

**THE ROLE OF ARCHITECTURAL HERITAGE IN THE RURAL BUILT
ENVIRONMENT: A CASE STUDY**

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ENVIRONMENT: A CASE STUDY**

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ABSTRACT

THE ROLE OF ARCHITECTURAL HERITAGE IN THE RURAL BUILT ENVIRONMENT: A CASE STUDY

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The built environment has mostly evolved under the influence of cultural heritage and has been shaped in response to our needs and resources. However, rapid changes have occurred in this environment with the impacts of globalization and mass production. The impact of these changes threatens to obliterate the unique character of rural settlements, which unlike urban areas still possess cultural identity.

The aim of this study was to investigate the sustainable transmission of rural building heritage to prosperity; the potential of its adaptation for new settlements; and the interpretation of designing new houses in the light of traditional ones; as an integral part of sustainable rural development. To this end, a case study was conducted in the village of Güzelöz in Kayseri, where the transition from historical to contemporary styles and techniques was readily observable.

The principles for effectively implementing projects which relate to the preservation and transmission of rural heritage have been formulated in the European Rural Heritage Observation Guide (ERHOG), which was initiated by Committee of Senior Officials of the European Conference of Ministers Responsible for Regional Planning/Spatial Planning (CEMAT) and the Village Design Statement (VDS) Packs, which were initiated by the Community Councils in United Kingdom (UK).

The new development in Güzelöz village, as carried out by the Ministry of Public Works and Settlement (PWS) together with additions and alterations to existing traditional houses, were studied to understand the changing needs of the villagers. A comparative analysis was made between the level of satisfaction for both the traditional houses and post-disaster houses (PDH). An evaluation according to the ERHOG and VDS criteria was conducted for both types of houses regarding the relation of buildings with their immediate vicinity; use of materials; functional requirements; and constructional concerns. The results showed the importance of the recognition and promotion of cultural heritage to create an appropriate built environment.

Keywords: Rural Architectural Heritage, Village Design Statement, Post-Disaster Housing, Sustainable Rural Development.

ÖZ

MİMARİ MİRASIN KIRSAL YAPILI ÇEVREDEKİ ROLÜ: ÖRNEK BİR ÇALIŞMA

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Kültürel mirasın etkisiyle gelişmekte olan, ihtiyaçlarımız ve kaynaklarla uyumlu olarak da şekillenen yapılı çevre, küreselleşmenin ve kitlesel üretimin etkisiyle hızla değişmektedir. Bu değişikliklerin, kentsel alanlardan farklı olarak hala kültürel kimliklerini sürdürmeye devam eden kırsal alanların kendine has karakteri üzerinde yıkıcı bir etkisi bulunmaktadır.

Bu araştırmanın amacı, kırsal yapı mirasının sürdürülebilir aktarımının ve yeni yerleşimlerdeki çağdaş gerekliliklere uyum potansiyeli ile yeni konutların geleneksel özellikler ışığında yorumunun sürdürülebilir kırsal kalkınmanın bütünüleyici bir parçası olarak araştırılmasıdır. Bu amaçla, çalışma alanı olarak gelenekselden çağdaş konut mimarisine ve tekniklere geçişin gözlemlenebileceği Kayseri'nin Güzelöz köyü seçilmiştir.

Kırsal mirasın korunması ve aktarımı konularında yapılan alıřmaların prensipleri, Bölgesel ve Mekansal Planlamadan Sorumlu Avrupa Bakanlar Konferansının Üst Düzey Memurlar Komitesi tarafından düzenlenen “Avrupa Kırsal Miras Gözlemlene Rehberi”nde (AKMGR) ve Birleşik Krallık Bölgesel Konseyleri tarafından hazırlanan “Köy Tasarım Rehberleri”nde (KTR) yeniden biçimlendirilmiştir.

Yerel halkın ihtiyaçlarını anlamak için, TC Bayındırlık ve İskan Bakanlığı tarafından alıřmaları yürütölmüş olan yeni gelişim alanı ile mevcut geleneksel konutlardaki ekler ve değışiklikler incelenmiştir. Geleneksel konut sahipleri ile afet konutu yararlanıcılarının memnuniyet seviyeleri açısından bu iki konut tipi karşılaştırılmalı olarak incelenmiştir. Ayrıca, KTR ve AKMGR kıstasları çerçevesinde geleneksel konutlar ve afet konutları; binaların yakın çevreleri ile ilişkileri, malzeme kullanımı, fonksiyonel gereksinimler ve yapısal konular açısından değerlendirilmiştir. alıřma sonuçları, bulunduğu yerin özelliklerine uygun yapılı çevrelerin yaratılması için, kültürel miras değeriinin farkına varıp, kültürel mirası ve çeşitliliğı zenginleştirmenin önemini ortaya koymaktadır.

Anahtar kelimeler: Kırsal Mimari Miras, Köy Tasarım Rehberleri, Afet Konutları, Sürdürülebilir Kırsal Kalkınma.

To My Parents...

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LIST OF ABBREVIATIONS

CEMAT	:	European Conference of Ministers Responsible for Regional Planning/Spatial Planning
ERHOG	:	European Rural Heritage Observation Guide
VDS	:	Village Design Statement
Ministry of PWS	:	Ministry of Public Works and Settlement
GDTRI	:	General Directorate of Technical Research and Implementation
PDH	:	Post-Disaster House

CHAPTER 1

INTRODUCTION

In this chapter the argument for and the objectives of the study, and the procedure followed are presented. The chapter is concluded with the disposition of the various chapters within the thesis.

1.1. Argument

The built environment is an integral part of our heritage, which has evolved in harmony with our needs and resources. However, with the industrial revolution, new technologies and materials have emerged that are changing the face of the human habitat. The impact of this change is causing more discord in our rural settlements. Life style is still dependent on the modes of production and economy of the region, as in the past. New buildings are being constructed in rural settlements that emulate those in urban areas; this state does not ensure sustainability in the region. Therefore, re-interpretation of the principles of traditional architectural design for new construction needs to be investigated.

In Turkey, although cities have started to resemble each other and have gradually become monotonous; rural areas stand out with having their own peculiar features and physical conditions. These areas attract attention with protected natural landscapes and original buildings types. However, due to indiscriminate consumption of natural reserves and the decrease in efficiency in economic activities, the migration from rural to urban areas has increased, which causes excessive and unstable growth of urban areas in contrast to the rural. In addition, due to various reasons such as: constructing dams and power stations near rural areas; natural disasters; seasonal residence in rural areas; the impact of

globalization; and mass production have lead to a discord between the distinctive character of villages and the life-style of villagers. During the re-structuring of rural areas, using standardized material of construction and inappropriate modern techniques for construction and repairs of buildings lead to negative impacts on the rural environment; because newly constructed buildings are contradictory with regional and cultural features of rural areas.

In order to avoid re-structuring of these areas, like cities without an identity, it is essential to prepare policies and their applications systematically. Local communities develop and adapt material and techniques to combat the problems and risks in their built environment by using their own experiences. They determined materials and methods of construction, location and planning organization of buildings according to their needs and environmental inputs; which should be used to guide policies and their applications. Hence, rather than ignoring the experiences acquired and accumulated during centuries, it would be wiser to take them a step further by taking into account the current requirements and adapting these techniques for the benefit of the present and future generations.

In recent years, in Europe, some policies and tools have been developed in order to preserve and enhance rural heritage by perceiving it as one of the tools of sustainable rural development. Among these tools, VDS and ERHOG are used for assessing the components of rural architectural heritage in order to discover its potential to guide the planning and implementation of new developments. On the other hand, in Turkey, especially after disasters, the new development area is selected and post-disaster houses are constructed as soon as possible to rehabilitate the affected area. This recovery process is conducted by governmental institutions that use PDH projects, which were prepared beforehand or who give permission to private firms to prepare the projects on an ad-hoc basis. However, previous studies related to PDH and their planning process, have shown that the cultural aspects of a region are not taken into consideration during the planning stage, which creates dissatisfaction amongst their users. Therefore, this study was initiated to investigate

planning tools that can be used to guide new developments while respecting the cultural heritage of rural areas.

1.2. Objectives

The objectives of the study are the following:

- Study and understand the rural heritage features of traditional houses,
- Study and understand rural heritage as a tool of sustainable rural development,
- Study and understand rural heritage to improve the quality of life in rural areas,
- Study some policies and tools which have been developed to preserve and enhance rural heritage in Europe,
- Investigate the PDHs which were built in Güzelöz Village in terms of rural built heritage,
- Compare the building materials, construction techniques, comfort levels, design of the traditional houses and PDHs in terms of rural heritage,
- Investigate negative and positive aspects of traditional houses and new development,
- Investigate changes in user preferences with regard to residential architecture,
- Investigate the sensitivity of the villagers regarding the values of rural heritage,
- Assessing the rural cultural heritage components of villages for new developments.

1.3. Procedure

The first phase of the study consisted of a literature survey to gain information about sustainable rural development, rural heritage, rural settlements, and some

principles about making additions and alterations to traditional houses, and constructing new settlements in the light of the rural heritage guides and the tools to protect and enhance rural heritage. This was based on an overview of publications found in the libraries of Middle East Technical University (METU), Bilkent University and the Higher Education Council of Turkey.

Then, existing and new settlements in Güzelöz Village, in Kayseri were visited and data was collected through interviews and observations, and interpreted through various visual media to explain rural residential building heritage features, current shift in re-making of houses and village morphology, and the new development area and post-disaster houses. Interviews were conducted with the owner of traditional houses and beneficiaries of PDHs. These were evaluated and presented. Also, an architectural survey of these houses included producing architectural drawings and taking photographs.

An evaluation study based on “Village Design Statement” and “European Rural Heritage Observation Guide” was applied to traditional house and new development in the village.

1.4. Disposition

The study is presented in five chapters. This first chapter is composed of the argument, disposition of subject matter that follows in the remaining chapters.

Chapter 2 is composed of a literature review, to include general aspects of sustainable rural development, importance of rural heritage in sustainable rural development, definition and policies of rural heritage, assessing criteria. The materials regarding the Village of Güzelöz have also been provided in this review.

Chapter 3 presents the material and methodology used to conduct the research.

Chapter 4 comprises analyses and discussions in the light of questionnaire data, informal interviews and observations.

Chapter 5 concludes the study by summarizing its findings.

CHAPTER 2

LITERATURE REVIEW

This literature survey is based on information taken from thirty-three published sources and sixteen websites, Turkish sources were translated by the author. It covers topics related to sustainable rural development, importance of rural heritage in sustainable rural development, assessing the rural cultural heritage components of villages for new developments and information related to the study area.

2.1. Sustainable Development

According to the Green Lines Institute (2007) “sustainability is a subject that commits everyone, as individuals or as peoples, not just in environmental and economic practices but also in the defense of our cultural and ethnic differences.”

Hřebík, Trébický and Gremlica (2006, 3-9) define sustainable development as a better quality of life for everybody, now and for the next generations. They also add that when evaluating sustainable development from different points of view such as; an idea, a philosophy or political conviction or school of thought, it is natural to come across various definitions; however, their message is always similar. They refer to Gro Harlem Brundtland’s words which sum up sustainable development as “...development which meets the needs of the present without compromising the ability of future generations to meet their own needs.”

Sustainable development does not focus solely on a simple question of technical arbitration or a pure debate on standards (Susini, 2004). According to the European Conference of Ministers Responsible for Spatial/Regional Planning (CEMAT)

(2006), sustainable development includes four general policy areas which are economic, social, environmental and cultural sustainability. In this framework, in the Ljubljana Declaration on the “Territorial Dimension of Sustainable Development”, a variety of tasks have been defined in order to achieve sustainable development. These tasks include “protecting and improving the natural and the built environment, ... achieving a balance between preserving the existing cultural heritage, attracting new investments and supporting existing living and working communities in rural areas and increasing public participation in spatial development approaches” (CEMAT, 2003, 4).

Being one of the factors of durability, identity and human dignity, cultural and natural heritage is an essential part of sustainable development and it ensures use of local culture, natural and landscape resources fairly and rationally and to recognize diversity. That is the reason why it is essential to analyse and redefine heritage immediately, in order to provide a guaranteed future and a chance for its transmission to next generations not only for the sake of conservation but also for understanding the importance of its functions and meanings in the context of current process of social change (De Boer-Buquicchio, 2003 and Jancic, 2003).

