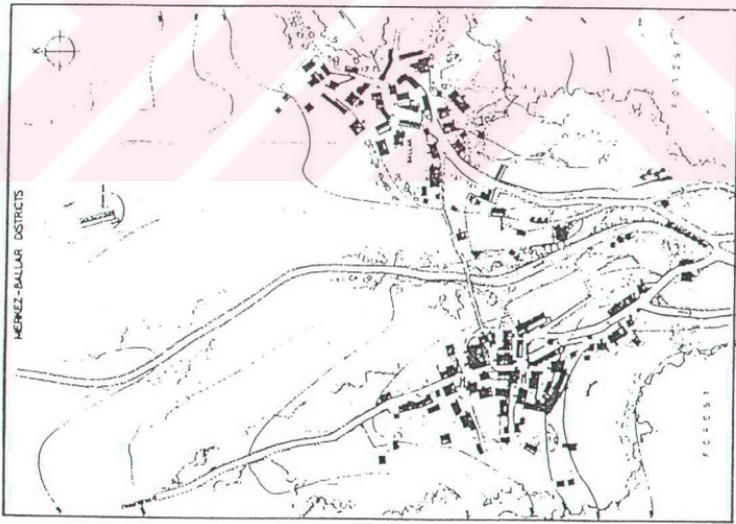


Figure 5.3. Map of Merkez Ballar (Turan, Cengizkan, 1984) Figure 5.4. Map of Ureyler District (Turan, Cengizkan, 1984)

5.1.2. Physical Environment

Kurtlar, Bostancilar and their districts were traditionally formed villages; not planned, just like all other traditional settings. They developed according to the needs and population growth of the villagers. The social, economic, cultural and physical forces have combined to produce the current vernacular architecture. These forces have largely remained constant for a long time in this area.

The settlements are generally on the hills sides and on top, so that they are the least disturbed in case of floods which occur infrequently. They are connected to the main road at lower levels and are surrounded by steep hills and forests at higher levels. (Turan, Cengizkan, 1984, p.78)

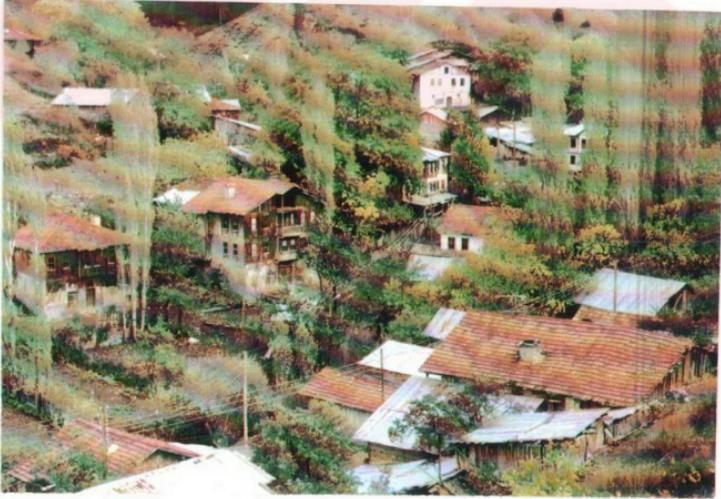


Figure 5.5 General View of Kurtlar

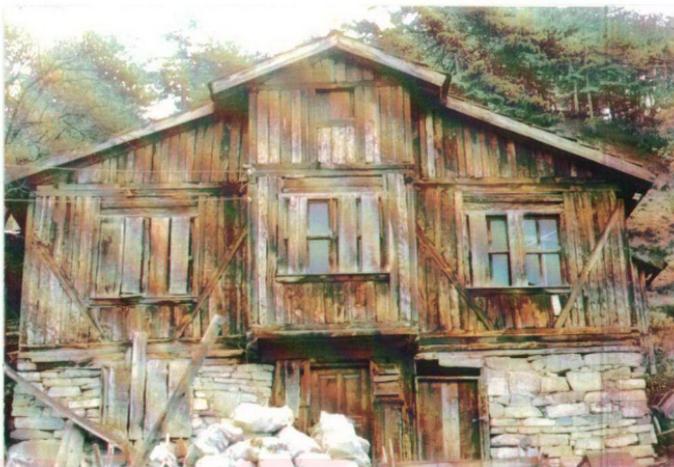


Figure 5.6. An old house in Kurtlar

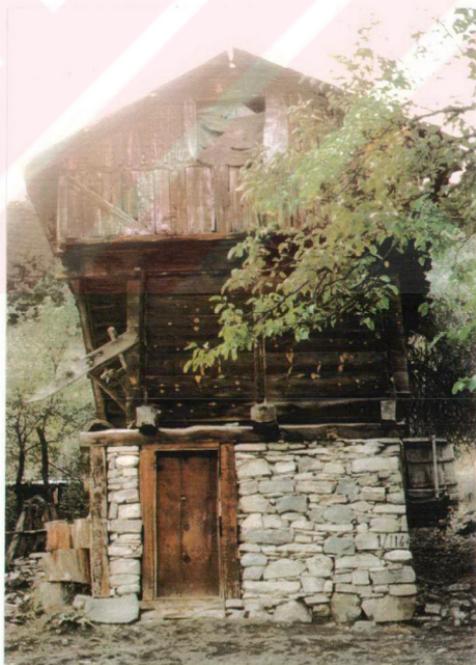


Figure 5.7. An old house in Kurtlar

Kurtlar and Bostancılar are rather close to the field of agriculture that villagers can easily reach their land. The orientation of the villages are formed in harmony with topography. As a result of this natural formation, the orientation of the houses are considered as satisfactory. There is said to be sufficient light as well as shadow casting on the villages.³⁹ Most of the districts have a linear plan as a result of safety reasons. There exist one main road and houses are located on both sides. It is not common to have another road which runs parallel to the main road. Besides, houses are constructed very close to each other as if they are forming a city wall. A wolf, for example, almost hardly can sneak into the village unless it uses the main road. Thus, in that case, it is definite that it will be caught by the villagers once it enters the main road.⁴⁰

According to the documentation of 1982 study, in Kurtlar, there existed two schools, one in Central Kurtlar (built in 1962) and the other in Üreyler (built in 1977). Children at Kaybiler attended the school in Central Kurtlar. In Bostancılar, there was only one school in Ballar district (built in 1963). Children at Parmaksızlar, Ferahlar and Müftüler attended the school in Ballar also.

In Bostancılar, there existed mosques in each district but only the one in Central Bostancılar was functioning and had an 'imam'. Mosques in other districts remained unused. The situation was the same in Kurtlar; only the mosque in central Kurtlar was in use and the rest remained unused.

There were common rooms in each district next to the mosque. The rooms were used by the villagers to come together on special days as well as

³⁹ See Appendix C, proceedings of conversations with the villagers.

⁴⁰ From the proceedings of conversations with Prof. Dr. Duran Taraklı

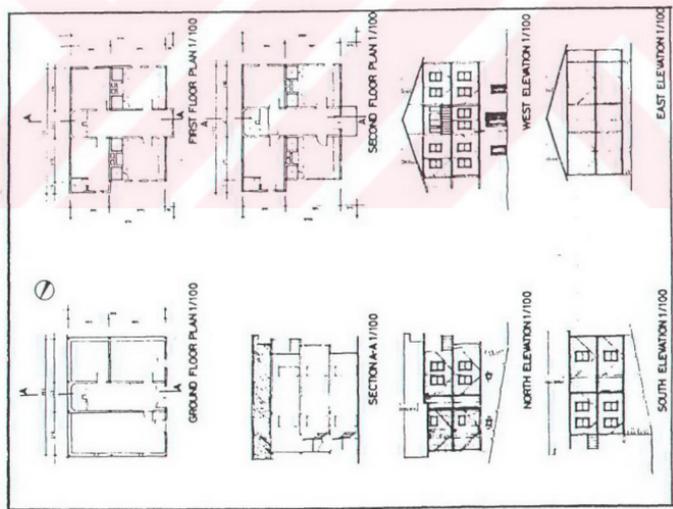


Figure 5.8. The house of Mehmet Kaya, Kurtlar
(Turan, Cengizkan, 1984)

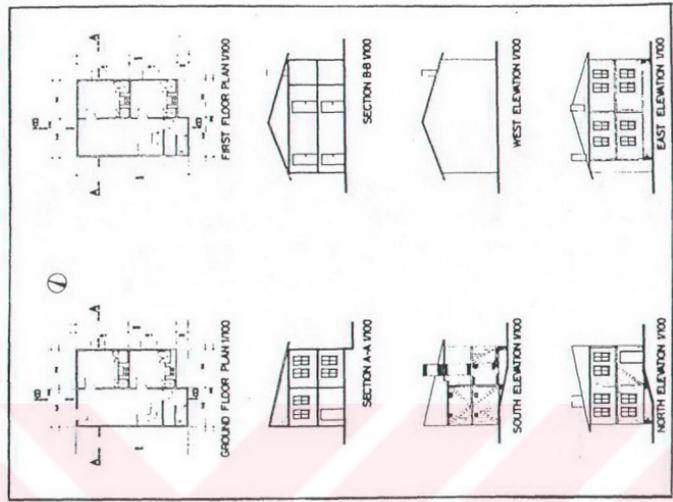


Figure 5.9. The house of Imam Ozturk Bostancilar
(Turan, Cengizkan, 1984)

temporary occupation by the ones who are in need of a place to stay. Besides, they are used for Kur'an courses for the children of the district.

There were no coffee houses or any kind of stores in any of the districts of the old villages. There existed no health centers either. The villagers went to Mudurnu or Bolu for shopping or medical care.

In each district there was a fountain built by YSE and they are called 'pınarbaşı'. Since there was no running water in the houses, water was supplied from the fountain and carried to the dwellings. Besides, dwellings did not have infrastructure. All districts of Bostancılar and only Central Kurtlar had electricity since 1981. As described in the study, "for heating, only wood is used but for cooking purposes butane gas is utilized." (Turan, Cengizkan, 1984, p.80)

It is also important to have a clear understanding of how the houses are planned and constructed by the villagers. Thus, 1982 study would best highlight the plan layout and construction methods of traditional dwellings:

The plan type is primarily traditional: 'karnıyark' (split-belly) in both Kurtlar and Bostancılar as well as their districts. Living spaces mainly consists of two floors where on each floor a buffer zone is located in the middle of the layout. (Turan, Cengizkan, 1984, p.82)

Mostly, it is noted that, barns are included in the houses; they are located under the living spaces. Thus, the living spaces are elevated from the ground and the houses become three storey-high. The buffer zone is referred as 'çardak', 'sofa' or 'salon' and "has at least a visual access to one side (generally to the entrance side) of the house" (Turan, Cengizkan,

1984, p.82). It also serves as a meeting ground and the space around the traffic area that is adapted for seating.

‘Çardak’ which is a common space into which rooms open has the staircase at the rear end (opposite to the entrance) of the house. Two of the rooms, called ‘ön oda’, face the street and those are the daily living rooms. At the rear end, the rooms are called ‘kör oda’ and are used as, kitchen or for storage purposes.
(Turan, Cengizkan, 1984, p.82)

One of the traditional ways of construction which is commonly used in Kurtlar and Bostancılar is called ‘çantı’ (loghouse). These are one-bay houses built from logs; and they are used as barns in the old villages. The other type of vernacular construction is the post and lintel method in wood. In this case, the building is either two, or sometimes, three stories resting on a stone foundation raised from the ground.⁴¹

5.2. Context of the new settlement: Yüzüncü Yıl

The project was realized by the credit of hundred billion US dollars which was supplied from European Council Housing Foundation in 1976. (1983: p.9) The complete project covered 3885 villages that are under the control of 53 counties of 17 cities which were located within the periphery of First Earthquake zone in Turkey. Thus, 20 villages were taken into the utilization program in 1980.

The research studies were stated as follows by Toprak İskan Genel Müdürlüğü (Directory of Land and Resettlement) as follows:

- Research on village inventory,

⁴¹ See Appendix C for detailed information.

- Research on prototype projects for economic and social buildings,
- Research on land and resettlement relationship,
- Research on management system which is convenient to the regional conditions,
- Research on determination of utility percentages of housing and agricultural structures.

The new project for the utilization of Kurtlar and Bostancılar was proposed and designed by Toprak İskan Genel Müdürlü ü (Directory of Land and Resettlement) of the Ministry of Village Affairs and Cooperatives.⁴² The very first ideas of the new settlement were of concern in 1979 and in 1980 pre-investment studies, researches were done; projects were completed. Construction of the site had been started in 1981 and main bodies of the houses and social buildings were built. Ultimately, 105 houses and other social buildings with infrastructure, and other facilities like running water, electricity, etc. were submitted to the villagers in July 1983. (1983, p.9)

5.2.1. Social Environment

It can be claimed that physical environment has impacts on social life. It is a fact that when changes occur in the physical environment, social environment gets influenced in time as well; it is affected from the impacts of physical change. Thus, in resettlements social change due to physical change can be perceived easily.

⁴² This piece of knowledge has to be updated. Since the project has been realized, there has been fundamental changes in the governmental organizations. At the moment, the above mentioned directory is a branch of Prime Ministry.

New settlement Yüzüncü Yıl which is founded in 1983, is one of the examples where social change with respect to physical change occurs. For true test of changes, 10-12 years of observation may not be sufficient. However, a decade is enough to grasp some changes at least. As Oliver states (1983: 32) “in ten years a generation can grow up which has values that are partially a reflection of the culture at its elders and partly a reflection of the changing nature of ‘modern’ society”.

To be sure, it is impossible to claim that a canvas cleaning has occurred in the social environment, even though it happened in the physical environment in Yüzüncü Yıl. It can be observed that even the physical environment is changed completely, individuals try to continue with their traditions, values, rituals in a way in the new settlement.

In case of Yüzüncü Yıl, the occupation of the villagers are not changed so much in ten years’ time. Commonly, in resettlements, it is claimed that new industries are being introduced to the community through the applications.⁴³ Furthermore, mostly the new location is desired to be close to the main road so that people would go out of the village for work to the nearest town everyday. These happened in Yüzüncü Yıl to a certain extend. Most of the villagers continue their previous occupation with agriculture; cultivating sugar beet, wheat and potatoes. Hence, during the site survey in the new settlement, couple of people is heard to be going to Mudurnu for work everyday. The ones working in Mudurnu, also live there. However, the communication with Mudurnu is better; villagers can easily reach to the town for their basic needs or other activities. It is important to highlight the impacts of Mudurnu Tavukçuluk in the province. Thus, occupation with poultry started to be wide spread during

⁴³ See 2.2 Resettlement.

the last years. What is more, the villagers continue keeping livestock for daily needs.⁴⁴

People continue making their bread in ‘tandır’ once a week.⁴⁵ They prepare food for winter and grow fruits and vegetables to meet their own needs. Going to Mudurnu market for shopping every Sunday is still a routine.

Daily activities of the villagers are almost the same and exhibit changes in pattern due to seasons. There exists a coffee house in the new settlement, thus, men no more come together in houses for chatting or playing games, but prefer meeting at the coffee house which is located at the social center of the village. Most of the villagers own televisions, so coming together for watching TV is no more a social phenomenon. For men, going to mosque every Friday is still frequent. It is observed that young generation is not joining the ritual so often. Older men are going to mosque every day. Women are also busy with housekeeping. Washing and getting water are not part of the daily life anymore because the new houses have running water inside and a bathroom. The presence of ‘çamaşırılık’ has disappeared from the village, but there is still a fountain near the mosque.

Social activities like marriage, celebration of holidays take place at the common room which is located at the social center of the village. There exists only one common room for the whole village, whereas there were one in each district of the old settings.

⁴⁴ One old man is occupied with apiculture for commercial purposes but it is just a small scale occupation.

⁴⁵ Despite the absence of ‘tandır’ in ‘institutional’ houses, it was not an obstacle for them. They build sheds to become ‘tandır evi’.

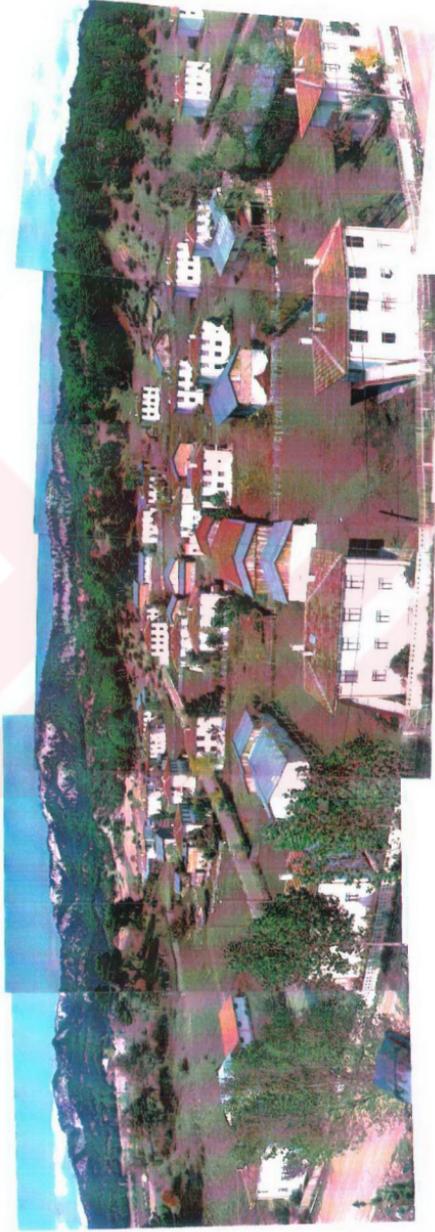


Figure 5.10. View of Yüzüncü Yıl



Figure 5.11. View of Yüzüncü Yıl

5.2.2. Physical Environment

Yüzüncü Yıl is a planned settlement within the framework of state resettlement and rehousing program and located 13 km. west of Mudurnu. (1983, p.30) The site chosen for the setting is totally 339.610 m² and can be described almost flat; having very little slope. Besides, the land is at a distance from the forest and is rather poor in vegetation.⁴⁶ The new settlement is pretty close to the main road to Mudurnu. Thus, transportation is possible by busses which are provided by Mudurnu Municipality. Besides, the new settlement location of the settlement is away from the field where villagers do agriculture for living.

The village is realized through building parcels and a network of roads with a zone for common buildings and social facilities. This zone is aimed to satisfy the needs of local people. For such a purpose, the school, mosque⁴⁷, common room, coffee house, market, parking lots, kindergarten and sports field are proposed to be located within the zone. Thus, this can be interpreted as being the square of the village where people come together.⁴⁸ (Figure 5.12)

There are 170 parcels on the site according to the project and each parcel is totally 1200 m² in area. Houses provided for the villagers are totally 105, with 73 m² base area and 62 m² use area. (1983, p.30) They are provided with infrastructure, running water in the houses and electricity. Houses provided by the government are identical in all aspects except for

⁴⁶ It is a strong belief of the author that during the excavation and construction, existing vegetation might have been destroyed as well.

⁴⁷ Actually, there is another mosque in the village, located in the south-east part.

⁴⁸ The validity of the project, how much of the original project is applied is discussed in 5.3. Analysis of Findings and Observations part.

BÖLÜ - MÜDÜRÜNÜ
KURTULAR, BOSTANCILAR KÖYLERİ
YENİ YERLEŞİM YERİ İMAR PLANI



Toplam alan	: 339.610 m ² .
Parsel Büyüklüğü	: 1200 m ² .
Parsel adedi	: 170
Kamulaştırma	: 3.718.715 TL.

Figure 5.12. The layout of the new village Yuzuncu Yil (.....,1983)

factors related to orientation and topography.⁴⁹ There is one type of house designed and constructed in the new settlement. Houses are built with fabricated bricks as load bearing elements. The floor, ceiling and the stairs are cast in reinforced concrete, further, a vertical column is used to tie the concrete floors. The plastering and floor finishing are in concrete (Figure 5.13).

Disaster houses consist of two floors which are two separate living units. There are two bed-rooms and one living room introduced to be a sleeping area at nights, a daily living room, a bath, and a kitchen on the first floor. It has an exterior staircase. (Turan, Cengizkan, 1984, p.97)

As documented in 1982 study, the ground floor is designed to function as a workshop for handicrafts, weaving tapestry and rugs, which is widespread in the villages, however it can easily be turned into a living unit. The houses are not provided with barns which are rather important for the villagers. However, it is stated by some villagers that ground floors are proposed to be barns. That is the reason why extra spaces for animals are not designed.

As stated before, a road system is applied in the new settlement. The gradation of the roads is pretty different than the traditional understanding of 'path'. Thus, there exists a main road on which housing units and social buildings are located, bus stops are placed.⁵⁰ There are secondary roads running parallel and intersecting to the main one.

⁴⁹ As topography is changing, the orientation of the dwellings can not be identical, thus create problems in related factors like sunlight, facing to north, etc.

⁵⁰ The main road was about to be covered with asphalt during the current field study.