Jancic (2003, 3) elaborates upon the different features of heritage which are necessary to explain why heritage is one of the most important tools of sustainable development. In terms of being a product, factor or source of development, heritage has a potential richness and becomes a valuable resource to finish projects successfully and to make them more interesting and attractive.

The European Union (EU) co-financed a 5 years project which focuses on the relationship between cultural diversity and sustainable development. This project combines multidisciplinary capacities from different countries for integrating, interpreting and managing cultural diversity as the keystone of a new point of view for sustainable development. This project evaluates “cultural diversity as a new form of capital, embodied in both material (monuments, historical sites) and

immaterial cultural assets (languages, traditions and lifestyles).” Cultural diversity is hoarded up between past and next generations and has power to supply necessary services for economic development and human welfare. It is very important to ensure the transmission of diversity heritage to the next generations in order to provide sustainable development in urban as well as rural areas.¹ In this study, the focus is on sustainable rural development which is explained in the following section.

2.2. Sustainable Rural Development

In the European Conference on Rural Development in Cork, Ireland it was accepted that rural areas, which are home to 25% of the population and 80% of the land in the EU, embody unique cultural, economic and social aspects (Fischler, 2001). “Rural areas are lively, active places abounding with ideas and innovation; therein lie the roots of the diverse cultures and much of the natural, architectural and historic heritage which make up the European identity” (Collignon, 2001, 27). Also, these areas are places of viable activities and diversified natural landscape –“forests and farmlands, unspoiled natural sites, villages and regional crafts and industries” (Fischler, 2001, 20). In brief, they possess a great diversity of “natural and man-made features”, that is they are rich in “amenities”, which is why they have a potential to make a contribution to our societies (Øyangen, 1996).

In the European Cork Conference, urgency of rural problems which grow out of over-development of cities, exploitation and negligence were also highlights (Fischler, 2001). According to CEMAT (2006), the industrialized urban society is prevalent in Europe for more than a century keeps rural areas especially the most “remote” and “peripheral” ones away from growth and development trends. Therefore, in recent years, rural development has gained an important role in

¹ Sus.div and Euro.div, “Sustainability Diversity”, <http://www.susdiv.org/>, retrieved August 15, 2008

regional development policies for major part of Europe. In spite of a strong diversification in most rural areas which has benefited from the proximity of large agglomerations or from tourism and/or from the settlement of retirees, some areas are still facing the constraints of remoteness and marginalization which have given rise to migration from these areas. In other words, context and situation of rural areas have a positive effect on rural development. The context and situation comprise of:

“the improvement of accessibility, of living conditions, of the environment, the conservation of cultural landscapes and of the cultural and natural heritage, the promotion of soft tourism, ... the promotion of high-quality regional agricultural, forestry and craft products while adopting environmentally-friendly production practices.” (CEMAT, 2006, 14)

Green, Deller and Marcouiller (2005) evaluate the relationship between amenities and rural development and point out that during the past few decades, some rural areas have faced “population and employment loss, high rates of poverty and a paucity of financial resources to provide basic services to residents”. On the other hand, there are some which have not struggled with these kinds of pressures because they possess the required amenities. Øyangen (1996) states that these amenities, which are natural and man-made features, have value to create opportunities for increasing employment and income rates, so they have critical importance for the future of rural areas. That is why the value of amenities as a tool for development was realized and there has been a growing demand for providing them. As Green, Deller and Marcouiller (2005,1) point out policy makers now prefer to build their economies on the promotion of amenities, hence “there is an apparent shift in rural economies from extraction of natural resources to promotion of natural and cultural amenities throughout Europe and North America.”

Marini and Mooney (2006) evaluate the relationship between amenities and rural development from a different perspective. With the globalization, there arise some questions about possibility of homogenization of all space, in other words wearing

off the difference between urban and rural areas. The contradiction under this idea is certainly the uniqueness of a rural place that attracts the ex-urban in-migrant. Johnson and Beale (1999) clarify this idea by giving an example from the United States of America (USA). In the USA, rural areas which have unique natural amenities and that attract retirees, tourists as well as manufacturing have been growing more quickly than the others. During the 1990s, the population of these areas whose economy is dependent on local economic activities like agriculture or mining were progressing. On the other hand, Marini and Mooney (2006) states that this high rate of immigration, and economic transformation that grows from increasing immigration, may create some negative effects on amenities, which are responsible for attracting immigrants in the first place. In this context rural economic development may create “its own gravediggers; yet there is a tremendous pressure on rural locales to construct their own unique ‘niche’ to attract development.”

2.3. Importance of Rural Heritage in Sustainable Rural Development

Courtneya, Hill and Roberts (2006) refer to Hoggart when they point out that heritage is probably one of the most significant guiding marks of transformation in rural areas because it has a potential to change people’s perception and evaluation criteria of natural environment.

Rouard (2001) indicates that with enhancing heritage, we can obtain a tool for people who live in rural zones to make them part of the development process of rural areas. Additionally, according to CEMAT (2003), this tool is likely to give rural areas a positive, renewed image and in this way, a trend for bringing new populations into these rural areas is supported.

Table 2.1. Contemporary approaches to the study of change in rural societies.
(Source: Panelli, 2006)

Approaches to Rural Studies	Characteristics of Rural Studies	Selected Authors Related to Rural Studies
Socio-material	Studies of population change and/or economic implications on both long-term and newer residents of rural centers	1) Beyers, W.B. and Nelson, P.B. (2000) 2)Broadway, M.J. (2000) 3) Smith, M.D., Krannich, R.S. and Hunter, L.M. (2001) 4) Stockdale A., Findlay, A. and Short, D. (2000)
Social/cultural capital	Studies of social and/or cultural knowledge, values and relations that are eroded or enabled through change	1) Brunori, G. and Rossi, A. (2000) 2) Israel, G.D., Beaulieu, L.J. and Hartless, G. (2001) 3) Putnam, R.D. (2000) 4) Schulman, M.D. and Anderson, C. (1999) 5) Warner, M. (1999)
Cultural-economic	Studies of how rural societies/units may mobilize cultural ‘resources’ through local economies	1) Ekman, A. (1999) 2) Kneafsey, M., Ilbery, B. and Jenkins, T. (2001) 3) Marsden, T. (1999) 4) Ray, C. (1998)
Networks	Studies of how networks (including political and economic ones) are mobilized as rural societies, communities or economic sectors are reorganized	1) Kneafsey et al. (2001) 2) Lockie, S. and Kitto, S. (2000) 3) Murdoch, J. (2000)

Chiva (2001) states that at last, rural sector and European policy-makers have introduced the idea of “mobilization” at every degree of administrative bodies around rural heritage as a means of local improvement and enhancement. Besides, Panelli (2006) indicates that cultural meanings and assets can be mobilized for rural and regional development, and cultural identities become important for local economies. The author indicates the studies on economic and cultural notions of consumption which show how local cultural resources can be used to rebuild rural areas and links between activities, such as; cultural festivals and wine, and food production. Such studies have now found a place among contemporary approaches which are different but overlapping conceptual and methodological influences in diversified rural change. Table 2.1 above lists these studies, their approaches and characteristic. In the first row, the studies related to analyse of population change and the various social and economic implications occurring between long-term residents and newcomers are given; in the second row, various indicators of social cooperation, participation and cultural knowledge that occur as changes in different household, production, community or local state settings are given; in the third row, economic and cultural notions of consumption together are given; and the last row is connected to network theories which were produced by analyses of the associations, underpinning changes and reorganization of rural societies.

According to the Borough Rugby Council (2005), English Rural Affairs Minister Knight states that:

“protecting buildings and other historic sites and structure was vital to the future of rural communities ...we need to ensure that we are not preserving our buildings while losing our communities. Supporting the rural built and natural landscapes is fundamental to developing sustainable rural communities, which will in turn ensure that our valuable rural heritage is conserved and celebrated, both now and in the future.”²

² It was quoted from English Rural Affairs Minister Jim Knight’s speech at the launch of English Heritage’s report “Heritage Counts”. Borough Rugby Council, “The Home of Rugby”, http://www.rugby.gov.uk/site/scripts/news_article.php?newsID=102, retrieved March 12, 2008

Nevertheless, there are still some issues about “the role of environment and natural heritage in rural development” which are waiting to be studied. (Courtneya, Hill and Roberts, 2006)

2.3.1. Definition of Rural Heritage

Chiva (2001) explains that rural heritage which is a natural merging of nature and culture, is a relatively new concept in Europe barely a few decades old. It is only in recent years that a dynamic, comprehensive approach, both scientific and political, has come to the fore in this area. According to the Romanian Ministry of Transports, Constructions and Tourism (RMTCT) (2007, 16), “the term ‘rural heritage’ has been used for a very long time with a restricted meaning, referring only to construction related to agricultural exploitation and to the small heritage composed of: mills, wells, chapels.” Because of the new regulations of territories in the rural development policy at European level, nowadays it is necessary to form a more complex definition. According to CEMAT (2003) from this perspective, planners have formed a wider definition to heritage, which includes all material and immaterial elements that have direct relationship between a human community and a territory over time. Schwimmer (2001) widens the definition by including natural heritage which is composed of flora and fauna and the landscapes sheltering them to tangible and intangible heritage which encompasses history, arts and culture. The following sections throw some light upon intangible and tangible rural heritage.

2.3.1.1. Intangible Rural Heritage

According to UNESCO ³, rural heritage can not be limited by only material manifestations, such as buildings and objects which have been protected over time.

³ UNESCO, “Intangible Heritage”, http://portal.unesco.org/culture/en/ev.php-URL_ID=34325&URL_DO=DO_TOPIC&URL_SECTION=201.html, retrieved March 30, 2008

Living expressions, traditions and customs, which have been transmitted from ancestors to descendants by mainly word of mouth, compose this notion.

According to UNESCO ⁴ and CEMAT (2003), a living heritage -intangible heritage- is the primary cause of our cultural diversity and its caring is a guarantee for continuation of creativity. This type of heritage is composed of a series of intangible issues which are inseparably connected to the tangible heritage; these can be listed as follows:

1. **Techniques and skills** that have enabled creation of landscapes, building of houses and making of furniture and developing, obtaining local products (traditional craftsmanship, knowledge and practices concerning nature and the universe);
2. **Non-written traditions** which is a way of expression that show us the influence of a community on its territory, and lifestyle of the community. The local dialects, music, dance and oral literature have originated from non-written traditions. They involve “stories and legends which depict individuals, or sites that played a part in local history, as well as place names (toponyms), which reflect particular uses or representations” and are used to assign an identity to their region or area;
3. **Ways of organizing social life and specific forms of social organization** include certain customs, regular events like, celebration, fairs and rituals (seasonal, agricultural, religious, trade etc.).

According to UNESCO ⁵ and CEMAT (2003), “by identifying and laying claim to these elements, the various parties involved in the rural world invest them with meaning, both for the community and in terms of their heritage value.”

⁴ UNESCO, “What is Intangible Cultural Heritage?”, <http://www.unesco.org/culture/ich/index.php?pg=00002>, retrieved March 30, 2008

⁵ Ibid

2.3.1.2. Tangible Rural Heritage

This type of heritage is more easily defined and it includes several parts:

- **Cultural landscapes:** they result from secular activities of human upon the environment (CEMAT, 2003). “Cultural landscapes bear witness to humanity’s creative genius, technical, economic and social development, imagination and cultural wealth.”⁶;
- **Immovable property:** this includes buildings for agricultural exploitation and those related to crafts or industry, cottage industry or collective life buildings which show signs of special actions or simply of an architectural style. In rural world, however, built heritage is not limited to buildings. It also includes fountains, washhouses, food markets, archaeological sites, ruins and walls, etc; i.e. everything that, in one way or another, helps to structure space (CEMAT, 2003);
- **Movable property:** according to UNESCO ⁷ and CEMAT (2003), all kind of artistic objects and works of art recording the past and present creativity and aesthetic values which help us to preserve the cultural identity of the communities that produced them. This includes objects for domestic use (furniture in regional styles, ancient jewellery, sculpted stones, all sorts of art objects, ancient musical instruments, seals and ancient coins, rare books and manuscripts, stamps, textile, etc.), for religious purposes (furnishings in churches and chapels), for festive events (carnival floats, village or corporation emblems);
- **Products:** they are consequences of an adjustment of local conditions, agricultural traditions, cultivation, rearing processing and culinary

⁶ Medina Portal, “Cultural Tourism in Mediterranean”, http://www.medinaproject.net/portal/pages/poc.php?ID_POC=724&ID_Lang=1, retrieved March 30, 2008

⁷ UNESCO, “Movable Heritage”, http://portal.unesco.org/culture/en/ev.php-URL_ID=35031&URL_DO=DO_TOPIC&URL_SECTION=201.html, retrieved March 30, 2008

traditions. These compose of vegetal varieties (plants, fruit, vegetables, etc.) and breeding of local animal species as well as manufactured products (wine, cheese, meat products, etc.) (CEMAT, 2003).

2.3.2. Rural Development Policies

In the past, policy-makers have not given enough consideration to abundance of diversity, which characterizes rural areas, for sustainable development process (Knickel and Peter, 2005). However, there is an increasing importance of sustainable development in the policy-making agendas of many countries (Hřebík et. al, 2006).

According to Beuret and Kovacshazy (2005), public authorities should firstly stop perceiving environment and amenities, which include natural and cultural heritage, as the source of problems for policies and they should understand that environment and amenities have a value as capital assets. When amenities are evaluated in this perspective, they can be important sources for creating new types of jobs directly or indirectly. Consequently, policy makers firstly have a duty to put forth a positive approach to consider nature and heritage as a whole, and then they should adopt a view which encourages local people to continue to live on their home ground and foster them to appreciate, enhance and promote their own heritage rather than perceiving local people only as the guardians of environment and cultural heritage. According to CEMAT (2003), there is another approach to protect these common assets. It is important to introduce their protection into European professional actions for solidarity and it is necessary to implement special common strategies to form more balanced approach to heritage protection in the fields of archaeology, ethnography, and traditional arts and crafts. Administrative bodies are in charge of determining management, support and funding measures and designing adequate tools for action. These tools should introduce rural heritage within a sustainable development process, and draw on its role in forming development players and its role as a catalyst for development.

Turkey has a wealth of cultural heritage that is in danger of being lost, especially in the built environment. Also, because of the process of harmonization with EU, Turkey needs to pay more attention than ever on the preservation of its rural heritage. In the following section policies related to the incorporation of rural heritage for a sustainable rural development are given separately for the EU and for Turkey in the following section since Turkey has entered the stage harmonization with EU.

2.3.2.1. European Union

In 1996, as per the Cork Declaration of the EU, it was decided to put in force a rural development program and to recognize the vital link between rural development and the successful preservation of national and cultural heritage which is transferred to next generations. This declaration is a milestone in defining the frame of action towards rural and cultural enhancement and it became an intermediary in transferring public financial support to maintain natural resources, biodiversity and cultural landscapes for rural development (Fischler, 2001).

Apart from EU, rural development has a significant role in policy agendas of Organization for Economic Co-operation and Development (OECD) member countries. One of the objectives of member countries in these agendas is “to preserve and develop the natural environment and cultural heritage of rural areas” (OECD, 1996).

In September 2000, “guiding principles for the sustainable spatial development of the European continent” were adopted in Hannover by the ministers responsible for regional planning of the Council of Europe’s member states. They drew the framework of a range of measures to stimulate development of rural areas in order to transform them into centers of both economic and recreational activities, and centers of natural environments. By putting these measures into effect, sustainable rural development, which associates economic growth and protection of the

heritage entity that includes both natural and cultural landscape, is promoted (Schwimmer, 2001).

Fischler (2001) states that over the past decade the historic Agenda 2000 reform is the most important endeavor on EU's Common Agricultural Policy (CAP)⁸. With this reform, European agricultural sector has obtained a tool to be compatible with environment, animal welfare and food safety, as well as with the national and cultural heritage. The CAP redefines the role of modern farmers: they are not only food producers but also protectors of environment and responsible for the enrichment of rural and cultural heritage during the process of sustainable rural development.

Thérond (2001) explains that the aim of Committee of Ministers Recommendation (89) to EU member states about preservation and improving of rural architectural heritage is to focus especially on areas which are under influence of significant, fast economic changes in the second half of the 20th century as a part of the EU's CAP. The Recommendation was composed as a result of the conference series which were held in different European countries. During 1990s, the recommendation became the milestone to create increased awareness of cultural and human values of rural areas which exceed the operation of agricultural market's expectations. The Recommendation has four aims, which are listed below:

1. The identification and understanding of the rural heritage through the development of inventory tools. To actualize the first aim, multidisciplinary

⁸ "The Common Agricultural Policy (CAP) has its roots in 1950s Western Europe, whose societies had been damaged by years of war, and where agriculture had been crippled and food supplies could not be guaranteed. The emphasis of the early CAP was on encouraging better agricultural productivity so that consumers had a stable supply of affordable food and ensure that the EU had a viable agricultural sector. Many important changes to the CAP were already made in the 1980s and at the beginning of the 1990s. A new emphasis was then placed on environmentally sound farming. This shift of emphasis, which was effected in 1999 (the "Agenda 2000" reform) and which promotes the competitiveness of European agriculture." European Commission, "Agriculture and Rural Development", http://ec.europa.eu/agriculture/publi/capexplained/cap_en.pdf, retrieved August 15, 2008.

approach has been used. Historical criteria and architectural typologies have been combined with ethnological, social and economic data.

2. The incorporation of rural heritage preservation measures in the physical planning process as part of a comprehensive approach to the enhancement of the environment. This part has focused especially on the promotion of contemporary architecture based on characteristics of traditional local architecture which remains still up to date.
3. The third part of the Recommendation again relates to role of heritage in local development. With this part, the necessity for a public strategy for preserving the heritage and perceiving preservation of heritage as a tool to create employment has been highlighted. The Recommendation also considers the diversification of tourism policies and the rural economy so as to incorporate all related sectors. This was considered important to avoid any contradictions which may cause the undermining preservation of resources. It is also stressed that preservation of cultural and the natural heritage should be perceived as one and they must not be enhanced with activities that cause compartmentalization.
4. Making people conscious about values of rural heritage and training them are the main points of the fourth part of the Recommendation. This is not only about raising awareness of the public and especially young people but also concerns all parts of heritage such as; studies on vernacular architecture, promotion of knowledge and training about traditional techniques and materials (Thérond, 2001).

According to Fischler (2001), there are also other practical steps to protect our natural and cultural heritage. One of them is “Leader+” which appeared as a new community initiative in order to enhance skills of local people in rural areas. With Leader+ basic services has been provided which are vital for rural economies and rural people. In this way, necessary steps have been taken to help enhance and strengthen rural heritage which is under pressure from urban areas. The other step is the support for afforestation. The reason of this is the close link between the

future of Europe's cultural and natural heritage and balanced development of rural areas. The idea of supporting environmentally friendly European agricultural sector which is a guarantee to protect our cultural heritage for the generations to come is brought to fore with this policy.

Jancic (2003) says that European Rural Heritage Observation Guide which was realized and adopted by the CEMAT in 2003 by providing development of rural areas as areas for living and carrying on economic and recreational activities and by composing guidelines for the management of this heritage linked to regional and spatial planning. One of the aim of this guide is to meet people who are worried about future of their living territories via national and local committees in the context of listing and describing rural heritage; another aim is to deliberate upon a question, what is the best way to promote this rural heritage?

According to the Countryside Commission⁹, Basingstoke and Deane Borough Council¹⁰, and Planning Help¹¹, in Europe especially in the UK, a practical tool called the Village Design Statement (VDS), which is produced by a village community, and not by the planning authority, is used to design strategies for all kinds of development, which is based on distinctive visual character of village, VDS guide authorities, planners, architects, village communities etc. with simplest and clearest ways. It is just an advisory document which does not stop change from happening and is not about whether development should take place or not, but it is about how development should be undertaken so as to respect the local identity, how any new building fits in to the village and how visual character might be

⁹ Natural England, "Landscape", <http://www.countryside.gov.uk/LAR/Landscape/CC/landscape/village/introduction.asp>, retrieved 17 April 2008

¹⁰ Basingstoke and Deane Borough Council, "Village Design Statements", <http://www.basingstoke.gov.uk/planning/leaflets/villagedesigns.htm>, retrieved 17 April 2008

¹¹ Planning Help, "the Campaign to Protect Rural England", <http://www.planninghelp.org.uk/influence-how-my-local-area-or-region-develops/community-tools/village-design-statements.htm>, retrieved 04 August 2008

protected or enhanced. VDS gives planning advice which is directly applicable to the statutory planning system. Hence, it ensures that new development is compatible with its setting. This is the big advantage of VDS. It is completely community based because only local people can well describe “landscape setting of the village, the pattern and shape of the settlement and the nature of buildings, spaces, landmarks and special features.” Preparing the VDS involves consideration for the future of the village and necessitates time, energy, imagination and determination; and it is based on the following considerations:

- It describes the distinctive character of a village and its surrounding countryside;
- It shows how character can be identified at three levels:
 - the landscape setting of the village,
 - the shape of the settlement,
 - the nature of the buildings themselves;
- A VDS forms design principles based on the distinctive local character;
- Production of a Statement fosters working in partnership with the local authority, engenders understanding of current planning policies, and offers the chance to influence future policies.¹²

2.3.2.2. Turkey

In Turkey rural areas were seen and evaluated only as places of agricultural facilities and the culture of the built environment was neglected until 1998. However, the integration process of Turkey into the EU has necessitated that rural

¹²Natural England, “Landscape”,
<http://www.countryside.gov.uk/LAR/Landscape/CC/landscape/village/introduction.asp>, retrieved 17 April 2008.

development policies be well adapted for: employment of local people in their territory; improvement of life quality; development decision making mechanisms about their living quarters by residents and usage of natural and cultural resources in a sustainable manner. As Örnek (2007) points out that in order to avoid rural unemployment and rural poverty, income-producing mechanisms can be important in terms of reversing migration. For instance, tourism is an important tool to create employment opportunities in Turkey. The facilities which are related to eco-tourism or culture tourism have developed slowly, but also they have triggered reverse-migration from urban areas to rural ones.

According to Örnek (2007) and Republic of Turkey Prime Ministry State Planning Organization (SPO) (2006), during the adaptation process, EU has called upon Turkey to adopt EU's CAP. The important point in these policies is to provide balanced development in terms of economic, social and environmental sustainable development and to provide actively participation of local people. In this context, the Republic of Turkey Prime Ministry State Planning Organization (SPO) published the National Development Strategy in Feb. 2006. The main aim of this strategy is to evaluate local potentials, resources, natural, cultural assets and to bring rural communities' sustainable job and living conditions into consonance with urban standards but in rural territories. In this document, strategic objectives and priorities were determined in the context of basic objective and principles of needs and circumstances of rural areas. Strategic Objective 1 is "Economic Development and Increasing Job Opportunities" and one of the priorities of this objective is "Diversification of the Rural Economy"; and it states that:

"....The richness and diversity of natural and cultural assets in the rural areas offer a significant potential for developing tourism and recreation activities. In this context, the contribution of tourism to rural economy shall be enhanced by; improving tourism and recreation activities and associated services, improving efficiency of promotion activities, restructuring in tourism and fund building in rural areas, creating appropriate infrastructure and superstructure

development models in the areas having considerable potential, identification of economic and environmental impact of tourism and institutionalizing of their monitoring, and ensuring sustainability...Such practices as diversifying cultural and artistic activities, restoring settlements and buildings of historical and architectural value, utilization of the appropriate ones for touristic purposes by keeping balance between the preservation and utilization, establishing and activating tourism and culture information centers will contribute to converting the rich culture and tourism potential into economic value...” (SPO, 2006)

Strategic Objective 3 is “Improving Rural Physical Infrastructure Services and Life Quality”. One of the priorities of this objective is “Improvement and Protection of Rural Settlements”; and it stipulates that:

“...in order to increase the quality of settlements and enhance their aesthetic qualities exemplary models considering supply-demand balances and purchasing power shall be developed and supported for housing production, which is in harmony with the local culture and ecology regarding architecture, capable of meeting local needs, at standard quality conforming to construction and health rules. In this regard, priority shall be given to territories having potential for rural tourism development...Projects shall be realized and supported such as improving the appearance and physical conditions of rural settlements which are significant in architectural and cultural respects and worth to protect or have potential in respect of tourism development, restoring and protecting of buildings that have historical and architectural value, and utilizing of those suitable for tourism. The concerned projects shall be realized in harmony with activities on diversifying culture, art and promotion activities and strengthening social life...” (SPO, 2006, 23)

2.4. Assessing Cultural Heritage Components for New Rural Developments

This section describes different aspects which are connected to the setting that will need to be analyzed as a basis for the design of a new village, and includes

guidance on assessments of the way a village is set out, the way a landscape looks and the way it is built within the framework of “Village Design Statements” and “Rural Heritage Observation Guide”. These components are assessed under three titles:

- Rural settings
- Rural settlements
- Rural buildings

According to the Countryside Commission (1996, 9) “villages grow and evolve, and what we see today is often very different from the shape, form and purpose of the original settlement.” First of all, it is important to understand and evaluate how a particular village evolved and then to propose its future, and to protect and enhance local distinctive character, future needs ought to be used. According to the Helpston Village Design Working Group (2001), these local characters make a village different from another one or from an urban area as shown in Figures 2.1 and 2.2. Great Shelford’s Village Design Group and South Cambridgeshire District Council (2004,6) states that “the character of a village is as much determined by the history of its people, their occupations and their styles of living, as it is by the geography of its location, present physical features and appearance.”