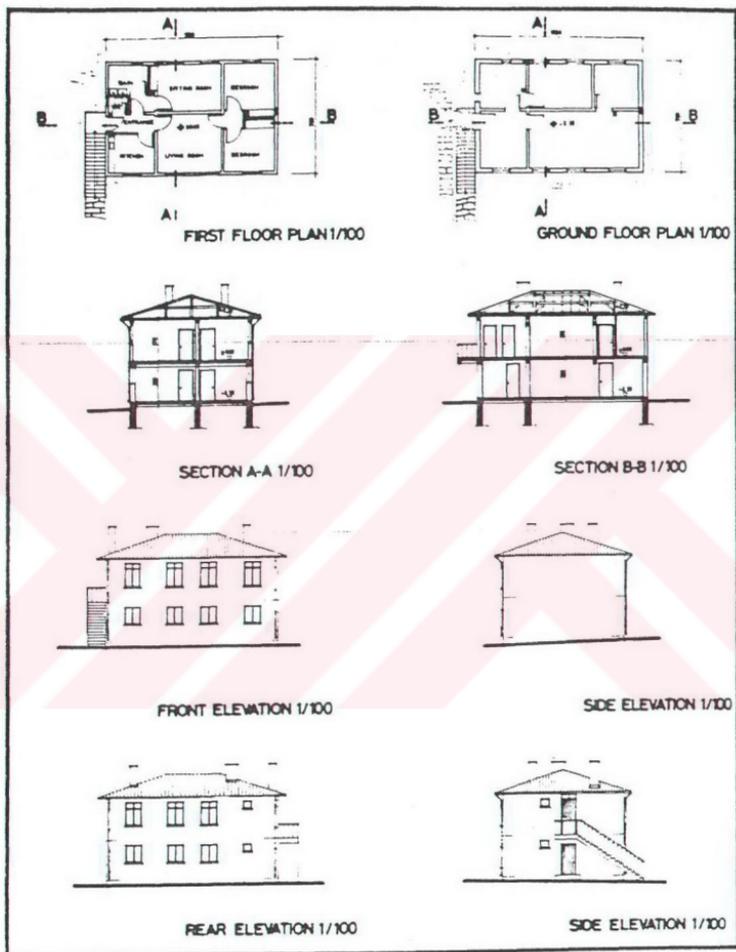


Figure 5.13. Disaster House (Turan, Cengizkan, 1984)

5.3. Analysis of Findings and Observations

As stated previously, the aim of the current study is to analyze and compare the effects of resettlement projects on people as well as to observe the modifications which have been taking place in Yüzüncü Yıl in time. In doing so, the true test of the hypothesis that were stated in 1982 study through observations, conversations, questionnaire would lead the current study to further develop.

During 1982 study “a questionnaire which consists of 72 questions were applied to the villagers” (Turan, Cengizkan, 1984, p.106) in order to understand the level of satisfaction of villagers on their old houses and the desire to move into the new houses.⁵¹ Thus, these questions led to the tentative hypothesis which are given in Appendix B. The same questionnaire is applied to 30 dwellings, totally 133 inhabitants for the same purposes. Both women and men were aimed to be questioned: 70 women (% 52.6) 63 men (% 47.4). Young members (between 15-30; 30 subjects) as well as middle aged (between 30-60; 46 subjects) and old ones (over 60; 30 subjects) were included in the questionnaire.

Through observations, conversations and questionnaire which were done during the current field study in 1994, the previously stated hypothesis are likely to be justified:

- What the governmental agencies design and build as ‘disaster housing’ has not been very successful from numerous points of views. The true test of this statement has been exposed during the time passed since people started to live in the ‘institutional’ houses in Yüzüncü Yıl.

⁵¹ See Appendix C for more information about the questionnaire.

- It is also justified that people, having little or no choice but end up living in ‘institutional’ houses find it necessary to change the ‘finished product’ physically for adaptation purposes and to create more ‘livable’ environments.
- It is also observed that villagers seem to adapt themselves to their new lives and new environment as well as new houses to a certain extent. During the current site survey, while talking to the villagers and applying questionnaire, it is observed that most of them are satisfied with their new houses and new settlement.⁵² However, modifications, additions, adaptations that are done in Yüzüncü Yıl in time, are best evidence that in fact, the new environment which was offered by the government, is not accepted as it is.

The current observations and results of previously stated hypothesis’ are as follows:

1. *Old settings, Kurtlar and Bostancılar are almost out of use now; most of the villagers moved to Yüzüncü Yıl in order to have better living conditions:*
 - As stated in 1982 study⁵³, provision of social amenities (being close to Mudurnu, ease of transportation, proper roads, etc.) at the new settlement is decisive about moving into the disaster houses.
 - %85 of the villagers are happy to be close to the main road. Most of them are going to Mudurnu at least once a week for various activities, especially for shopping and visiting relatives.

⁵² During the site survey, it was observed that the villagers were lying while saying that they are satisfied with the institutional houses.

⁵³ See page 46.

- Complaints about the old houses like inadequacy of number of rooms, absence of kitchen, bathroom, and guestroom are decisive in moving also, as well as houses' dissimilarity to modern houses and their lack of sewage system (% 80 of the villagers).
- There are a couple of families left who are still living in the central districts at the moment for different reasons (5 families out of the population of 24 families in Central Kurtlar).
- During the conversations, it was noted that some of the villagers, who are still living in the old settings, did not believe that government would provide them new houses with all utilities inside (sewer system, running water, electricity). Thus, they were not written down on the list for getting houses in 1980. However, they are waiting for new houses in Yüzüncü Yıl which are promised to be constructed by the government⁵⁴ (2 out of 4 families who are still living in Central Kurtlar).
- Except for central Kurtlar and Bostancılar, all traditional wooden houses in dispersed districts are removed. As mentioned earlier, 1982 study claims that villagers would use their traditional houses in old villages that are nearer to the fields in summers and disaster houses in Yüzüncü Yıl in winters. Thus, this statement is falsified in time as there are no houses left in many of the districts. However, hypothesis can still be valid for the central Kurtlar and Bostancılar as houses

⁵⁴ People claim that second phase of disaster houses will be constructed soon and they also tell that the new housing will be a self-help project. Government will supply money to the villager and ask them to build their own houses. However, people do not trust the government, as they think that the given money will not be sufficient for building their houses. Thus, they prefer the government to build the houses, just like the previous application.

are still standing, but, they are not in good shape, thus, need renovation.⁵⁵

2. *The resettlement project offers pseudo activities and spaces for Yüzüncü Yıl which do not really satisfy the needs and expectations of the local people:*

- It proposes various facilities to villagers, like sports field, kindergarten, parking lots, a big market -bakkal- (Figure 5.12.). However, except for the school, mosque and the coffee house, other facilities remained on paper; they are not constructed. Some activities were tried to be realized, kindergarten for example but remained as a sign only. One of the most important reasons for this is the conflicting value systems of the villagers and designers that is highlighted in Chapter 3. It can be easily seen that a market would not be able to survive here. It is stated by the villagers that there was a market (bakkal) in the village but it went bankrupt because nobody paid in cash.⁵⁶ It is also another fact that parking lots do not serve its purpose as there are very few cars which belong to the villagers. Thus, naturally, they can not be formed, or are sentenced to disappear from the site. Besides, a kindergarten in such a setting can not survive. It is a term belonging to urban settings where there exist no place for kids to play. However, kids are in nature in rural settings. These features prove that such applications are unnatural for the environment and do not overlap with the real life activities and needs of the local people.

⁵⁵ During the site survey, it was not possible to talk with other people living in the old villages as they were not in the village during that time. Besides, they are just couple of families. See Appendix D for more information.

⁵⁶ From the proceedings of conversations with the villagers. See also Appendix E.

3. *The site chosen for the new settlement Yüzüncü Yıl is ineffective; it is almost flat and poor in vegetation:*

- As stated before, in relocation applications flat lands are preferred by the contractors and as Bayülke claims (1984: 18) this preference of the contractors effects the site selection.⁵⁷ “Such sites do not require excavations and fill and flat areas are usually filled up areas and excavations for foundations and utility lines would be easy” (Bayülke, 1984, p.18).
- As stated by Turan and Cengizkan in 1982 study (1984: 119) the vernacular settlement takes environmental factors such as wind, sun, and snow, into consideration; whereas the disaster houses are open to the prevailing wind; exposed to sun light and lack fair orientation.
- In Yüzüncü Yıl, houses are located away from each other within a parcel; they do not have a tight layout thus, do not have a protective property from natural effects. In old villages, houses were said to be located intensely and close to each other for security purposes. However, this intense location provides solar control as well as natural effects.⁵⁸

4. *State provided houses are not flexible in site selection and orientation:*

- As stated in 1982 study, in vernacular settlement, there is a possibility of choice of the site and orientation , while in the case of Yüzüncü Yıl, as the buildings are already built and a rather restrictive settlement plan is applied, there is no choice.

⁵⁷ See 2.2.1. Relocation.

⁵⁸ See Appendix E.

5. *The identical character of the houses and street pattern lead to problems of orientation:*

- It is rather difficult to orientate oneself in Yüzüncü Yıl as a result of repetition of identical houses and the way they are located on the site: Identical houses are located one after another and in both ways more than once. Thus, roads which run parallel and perpendicular to each other. During the current site survey, it was almost impossible to describe which houses were visited or where the research group should meet. The difficulty is that, none of the houses have any characteristic to be a reference point.

6. *Houses are designed without taking the site variables into consideration:*

- As a result of topography, houses may need to be located on the site with different angles and positions. In case of Yüzüncü Yıl, more than half of the houses are oriented correctly to the sun in harmony with the topography. Some of them are located behind the hill so that they can not get enough light and some of them are located in a way that their living spaces are facing to north. Thus, there are various problems in those dwellings as being very cold and dark. It is a fact that, among false oriented houses (around 15 houses of the whole settlement), only two of them made alterations on the facade: opened extra windows to get more light and closed some of the existing windows to get rid of negative effects of orientation to north.

7. *Housing, provided within the framework of state resettlement and rehousing programs, often advocate prototype housing⁵⁹ as well as standardization and repetition as a result of the fundamental policies of 'institutes', thus lead to various weaknesses in the physical environment :⁶⁰*

- The new settlement Yüzüncü Yıl is an end product of the same policy. There exist rows of standardized houses within a plot pattern. Thus, site plan does not have the variation of different patterns of houses coming together.
- The identical character of houses leads to lack of identity and self-expression of the individual. Besides, the individual is tried to be standardized.

8. *New houses are rather tight in terms of space flexibility and allow no alterations; however design deficiencies of state provided houses were modified by the occupants, in the form of alterations and extensions to them; fundamental changes have been done in functions of the houses by the villagers:*

- Almost all of them who could afford, altered the ground floor into living spaces; added a kitchen and a bathroom in order to live downstairs (Figure 5.14). The upper floor is used for storage purposes and guestrooms. In some families, it is seen that multi-family living is adopted and thus, upper floor belongs to the married child of the family (%45 of the families altered the ground floor into living spaces).⁶¹

⁵⁹ See Appendix A.

⁶⁰ See 3.2.3. Standardization and Repetition.

⁶¹ The rest of the families (%55) are willing to make the same alterations but at the moment they can not afford the alteration expenses.

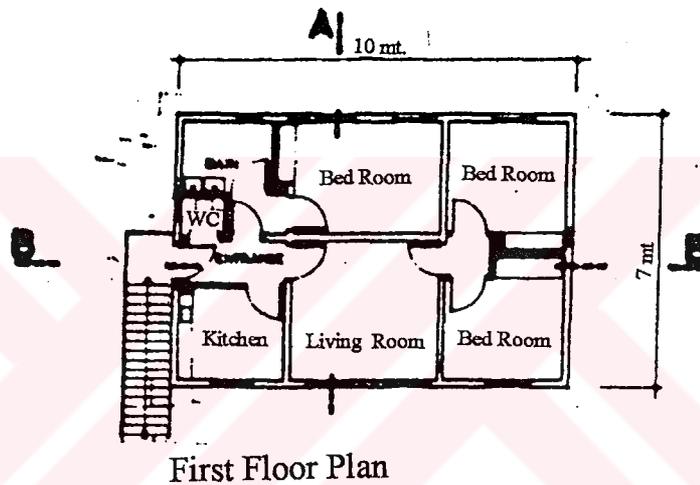
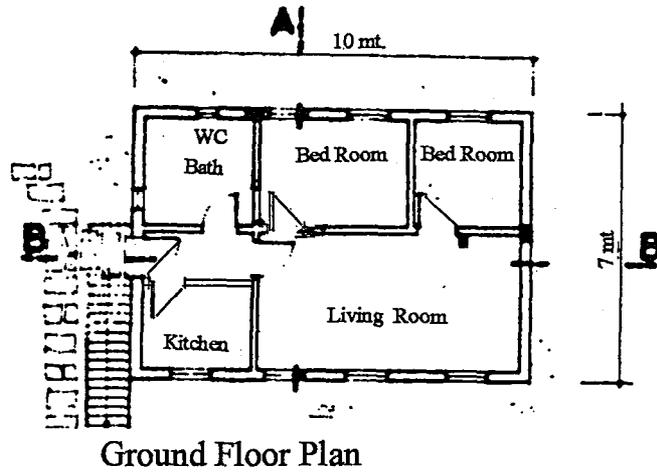


Figure 5.14 The altered form of disaster houses in Yüzüncü Yıl

- Production patterns of old villages were not taken into consideration during design process. As documented in 1982 study, houses provided by the government, have living spaces on the first floor and the ground floor is designed to function as a workshop for handicrafts, weaving tapestry and rugs, which is claimed to widespread in the villages⁶². However, there are no barns or shelter for poultry, no straw house; there exist no

⁶² During the site survey, nobody was talking about the mentioned activities.



Figure 5.15. View of additional spaces to disaster houses



Figure 5.16. View of additional spaces to disaster houses

'tandır evi' where people make their bread and food. Thus, such spaces which are vital for the villagers, are built by themselves.⁶³ It is stated by the villagers that, most people removed their old houses in the districts in order to build the sheds (%100 of the families added 'samanlık', % 70 added barn, %50 added storage, poultry, %80 added 'tandır evi', %30 of the families added garage, 2 families added a balcony, one added a vestibule).



Figure 5.17. View of additional spaces to disaster houses

⁶³ Those are the only sheds where self-expression and identity of the individual are reflected. It is another discussion how far those sheds reflect the character of local people. They are rather primitive and away from reflecting traditional motives.



Figure 5.18 View of additional spaces to disaster houses

9. *New construction materials which are introduced through Yüzüncü Yıl houses are not convenient to the climatic conditions of the region:*

- The new materials could have been used more efficiently as proposed in 1982 study (Turan, Cengizkan, 1984, p.120). As stated in 1982 study, the thermal performance of disaster houses are rather poor when compared to old houses but villagers find the new ones desirable for heat gain. This is justified in time as well because most of the villagers made alterations on houses to make them stronger in insulation. They laid wood or plastic sheeting on the floor (the floor is concrete) or cover some of the existing windows with plastic sheeting (%80 of the dwellings).

10. *The aim of the resettlement project is to get dispersed districts of Kurtlar and Bostancılar together in order both to supply them with infrastructure and utilities and to socially interact them: In fact only the physical union is achieved through the application.*

- Although Yüzüncü Yıl is aimed to be one single village, there are two separate administrative units as Kurtlar and Bostancılar. Besides, there exist two different ‘muhtar’ for each unit. It is stated by the ‘muhtar’ of Kurtlar that there has been a referendum about the union of administrative units but the result was ‘NO’.
- The layout of the settlement is so widespread that it is rather difficult to get integrated with everyone living in the village. (Figures 5.10, 5.11) Mostly neighboring houses have intense interaction, but not the whole settlement (%80 of the women -of 30 families- told that they meet only the neighbors living next to their houses).

11. *There have been changes in the social structure of the village:*

- There exist villagers who were working in big towns for some time and finally came back to Yüzüncü Yıl after it is constructed. Thus, indigenous culture has started to change and to mix with other value systems⁶⁴ (3 families out of 30 on which questionnaire is applied).
- Social classes have appeared among the villagers. As all the houses are identical, little changes that have been done become significant; thus, they create stress in the community. In the old

⁶⁴ Muhtar of Kurtlar has been working in different cities for 30 years. He has retired and come back to his home town. At this point, it is important to realize how close he is to his own culture, traditions, values after being outside for such a long time. Though, he is trying to bring urban features to Yüzüncü Yıl.

villages, people had equal facilities: everybody got water from the fountain by the mosque. But now, some people get artesian wells in their garden in order to avoid water shortage.⁶⁵

- Especially the old generation is uncomfortable with the appearance of social classes within the village. Thus, they are nostalgic about their old settings. They long for good old days.



Figure 5.19. Old and New Generations in Yüzüncü Yıl

12. *Young generation seem to be adapted to their new environment more easily than the old one; rate of acceptance is higher:*

- They think they have better living conditions in Yüzüncü Yıl. To be sure, they are very satisfied with the utilities that new

⁶⁵ See Appendix E.

houses have like sewer system, running water, etc. (%100 below 35 years of age -of 30 families).

- The new settlement is closer to Mudurnu. Besides, Mudurnu municipality provided busses for them. Thus, they can have closer connection with big towns and cities.
- Youngsters long for urban life. Yüzüncü Yıl embeds urban measures to a certain extend, thus found to be desirable. During the site survey, it was rather surprising to hear that some of the young people are satisfied with their houses but they also wish to own an apartment in Mudurnu. It is prestigious for them (2 out of 30 families).

CHAPTER 6

CONCLUSION

What the governmental agencies design and build as 'resettlements' in rural areas have not been very successful from numerous points of views. Despite all the deficiencies, they are accepted to a certain extent by communities that they have been designed for; however, they are also abandoned for various aspects as well. It is a fact that, these applications which are pursued through state resettlement and rehousing programs, "accelerate social and physical change that may destabilize the society and cause conflicts of interest and values" (Aysan, Oliver, 1987, p.4).

Throughout this thesis, deficiencies of resettlements through which changes have been accelerated are discussed and as a result it is concluded that resettlements are the interventions which are imposed by the 'institutes' of governments on communities' social and physical environments. Through such projects, better living conditions are claimed to be introduced to rural communities by outside agencies; in fact cultures of rural communities are affected.

As stated before, in order to expose the changes in cultural lives of the communities, the case study of Yüzüncü Yıl Resettlement is examined and the application is questioned. In doing so, changes in physical and social

environments are examined and finally, the findings are grouped under 6 different topics which are related to different scales and processes of the application. Through these 6 items, a comparison of the old villages, Kurtlar-Bostancılar and the new settlement, Yüzüncü Yıl is conducted. Thus, deficiencies of the application as well as ‘to what extent the new settlement is accepted and abandoned by the villagers’ are achieved; the consequences are given below:⁶⁶

Location:

1. The site chosen for resetting do not satisfy the expectations of the local people.
2. Flat areas are commonly preferred by the institutes as well as the contractors because they are easy to handle during the construction.
3. Sloping land might have provided the new village with better solutions for house design; to build two storey houses and use them for different activities: ground floor as the barn or hay storage and upper floor as living spaces.
4. Sloping sites are least disturbed in case of floods when compared to flat areas.
5. The new settlement has no climatic control; open to prevailing wind and exposed to sun light and lack of fair orientation as a result of poor vegetation and flat land.
6. The production patterns and economic situation of the village is affected; villagers are introduced with new modes of production.

⁶⁶ For details see Tables 6.1, 6.2 and 6.3.

Infrastructure:

1. The villagers have better living conditions; electricity, running water sewage system, etc. in their houses.
2. The new settlement is hygienic in modern sense.

Site Plan:

1. Local people of Kurtlar and Bostancılar are introduced with new ways of living as well as a new settlement planned with the influence of a different understanding.
2. In the village, there are activities like kindergarten, parking lots, which do not really fulfill the requirements of local people, thus, remained on paper or left empty.
3. Security and climatic protection are neglected through the new site planning of the village.
4. The applied plot and road system make it difficult to address oneself as a result of the similar roads and identical dwellings within each plot.
5. The new village is rigid in site plan. It does not grow according to the needs of the local people but develops with respect to the decisions of the design group.

Plot Design:

1. Plot sizing leads to a dispersed layout, thus, some shared activities fade away; people become more individualistic because they have their own territory for various activities.
2. It provides space around the houses so that people may have extra activities or buildings like barns, cottages, storage, gardens, etc.

House Design:

1. There is dissatisfaction with the new houses; many alterations have been done in space organization of the 'institutional' houses.
2. Villagers built new sheds in order to fulfill their needs with respect to their production patterns, i.e. barn, storage, cottage, straw house, tandir evi, etc.
3. In the new settlement, as a result of the identical character of the houses, there is a lack of self-expression and self identification; which causes monotony, lack of variation and traditional richness.
4. There is lack of good orientation and relation with topography in the state provided houses. Thus, alterations on facades occur in time.

Building Process:

1. The new houses are exposed to premature aging as a result of the inconvenient construction techniques and materials which do not fit to the climatic conditions of the region.
2. Introduction of new construction materials creates low thermal performance of the new houses.⁶⁷

⁶⁷ See Appendix B.

COMPARATIVE REMARKS AND RESULTS ON THE OLD VILLAGES, KURTLAR-BOSTANCILAR AND THE NEW SETTLEMENT, YÜZÜNCÜ YIL			
KEYWORDS	OLD VILLAGES (1982)	YÜZÜNCÜ YIL (1994)	CONSEQUENCES
LOCATION	<ul style="list-style-type: none"> • Possibility for a choice of individual place; selection of place according to daily activity patterns and production conveniences. • Located on the hill sides or on top, on sloping areas, they are surrounded by steep hills. • Surrounded by forests. • Close to the fields of agriculture. 	<ul style="list-style-type: none"> • Do not allow for a choice of site selection; the selection is done according to designers' criteria. • Almost flat, having very little slope. • Poor in vegetation. • Far away from the agricultural lands but instead close to the main road to Mudurnu 	<ul style="list-style-type: none"> • The site chosen do not satisfy the expectations of the local people. • Sloping land might have provided the new village with better solutions for house design ; to build two storey houses, ground floor being barn or hay storage and upper floor being living spaces. • Sloping sites are least disturbed in case of floods. • The new settlement has no climatic control; open to prevailing wind and exposed to sun light and lacks fair orientation as a result of poor vegetation and flat land. • The production patterns and the economic situation of the village is affected: villagers are introduced with new modes of production.
INFRA-STRUCTURE	<ul style="list-style-type: none"> • Not exactly hygienic in modern sense. • Lack of running water • Disposal of faeces in accordance with ecological balance. 	<ul style="list-style-type: none"> • Hygienic as a result of the supplied utilities. • Provision of running water. • Provision of sewer system for disposal of feces. 	<ul style="list-style-type: none"> • The villagers have better living conditions; electricity, running water, sewage system, etc. in their new houses. • Disturbance of ecological balance. However, it is a fact that sewer system is hygienic when compared to the old system in the old villages.

Table 6.1. Comparative Remarks and Results of the Old Villages, Kurtlar- Bostancilar and the new settlement, Yüzüncü Yıl -1

COMPARATIVE REMARKS AND RESULTS ON THE OLD VILLAGES, KURLAR-BOSTANCILAR AND THE NEW SETTLEMENT, YÜZÜNCÜ YIL			
KEYWORDS	OLD VILLAGES (1982)	YÜZÜNCÜ YIL (1994)	CONSEQUENCES
	<ul style="list-style-type: none"> Not designed nor planned; simply grew according to the needs of the villagers. 	<ul style="list-style-type: none"> Planned; realized through plots and a network of roads and a zone for social buildings. Offers space for pseudo activities which do not really fit to the real activities of the local people. 	<ul style="list-style-type: none"> Through the designed village, local people are introduced with a new way of living as well as a new understanding of settlement. Such activities do not really fulfill the requirements of local people, thus, remain on paper. If built, they remain empty, i.e. unused building for market, unrealized parking lots and kindergarten.
SITE PLAN	<ul style="list-style-type: none"> Linear plan layout for security and protection purposes. Provide flexibility in location of the houses. No orientation problem; grew in harmony with the topographic and climatic properties of the region. 	<ul style="list-style-type: none"> Dispersed plan layout; plot sizing and road system. Not flexible in location of the houses, the locations are predetermined. Has orientation problems; some houses face to north so do not get enough sun light to the living spaces. 	<ul style="list-style-type: none"> Security and climatic protection are neglected through the new site planning of the village. The applied plot and road system makes it difficult to address oneself as a result of the similar roads and identical dwellings within each plot. This creates rigidity of the site plan. The village can not grow according to the needs of the locals but develops with respect to the decisions of the design group. Leads to various alterations on facades.
PLOT DESIGN	<ul style="list-style-type: none"> No plot sizing; houses are built according to the population growth and the needs of the villagers. 	<ul style="list-style-type: none"> Provides plots of 1200 m² for each family. 	<ul style="list-style-type: none"> Provides space around the house for extra activities or buildings like barns, cottages, storages, etc. Leads to dispersed layout; thus, some shared activities fade away; people become more individualistic because they have their own territory for various activities.

Table 6.2. Comparative Remarks and Results of the Old Villages, Kurtlar- Bostancilar and the new settlement, Yüzüncü Yıl -2

COMPARATIVE REMARKS AND RESULTS ON THE OLD VILLAGES, KURTILAR-BOSTANCIAR AND THE NEW SETTLEMENT, YÜZÜNCÜ YIL			
KEYWORDS	OLD VILLAGES (1982)	YÜZÜNCÜ YIL (1994)	CONSEQUENCES
HOUSE DESIGN	<ul style="list-style-type: none"> • Congruent with daily household activities in terms of spatial organization and layout. • Congruent with production patterns of the villagers. • Similar plan layouts, 'karmyank' type, that lead to differences in house form. • Potentiality to inhabit more than one family. • Flexibility according to the topography. 	<ul style="list-style-type: none"> • Inconvenient space organization; do not satisfy the daily household activities. • Ignorance of production patterns in design process. • Identical and standard units, exactly the same plan layouts. • Potentiality to inhabit more than one family. • Designed without taking the site variables into consideration. 	<ul style="list-style-type: none"> • Dissatisfaction with the new houses occurs, thus, many alterations take place in space organization of the 'institutional' houses. • Villagers built new sheds in order to fulfill their needs with respect to their production patterns, i.e. barn, storage, straw house, tandir evi, etc. • This leads to lack of self-expression and self-identification; causes monotony, lack of variation and traditional richness in the new settlement. • Lack of good orientation, relation with topography is the end product and deficiencies of the new settlement.
BUILDING PROCESS	<ul style="list-style-type: none"> • Local craftsmen built the houses according to the regional reality of the settlement. • Use of accustomed and traditional materials in congruence with their constructive properties. 	<ul style="list-style-type: none"> • Contractors constructed the new settlement according to the decisions of the designers. • Introduction of new construction materials and new technologies, i.e. reinforced concrete, bricks, etc. 	<ul style="list-style-type: none"> • New houses are exposed to premature aging as a result of inconvenient construction techniques and materials which do not fit to the climatic conditions of the region. • Use of material creates low thermal performance of the house.

Table 6.3. Comparative Remarks and Results of the Old Villages, Kurtilar- Bostancilar and the new settlement, Yüzüncü Yıl -3

6.1. Criticism

This thesis is proposed to reach to a better understanding and observing physical and cultural factors which relate to housing and resetting in rural areas which are pursued within the framework of state resettlement and rehousing programs. In doing so, culture and resettlement relation, impacts of culture on physical environment and impacts of 'modernism' which are in the form of rapid modernization, are found to be important factors which should be reinvigorated in description of the problematic. The conceptual framework is supported by the case study of Yüzüncü Yıl settlement which was founded through state resettlement and rehousing program, in 1983.

At this point, it would be rather beneficial to note the fable which would explain the deficiencies of the method followed by of the intervening group:

There is an old fablewhich is about the five blind man and the elephant: One says the animal is like a snake (he hold the tail); another that is like a tree (he hold the leg); another holds the ear, another the trunk, another the tusk, and each comes to a different conclusion about the nature of the animal. The story is generally told to illustrate a parable about method: you can not understand a complex phenomenon from the information you have about a part of it. To understand the elephant you have to have the information from all the sources, and about all the phenomena.
(Oliver, 1984; p.26)

As narrated in the fable, an outside intervening group can not understand the real life activities of communities through observations unless they experience the communities in all aspects. Thus, intervening group is trapped with limited conditions of communities: mostly fail to grasp the

local motives and value systems which have various impacts on house form and settlement formation. Besides, as a result of lacking knowledge, mostly they keep their own value systems superior on regional realities.⁶⁸ Consequently, resettlements happen to become ill-fitting prosthesis for social and physical environments; they are interruptions on communities' cultural lives.

It is another fact that, this 'institutional' intervention embeds political decisions, governmental regulations. What is more modernism is reinvigorated through such applications. It is definite that modernism which is the product of industrial revolution, has various impacts on Third World countries. The reflections of the impacts are in the form of a 'distorted' modernism as a result of the fact that modernism is not indigenous to Third World countries and creates rapid modernization. Thus, in such countries, direct penetration of the new understanding has been unavoidable; it is mostly adopted as the state policy. Consequently, new features which have no relation to the original structure and system of cultures, are introduced through state provided applications like state resettlement and rehousing programs.

However, the parable above gives another message as well.: a neat argument for the integration of the studies of varying groups of different disciplines who have different objectives and skills to attain them. (Oliver, 1984, p.26) It is important to realize that in order to reach to an understanding of the subject thoroughly, a wide spectrum of studies in different disciplines at different scales is needed.

⁶⁸It is another argument to what extent do the 'institutes' try to reach to a thorough understanding of the local motives and produce settlements with respect to the needs of the communities.

For various reasons, conducting a research on the subject of resettlements and their impacts on culture is rather beneficial:

- It is important to emphasize the importance of culture and search ways for how to keep the indigenous patterns of communities in the era of ‘globalism’.
- It is vital to see how ‘modernism’ influences Third World countries in the form of a distorted modernization, like Turkey and to brainstorm on how should the penetration of ‘modernism’ be, or is it ever possible for us to control quick modernization; to decide about what to accept and abandon related to the distorted mode of modernization.
- It is pathetic to see how the new settlement Yüzüncü Yıl has changed the local patterns and regional realities.

Throughout this thesis, continuity of culture as well as physical environment and conservation of old structures are supported under different titles. However, the argument still continues to float around: What should be the new architecture of rural communities if resettlement is essential for any kind of reason? However, Marcello Piacentini’s ideas might be helpful for clarifying minds as well as starting new arguments up for the solution of the problem:

It involves, basically, resolving the debate between impersonal, international standardized architecture, and localized vernacular architecture. But then are the two tendencies really anti-thetical?...it is possible to arrive at the vision of a sane architecture which will be neither old nor new but simply true... (Curtis, 1986, p.24)

6.3. Promises and New Perspectives

Throughout the thesis facts on understanding the cultural factors which relate to housing and resettlement in rural areas are tried to be exposed. There exist no recommendations nor a set of rules and methods on how to solve problems of resettlement applications and their negative effects on culture and physical environment. However, observation of a resettlement and exposition of the impacts would be beneficial in creating appropriate living environments for those who need to be relocated or rehoused.

For the further development of the subject, it is important to produce proposals for such applications. The proposals are as follows:

- *Proposals on how should resettlement projects be handled by 'institutes' in design process:* In the previous chapters 'why resettlement and rehousing projects are rejected or not fully accepted by the local people' is discussed. Consequently, there appears a set of proposals on what should be done during design and production process of new settlements.
 1. There should be a better organization and a committee within Ministry of Resettlement and Reconstruction. It is important to realize that the climatic map of Turkey is not sufficient to produce housing. Thus, this map should be enlarged and detailed.
 2. Houses produced for regions should have the flexibility of space alterations, so that individuals could produce their own spaces. This would lead to higher rate of acceptance of the houses.
 3. Communication with the locals and their participation in design and production process should be encouraged.

4. Architects should have the experience of the context of the communities for which they are going to design new settlements.
 5. Institutes should have contact with universities and work together with them in search of better ways for resettlements and rehousing.
- *Proposals on what can be done with the old settings, how can they turn out to be desirable:* It is important to keep the traditional houses in Kurtlar and Bostancilar away from being removed, thus, these villages should be used for some purposes.
 1. The villagers should be encouraged to use their old houses in the old villages during summer time. In order to do so, there should be some kind of support -money, material, etc.- from the organizations in order the villagers to renovate.
 2. The villages could be rented to some organization so that the villages would have some activity, thus, they would be taken care.
 3. The villages -at least one of them, Kurtlar- would be turned into METU village so that students and tutors would help the village to survive.

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APPENDIX A

REGIONAL PROTOTYPE DISASTER HOUSES⁶⁹

Genel Müdürlüğümüz kuruluşundan 1970 senelerine kadar geçen zaman süresince afet konutlarının taş, tuğla ve bilhassa ahşap tuğla olmak üzere 12 tip proje yürürlüğe konmuştur. Ekonomik faktörlerden dolayı konut alanları oldukça küçük tutulmuş nüve ve inkişaf diye iki üniteye ayrılmıştır. Nüve kısmı yaşama, bir oda, banyo, mutfak, wc.'den teşekkül ettirilmiş, (ortalama 45 m²) umumiyetle bu kısım idarece yapılmış, inkişaf kısmın 2 odanın eklemesi suretiyle yapılacağı öngörülerek yapımı afetzedeye bırakılmıştır. Konutların yapılacağı parseller üzerinde işletme üniteleri düşünülmemiştir. Bu projeler gerek ihale gerekse kendi evini yapana yardım metodu ile yapılacak yerlerde uygulanmıştır.

Uygulamalarda alt yapıların eksik olması, parsel ve konutların küçük tutulması işletme ünitelerinin olmaması, bekleyen afetzede sayısının çokluğu ve ekonomik dar boğazlar nedeni ile bazı şikayetlere neden olmuş, bunun üzerine bölgesel yeni tip projelerin deprem ve ısı yönetmeliklerine göre uygunluğu sağlanarak 1983 yılı inşaat sezonunda uygulamaya konulmuştur.

⁶⁹ This piece of knowledge is taken from the leaflet 'Bölgesel Afet Tip Konutları' prepared by T.C. Bayındırlık ve İskan Afet İşleri Genel Md. Proje ve Planlama Daire Bşk.

Yeni tip projeler üretilirken;

- Devlet Meteoroloji İşleri Genel Müdürlüğü,
 - Devlet İstatistik Enstitüsü,
 - Türkiye Bilimsel Teknik Araştırma Kurumu,
 - Deprem Araştırma ve Yapı Malzeme Genel Müdürlüğü,
 - Çeşitli Üniversiteler (İTÜ; ODTÜ; KTÜ; ADMMA; Ege Üniversitesi),
- Gibi kuruluşlarla temasa geçilmiş ve bu konuda görüşleri alınmıştır.

Bu bilgiler ile aşağıdaki faktörlerin ışığı altında yeni tip projeler üretilmiştir.

1. İklim,
2. Yapının kullanım karakteristiği,
3. Yöresel yapı sistemi,
4. Sismik yapı (Deprem bölgeleri)
5. Topoğrafik yapı,
6. İnşaat malzemeleri,
7. Mevcut yapı elemanları,
8. Doğal Çevrenin projeye etkisi,
9. Sosyal yapı
10. Projenin gelişime açık tutulması,
11. Rölövelerin incelenmesi ve gezi notları,
12. Detayların kolay ve uygulanabilir olmaları,
13. Ekonomik faktörler,

Yeni projeler köy ve kasaba tipleri olmak üzere iki bölümde düşünülmüştür.

Isı ve deprem yönetmeliklerine uyularak; Köy tipler: Tek katlı, iki katlı ve eğimli araziye göre Genel Müdürlüğümüzce belirlenen parsel ebatlarına göre geliştirilmiştir.

Köy tipi projelerde işletme üniteleri (ahır, samanlık) düşünülmüştür. Bu kısım kimi zaman konutla beraber, (alt kat işletme, üst kat konut olmak üzere) kimi zaman ayrı olarak tanzim edilmiştir. Konut metrekareleri ortalama 65-85 m² arasındadır. Konutlar; yaşama, 2 veya 3 yatak odalı, banyo wc. hacimlerine sahiptir. Yapı sistemi yığmadır. Projelerde iklim bölgelerine göre duvar kalınlıkları belirlenmiş, kimi zaman çift doğrama kullanılmıştır.

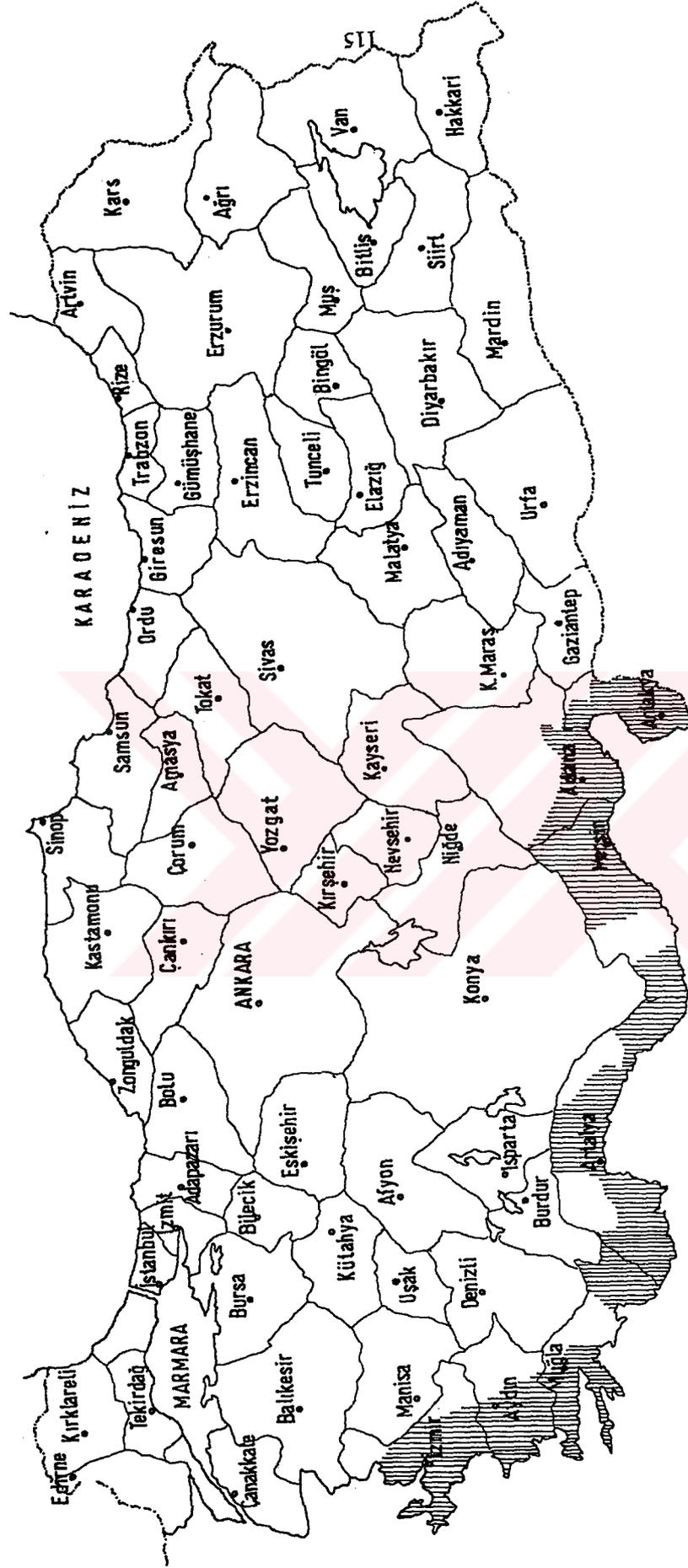
Kasaba tipleri: Nüfus oranına göre 2-3 yatak odalı olup sosyal konut niteliğindedir. 2-5 kat arası düşünülmüştür. Ortalama 70 m² 'dir. Yığma ve betonarme olarak tanzim edilmiş, duvar kalınlığı, tecrit ve çift doğrama iklim bölgesine göre projelerde kullanılmıştır.

Ayrıca; projelerle birlikte gerekli tüm açıklayıcı bilgi birlikte verilmiştir.

Bu konutlarda oturan afetzede ailelere proje çizenleri olarak yaşamları boyunca mutluluklar diliyoruz.

A. Nail Ulusoy

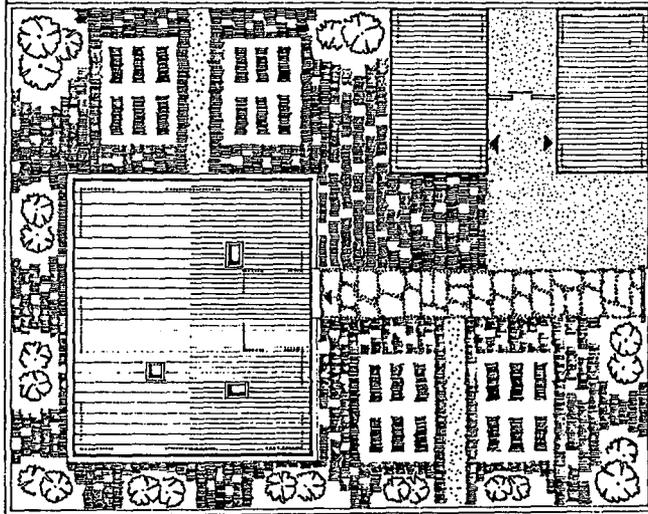
Proje ve Plan Daire Başkanı



I. İKLİM BÖLGESİ HARİTASI . BÖLGEYE GİREN İLVE İLCELER

ADANA	ANTALYA	Çesme	Fethiye	İskenderun	Kaş	Manavgat	Milas	Serik	Torbali
Alanya	Bodrum	Datca	Finike	İZMİR	Kırıkhan	Marmaris	Samandğ	Silifke	Urla
Altınözü	Bornova	Dörtiyol	Foça	Karataş	Kumluca	Menemen	Seferhisar	Söke	Yayladağı
Anamur	Ceyhan	Erdemli	Gazipaşa	Karşyaka	Kuşadası	MERSİN	Selçuk	Tarsus	Yumurtalık
ANTAKYA									

Figure A.1a. Map of 1st Climatic Region

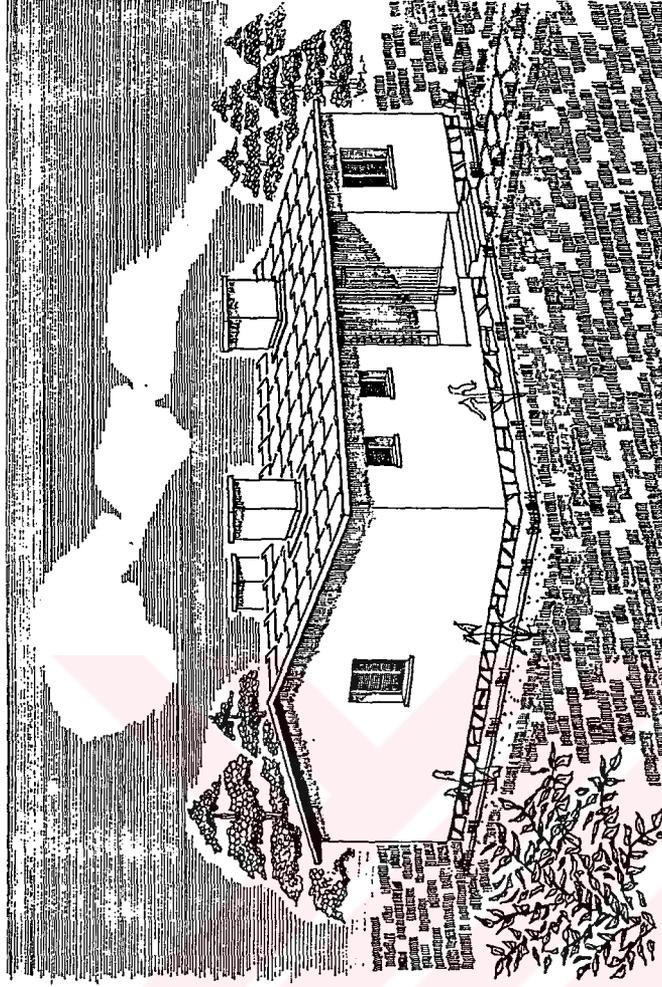


VAZİYET PLANI 1/200

83_K/I.03

I. İKLİM BÖLGESİ İÇİN KÖY TİPİ KONUT PROJESİ

İKLİM BÖLGESİ	: I	NET ALAN	: 69.6 M ²
DEPREM BÖLGESİ	: 1-2-3-4	BRÜT ALAN	: 82.8 M ²
YAPI SİSTEMİ	: YIGAMA	ISITMA SİSTEMİ	: SOBA
KAT ADETI	: 1		
KULLANIM AMACI	: KONUT		



PERSPEKTİF 1/100

ISI VE DEPREM YÖNETİMLİĞİNE UYBUN OLARAK DÜZENLENMİŞ OLAN BU PROJEDE I. BÖLGE İKLİM KOŞULLARINA , DÜZ YADA ÇOK AZ EGİMLİ ARAZİ YAPISINA GÖRE PLANLANMIŞTIR. TEK SATHLI PENCERE TİPİ İLE DUVARLARDA 19 CM LİK DÜŞEY DELİKLİ TUĞLA KULLANILMIŞTIR. AİLE BÜYÜKLÜĞÜ 5-6 KİŞİLİKTİR. BÖLGE ÖZELLİĞİ OLARAK HAVAT TEŞKİL EDÜLMÜŞTİR , İŞLETME ÜNİTESİ KONUTTAN AYRI OLARAK DÜŞÜNÜLMÜŞTÜR.