According to CEMAT (2003), it is important to understand the family set up and whether it is based on legacies or connected with regional or local traditions. CEMAT (2003) also emphasizes the need to assess the social set up with respect to social privacy links with their close neighbors, traditional festivals, and family rituals *etc.* as well as the need to evaluate personal privacy in a house. With regard to domestic set up CEMAT (2003, 54) seeks answers to the following questions:

1. Are parts of the house specifically allocated to men, women or children?
2. Which room is preferred for gatherings?
3. What is each person’s role in the family?

4. How are tasks distributed within a family? Has this changed?
5. Has allocation of the rooms changed to adapt to current lifestyles?



Figure 2.1. Odd or unusual features are often the elements which make one village quite distinct from another.

Source: Countryside Commission (1996, 24)

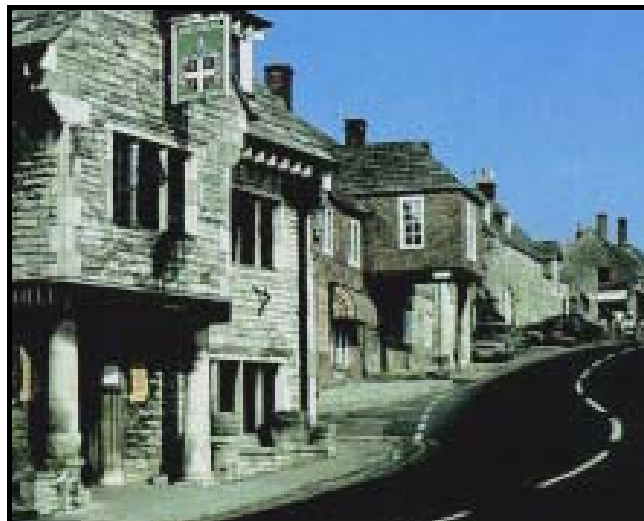


Figure 2.2. The historical aspects of the village provide useful background material for the design principles.

Source: Countryside Commission (1996, 24)

2.4.1. Rural Setting

According to Countryside Commission (1996, 25), an assessment of the rural setting should comprise of the following:

- A brief description of geographical and historic background;
- A short description of the village as it is today; the people, economics and future prospects;
- Any special considerations that affect development pressures in the village, such as tourism or mineral extraction, *etc*;
- The visual character of the surrounding countryside;
- The relationship between the surrounding countryside and the village edges;
- The relationship between the village and any special landscape features, such as ancient monuments, woodlands or nature reserves;
- Buildings seen in the landscape, *eg.* farm buildings.

Some of the important aspects such as, geographical and historic background, economic development, visual character and landscape are described in more detail in the following sections.

i. Geographical and Historic Background: Community Council of Devon (2005) recommends that geographical, topographical and geological influences are used to guide a new development. It is necessary to determine whether there are some natural features like a watercourse or floodplain which makes the place distinctive or not. According to Northern Ireland Department of the Environment and Department for Regional Development (2000), there is a relationship between the location of buildings or planting which will be used and the composition of the ground which includes the geology and soil types. Therefore, it is essential to analyze them before taking some decisions about a new development. For instance,

there is a significant layout limitation on clay soils about the location of buildings. Generally it is necessary to locate buildings well away from trees. Furthermore, Northern Ireland Department of the Environment and Department for Regional Development (2000, 16-17) stipulates that historical features of a village are considered carefully in order to achieve the desired quality. Each site has a unique history which is analyzed to give new design proposals a distinctive local character. This historic information is drawn upon to ensure that “the development will respect the history of the site, appropriately protect and integrate features of the archaeological and built heritage, and inform the overall design concept.” According to Great Shelford’s Village Design Group and South Cambridgeshire District Council (2004) another important issue is to create awareness among village residents about historical aspects of the place in which they live and it is necessary to persuade people to protect that heritage.

ii. Economic development: According to the Countryside Agency (2004), and Great Shelford’s Village Design Group and South Cambridgeshire District Council (2004), the economic life and commercial development bring increasing pressures for future change. Therefore, how to manage this development is very important. It ought to provide an opportunity to encourage “local solutions to local problems”. In this framework, encouraging sensitive and sympathetic use of buildings can be given as an example. A redundant farm building might be developed into workshop for a new local business. At the same time, this is a chance to protect these building’s features.

According to CEMAT (2003), as becoming modes of production, agriculture and fishing are two essential activities, which serve as the focus for many others, in terms of spatial arrangement and houses, i.e. rural heritage. According to TRMTCT (2007), practices and techniques which are used for cultivation, animal husbandry, hunting, fresh-water and coastal fishing and conservation or abandon of some traditional elements can be regarded as the part of the determinative factors of economy on houses and their spatial arrangement.

iii. Visual Character: According to Northern Ireland Department of the Environment and Department for Regional Development (2000), site contours, existing buildings and landscape features are the factors which affect views. Both attractive views and unsightly ones are identified by an analysis of views into and from the site in order to determine layout strategies, provide vistas, maximize attractive and important views, and mask the unsightly. The Community Council of Devon (2005, 16) determines some questions to ask during an analysis process are listed below:

1. How do the edges of the village meet the landscape?
2. When you walk around the edge of the village looking back in, what are the distinctive features - are they buildings, trees, greens or other features?
3. Are there notable or characteristic “views into” and “views out of” the village? (How much more can be seen in the winter months when trees are bare?)

As a result, according to Great Shelford’s Village Design Group and South Cambridgeshire District Council (2004), it is necessary to remember the following points about the rural landscape as a guide for a new development:

- maintaining the present degree of separation from neighboring conurbation,
- responding to the form of the land, its contours and views to and from the site,
- making the best use of existing vegetation, and protect or create, appropriate conditions for flora and fauna to thrive,
- promoting designs that respond to the microclimate of the site, and that might contribute to the energy efficiency of the buildings designed

iv. Landscape: “Compiling a list of the items of rural heritage in one’s region or territory begins by reading the landscape” (CEMAT, 2003, 42) because landscape is “the earliest and most fundamental influence on the development of every village” (the Countryside Commission, 1996), and provides a context and setting for a settlement (the Community Council of Devon, 2005). Therefore, it is essential to identify, locate and date elements of landscape and describe the relationship between them (CEMAT, 2003). Besides, effects of land’s shape, climate, water and local materials on landscape should be considered (the Countryside Commission, 1996).

According to Community Council of Devon (2005, 16), while examining the physical and natural influences of landscape on a village, and identifying possible activities for safeguarding landscape, the following questions are asked:

1. How does the village sit in the landscape, is it coastal, located in a flat landscape, nestled in a valley or on an estuary, on a slope, or on a ridge?
2. How did it evolve in the landscape and how has its layout and design been affected by the shape of the land, local climate, availability of water, local materials?
3. Does the village stand proud in the landscape: do you see rooftops or right into the heart of the village?
4. What does the surrounding countryside look like? What are its obvious major elements such as woods, river and streams, railways, hills, and so on?
5. Does the village harmonize with the landscape or are there areas which could be enhanced through further landscape design?
6. Is there a sense of arrival or departure from the village and its surrounding landscape?

2.4.2. Rural Settlements

According to Countryside Commission (1996, 25), the settlement pattern and character should comprise of the following:

- Overall pattern of village, distinct zones and layouts,
- Character of streets and routes through the village,
- Character and pattern of open spaces in the village and connections with the wider countryside,
- The relationship between buildings and spaces,
- Characteristics of local roads and streets,
- Footpaths, cycleways and parking,
- Street furniture, utilities and services.

According to Community Council of Devon (2005, 17), there are some questions to understand the settlement pattern and character, which are:

1. How has the village evolved and changed?
2. What is the overall shape and pattern of the village? Is it linear, complex, multi-centred, square, or random? Is there an overall pattern?
3. Are there distinctly different areas of the village, in appearance or physical character? How do these relate to each other, do they sit comfortably together, what are their characteristics? Does the density of building vary?
4. Are there landmarks or visual focal points within the village, such as a church or other building, a pond, a green, a tree?
5. What are the patterns of the roads and footpaths, where do they meet and cross - are these points or nodes important to character?

Some of the important aspects such as, streetscape, open spaces, and street pattern and highways are described in more detail in the following sections.

i. Streetscape: The term streetscape refers to the look of a particular street, regarding the arrangement and design of plots, buildings and materials, roads and footpaths, street furniture, open spaces and planting. If all of these elements are reinforced and are provided to work together, attractive, interesting and consistent streetscapes will be created. This is important to perpetuate an identity for a village (Wicklow Rural Partnership and Wicklow County Council, 2006).



Figure 2.3. A view from streetscape.

Source: The Village Design Statement Committee of Blackheath, Shamley Green and Womersley (2006, 7)

According to Community Council of Devon (2005) vertical and horizontal rhythms in the village street scene should be considered carefully. It is necessary to determine whether elements like windows, doors, pargetting, chimneys, gable ends

etc. are distinctive features or not, and to take account and respect their proportions and their details (Figure 2.3).

ii. Open Spaces: According to the Residents of Baughurst Parish, Basingstoke and Deane Borough Council (2004), the essence of countryside is the open spaces which are one of the ways to enjoy surroundings. The open spaces within a village are as important as its buildings. Therefore, it is vital to give careful consideration to the space within individual plots and the space between buildings which are suitable for plantation and natural tree cover. These are valued to soften or screen some unwanted details of buildings and to create continuity of vistas of landscape by residents.

According to Community Council of Devon (2005, 17-18) recommends some questions to ask while evaluating open spaces of a village; these are:

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1. Does the village have one large open space or lots of connecting spaces? Do they provide a connected route to the open countryside or are they contained within the village?
2. What is the character of various open spaces in the village, both private and public, such as greens, allotments, recreation grounds and churchyard? Include front and back gardens if these are notable open spaces.
3. Take note of trees, hedges, walls and fences, and the presence or absence of front gardens. Do parts of the village have any sort of wildlife or vegetation that is especially distinctive?

iii. Street Pattern and Highways: The pattern of roads, streets and footpaths in the older parts of villages generally are suitable for pedestrians and horse-drawn vehicles, not for modern vehicles and traffic. Therefore, new developments have an important role to find most suitable ways to solve the modern transport system

problems without damaging traditional character of spaces in a village and general physical quality of a village (Countryside Commission, 1996).

According to Community Council of Devon (2005, 17), in order to give a general idea about street pattern of a village, it is necessary to answer these questions:

1. What are the characteristics of the various local roads; are there pavements and kerbs or grass verges and drainage ditches? Are the roads narrow, wide, straight, curving? Are there cul-de-sacs or through roads?
2. Are there features that make any road unusual or unique?
3. What materials have been used for road surfacing?
4. Are there electricity substations or overhead cables?
5. Are there bus shelters, street lighting, signs? How have these been designed?
6. Are there important or prominent footpaths, bridleways or cycleways?

iv. Building Layout: According to the Basingstoke and Deane Borough Council (2004), variety in the positioning of buildings on their plots and in the landscape is an important feature which is necessity to carefully considered and encouraged. The relationship and space between adjacent buildings may be an important feature of a village so, it is necessary to evaluate them in terms of “general layout, proximity and privacy”. The use of different building heights, frontages and forms will help creating variety and interest in a layout thereby enhancing visual character.

Orientation of the site, sun paths, layouts and dwellings are important in terms of location and spacing of buildings and trees, providing enough daylight and sunlight for buildings, gaining passive solar energy and contributing to energy conservation. By deciding principles of layout and design of the buildings and surrounding

spaces carefully, overshadowing and unreasonable obstructions which block a satisfactory level of daylight and an acceptable minimum amount of sunlight can be prevented. (Northern Ireland Department of the Environment and Department for Regional Development, 2000)

According to Community Council of Devon (2005, 19), it is necessary to answer some questions while assessing the term “layout” and “orientation” during the design process of new buildings and settlement such as:

- Are building frontages on the road or are they set back from the road?
- What are the sizes of the plots - are there front gardens, back gardens, provision for car parking?
- Is the orientation of buildings a local characteristic?
- While deciding orientation of buildings, did people take account need for sun, shade and shelter from prevailing weather?

Northern Ireland Department of the Environment and Department for Regional Development (2000) recommends that likely sources of noise, such as railways, motorways and distributor roads near the site should be identified on plan. Besides, if there are any industry buildings near a site which cause dust, vibration or odours, it is essential to be highlighted. Mitigation of the effect of noise and other nuisances should be considered and appropriate protection measures should be used such as mounding and buffer planting.

2.4.3. Rural Buildings

“A building is defined as a permanent structure composed of walls and a roof” (CEMAT, 2003, 47), and according to Conseil National de l’Ordre des Architects, (2004) this is not at all because when buildings answer local and regional

requirements, needs for integration and new aspirations of public, cultural satisfaction can be provided.

Rockingham Planning Commission (2003) stipulates that as a general rule, new built environment development follow the best examples of traditional and local features of a village in order to preserve and enhance rural character, quality of life and aesthetic quality of both residents of development and a village as a whole, and to create and clearly define public and private spaces through architectural design. For instance; reflecting building scale with subtly graduation changes, continuous use of front porches on residential buildings and cornice lines in buildings of the same height, maintaining horizontal lines of fenestration, and by reflecting architectural styles, details, design themes, building materials, and colors which are used in nearby buildings.

CEMAT (2003, 50) recommends that while studying on a village, “activities which are still performed in the houses and farms, existence skills of local architecture, the preservation of traditional architecture, etc.” are evaluated as positive aspects of villages, while “abandoning regional building styles, and the lack of reference to them in new buildings, the lack of interest on the part of local people, the neglect of specific skills, etc.” are evaluated as negative aspects and there are several questions to assess rural buildings; these can be listed as follows:

1. What are their architectural features?
2. Do they belong to several periods? If yes, it is possible to retrace their architectural development?
3. Do the architectural features have a practical role, a social or religious significance or are they merely ostentatious?
4. Have they changed over time?
5. Are they still used today? If not, why (new, more efficient or economic techniques)?

6. Is the farm or residential house typical of the region?
7. What materials have been used? Are they traditional? Where have they come from? Are they well preserved?
8. What comments can be made about their location?

Building maintenance is also an essential factor to protect built environment and to ensure transmission of built tradition of villages to posterity. Therefore, it is important to encourage all owners of buildings to maintain through regular painting, reserve boundaries, and original features etc. All maintenances related to existing building should be compatible with character of buildings and its neighborhood conditions. Like removing of original render and replacing of windows and doors, alterations should be made by taking account impact on character of village, streetscape and a building. In this case, professional advice and consideration of all alternatives are necessary (Durrow Local Community, 2002).

2.4.3.1. Building Types

Buildings in rural settlements can be examined in five categories; which are defined below:

- i. Public buildings:** this category of buildings has a role in public life; religious buildings, places of worship, official buildings (town halls and schools), commercial buildings (food markets), community edifices (fountains and washhouses) and sports facilities.
- ii. Farms and residential buildings:** this category of buildings involves village houses, farms and certain types of architectural features of these buildings.
- iii. Craft and industrial buildings:** this category of buildings covers craft or industrial activities: factories, plants, workshops, cellars and mills.

- iv. **Working buildings:** this category of buildings includes all buildings which are or were for farming, except residential buildings: barns, livestock buildings, dovecotes, temporary buildings.
- v. **Historical buildings:** this category of buildings is witnesses to the past, but may still be in active use: castles, abbeys, archaeological sites, ruins and remains, walls, keeps and towers (CEMAT, 2003).

According to The Community of Ballinaclesh, Wicklow Rural Partnership and Wicklow County Council (2006), in new building designs, it is very important to prevent monotonous repetition of standard types and designs. Variations which are based on a common design theme which is appropriate to local features can be fostered within defined limits. Complementing local features of village and contributing towards the village's distinctive sense and identity could be considered in all types of new development.

The Community Council of Devon (2005, 18) states that there are some important questions which could be asked at the beginning of building types' evaluation process; these are:

1. Types of building can be seen and where?
2. How do buildings differ in height, size, style and density?
3. Are there any key buildings that help orientate you or provide important focal points?
4. Apart from houses, what are the characteristics of the other buildings in the village?

2.4.3.2. Building Components

It is critical and important to identify and analyze building forms which affect the formation of village's character, in order to make visible additions or new buildings consistent to existing forms (Glen Eira City Council, 2002). There are some

features which define form of buildings such as, “their purpose, technological skills available when they were built, regional materials, site restrictions, traditions, regional architectural styles, local ways of life” (CEMAT, 2003, 47).

According to Northern Ireland Department of the Environment and Department for Regional Development (2000, 11), building design analyses should involve “visual characteristics of building forms and related elements, such as; aspect and orientation, proportion, the balance of solid to void, the shapes and details of roofs, chimneys, windows and doors and the materials used”. Together with these characteristics mix of dwellings, their density, their design and layout, and color also strongly affect residential environment and residents’ quality of life which includes needs of privacy, daylight, freedom from nuisance and space for household activities.

The Community Council of Devon (2005, 18) recommends some questions that can help analyzing character of buildings in villages are:

1. What is the basic form of the tall buildings, are they 1 or 2 stories, square, rectangular, tall, narrow, deep?
2. Are they terraced (long, short, courtyard) detached, attached?
3. Do they have flat roofs, pitched roofs, dormer windows, extensions, porches?
4. Are their frontage flat, protruding, simple detailed?

i. Walls and roofs: While designing buildings, it is important to avoid long, monotonous and uninterrupted walls or roof planes because they might be the most obvious feature of a building (Figure 2.4). With making offsets using projections, recesses, and changes in floor level etc., visual effect of a simple and long wall can be characterized and with that way architectural interest and variety can be created. In a similar manner, to break monotonous effect of a single and long roof, offsets of roof-line can be used as a tool for instance; boring effect of flat roofs can be

avoided with using pitched roofs (Rockingham Planning Commission, 2003). Another important thing is to bear in mind compatibility of roof styles and pitches with existing local structure. At first, maybe roof can be evaluated as an ordinary, unimportant and invisible element of a building and streetscape; however, it should be taken into account that even a minor alteration causes major impact on surrounding area (Figure 2.5 and 2.6) (Durrow Local Community, 2002).

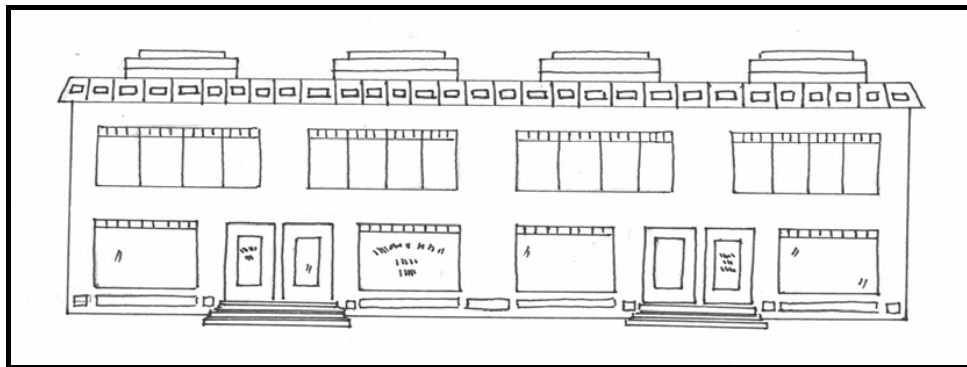


Figure 2.4. It is necessary to avoid monotonous walls.
Source: Rockingham Planning Commission (2003)



Figure 2.5. Left: street scene showing clay tiles and typical roof forms, Right: simple roof shape, usually with gable walls.
Source: Wedmore Village Design Team (2005, 9-10)



Figure 2.6. Left: cottages displaying varied wall and roof heights, and small flat-roofed dormers, Right: group of stone buildings tight onto the road, showing typical roof pitches, predominance of gables and variety in roof height.
Source: Wedmore Village Design Team (2005, 16-17)

ii. Dormers and chimneys: They are the elements which are used to enliven a roofscape. Reducing the perceived overall building height, adding visual interest to buildings and breaking up large areas of roof can be considered as some of their key effects (Figure 2.7) (The Residents of Baughurst Parish, Basingstoke and Deane Borough Council, 2004).



Figure 2.7. Left: stone cottages with brick chimneys, Right: chimneys are terminal features at the apex of the gable end of the building.
Source: Basingstoke and Deane Borough Council (2004, 6)

iii. Windows: “Windows are the eyes of a building and can dramatically influence the character of the building.” They have an important contribution to character of buildings and streetscape (Basingstoke and Deane Borough Council, 2004, 21). Therefore, Rockingham Planning Commission (2003) recommends that windows are suitable for a rural setting and architecturally in harmony with “the style, materials, colors, and details of building”. Wedmore Village Design Team (2005) gives window frames and openings as examples to clarify the subject. For instance; window frames can be a significant detail on many buildings and timber sliding sash or symmetrical side-hung casements can be traditional, or a variety of techniques for constructing window openings which include “arch in stone, timber lintel, brick arch, dressed stone, keystone and voussoirs, projecting sills in real or artificial stone” can be peculiar to a village as shown in Figure 2.8.

iv. Doors and Entrances: According to Rockingham Planning Commission (2003), it is better to define and articulate entrances of buildings with architectural elements such as lintels, pediments, pilasters, columns, porticoes, porches, overhangs, railings, balustrades, and others, where appropriate. Besides, usage of any such elements could be compatible with style, materials, colors, and details of a building as a whole, as could the doors.



Figure 2.8 a) Timber lintel, b) Stone/brick arches over windows and stone/timber sills, c) Windows with brick detailing.

Source: Wedmore Village Design Team (2005, 7)

2.4.3.3 Building Materials

“Traditional local materials and craft practices provide an organic link with the geology of an area and form a constituent part of local character” (Figure 2.9) (Great Shelford’s Village Design Group and South Cambridgeshire District Council, 2004, 19). Besides, construction techniques contribute valuable historical points of reference (CEMAT, 2003). On the other hand, because of importing more economic materials and building techniques which is the result of Industrial Revolution and of improved communication, and atrophy of local craft skills, the relationship between building and landscape setting is fractured. “Traditional building crafts embodied the skills for ornamenting buildings to enrich the basic fabric. The loss of these crafts makes surviving examples more precious and in need of protection.” It is necessary to discourage attempts at reproducing craft products, because they cause devaluing real craft work which is represented in the village’s authentic buildings (Great Shelford’s Village Design Group and South Cambridgeshire District Council, 2004, 19).



Figure 2.9. A feature of Wedmore, England is the use of local Wedmore stone as a building material for houses.

Source: Wedmore Village Design Team (2005, 9)

According to Northern Ireland Department of the Environment and Department for Regional Development (2000) and Durrow Local Community (2002), in order to create coherence, distinctiveness and local identity, it is essential to use unifying elements like appropriate materials, detailing and components - texture, color, proportion etc. - which reflect traditional character of village and compliment existing buildings and styles.

According to South Cambridgeshire District Council (2004), instead of using one type of material, it is necessary to increase the range of materials, textures and colors which are appropriate to local character, in terms of giving variety and interest to appearance of a village.

According to the Community Council of Devon (2005, 19) it is important to determine whether there are certain characteristic materials or not in a village, such as; timber framing, red brick, thatch, clay tiles etc. The other important point is that simply the materials or the way in which they are used effect local character of place. Moreover, while designing, it is necessary to answer these two key questions:

- 1) Is the form and proportion of buildings more important than materials?
- 2) How are modern materials used and could they be used more effectively?