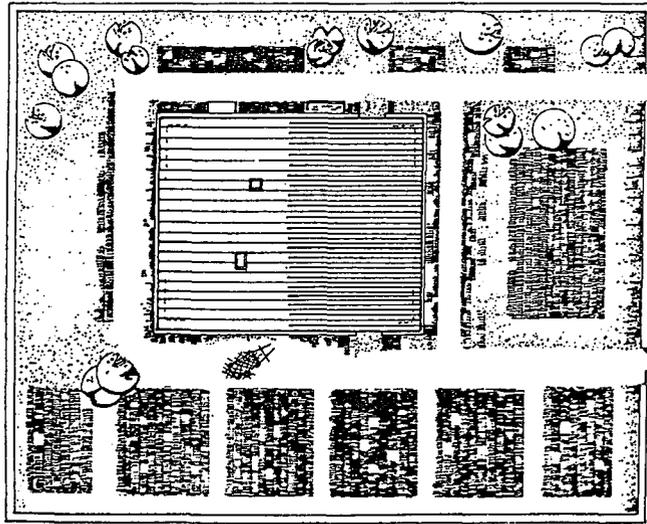
Figure A.1b. Site Plan and Perspective (83-K/I.03)



83-K/1.03

KONUT İÇİN FAYDALI ALAN (NET ALAN)	M ² LERİ
YAŞAMA (SALON)	: 19
EBEVEYN YATAK ODASI	: 7.9
YATAK ODASI	: 8.9
YATAK ODASI	: 7.5
MUTFAK	: 6.7
TANDIR	: 5.8
BANYO	: 4.4
WC	: 2
HAYAT (TERAS)	: 7.4
TOPLAM	: 69.6 M ²
DUVAR ALANLARI TOPLAMI	: 13.2 M ²
İNŞAAT ALANI	:
TOPLAM YAPİ ALANI	: 82.8 M ²

Figure A.1c. Plan and Front Facade (83-K/1.03)



VAZİYET PLANI 1/200

83_K/I.06

1. İKLİM BÖLGESİ İÇİN KÖY TİPİ KONUT PROJESİ

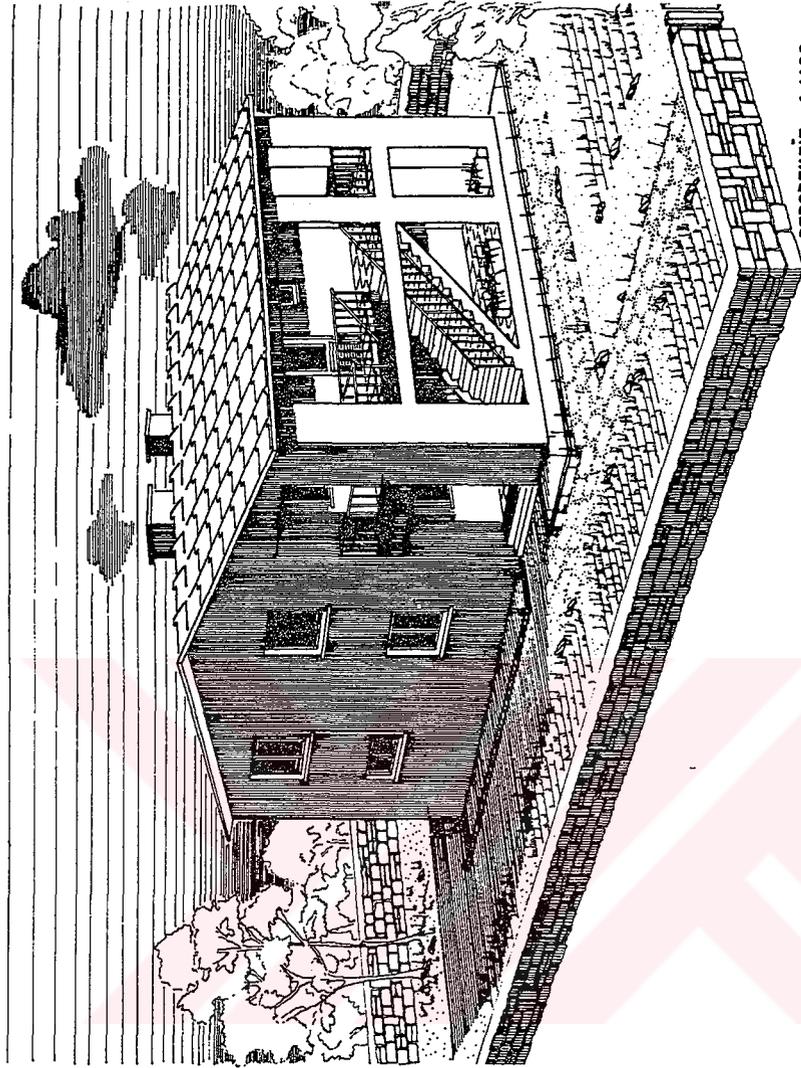
İKLİM BÖLGESİ : I NET ALAN : 97,7 M²

DEPREM BÖLGESİ : I-2-3-4 BRÜT ALAN : 138,9 M²

YAPI SİSTEMİ : YİĞNE İSİTMA SİSTEMİ : SOBA

KAT ADEDI : 2

KULLANIM AMAÇI : KONUT-İŞLETME

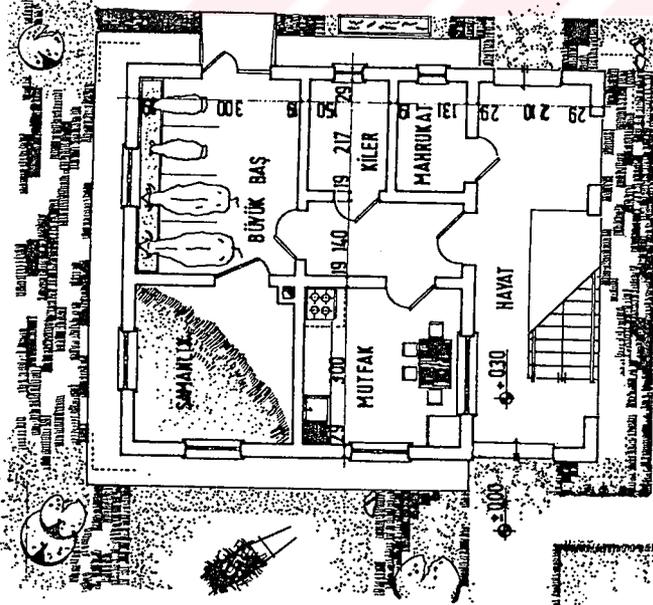


PERSPEKTİF 1/100

İSİ VE DEPREM YÖNETMELİĞİNE GÖRE 2 KATLI OLARAK DÜZENLENMİŞ OLAN PROJE I. BÖLGE İKLİM KOŞULLARINA DÜZ YADA ÇOK AZ EĞİMLİ ARAZİ YAPISINA GÖRE PLANLANMIŞTIR. TEK SATIHLI PENCERE TİPİ İLE DUVARLARDA 19 CM LİK DÜŞEY DELİKLİ TUĞLA KULLANILMIŞTIR. AİLE BÜYÜKLÜĞÜ 4,5 KİŞİLİKTİR.

BÖLGE ÖZELLİĞİ OLARAK HAYAT TEŞKİL EDİLMİŞTİR, ZEMİN KATTA MUTFAK BARÇE VE İŞLETME ARASINDA DİREKT BAĞLANTI SAĞLANMIŞTIR.

Figure A.1d. Site Plan and Perspective(83-I.06)

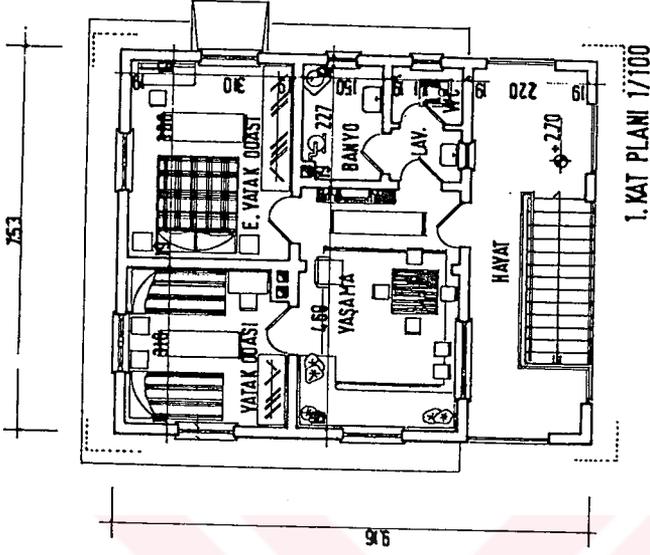


ZEMİN KAT PLANI 1/100

83_K / I.06

KONUT İÇİN FAYDALI ALAN (NET ALAN) M²-LERİ

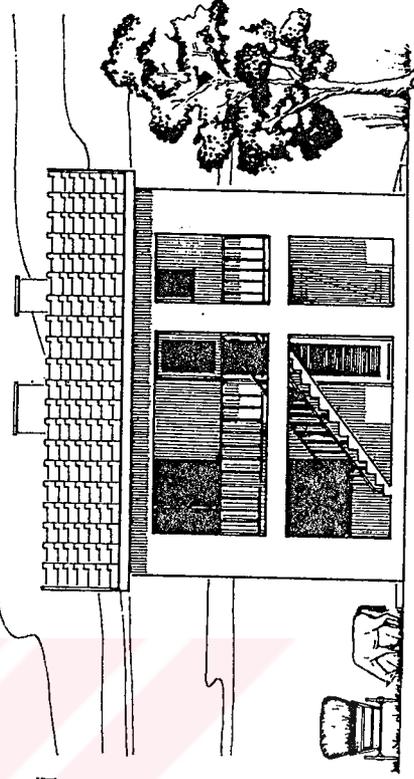
YAŞAMA (SALON)	: 14,5
EBEVEYN YATAK ODASI	: 11,9
YATAK ODASI	: 9,6
MUTFAK	: 9
KILER	: 3,3
BANYO	: 3,4
WC + LAVABO	: 3,2
HOL (SİRKÜLASYON)	: 4,2
HAVAT (TERAS)	: 16,5
TOPLAM	: 74,5 M ²
DUVAR ALANLARI TOPLAMI	: 223 M ²
İNŞAAT ALANI	:



I. KAT PLANI 1/100

İŞLETME İÇİN FAYDALI ALAN (NET ALAN) M²-LERİ

BÜYÜK BAŞ	: 11,3
SANATLIK	: 9
MAHRUKAT	: 2,8
TOPLAM	: 23,1 M ²
DUVAR ALANLARI TOPLAMI	: 71 M ²
İNŞAAT ALANI	:
YAPI ALANI	: 302 M ²



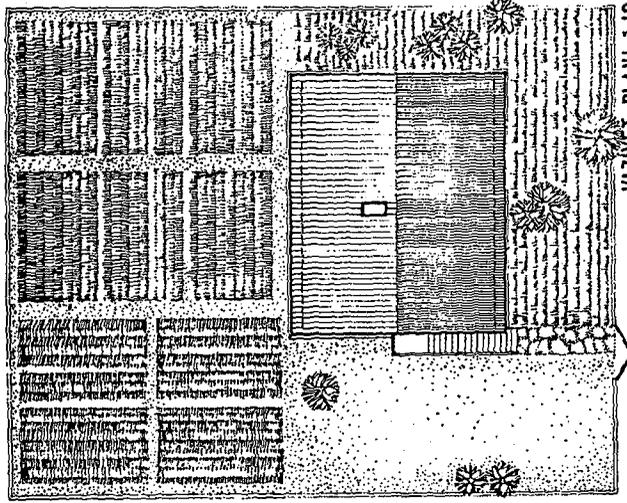
ÖN CEPHE 1/100

Figure A.1e. Plans and Front Facade (83-K/I.06)

II. İKLİM BÖLGESİNE GİREN İL ve İLÇELER

Abana	Bakırköy	BURSA	Öinar	Gediz	İkizdere	Kırkağaç	MUĞLA	Sarıgöl	Trebolu
Adalar	BALIKESİR	Cide	DIYARBAKIR	Gelibolu	İmroz	KIRKLARELİ	Muratlı	Sarıyer	Tonya
ADAPAZARI	Balyağ	Cizre	Doğanşehir	Gemlik	İnebolu	Kızıltepe	M.Kemalpaşa	Sarıhanlı	Torul
Acıpayım	Banaz	Çal	Domanç	Gercüş	İnegöl	Kilis	Mut	Savaştepe	TRABZON
ADIVAMAN	Bandırma	Çameli	Durağan	Gergir	İpsala	Kiraz	Hazilli	Sayur	Turgutlu
Ağlasun	Bartın	Çamlıhemşin	Dursunbey	Germencik	İslahiye	Kocaeli	Hızıp	Selendi	Türkeli
Akcaabat	Batman	Çan	Düzce	Gerze	İSTANBUL	Kocaz	Husaybin	Senirkent	Türkoglu
Akkakale	Bayındır	ÇANAKKALE	Ecaabat	Geyve	Ivrindi	Korgan	Of	SİRT	Ula
Akkoca	Bayramiç	Çardak	EDİRNE	GİRESUN	İZMİT	Korkuteli	Öğuzeli	Silivri	Ulubey (OROU)
Akhisar	Bergama	Çarsamba	Edremit	Gölpazarı	İznik	Kozan	ORDU	SİLOPI	Ulubey (UŞAK)
Akkuş	Besni	Çatalca	Eğirdir	Gölcük	Kadıköy	Köyceğiz	Orhaneli	Sivri	Ulubey
Akseki	Besiktas	Çatalzeytin	Elmalı	Gölnhisar	Kadirli	Kula	Orhangazi	Sivri	Ulus
Akyazı	Beşiri	Çaycuma	Emel	Gölköy	Kahta	Kumru	Osmaneli	SİNOP	URFA
Alaçam	Beykoz	Çayeli	Eminönü	Gölpazarı	Kale	Kurtalan	Osmaniye	Sivaslı	UŞAK
Alaşehir	Beyoğlu	Çaykara	Enez	Gönen	Kalkandere	Kurucaşile	Ödemiş	Siverek	Uzunköprü
Andirin	Biga	Çetikhán	Ernek	Görete	Kandıra	Kuyucak	Ömertli	Sındırgı	Ünye
Araban	Bigadic	Çerkezköy	Eregli	Gördes	Karaburun	Küre	Pazar	Soma	İsküdar
Araklı	Bilecik	Çermik	Erfetek	Göynük	Karacabey	Ladik	Pazarlık	Söğüt	Vakfikebir
Arduoç	Birecik	Çinar	Ergani	Gölnar	Karacasu	Lalapaşa	Pazaryeri	Sultanhisar	Vezirköprü
Ardesen	Bismil	Çine	Ermemek	Gündoğmuş	Karahallı	Lapseki	Pehlivanlı	Suruç	Viranşehir
Arhavi	Borçka	Çivril	Eruh	Güney	Karaisalı	Lüleburgaz	Perşembe	Susurluk	Vize
Arsin	Bozabat	Çortlu	Espiye	Hadım	Karamürsel	Maden	Pınarhisar	Sürmene	Yalova
ARTVİN	Bozcaada	Çoruh	Eşme	Halifeli	Karasu	Maçka	Pozantı	Sütçüler	Yatağan
Atabey	Bozdoğan	Çüngüş	Eynesil	Hassa	Kartal	Malikara	Pötürge	Şarköy	Yavuzeli
Ayancık	Bozbur	Dazkırı	Eyüp	Haysa	Kavak	MANİSA	Reyhaneli	Şirnak	Yenice
Aybastı	Bozkurt	Demicri	Ezine	Havran	Kaynarca	Manyas	RİZE	Şile	Yenişehir
AYDIN	Bozova	Demirköy	Fatih	Havza	Keciborlu	MARAŞ	Salihi	Şişli	Yeşilova
Ayvaciç	Bozüyük	DENİZLİ	Fatsa	Hayrabolu	Keles	MARDİN	Samsat	Tavas	Yomra
Ayvatic	Bucak	Dereli	Fekte	Hendek	Kemalpaşa	Mazıdağı	SAMSUN	Tavsanlı	Zeytinburnu
Azdavay	Bulancak	Derik	Fındıklı	Hilvan	Kepsut	Meriç	Sapanca	Tefenni	ZONGULDAK
Babaeski	Buldun	Devrek	GAZİANTEP	Hopa	Keşan	Miyol	Saray	TEKİRDAĞ	
Bafra	BURDUR	Dicle	Gaziosmanpaşa	Isparta	Keşap	Mudanya	Sarayköy	Terme	
Bahçe	Burhaniye	Dikili	Gebze	İdil	Kınık	Mudurnu	Sarıcakaya	Tire	

Figure A.2b. List of cities and towns in 2nd Climatic Region

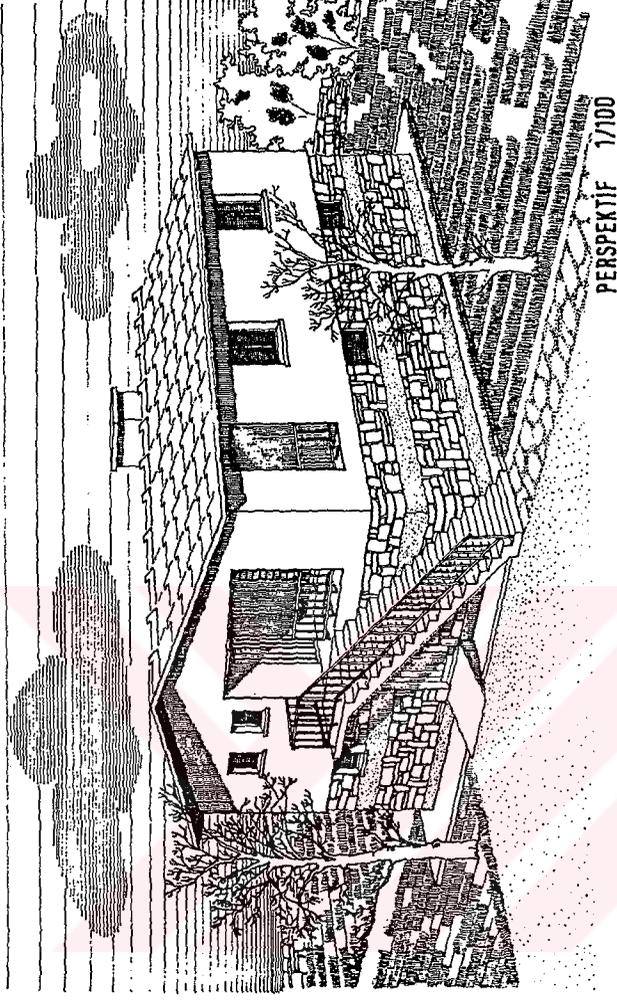


VAZİYET PLANI 1/200

83_K/II.01

İKLİM BÖLGESİ İÇİN KÖY TİPİ KONUT PROJESİ

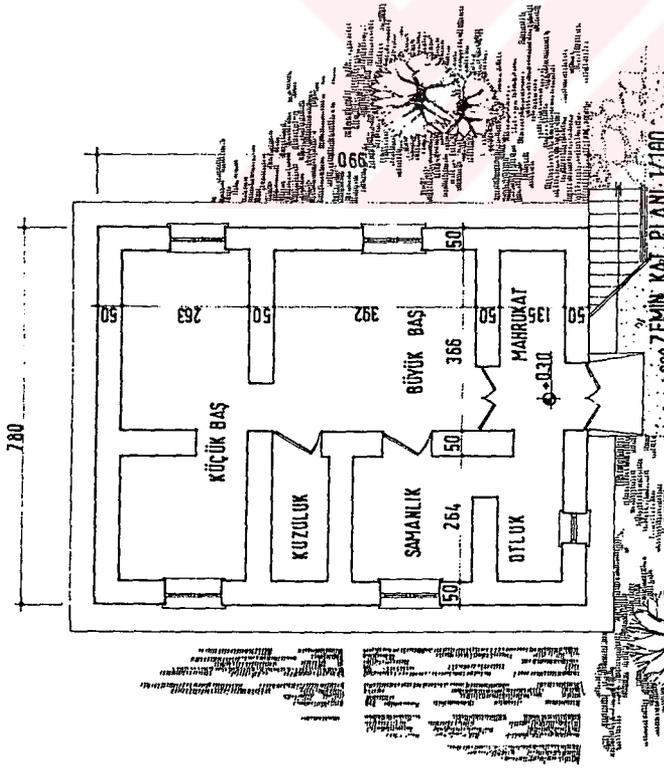
İKLİM BÖLGESİ	: II
DEPREM BÖLGESİ	: 1.2-3.4
YAP SİSTEMİ	: YIĞMA
KAT ADEDI	: 2
KULLANIM AMACI	: KONUT + İŞLETME
NET ALAN	: 105,7M ²
BRÜT ALAN	: 154,4M ²
İSİTMA SİSTEMİ	: SOBBA



PERSPEKTİF 1/100

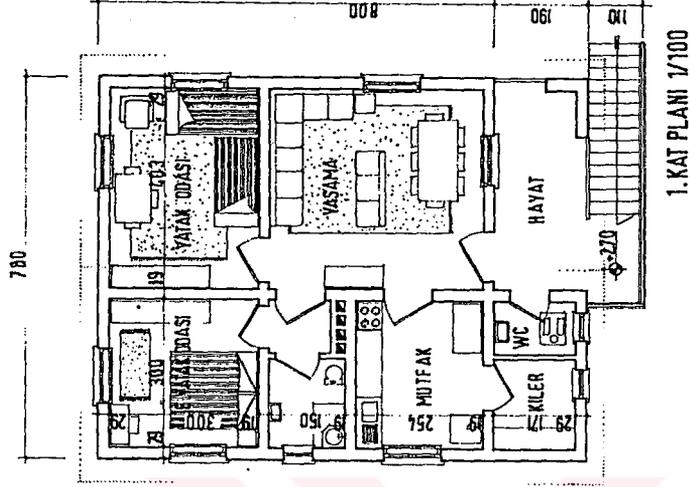
İSTİ VE DEPREM YÖNETMELİĞİNE GÖRE 2 KATLI OLARAK DÜZENLENMİŞ OLAN PROJE İKLİM KOŞULLARINA GÖRE, ÇİFT SATIRLI PENCERE VE 29 CM LİK DOĞU TUĞLA KULLANILMIŞTIR. AİLE BÜYÜKLÜĞÜ 5-6 KİŞİLİKTİR. BÖLGE ÖZELLİĞİ DİKKATE ALINARAK HAVA SİRKÜLASYONUNU SAĞLAYAN BİR TERAS PLANLANMIŞTIR, İŞLETME ÜNİTESİ ZEMİN KATTA KONUT İSE, 1.KATTA DÜZENLENMİŞTİR.

Figure A.2c. Site Plan and Perspective (83-K/II.01)



83_K/II.01

KORUT İÇİN FAYDALI ALAN (NET ALAN) M ² -LERİ	İŞLETME İÇİN FAYDALI ALAN (NET ALAN) M ² -LERİ
YAŞAMA (SALON) : 17	BÜYÜK BAŞ : 162
EBEVEYN YATAK ODASI : 9	KÜÇÜK BAŞ : 27
YATAK ODASI : 12	KUZULUK : 62
MUTEAK : 76	SAHANLIK : 35
KİLER : 32	OTLUK : 49
BANYO : 27	MAHRUKAT : 439 M ²
WC : 17	TOPLAM : 333 M ²
HAYAT (TERAS) : 76	DUVAR ALANLARI TOPLAMI : 772 M ²
HOLL (SİRKÜLASYON) : 14	İNŞAAT ALANI :
TOPLAM : 622 M ²	YAPI ALANI :
DUVAR ALANLARI TOPLAMI :	
İNŞAAT ALANI : 772 M ²	
YAPI ALANI : 154 M ²	
TOPLAM YAPI ALANI :	



1. KAT PLANI 1/100

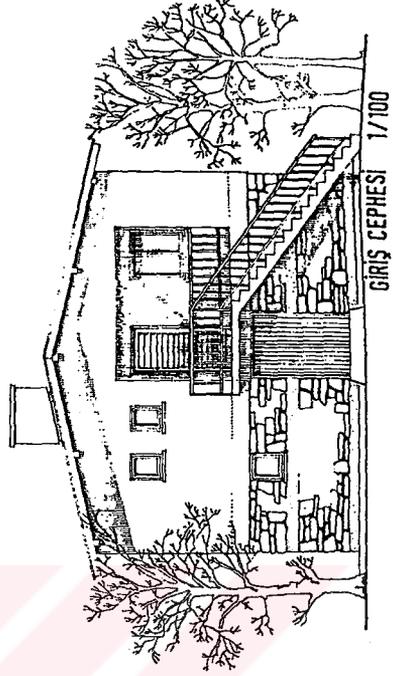
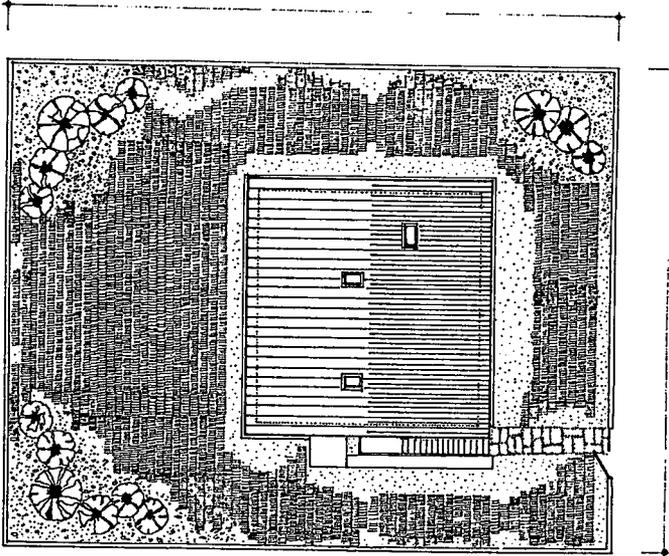


Figure A.2d. Plans and Front Facade (83-K/II.01)

III. İKLİM BÖLGESİNE GİREN İL ve İLÇELER

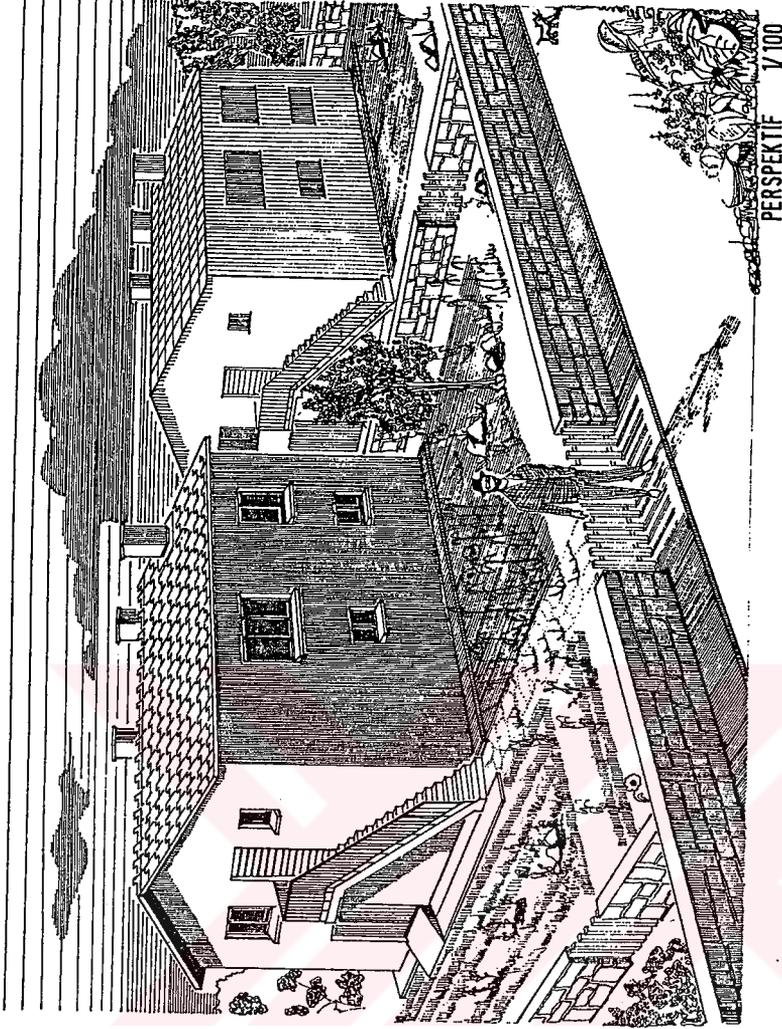
Adilcevaz	Beyşehir	Derinkuyu	Büyükpınar	KAYSERİ	Muradiye	Sarıoğlak	Tatvan
Afsin	Beytüşşebap	Devetli	Gürün	Keban	MUŞ	Sarız	TOKAT
AFYON	BINGÖL	Devrekani	Hacıbektaş	Kelkit	Mutki	Sason	Tomarza
Ağın	BİTLİS	Divriği	Hafik	Kemah	Halluhan	Seben	Tosya
Ahlat	Bogazlıyan	Doğanhisar	Hani	Kemaliye	Hazmiye	Seydişehir	Turbanbeyli
Akçadağ	BOLU	Eflani	Haymana	Keskin	NEVŞEHİR	Seyitgazi	TUNCELİ
Akdağmadeni	Bolvadin	ELAZIĞ	Hazro	Kıbrısçık	NIĞDE	Sincanlı	Turhal
Aksaray	Bor	Elbistan	Hekimhan	Kiğı	Hıksar	SİVAS	Tuzluca
Aksehir	Bünyan	Eldivan	Hizan	Kırkkale	Olur	Sivrice	Uludere
Alaca	Çihanbeyli	Elmadag	Hozat	KIRŞEHİR	Orta	Sivrihisar	Ulukisla
Almus	Çamardı	Emirdağ	Iğdır	Kızılcahamam	Ortaköy (ÇORUM)	Solhan	Ürgüp
Altındağ	Çamlıdere	Erbaa	Ilgaz	KONYA	Ortaköy (NIĞDE)	Sorgun	VAH
Altınbaş	Çankaya	Ercis	Iğın	Koyunhisar	Osmancık	Sulakyurt	Yahyalı
Alucra	ÇARŞIRI	Ereğli (KONYA)	İhsaniye	Kozaklı	Ovacık	Sullandı	Yalvac
AMASYA	Çay	ERZİNCAN	İliç	Kozluk	Özalp	Suluova	Yapraklı
ANKARA	Çayıralan	Eskişehir	İmranlı	Kulu	Palu	Sungurlu	Yenimahalle
Araç	Çayrılı	Eskişehir	İncesu	Kulp	Pertek	Susehri	Yerköy
Aralık	Çekerek	Felahiye	İskilip	Kurşunlu	Pervari	Şabanözü	Yeşilhisar
Arapkir	Cemişkezek	Gelendost	İspir	KÜTAYHA	Pınarbaşı	Şarkışla	Yeşilyurt
Arguvan	Çarkeş	Gemerek	Kadinhani	Lice	Pülümür	Şarkikaraağaç	Yığılca
Artova	Çicekdag	Benc	Kalecik	MALATYA	Polatlı	Şavsat	Yıldızeli
Avanos	Çifteler	Berede	Kaman	Mahmudiye	Posof	Şebinkarahisar	YUZGAT
Ayaş	ÇORUM	Gevaş	Kangal	Mazgirt	Refahiye	Şefaatlı	Yunak
Bala	Çubuk	Göksun	Karabük	Mecitözü	Resadiye	Şereflihisar	Yusufeli
Baskil	Çukurca	Göynücek	Karakocan	Mengen	Safranbolu	Şiran	Zara
Bayat	Çumra	Güdüz	Karaman	Merzifon	Saimbeyli	Şirvan	Zile
Bayburt	Daday	Bülşehir	Karapınar	Mesudiye	Sandıklı	Şuhut	
Baykan	Darende	Gümüşhacıköy	Kargı	Mihalıççık	Sarayönü	Taşköprü	
Beypazarı	Delice	GÜMÜŞHANE	KASTAMONU	Mucur	Sarıkeya	Taşova	

Figure A.3b. List of cities and towns in 3rd Climatic Region



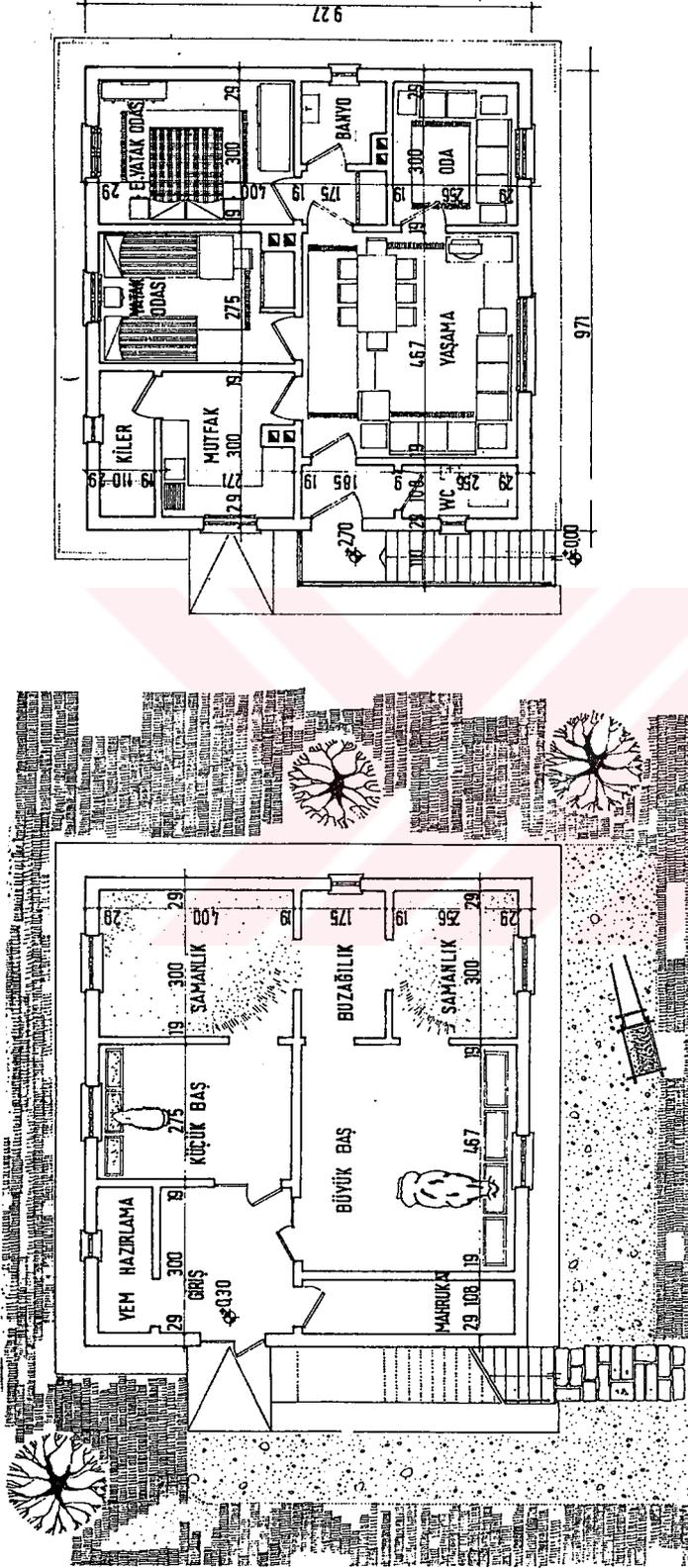
83_K/III.03

III. İKLİM BÖLGESİ İÇİN KÖY TİPİ KONUT PROJESİ	
İKLİM BÖLGESİ	: III
DEPREM BÖLGESİ	: 1.2.3-4
YAPI SİSTEMİ	: YIĞMA
KAT ADETI	: 2
KULLANIM AMACI	: KONUT • İŞLETME



İSİ VE DEPREM YÖNETMELİĞİNE GÖRE 2 KATLI OLARAK DÜZENLENMİŞ OLAN PROJE III. BÖLGE İKLİM KOŞULLARINA DÜZ YADA ÇOK AZ EĞİMLİ ARAZİ YAPISINA GÖRE PLANLANMIŞTIR. ÇİFT SATIHLI PENCERE TİPİ İLE DİŞ DUVARDA 29 CM LİK DOĞU TUĞLA KULLANILMIŞTIR. AİLE BÜYÜKLÜĞÜ 5_6 KİŞİLİKTİR.	
PROJEDE ZEMİN KAT İŞLETME ÜNİTESİ 1KAT İSE KONUT OLARAK DÜZENLENMİŞTİR.	
:150.2 M ²	
:180 M ²	
:SOBA	

Figure A.3c. Site Plan and Perspective (83-K/III.03)



83_K/III.03

KONUT İÇİN FAYDALI ALAN (NET ALAN) M ² LERİ	İŞLETME İÇİN FAYDALI ALAN (NET ALAN) M ² LERİ
YAŞAMA (SALON) :21	GİRİŞ :8,1
EBEVEYN YATAK ODASI :12	BÜYÜK BAŞ :21
YATAK ODASI :11	KÜÇÜK BAŞ :11
ODA :77	SAMANLIK :12
MUTFAK KİLİT :12	SAMANLIK :77
BANYO :4	BUZAĞILIK :7
WC :28	YEM HAZIRLAMA :33
SİRKÜLASYON :4,6	MAHRUKAT :4,9
TOPLAM :75,1 M ²	TOPLAM :75,1 M ²
DUVAR ALANLARI TOPLAMI :299 M ²	DUVAR ALANLARI TOPLAMI :299 M ²
İNŞAAT ALANI :	İNŞAAT ALANI :
TOPLAM YAPI ALANI :90 M ²	TOPLAM YAPI ALANI :90 M ²

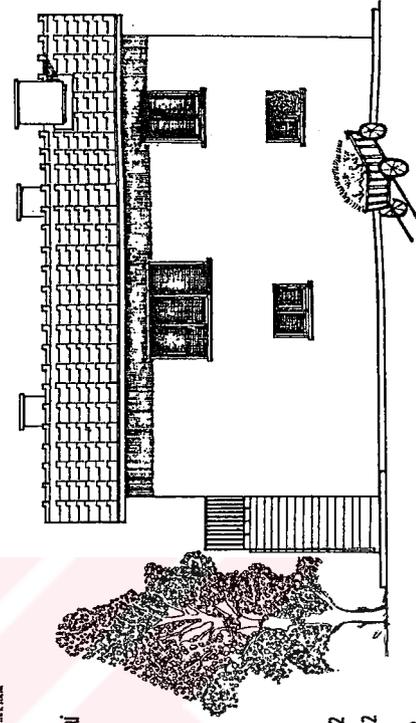
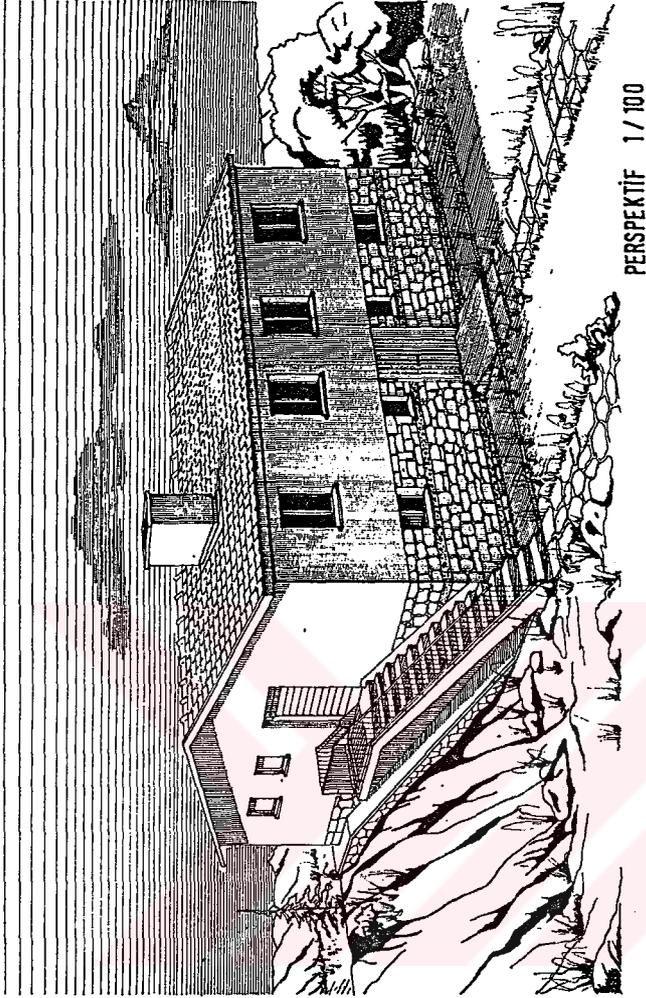
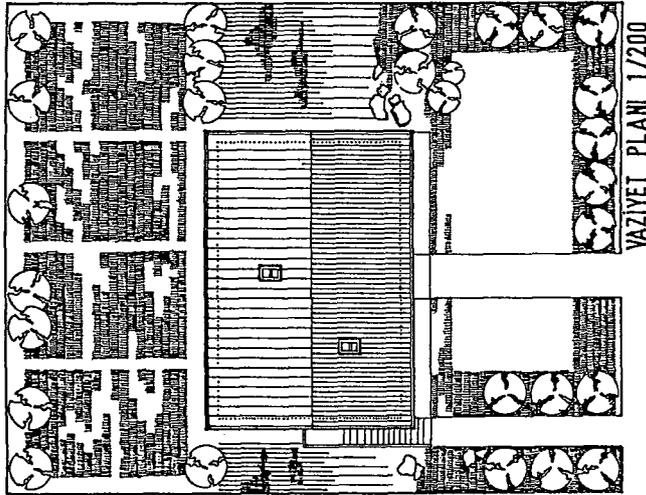


Figure A.3d. Plans and Front Facade (83-K/III.03)



83_K/IV.01

IV. İKLİM BÖLGESİ İÇİN KÖY TİPİ KONUT PROJESİ

İKLİM BÖLGESİ	: IV	NET ALAN	: 1181 M ²
DEPREM BÖLGESİ	: I.-2.-3.-4	BRÜT ALAN	: 150 M ²
YAPI SİSTEMİ	: YÜZME	İSİTME SİSTEMİ	: SOBA
KAT ADETİ	: 2		
KULLANIM AMACI	: KONUT+İŞLETME		

İSİ VE DEPREM YÖNETMELİĞİNE GÖRE 2 KATLI OLARAK DÜZENLENMİŞ OLAN PROJE MEYVİLİ ARAZİ YAPISINA GÖRE PLANLANMIŞTIR. IV. BÖLGE İKLİM KOŞULLARINA GÖRE ÇİFT SATHLI PENCERE VE 29 CM LİK DOLU TUĞLA KULLANILMIŞTIR. AİLE BÜYÜKLÜĞÜ 5-6 KİŞİLİKTİR. İŞLETME ÜNİTESİ ZEMİN KATTA, KONUT İSE 1.KATTA DÜZENLENMİŞTİR.