2.5. Recommendation for Preservation of Heritage in New Rural Buildings

There are some important points while proposals of new development are being designed. Local characteristic of site and its wider context like existing contours of slope, river, and established boundaries should be considered. "Development should be adapted to the site, and not the site adapted to the development" (Wicklow Rural Partnership and Wicklow County Council, 2006, 18). At the same

time, helping to renew specific local architecture of an area, identifying and creating visual cohesion, and a balance between innovation and local character by avoiding a cocktail of features must be parts of a new development. As a starting point for a reference, new forms should be inspired by and be derived from pattern of predominant local forms in village. Besides, new developments should be compatible with existing “traditional” and “rural” character of buildings in the sense of architectural styles and should be kept away from monotonous repetitions by creating subtle variations which should be in accordance with design, silhouette, scale, density, materials and colors within the village. At this point, design of components like doors, windows, height, pitch, and ridges of roofs should be considered carefully with showing respect components which present in the vicinity of site. This issue is important especially in terms of redevelopment and alterations of existing buildings with reflecting proportions of the components such as windows to walls and the design of the roof. Moreover, detailing of these components should be simple and reflect appropriate parts of rural character of a village. Particularly, an examination of existing detailing is important when consistency and diversification are needed to create within a series of buildings (Sligo County Council and the Heritage Council, 2002).

According to Sligo County Council and the Heritage Council (2002, 16) it is essential that proposals for new development also should be prepared by taking into account the materials which should:

- be harmonized with existing local character of the village, and be chosen to reflect and respect nearby colors, textures, materials, shapes, styles and proportions;
- respect other materials which are used in nearby villages;
- be similar to those of the existing buildings when designing extensions.
- be in appropriate combination of different external materials in the same building;

According to Sligo County Council and the Heritage Council (2002, 16) it is also essential to seek to enhance people to reuse of building materials which are in good condition from buildings which have been inevitably destroyed.

According to the Community of Ballinaclesh, Wicklow Rural Partnership and Wicklow County Council (2006), Northern Ireland Department of the Environment and Department for Regional Development (2000), Basingstoke and Deane Borough Council and East Woodhay Parish Council (2005), and Sligo County Council and the Heritage Council (2002), as a general principle; in new built environment development, apart from preserving local architectural features and ensuring their maintenance, usage of energy and resource conservation like maximizing solar gain should also be considered carefully. To ensure this, consideration should be given to the orientation of dwellings in order that living rooms can benefit from passive solar gain. Furthermore, the total energy used in development should be decreased as far as possible with encouraging sustainable development practices. This should be seen not just in terms of construction but in terms of the total cost of development. For instance; material extraction or production and transport through construction site, maintenance and running costs. By using local sources, environmentally friendly and energy efficient materials for construction, the aim of minimizing energy need can be achieved. Besides, running costs can be decreased.

Apart from new development, “removal or unsympathetic replacement of even minor features can have a deleterious effect on the whole appearance of a building and a village.” However, giving careful attention to modernize traditional buildings, “both in respecting the style and proportion, and in the choice of materials and coloration”, alterations could be useful in terms of becoming “remedial measures” for inappropriate earlier construction (Great Shelford Village Design Statement and South Cambridgeshire District Council, 2004).

According to the Villagers of Four Marks, and the Parish and District Councils (2006), and Helpston Village Design Working Group (2001), alterations and extensions should;

- be designed with taking into account size of plot and should not fill the site;
- be designed to avoid disregarding of neighboring buildings;
- try to let enough space for maintenance of both the dwelling in question and neighboring properties;
- closely match the existing building in terms of materials;
- retain the scale and design of the original elements and should respect the building's age and character;
- keep the balance between solid and void;
- not have any detrimental effect on trees and hedges, including their root systems. However in some instances replacement planting may be desirable in order to enhance the landscape setting of the development.

According to Glen Eira City Council (2002), “conservation, following existing architectural traditions, simplified interpretation and sympathetic contemporary design” can be used as design approaches to prepare proposals for new development, and extensions and alterations to existing structures. According to the council, following existing architectural traditions design approach is suitable for valuing existing architecture and for designing new works in the same stylistic traditions of an area. The key point is to enter into the spirit of a past era and use the architectural vocabulary of the past. Simplified interpretation is appropriate for proposed additions and alterations to existing structures, in terms of being in the spirit of the style but not necessarily literal. These proposals should continue appropriate design sensibilities, and utilize similar street setbacks, building scale, form and proportions, roof shapes, window and door opening types and building materials and colors. The council defines sympathetic contemporary design as:

“it shows sympathy and resonance with the original form and design of a building and/or the character of an area, without replicating past historical styles, forms or detailing. The design would need to demonstrate deference and ‘good manners in architecture’ to (as appropriate) the existing structure and any neighboring significant and/or contributory buildings through the appropriate use of materials, textures, colors, finishes, rhythms, proportions, scale, angles, roof forms, solid/void relationships, massing, set backs and planting” (Glen Eira City Council, 2002, 9).

Also, sympathetic development should provide accommodations which enhance the “existing diversified social structure”. Therefore, houses should range from “low-cost, through smaller quality homes for the retired and young professionals to family homes of varying sizes” (Basingstoke and Deane Borough Council, 2004).

Yürekli and Yürekli (2005, 87) also highlight that healthy development can be achieved only awareness; the awareness of where we are, and who we are. By conserving physical aspect only such as stone and timber, this awareness can not be developed. The important point is to understand “the spirit of the artifacts”. “What will be conserved to eternity will not be the material but it will be the ideas, the essence”.

According to Glen Eira City Council (2002, 14), the method of “assessing the visibility of proposed new buildings and works from a street” could be used in order to determine the probable impact of a proposal on cultural heritage significance and architectural integrity of a building and heritage area, especially when works have little impact on significance of a streetscape or have not the visibility from the street (Figures 2.10). “This approach, subject to an appropriate design, can enable alterations and additions to the rear of contributory buildings without the same level of concern about their impact from a heritage viewpoint.”

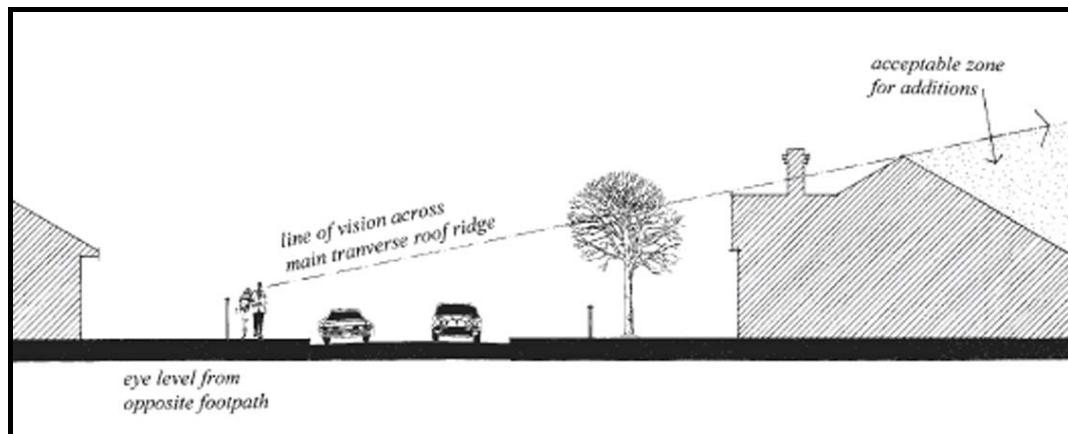


Figure 2.10. Establishing the height (vertical).
Source: Glen Eira City Council

To sum up, there are a number of key factors that should be borne in mind by all people who are involved in the design process to help creating an attractive places and surroundings. These are:

- respect local village structure patterns and scale in layout;
- avoid too much repetition of one type of house and encourage a range of house types which are appropriate to the full spectrum of residential needs;
- avoid monotonous, standardized mass housing and inauthentic design;
- encourage adaptability of buildings to allow for changes in lifestyles and working arrangements;
- esteem local characteristics and context of a site;
- be consistent with the existing streetscape;
- answer to typical setting, garden forms, public and private open space;
- extend the permeable grain of the traditional parts of the village, with a positive space-forming relationship of buildings to routes and shared open areas;
- reflect and be consistent with local buildings' character, variety of proportions, colors, features and textures of an existing built environment;

- respect local distinctive details and traditional building materials and exactly match them with a chosen building form and adjacent buildings;
- reinforce to observe palette of coloration from local materials and regional setting;
- arrange roads and pedestrian linkages;
- create opportunity for appropriate innovation and contemporary design;
- create potential to provide locally based employment opportunities;
- consider elderly housing (Sligo County Council and the Heritage Council, 2002, Laois County Council, 2007 and South Cambridgeshire District Council, 2004).

2.6. Rural Heritage in Turkey

Factors that influence the built environment in Turkish villages are the life style, family structure and size, safety, privacy, religion, and economy.

According to Snyder (2005, 1), the improvement in house schemes, and its domestic and spatial divisions can be understood by examining socio-cultural behavior, functional needs, the local economy as well as typical building methods. “Buildings and the context, in which they sit, are a result of complex spatial and cultural relationships.” Rapoport (1969, 47) states that “house form is not simply the result of physical forces or any single casual factor, but is the consequence of a whole range of socio-cultural factors seen in their broadest terms.” Therefore, it can be said that architecture is useful in evaluating social changes and cultural values.

Ören (1996) explains the relationship between social, economic, cultural activities and life style of occupants and, planning of buildings by showing the differences between the requirements to form layout and spatial requirements of urban houses and to form rural ones. While in urban areas, only daily life activities of people, like cooking, eating, bathing, entertaining and sleeping etc., affects the formation of

housing units; in rural areas, in addition to daily life activities, production practices and needs of occupants' animals also are considered while designing houses.

i. Socio-cultural Factors: They can be divided into four groups; family structure and size, safety, privacy, and religion (Cimrin, 1996).

- **Family Structure and Size:** Tosun (1983) states that in every culture, family structure acquires a different character. It can be said that basically there are two types of families: extended and conjugal. Furthermore, while qualitative requirements are formed by the family structure, quantitative requirements such as, number of rooms, size of the house, etc. are formed by family size.
- **Safety:** Onat (1992) explains that while deciding house form and usage of stockades, palisades and fences, safety has a determining role. Cimrin (1996) gives an example to explain the role of safety in rural settlements, when a house has a two storey, generally ground floor is used for animals and storing crops, and providing their safety is a very important issue; therefore, owner of a house prefers this floor without windows or with small and barred ones.
- **Privacy:** According to CEMAT (2003), private and social life are the components of privacy. Private life is composed of family life, family memories, private space, gardens, and everything that plays or played a role in family life. Tosun (1983, 160) defines the private life as need of personal space which is composed of rooms and space for individual activities. "Privacy in a room and the relation of the sequential activities between the rooms" are given by same author as an example of personal privacy. According to CEMAT (2003), social life is composed of extended family (brothers, sisters, cousins, and relatives), neighbors, meetings, everything that plays or played a role in the relationship between the individual or family and his/her/its immediate social environment. Tosun (1983, 160) defines the social life as "the privacy of a house from outsiders and the

family interactions with its near surroundings and neighbors” and the social privacy is “social relations of some members of the family, relations between guests and the family members, relations to men folk who come to the door, or relations with the next-door neighbors”.

- Religion: In terms of shaping form, plan, spatial arrangement and orientation of a house, religion has a determinative role in rural areas. However, this role becomes meaningful with the effects of other factors (Onat, 1992).

ii. Economy: Rapoport (1969) highlights the importance of economy on settlement pattern and building forms by explaining some doubts. Generally, principal shifts in style and type of production and economic basis of life-style causes consequential changes in the nature of family and society, basic needs, traditions, population characteristics, and thus in the house form. However, there are some examples from primitive societies, which all whether accept or not the economy available around them, do not give up their way of life. Therefore, the argument that economics determine the house form becomes rather suspect.

In the following sections an example of best practice in preservation of rural heritage in new building design, *i.e.* the Nail Çakırhan house, is given as well as information on the case study area, which is the village of Güzelöz, obtained from literature search is presented.

a) Best practice: Nail Çakırhan House

Traditional buildings are the way to show the features of their time. They are the reminder of “origins and former ways of life in the village”, occupants’ lifestyle, and construction methods and materials. This is the key point to feel the locality. However, as time passes, buildings undergo variations because of changes of building use, employment and social mix. These changes affect the type and appearance of buildings, and infilling and extension of the original settlement.

Notwithstanding, villages and buildings which sustain some of their historical features and visual associations have retained their distinctiveness and integrity (Great Shelford's Village Design Group and South Cambridgeshire District Council, 2004). Therefore, it is vital to sustain a link between future developments and old existing buildings of the village (Durrow Local Community, 2002). Sligo County Council and the Heritage Council (2002) stipulates that what has already been done should be learnt and improve upon is necessary while proposing a new development. Proposals of a new development are formed from existing village structure and innovate by reinterpretation. In other words; the important point is to make it look new and local at the same time.