Figure A.4b. Site Plan and Perspective (83-K/IV.01)

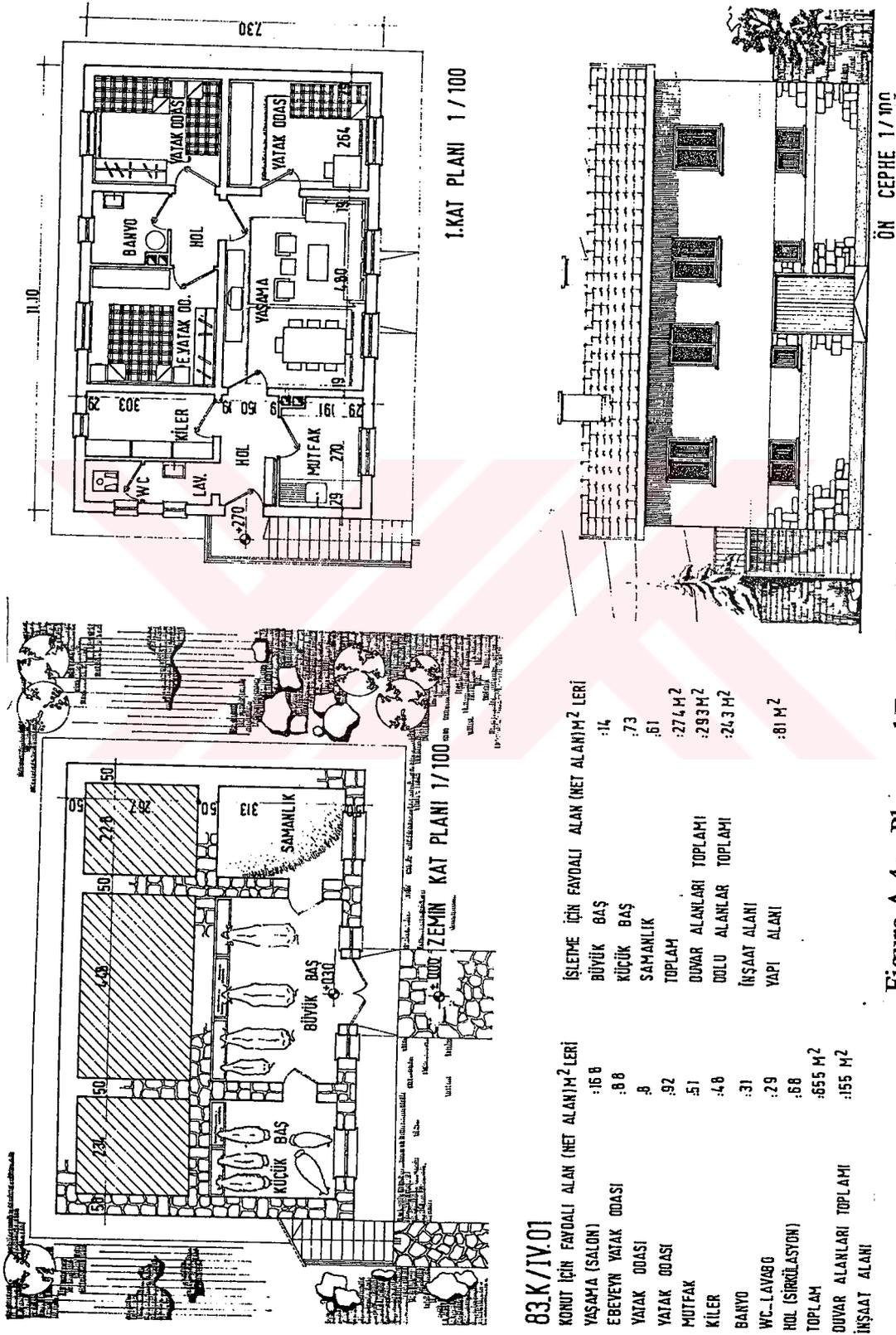
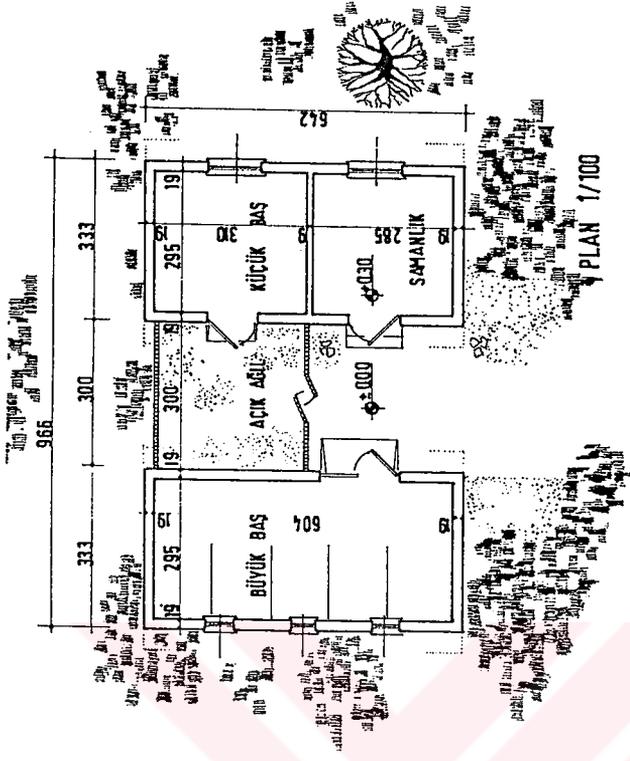
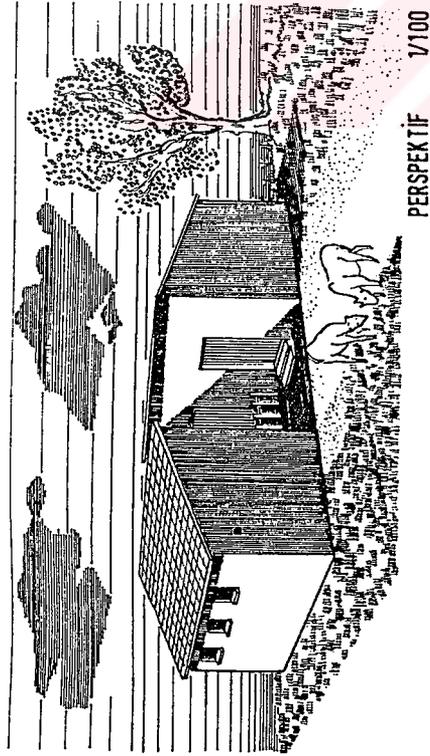


Figure A.4c. Plans and Front Facade (83-K/IV.01)



83.AS /01

I. İKLİM BÖLGESİ İÇİN AHIR _SAMANLIK PROJESİ	
DEPREM BÖLGESİ	:1-2-3-4
YAPI SİSTEMİ	:YİĞMA
FAYDALI ALAN NET ALAN M ² LERİ	
BÜYÜK BAŞ	:17.8
KÜÇÜK BAŞ	:9.1
SAMANLIK	:8.4
TOPLAM	:35.3 M ²
DUVAR ALANLARI TOPLAMI	:7.4 M ²
AÇIK AĞIL	:9
3RÜT ALAN	:4.27 M ²

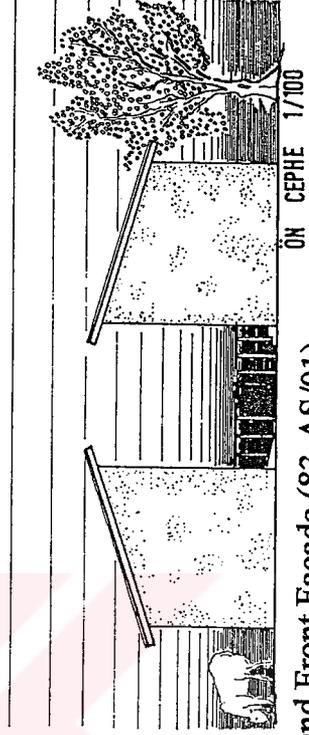


Figure A.5a. Plan, Perspective and Front Facade (83-AS/01)

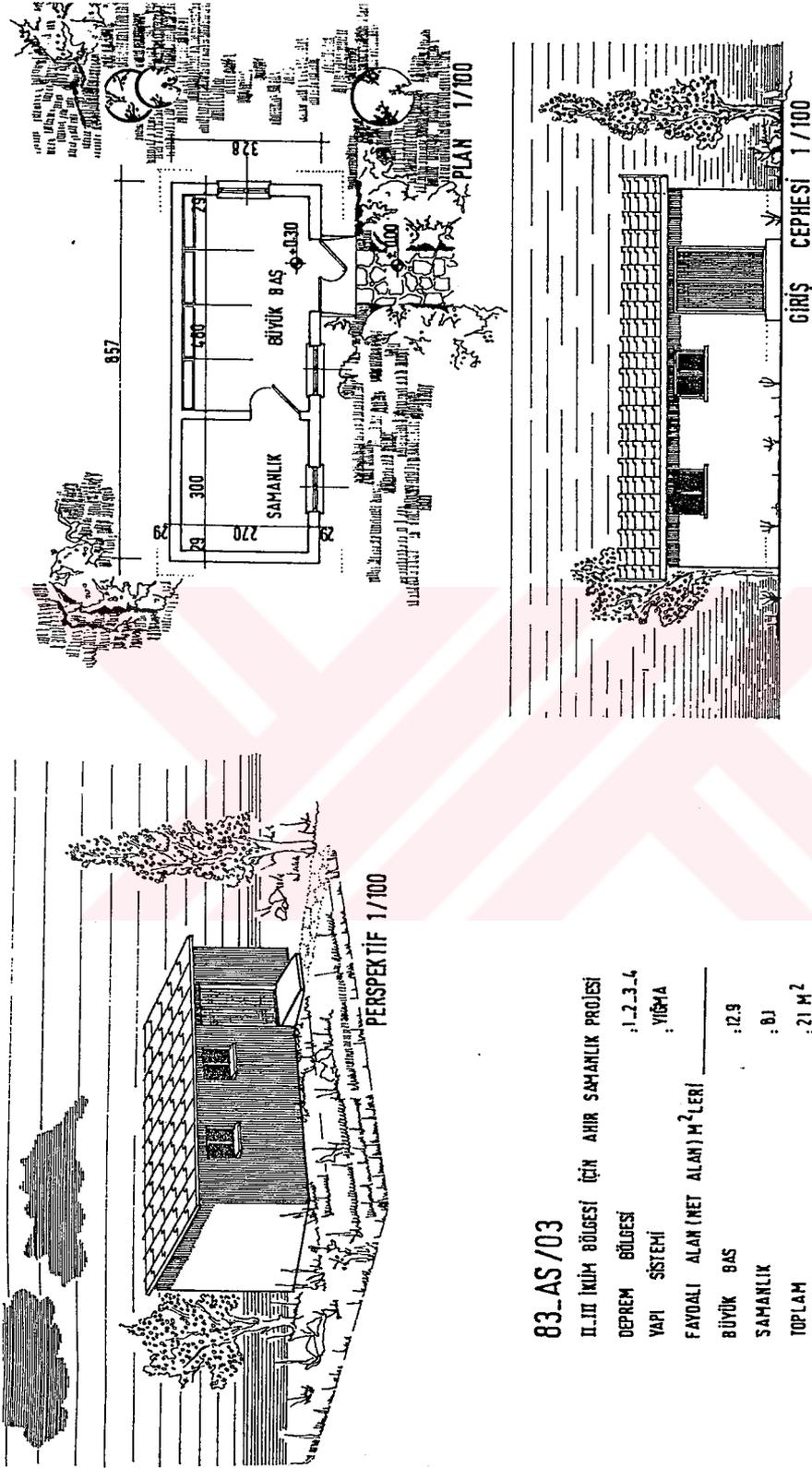
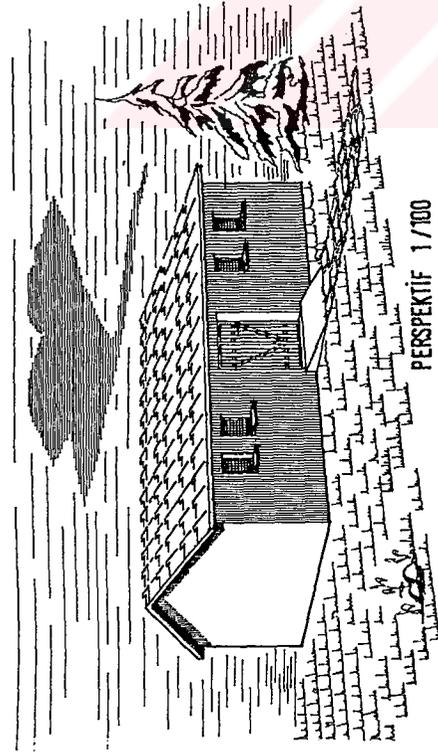
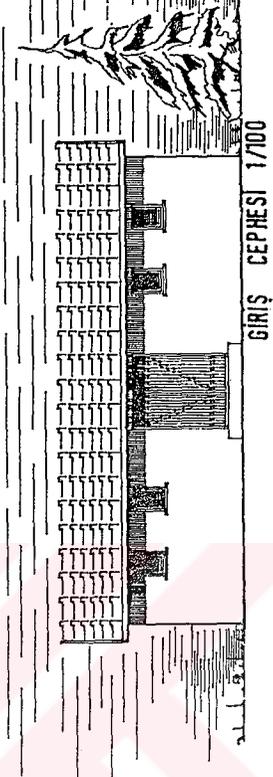
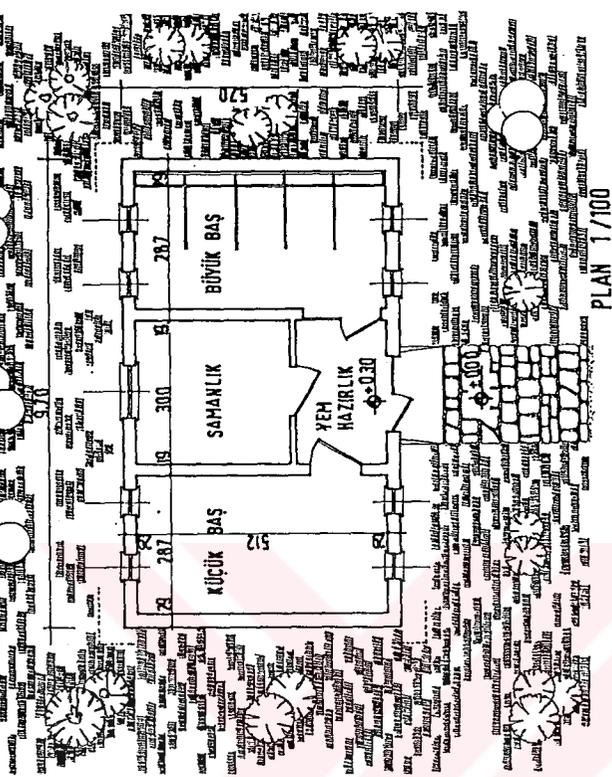


Figure A.5b. Plan, Perspective and Front Facade (83-AS/03)



83_AS/05

III. IV. KILIM BÖLGESİ İÇİN AHIR SAMANLIK PROJESİ

DEPREM BÖLGESİ	: 1,2,3,4
YAPI SİSTEMİ	: YIĞMA
FAYDALI ALAN (NET ALAN) M ² LERİ	
BÜYÜK BAŞ	: 14,7
KÜÇÜK BAŞ	: 14,7
SAMANLIK	: 9,3
YEM HAZIRLAMA	: 5,8
TOPLAM	: 44,5 M ²
DUVAR ALANLARI TOPLAMI	: 10,7 M ²
BRÜT ALAN	: 55,2 M ²

Figure A.5c. Plan, Perspective and Front Facade (83-AS/05)

APPENDIX B

CATEGORIES AND RELEVANT QUESTIONS RELATED TO 1982 RESEARCH PROJECT

Societal Context:

- Is the architecture of housing affected by the patterns of settlement, population, and the social changes?
- How does spatial organization affect community behavior or vice versa?
- What are the impacts of economic and political changes on the built environment?
- How do family structure and patterns of mobility affect design?
- What is the role of tradition?
- What kind of changes are initiated by a cross-cultural transfer of architectural values?
- What is the dialectic of historic precedent and innovation, of continuity and progress?
- How do ideas and actual implications concerning informal and formal organization relate to cultural variables?

Experiential Context:

- What are the transcultural and subcultural aspects of place making?
- What psychological variables affect architecture in diverse cultural settings, economic condition, environments?
- How do people accommodate life support in the fabric of built environments?
- How does architecture achieve symbolic content?
- How are the imprintability and possession manifested in the architecture of different times, cultures?
- What constitutes “feeling at home” in traditional settlements?

Environmental - Technology Context:

- What principles of design are environmentally and technologically sound in a world of limited resources, i.e. economic scarcity?
- What happens when technology is imported, i.e. when non-local materials and unaccustomed way of building is invited instead of the traditional means of construction?
- What are the expressive aspects of technology through the integration of building systems?
- What are the implications of design values and construction method on resources in the region?
- How may architecture be considered as an ecological phenomenon?
- How do diverse cultural views of nature affect the built environment?
- Of what significance is environmental regionalism in the society as a whole or in a country with diverse environmental factors?
- How are factors such as energy, transportation, communication, and life style affecting the form and meaning of vernacular (and/or rural) settlements?

- How does one deal with updating and maintaining the rural infrastructure?

Tentative Hypothesis of 1982 Study:

Environmental Adaptation: (energy utilization of the buildings, energy balance of the settlement)

- With regard to heat flow specifically and energy conservation in general, spatial organizations in the vernacular examples is in accordance with the specific uses and activities taking place in different spaces.
- Thermal performance of vernacular buildings exhibit a better interaction between the environmental conditions such as orientation, form, surface/volume ratio, fenestration/surface ration, than the neo-vernacular and the institutionalized counterparts.
- Energy budget at settlement scale in the institutionalized examples show that environmental conditions such as meteorological, geographical, topographical variables, are not treated with due consideration as in the vernacular solutions which depend on past experience and pragmatic factors.
- Materials used in the vernacular buildings exhibit a better thermal performance, i.e. less heat loss and more heat gains, than their counterparts used in the neo-vernacular examples and/or the institutionally designed buildings.

Environmental Adaptation (Life condition, mode of production)

- Spatial organization and layout in the vernacular buildings show a congruence with the daily household activities.
- Spatial organization and accustomed daily household activity patterns are incongruent with each other in the government designed and built houses.
- Users do not identify the government designed and built houses with themselves as they do identify with the vernacular counterparts which are the products of their thought process, their past experience, accustomed way of living and construction, their labor, in short which are products of an agglomeration of daily life and architectural experience.
- In the vernacular settlements there is a possibility for a choice of place, while the settlement alternative provided by the government does not allow such a choice.
- Selection of place for the vernacular settlement is done according to the daily activity patterns and production conveniences.

Bureaucratic constraints:

- Deficiencies in payment and inflexible bureaucratic rules in the financial help extended by the government for construction and/or new construction after the disaster are the major reasons for mishandling the post-disaster projects.
- Lack of control during construction of the government built houses, choice of cheap materials, and environmentally inappropriate design features are major reasons for premature aging of the institutional buildings.

Building Structure, Construction, and Technology:

- Buildings built in the vernacular tradition perform better structurally during natural hazards- earthquake, landslide- than the buildings built by the government which are supposedly designed specifically with these factors in mind but lack the necessary control during construction.
- Newer buildings, no matter what their classification- vernacular, neo-vernacular institutionalized- is, are more susceptible to earthquake hazard than the older ones.
- Accustomed and traditional materials used in vernacular building constructions are handled and treated in congruence with their constructive properties, while the new construction materials used especially in the neo-vernacular construction are not.
- Neo-vernacular buildings in the rural areas are developed primarily after the introduction and availability of new construction materials.

Socio-economic Structure and the Built Environment:

- Readily available household appliances - oven, refrigerator, gas-stove, electric stove, washing machine, etc. - are ill-fitting elements into the previously congruent relationship between spatial organization and activity pattern.
- Means of self-identification, symbolic quality and individual spatial organization are reflected in the vernacular houses according to the wealth of the owner and his role in the production process, while the houses built by the government as disaster housing do not take these factors into consideration.
- Neither the neo-vernacular nor the institutionalized buildings show the degree of flexibility which can be defined as the capacity to provide rearrangement, reorganization and expansion while maintaining the

overall order of the structural components, that the vernacular buildings exhibit.

- Elderly people are more sensitive to the existing vernacular buildings than the younger people.
- Younger people are more inclined to prefer the neo-vernacular and/or the institutionally designed housing.

Beliefs:

- Fatalism and belief in destiny are influential factors in the reluctance, or the indifference shown by the peasants towards the educational attempts to show them the techniques for improvement of the existing housing or how to build properly against disasters, namely the earthquake.

Health Standards:

- In modern sense of the word, the vernacular houses are not exactly hygienic.
- Institutionally designed houses, though they may carry all the features furnished by the principles of hygienic environment to start with, are not very conducive for health after a short period.

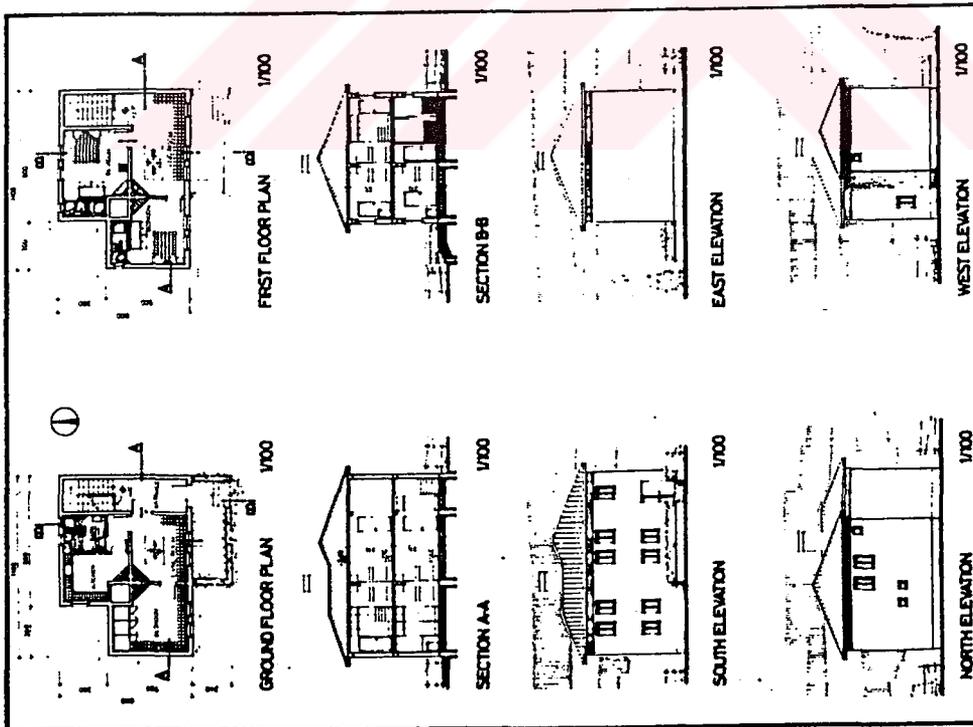


Figure B.1. Disaster House Proposal 1
(Turan, Cengizkan, 1984)

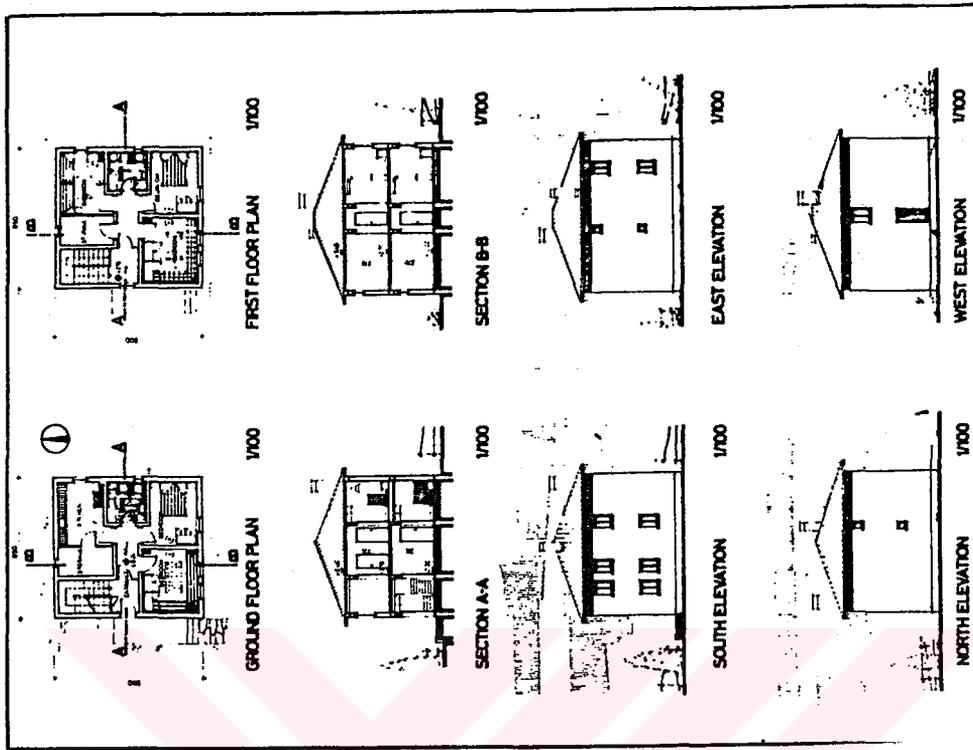


Figure B.2. Disaster House Proposal 2
(Turan, Cengizkan, 1984)

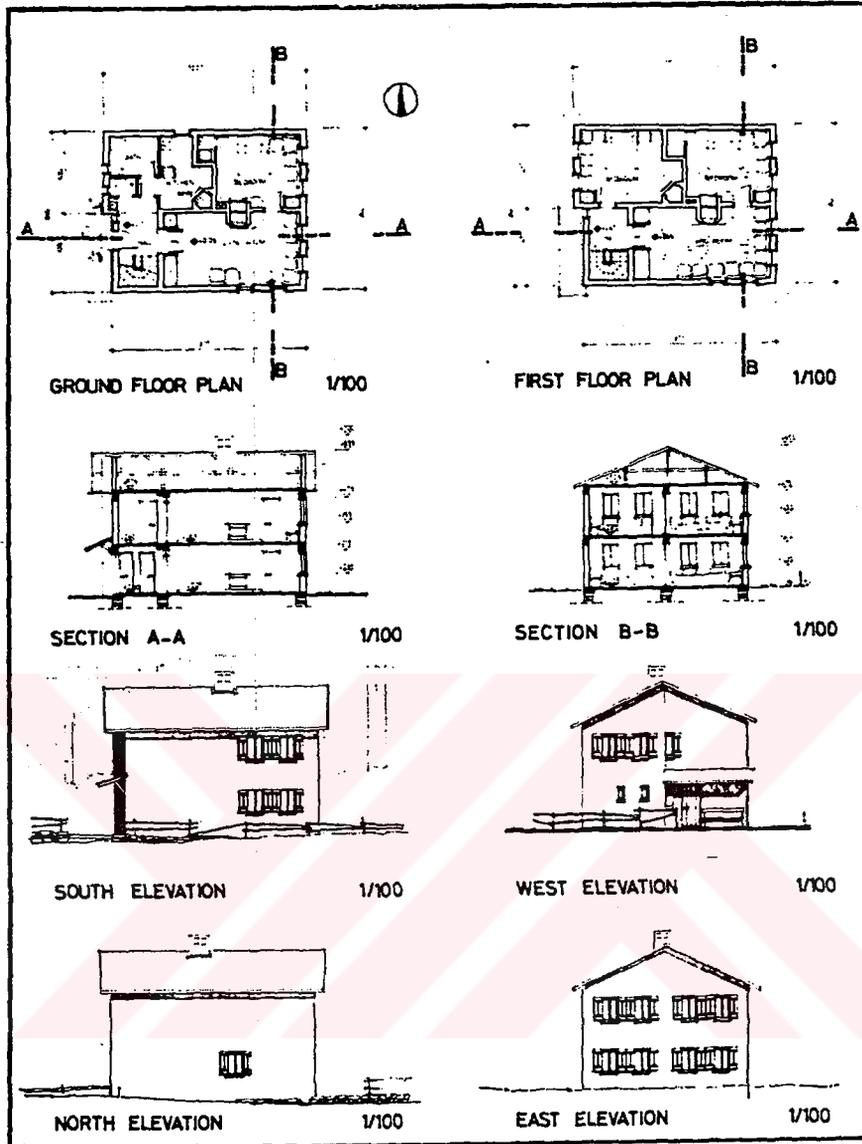


Figure B.3. Disaster House Proposal 3 (Turan, Cengizkan, 1984)

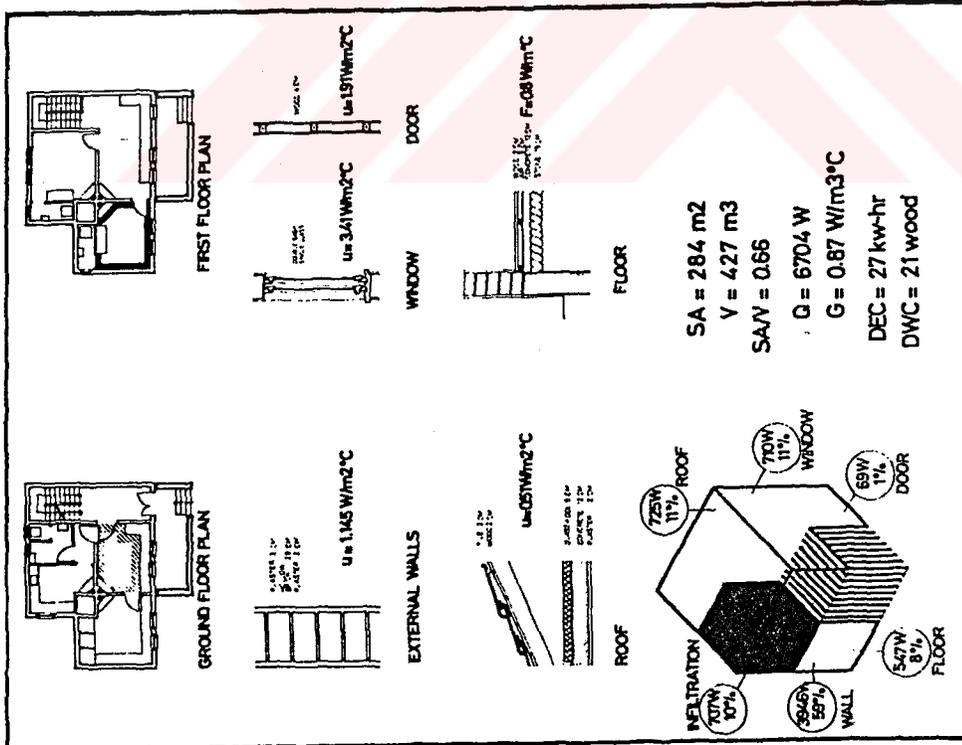


Figure B.4. Thermal Performance Analysis Proposal 1
(Turan, Cengizkan, 1984)

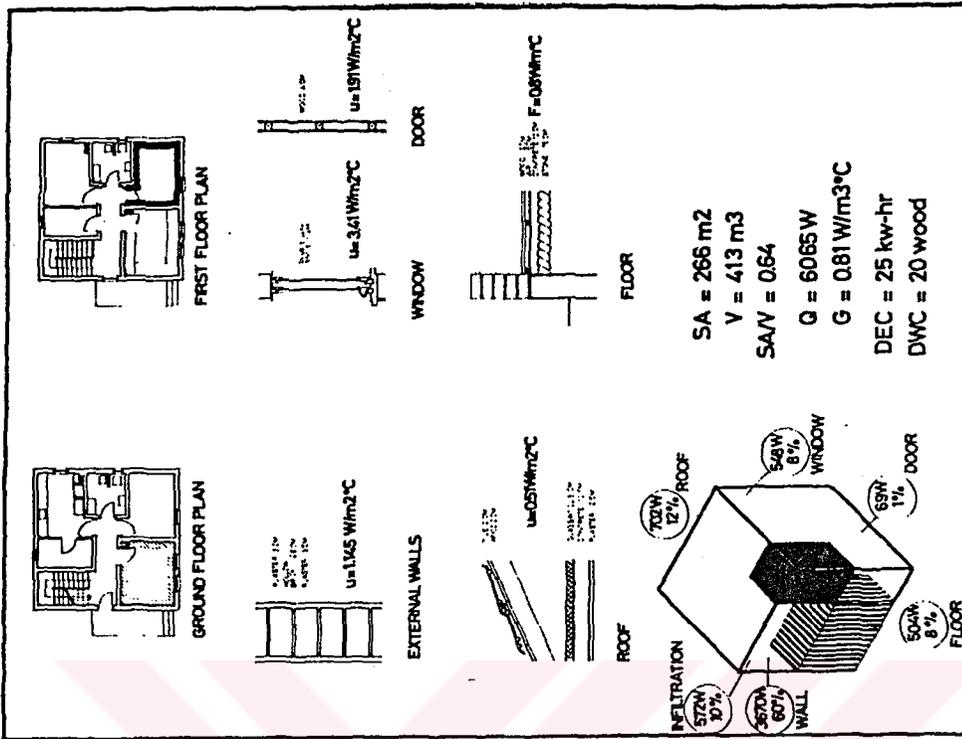


Figure B.5. Thermal Performance Analysis Proposal 2
(Turan, Cengizkan, 1984)

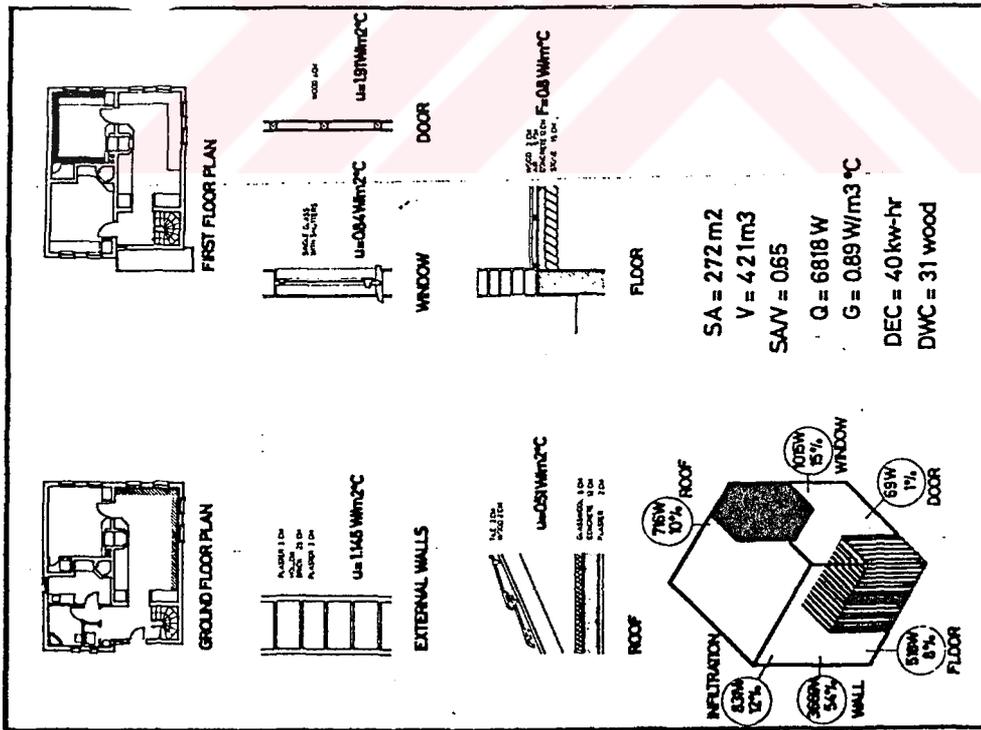


Figure B.6. Thermal Performance Analysis Proposal 3 (Turan, Cengizkan, 1984)

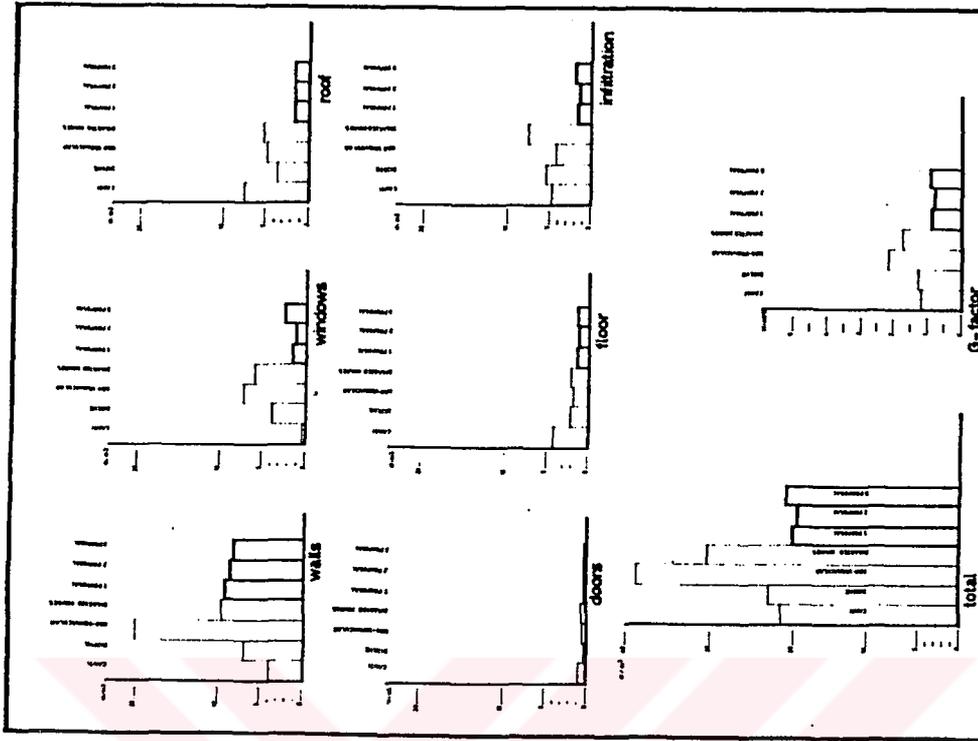


Figure B.7. Comparison of Thermal Performances of the Typical Buildings and Proposed Disaster Houses (Turan, Cengizkan, 1984)