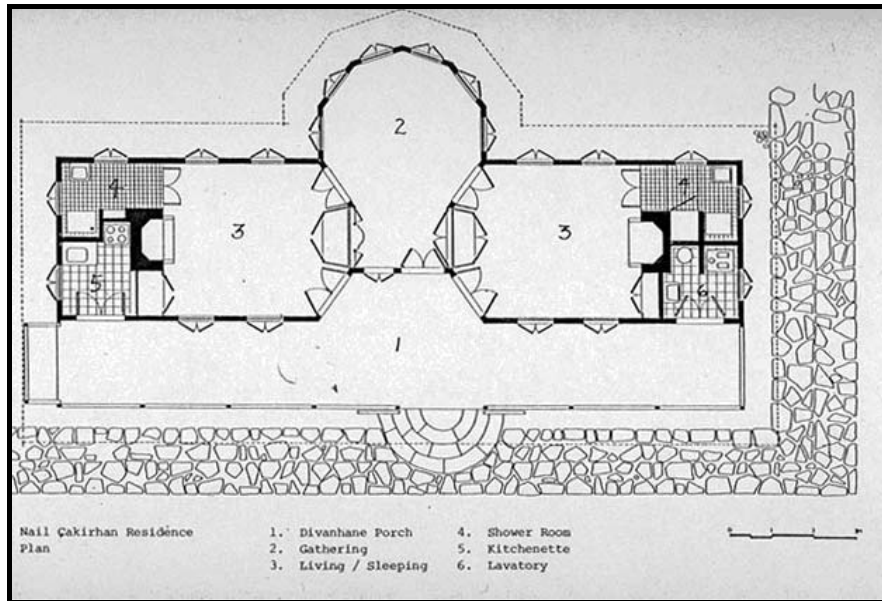


Figure 2.11. Plan of the Nail Çakırhan House.

Source: http://archnet.org/library/images/thumbnails.jsp?location_id=1627

Boratav (2005) gives the Nail Çakırhan House as an example which goes well beyond the simple reproduction of past models. Design and ornaments of this

house include pure and elegant elements which are a direct continuation and reflection of traditional behavioral values (Figures 2.11-2.14). The author refers sentences from the speech of H. H. Kerim Aga Khan at the Award Ceremony about the Nail Çakırhan House:

“In the Third World nations architecture has long tended to be dominated by imported aesthetic ideas as well as by western technology and materials. Even countries which have controlled their own political destinies for generations have accepted international canons of architecture which are in essence alien. We should say to them, as to all people who build for the Islamic world, your cultural heritage is just unique and universally admired. Enhance your traditions and project them into the 21st century. Move ahead within your own idiom and culture.” (Boratav, 2005, 36)



Figure 2.12. Front façade of the Nail Çakırhan House.

Source: http://archnet.org/library/images/thumbnails.jsp?location_id=1627



(a)



(b)

Figure 2.13. a) A raised covered loggia runs the length of the timber house through western façade, b) Southern façade of the house.
 Source: http://archnet.org/library/images/thumbnails.jsp?location_id=1627



(a)



(b)

Figure 2.14. a) Interior view of room with fireplace, b) Interior of side room.
Source: http://archnet.org/library/images/thumbnails.jsp?location_id=1627

b) Case study: Güzelöz Village

The survey was carried out in Güzelöz Village which is located on the west of the province of Kayseri, in the Cappadocia region. The city of Kayseri which is large and industrialized city lies in Central Anatolia. The province of Nevşehir and Niğde lie on the west, Yozgat on the north, Sivas on the north and north-east, and Adana and Kahramanmaraş on the south of Kayseri (Figure 2.15). There are 16 districts in the province of Kayseri and Güzelöz Village is located in one of them, i.e. the district of Yeşilhisar ¹³ (Figure 2.16).

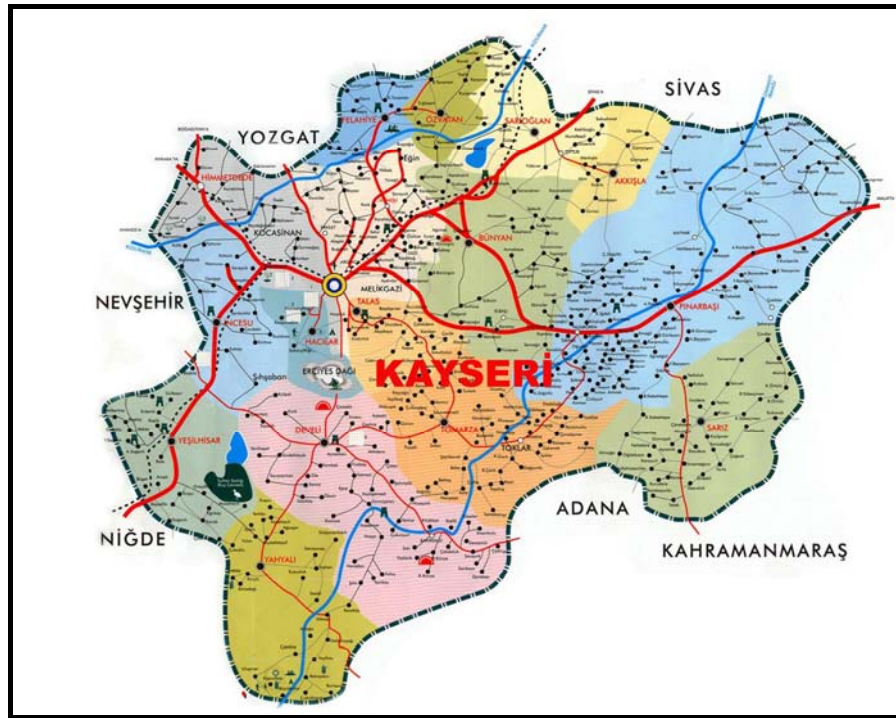


Figure 2.15. Map of Kayseri.
Source: www.kayseriliyim.com

¹³ T.C. Kayseri Valiliği, <http://kayseri.gov.tr>, retrieved August 15, 2008

The climate of the district is hot and dry in summers, very cold and snowy in winters but rain fall is rarely, hence, there are no forests in the district.¹⁴

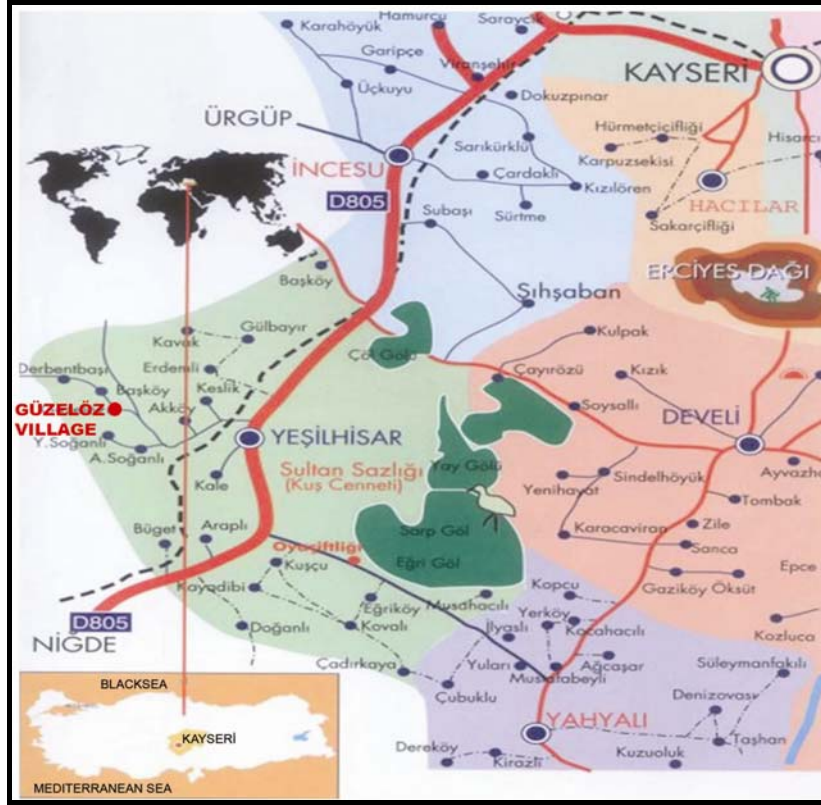


Figure 2.16. The location of Güzelöz Village.
Source: www.yesilhisar.gov.tr

Güzelöz (Mavrucan) Village is located at the junction of the ancient routes Koloneia-Kyzistra (Aksaray -Yeşilhisar) to Kaisareia (Kayseri) and Sobesos (an archaic city) to H.Prokopios'a (Ürgüp), and was founded between the ancient necropolis and the Mavrucan Valley (Figure 2.17). Its geographical features are

¹⁴ T.C. Yeşilhisar Kaymakamlığı, <http://www.yesilhisar.gov.tr>, retrieved August 15, 2008

similar to Cappadocia; however, most of the fairy chimneys have been destroyed. Although it is located very close to the Soğanlı Valley which has been studied in detail there is not enough information about Güzelöz Village and rock-churches nearby. In the village, there is some rock-cut architecture from the Byzantine period including churches, tombs and cemeteries which unfortunately have been destroyed by treasure hunters and by the villagers who are using them as stables for keeping animals (Canverdi, 2005).



Figure 2.17. A view from the road junction.

Source: <http://www.yesilhisar.gov.tr>

Güzelöz Village is under the threat of falling boulders for the past 25 years. Although the Ministry of Public Works and Settlement (PWS) had taken the decision to build a new settlement, composing of 22 houses, 25 years ago¹⁵, the

¹⁵ Akşam Online, İç Anadolu, <http://www.aksam.com.tr/arsiv/aksam/2001/10/31/icanadolu/icanadolu1.html>, retrieved July 23, 2008

project was prepared in September 2006 and the houses were constructed in 2008¹⁶ (Figures 2.18-2.19). The plans, elevations and sections are given in below (Figures 2.20 - 2.23).



Figure 2.18. The plan of new development area and cadastral plan of the village redrawn by the author.

Source: Kayseri Provincial Directorate of the Ministry of Public Works and Settlement and Yeşilhisar District Office of the Land Registry.

¹⁶ Kayseri Provincial Directorate of the Ministry of Public Works and Settlement, July 2008

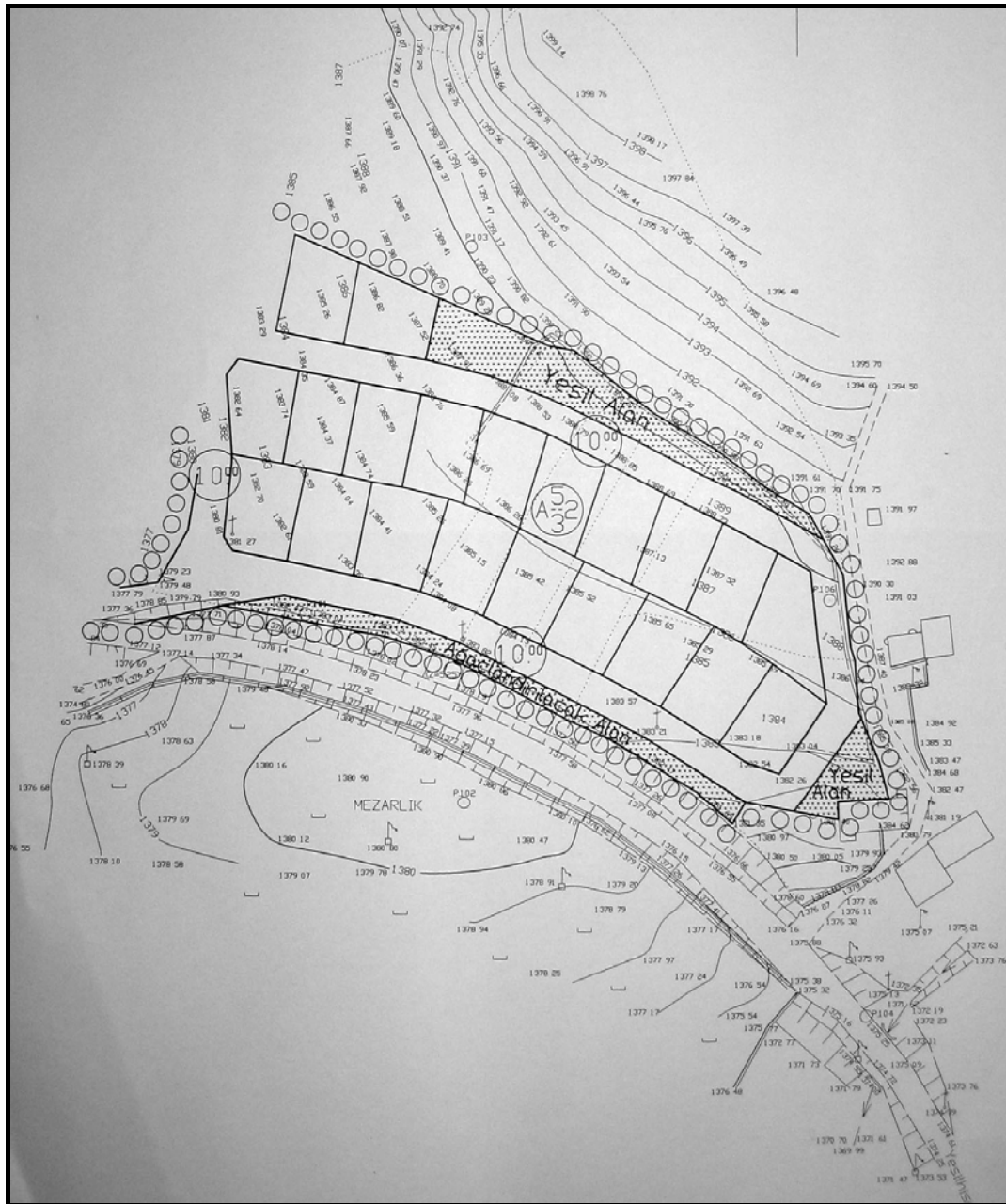


Figure 2.19. The plan of new development area.