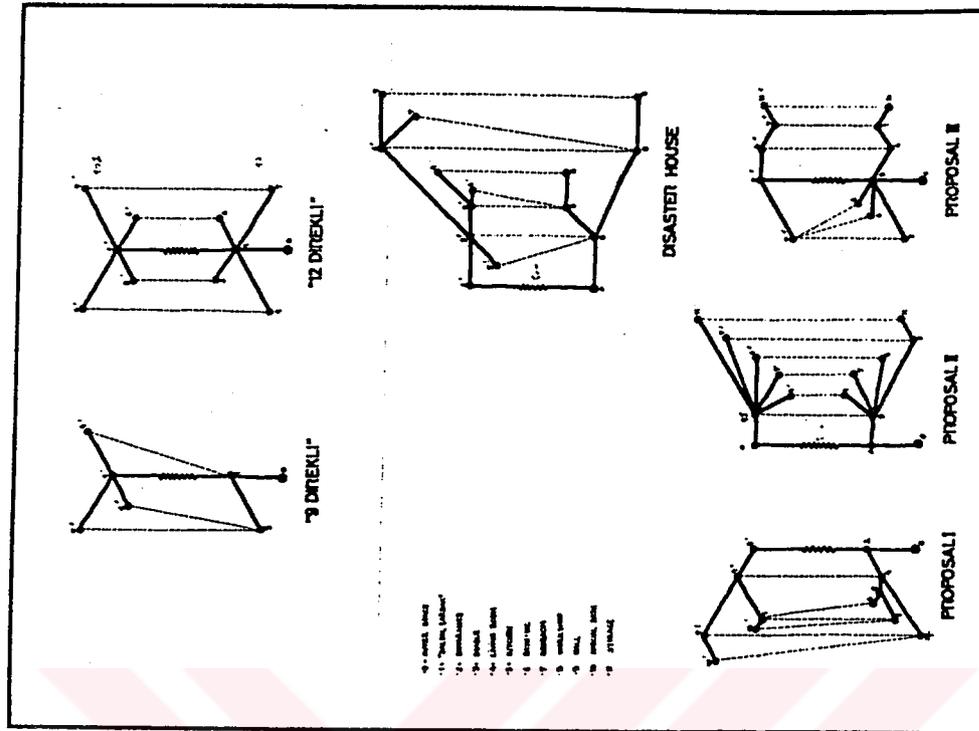
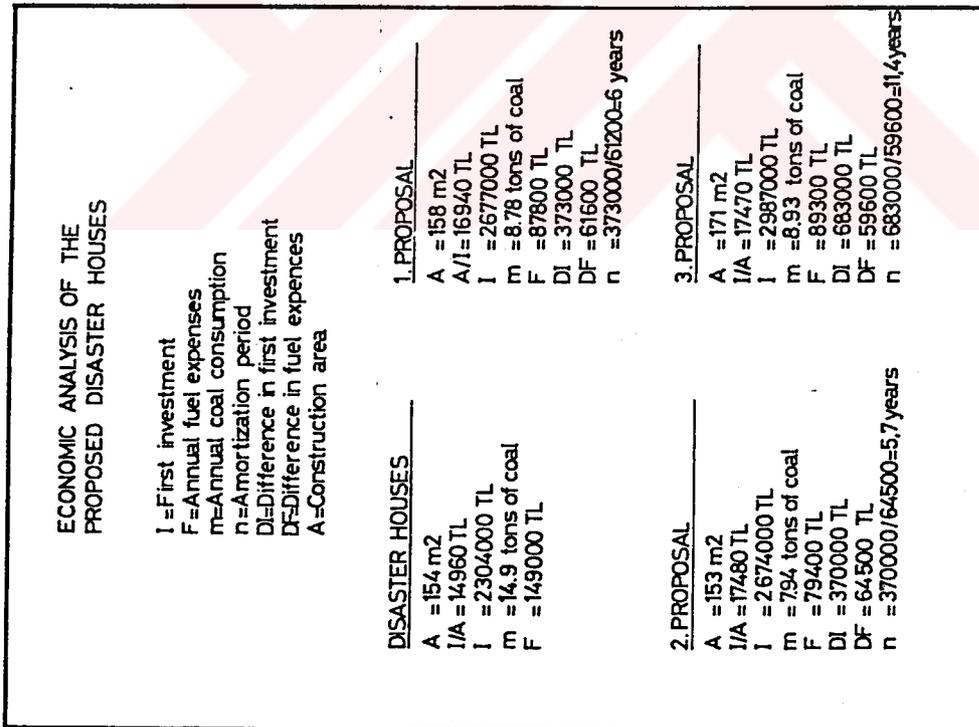


Figure B.8. Economic Analysis of the Proposed Disaster Houses (Turan, Cengizkan, 1984)

Figure B.9. Analysis of the Spatial Relations by the Graph Theory (Turan, Cengizkan, 1984)

APPENDIX C

THE QUESTIONNAIRE

During 1982 study “the questionnaires consisting of 72 questions were applied to 58 subjects; 20 living in Kurtlar, 27 in Bostancılar, 4 in Üreyler, 4 in Parmaksızlar and 3 in Ferahlar” (Turan, Cengizkan, 1984, p.106). 4 subjects lived in neo-vernacular and 2 in institutionalized examples of housing; the rest lived vernacular houses. Women and men of the households were targeted- 35 women (% 60.3) and 23 men (% 39.7); in some cases young members (below 30; 7 subjects) were questioned as well as middle aged (between 30-60 years of age; 37 subjects) and old ones (over 60; 11 subjects), the mean value of age being 48.40.

The current study applies the same questionnaire to the villagers who are now living in the new village in order to understand the level of satisfaction, level of acceptance of the ‘institutional’ houses. The results are given throughout the thesis especially in field study part.

1. Köyün adı :
2. Hane Numarası :
3. Ev Tipi :
Yöresel (), Yeni Yöresel (), Kurumsal ()
4. Evin yapıldığı tarih:
5. Kaç yıldır o evde oturduğunu:
6. Ev sahipliği durumu:
Ev sahibi (), Kiracı (), Birden fazla ev sahibi ()
7. Daha önce yaşadığı yer:
Başka köy (), Aynı köy (), Diğer :
8. Aynı köy ise daha önce yaşadığı ev (3 nolu sorudaki tiplere göre) :
9. Aile Yapısı:

	Yaş	Cinsiyet	İş	Meslek	Eğitim Durumu	Okur-Yazar Durumu	Yıllık Gelir	Kaç Yıllık Evli
Anne								
Baba								
Çocuk 1								
Çocuk 2								
Çocuk 3								
Çocuk 4								
Büyükanne								
Büyükbaba								
Diğerleri								

10. Geçiminizi en çok neyle sağlıyorsunuz?
Çiftçilik (), Hayvancılık (), Tavukçuluk (), Ormancılık ()
Dericilik (), El Sanatları (), İşçilik (), Diğerleri ()
11. Toprağınız var mı? Kaç dönüm?
Evet (), Hayır ()
12. Arabanız var mı? Modeli,
Yok (), Traktör (), Otomobil (), Kamyon (), At Arabası ()
13. Sebze ve meyvenizi kendiniz mi yetiştirirsiniz? Evet (), Hayır ()
Nerede depolarsınız?

14. Sahip olduğunuz hayvanlar:

	Hayvan Türü	Sayısı
Büyükbaş		
Küçükbaş		
Kümes		
Kedi-Köpek		

15. Ekmeğinizi Kendiniz mi yaparsınız? Evet (), Hayır ()
Niye?
16. Kış için evde yiyecek hazırlar mısınız? Evet (), Hayır ()
17. Evde kışlık yiyeceklerinizi depolayacak yeriniz var mı?
Ambar (), Depo (), Başka ()
18. Ailenizde çalışmak için köyden giden var mı? Evet (), Hayır ()
Varsa nereye gittiler?
Yakın köy (), Kasaba (), Şehir (), Büyük Şehir (), Yurt Dışı (),
19. Köyün dışına çıkıyor musunuz?
Hergün (), Haftada birkaç kez (), Haftada bir (), Ayda bir (),
Mevsimlik (), Çok seyrek (), Hiç ()
20. Ne için köyün dışına çıkıyorsunuz?
Alış-veriş (), Ziyaret (), Çalışma (), Eğlence-gezme ()
Kentsel kurumlardan yararlanma (), Diğerleri ()
21. Köyün dışına çıktığımızda genellikle nerelere gidiyorsunuz?
Başka köy (), Kasaba (), Yakın şehir ()
22. Evinizde akarsu var mı? Evet (), Hayır ()
İster misiniz? Evet (), Hayır ()
23. Nerede yıkınıyorsunuz?
Oda (), Mutfak (), Avlu (), Yüklük (), Banyo (), Çay-dere (), Diğer ()
23. Çamaşınızı nerede yıkıyorsunuz?
Evin içi (), Bahçe-Avlu (), Balkon-Çardak (), Çeşme (), Diğer ()
24. Sıcak su hazırlamak için ne kullanıyorsunuz?
Odun (), Kömür (), Tezek (), Tüpgaz (), Gazyağı (), Termosifon (), Başka
25. Aydınlanmada ne kullanıyorsunuz?
Elektrik (), Gaz lambası (), Mum (), Tüpgaz (), Başka ()
26. Evinizi ısıtmak için hangi yakacağı kullanıyorsunuz ?
Odun (), Kömür (), Elektrik (), Gazyağı (), Diğer ()
27. Yakacak malzemesini nereden temin edersiniz?
Köydeki dükkan (), Köy civarı (), Kasaba (), Şehir (), Orman Müdürlüğü ()
28. Sizce tuvalet evin içinde mi, dışında mı olmalı? İçinde (), Dışında ()
29. Televizyonunuz var mı? Evet (), Hayır ()
30. Televizyonunuz yoksa genellikle nerede seyredersiniz?
Komşuda (), Kahvede (), Köy odasında (), Diğerleri ()

31. Gazeteyi nerede okursunuz?

Okumam (), Evde (), Kahvede (), Köy odasında (), Diğerleri ()

32. Evinizde şunlardan hangileri vardır?

Buzdolabı (), Çamaşır Makinası (), Ocak (), Fırın (), Dikiş makinası (),
Elektrik ıttüsü (), Kömür ıttüsü (), Dödüklü tencere (), Elektrik Süptürgesi (),
Telefon (), Teyp (), Pıkap (), Radyo (), Saat (), Termometre (),

33. Yemeđinizi çođunlukla nerede pişiriyorsunuz?

Fırın (), Ocak (), Tandır (), Başka ()

34. Yemeđi genellikle nerede yersiniz?

	Ev içi	Bahçe, Çardak	Tarla	Diđer
Yaz				
Kış				

35. Bozulacak yiyecekleri nerede tutarsınız?

Buzdolabı (), Avlu (), Ev içi (), Başka ()

36. Camiye sık gider misiniz?

Hergün (), Cuma gınelri (), Ramazan, ölüm, v.b. özel günler (), Hiç ()

37. Kahveye sık gider misiniz?

Hergün (), Haftada birkaç kez (), Ayda birkaç kez (), Çok seyrek (), Hiç ()

38. Köy odasına sık gider misiniz?

Hergün (), Haftada birkaç kez (), Ayda birkaç kez (), Çok seyrek (), Hiç ()

39. En sık komşuluk ettiđiniz kişilerin evleri hangileridir?

40. Komşularla genellikle nerelerde biraraya gelirsiniz?

Yaz:

Kış:

41. Köy dışından yatıya gelen konuklarınızı hangi odada yatırırsınız?

42. Evinizde sizden önce deđişiklikler yapılmış mı?

Ev içi	
Cephesi	
Ekler	

43. Evinizde siz deđişiklik yaptınız mı?

Ev içi	
Cephesi	
Ekler	

44. Elinizde olsaydı, evinizde ne gibi deđişiklikler yapardınız? Niye?

45. Bu evden memnun musunuz? Niye?

a) Fiziki

b) Ev nifusuna ilişkin

46. Elinizde olsa ne tür bir eve çıkmak istirdiniz? Niye?

47. Bu evin beğendiğiniz (en iyi) yanları nelerdir?

48. Bu evin beğenmediğiniz (en kötü) yanları nelerdir?

49. Köyde en çok hangi evi beğeniyorsunuz? Niye?

50. Köyde sizce en önemli ev hangisi? Niye?

51. Köyünüzün en çok nelerini seviyorsunuz? Niye?

52. Eviniz hiç afetlerden zarar gördü mü? Evet (), Hayır ()

53. Afetten sonra konut için yardım gördünüz Mü?
Nasıl?

54. Bu yardım biçiminden memnun musunuz?

a) Mali

b) Kişiselleştirme olanağı

55. Konut parasının ödenmesinde zorluk çıktı mı? Evet (), Hayır ()

56. Bu konutu kendiniz yapmış olmayı ister miydiniz? Evet (), Hayır ()

57. Afet konutlarını beğeniyor musunuz? Niçin?

58. Ahşap yerine tuğla ve betondan yapılmış ev sizce daha mı iyi?
Evet (), Hayır ()
59. Çatınızın malzemesi ne olmalı?
Marsilya kiremit (), Alaturka Kiremit (), Ahşap (), Ondüle Saç ()
60. Evinizde döşemenin malzemesi ne olmalı? Niye?
Tahta (), toprak (), Beton (), taş ()
61. Evinizin pencereleri daha büyük olsa daha mı iyi olurdu? Evet (), Hayır ()
Niye?
62. Doğal afetlere karşı ne yapılabilir?
63. Devlet doğal afetlere karşı neler yapabilir?
64. Devletin yaptığı konutlar afete karşı sizin yaptıklarınızdan daha dayanıklı mı? Niye?
65. Devletin yaptığı konutlar iklim koşullarına sizin yaptıklarınızdan daha uygun mu?
Evet (), Hayır ()
66. Devletin yaptığı konutlar iklime uygun değilse , korunmak için ne tedbir alıyorsunuz?
Pencereye naylon (), Çatı arasına saman (), Diğerleri ()

APPENDIX D

INFORMATION ABOUT KURLAR AND BOSTANCILAR¹

The districts and the population is as follows:

Central Ballar	20 families	}	Total for Bostancılar 57 families, population 286
Ballar	10 families		
Ferahlar	13 families		
Parmaksızlar	9 families		
Müftüler	5 families		

Central Kurtlar	24 families	}	Total for Kurtlar 42 families, population 250
Üreyler	12 families		
Kaybiler	6 families		

¹ The information is taken from the proceedings of 1982 study.

Table D.1. Bostancılar Village

District	Number of Houses	School Bldg.	Number of Students	Mosque	Village Room
C. Bostancılar	20	1	22	1	+
Ballar	10	-		1	+
Ferahlar	13	-		1	+
Parmaksızlar	9	-		1	+
Müftüler	5	-		1	+

Table D.2. Kurtlar Village

District	Number of Houses	School Bldg.	Number of Students	Mosque	Village Room
C. Kurtlar	24	1	16	1	+
Üreyler	12	1	4	1	+
Gaybiler	6	-		1	+

The distance between these districts are:

Central Bostancılar - Ferahlar 1.5 km.

Central Bostancılar - Parmaksızlar 2.5 km.

Central Bostancılar - Ballar 0.4 km.

Central Bostancılar - Kurtlar 4.8 km.

Central Kurtlar - Ferahlar 2.3 km.

Central Kurtlar - Kaybiler 1.2 km.

Central Kurtlar - Üreyler 3.8 km.

The temperature of the region is cooler than temperate throughout the year with a fairly high humidity even in summers. This classification been obtained by De Martonne-Gotmann Method. Monthly data for average temperature, precipitation, and relative humidity taken from the Bulletin of the State Meteorology Institute are given in Table D.3. Since the durations of bright sunshine but not the solar radiation itself, are measured, the solar radiation intensity has been derived from the measured bright sunshine durations by the Angström Method. The monthly data for total solar radiation reviewed on a horizontal surface is also given in Table D.3. The prevailing wind in the region is from south-west. Heating-degree days calculated according to a base temperature of 15° C are also given in Table D.3.

Table D.3. Monthly climatic data for the region Kurtlar, Bostancılar

	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Temp. (°C)	-0.6	-0.2	3.4	8.4	12.9	16.0	18.3	18.3	15.6	10.6	7.3	2.9
Precipitation (mm)	80.6	63.2	64.2	54.5	58.3	45.9	22.0	12.1	18.4	21.4	33.4	85.0
Rel.Hum. (%)	77	78	75	65	61	57	54	54	58	64	68	78
Sol.Rad. (kw-hr/ m ²)	155	195	248	289	326	351	358	341	302	236	185	145
Heating-Degree Days	484	426	360	198	65	-	-	-	-	136	231	375

APPENDIX E

FIELD STUDY PROCEEDINGS

Information gathered as a result of conversations with the villagers who are living in Yüzüncü Yıl and the old villages.

26-29 October 1994

- People do not call these houses as "disaster houses" because they say that disasters have not been so destructive in the province. The reason is to gather the spread villages and easily solve the problem of infrastructure and social services.
- "Even though it has been 13 years since villagers started to live in Yüzüncü Yıl, the new settlement has not been a Muhtarlık," says İrfan Eryılmaz, the muhtar of Kurtlar and adds "they are still two separate villages, having two different muhtars."
- There has been a lottery drawn in deciding about the settlements, thus villagers from different villages and districts are living mixed without any distinction.

- There has been a referendum on the union of two villages under one muhtarlik. The result was "NO".
- An old woman who is still living in Kurtlar, says that they never believed that the government was going to built those houses. That's why her family did not see any reason to be written down in the list. But now they want to have a place in Yüzüncü Yıl.
- There are also couple of houses that refuse to move down to the new settlement. I did not have the chance to talk with them personally, but muhtar of Kurtlar says that they are following a family that has a power upon them. The powerful family does not want to come down because he will lose his power in Yüzüncü Yıl. (At this point I do not know how reliable the muhtar is!)
- Muhtar was an officer in Müftülük and worked in different cities for 30 years. Thus he is closer to urban life than village life. He does not understand why people still want to live in the old villages. He calls them "stubborn". He is trying to change the way of living of other people because he is degrading their way of living.
- The son of muhtar wants to open a market (bakkal) in the new village. Once there was one, says the son, but nobody paid in cash, so the guy bankrupt.
- There is an upset atmosphere in Yüzüncü Yıl. The muhtar of Kurtlar explains it to us: After the elections of March 1994, muhtar at Kurtlar has changed. Thus, a relative of ex-muhtar shot the new muhtar and his two nephews. One nephew was dead, the other was wounded

severely that he is paralyzed down from the neck at the moment. The muhtar had 5 shots to his body but he was the luckiest among all so that he became very well again. So this occasion divided the village into two, and some families became enemies.

- All the neighborhoods and districts, except Central Kurtlar and Central Bostancılar, are destroyed by the villagers. They broke down their houses and took the wood with them to Yüzüncü Yıl and built extra spaces in addition to their houses. (Barn, straw house, hen house, oven house etc.)
- Some people had to leave their old houses without their wish as a result of the school problem. The school at the villages were moved down to the school at Yüzüncü Yıl and it became impossible for the kids to walk the distance in between especially in winter time. (But there are still kids walking that way!)
- Muhtar says that they are trying to form a common transportation, a ring-school service for the kids walking from the central villages of Kurtlar and Bostancılar. They already have provided a mini-bus to Bostancılar.
- A young guy from Central Kurtlar said that the vegetation or the topography is not appropriate. Thus the new village is always sunny. But Kurtlar does not get the noon sun that strong.
- People are happy to live in Yüzüncü Yıl, because they came together with their neighbors. It is easier to meet them. The neighborhood relations became stronger.

- The Central Kurtlar is very close to the agricultural fields where it is quite a distance from Yüzüncü Yıl.
- A 70 years old woman tells us how unhappy they are here. They want to go back to their old village. She says that nothing is the same here, in this new village. Everything has changed, people have changed. "They have become snobs" says her while pointing out the old mother who is busy with the digging of the artesian well in his garden.
- The economic status of the families are highly exposed in Yüzüncü Yıl. As all the houses are the same, even the smallest addition that is done in a good way or expensive way, is seen. Thus, this class differentiation makes people unhappy. The above 70- years old woman was very upset when she was talking about the water well of the old muhtar. Because that district is above the water level and water is not running all the time. So the old muhtar had a well of his own. And this makes this old woman upset because she has to go to the fountain or the mosque everyday to supply the water need.
- The village has a high rate of reading and writing.
- There exist two families that take our attention: One is a retired soldier, the other is a retired topograph. These two families lived in big cities for a long time and thus their attitude is more "urban" than "rural". They come together more frequent than they meet others.
- The retired soldier has a dish washer. (The only one in the village.) The change in this house is done rather consciously. The house is enlarged as a mass instead of a half built shed attached to the main

body of the house. They are the only one who talks about installing a radiator system for heating the house.

- The head officer in Tapu Kadaastro in Mudurnu is very angry with the villagers, and even quarreled with the muhtar because of the added sheds to the houses that the government has given. He can not understand why these guys follow the old, past "essence" of their previous living. He says that the government has built them "modern houses", and these guys are trying to change them instead of getting adapted to those houses.
- The villagers think that the houses are "functional" because it has electricity, running water, WC-Bathing room inside.
- Mostly women complain about the size of the kitchens. They wish that they could be able to eat inside. (I did not know eating in the kitchen exists in our culture.)
- People say that upper floors are more humid when compared to the ground floor.
- Almost everybody (the ones who have enough money) changed the ground floor into the living space which was planned as barn and storage. The layout of the ground floor is more convenient for a family living. They added WC and a kitchen to the ground floor.
- The living room of the ground floor is larger than the upper floor which means more functional.

- It is a disadvantage, says everybody, to have concrete ground/floor. It gets really cold. So most of them prefer wood.
- Both at the old villages and the new, some houses have satellite antenna.
- An old man says that he is very happy to move to Yüzüncü Yıl because he was living in the woods and was giving harm to the woods by ordinary cutting which is a common problem in such villages. So now he is out of the woods and the woods are safe.
- Mehmet Salim and his wife who are 68 years old, moved down to the new village on the same day that we were doing the questionnaire. The wife says that the houses are not sufficient to the "cultural way of living".
- The muhtar of Kurtlar is strongly opposing to the idea of building the barns under the living spaces in concrete building. He claims that due to the lack of ventilation, there will be a bad smell which animals and humidity will create and also fleas will appear.
- Some people think that these new houses are not so strong to bear any disasters. There has already been damages on the walls.
- The uncle of the muhtar says that these houses do not have any "direk", thus they do not stand strong against the disasters. He also commands that, during the construction, the architects or engineers did not control these buildings well, but he also adds that it is kind of impossible to

control all of them, one by one, as there were a lot of houses under construction at the same time.

- Mehmet Çolpan says that the reliability of the wooden houses is higher than these ones. The reason is that the wooden house has higher elasticity. In case of an earthquake, the wooden house moves forward and backwards and sustain the effect. But the concrete ones collapse easily as they can not move.
- Some people are dreaming about the city life. Some say that, if they had enough money, they wished to have a flat of their own. Also some people wish that they had a balcony.