Source: Kayseri Provincial Directorate of the Ministry of Public Works and Settlement, 2008.

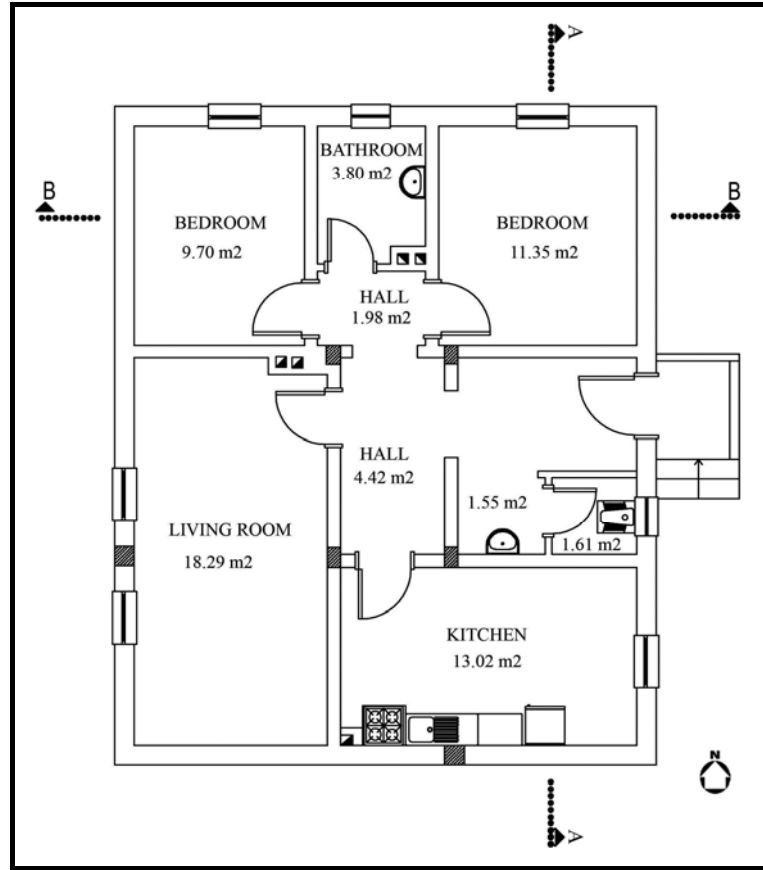


Figure 2.20. Plan of the post disaster house redrawn by the author.
Source: Kayseri Provincial Directorate of the Ministry of Public Works and Settlement.

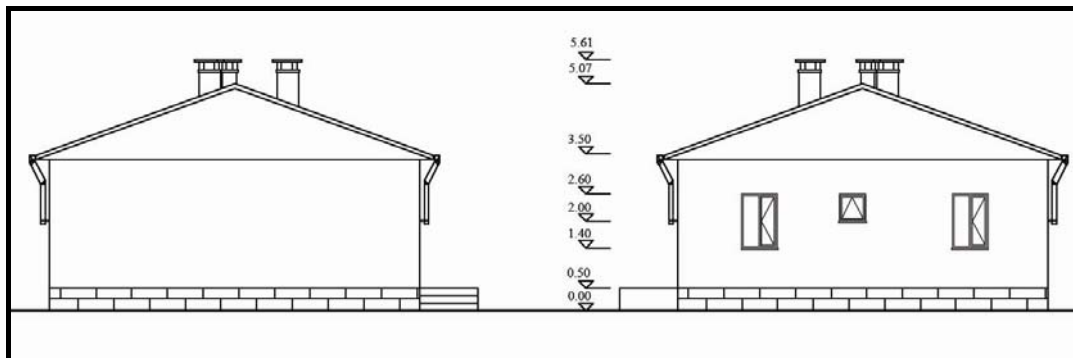
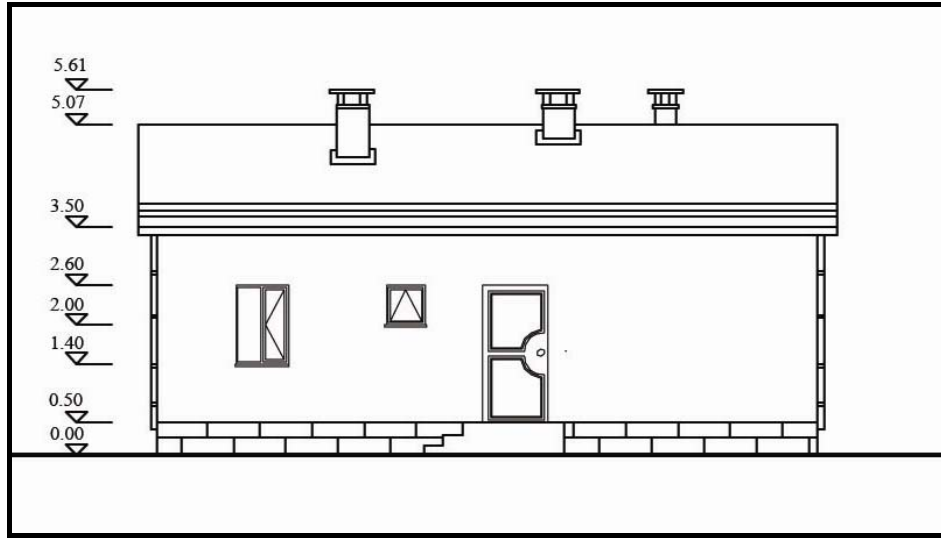
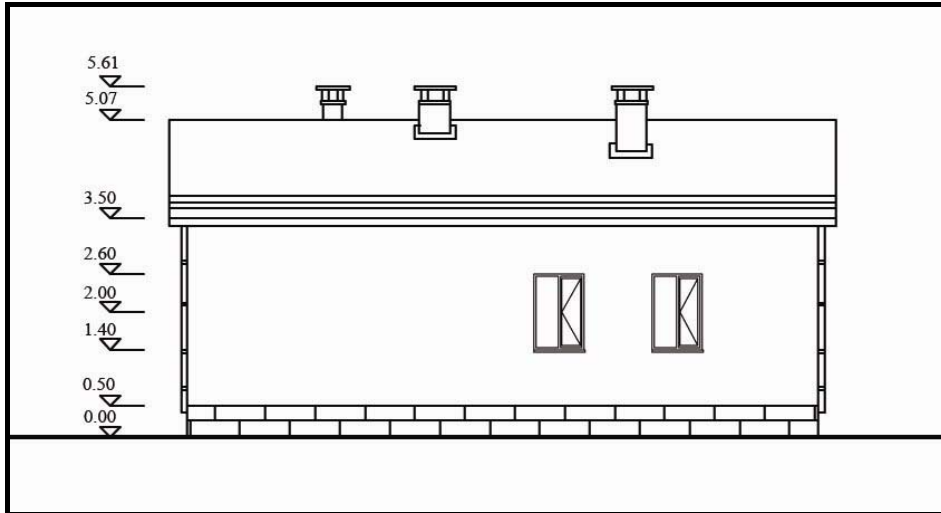


Figure 2.21. North and south elevations of the post disaster house redrawn by the author.

Source: Kayseri Provincial Directorate of the Ministry of Public Works and Settlement.



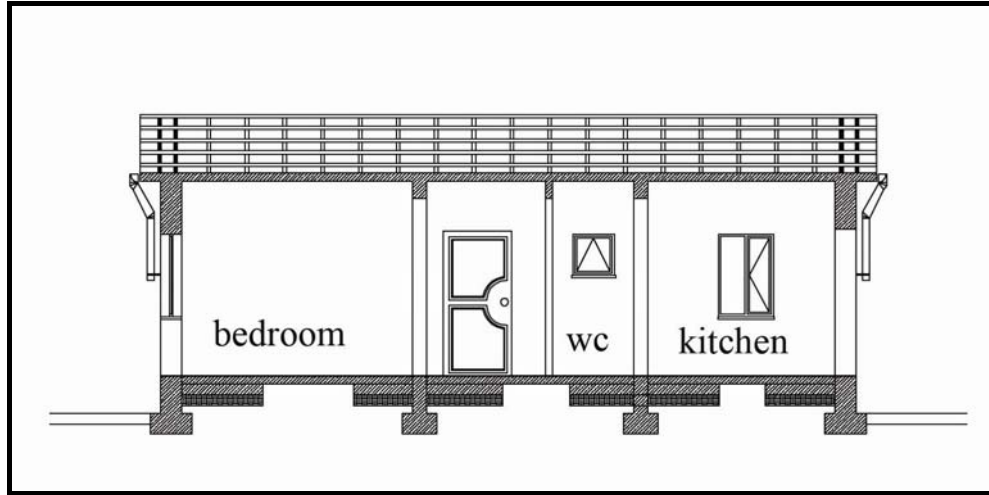
(a)



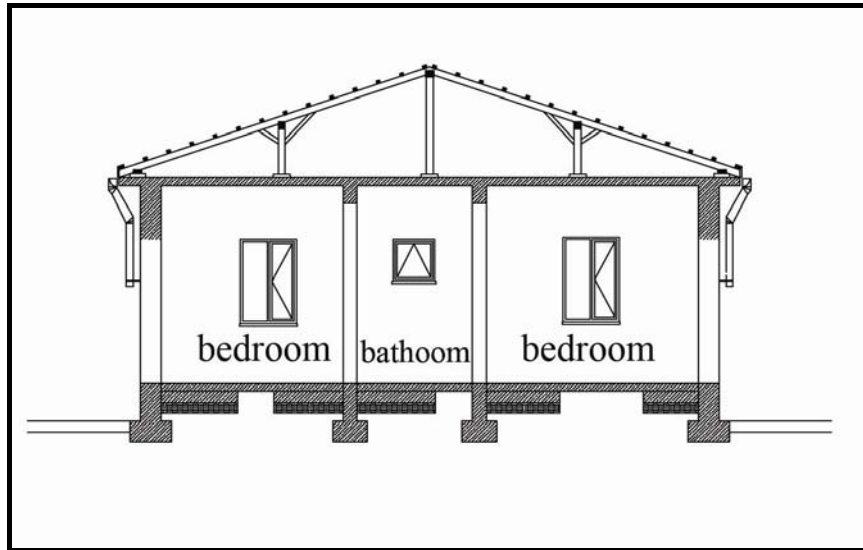
(b)

Figure 2.22 East (a) and west (b) elevations of the post disaster house redrawn by the author

Source: Kayseri Provincial Directorate of the Ministry of Public Works and Settlement



(a)



(b)

Figure 2.23. AA (a) and BB (b) sections of the post-disaster house redrawn by the author

Source: Kayseri Provincial Directorate of the Ministry of Public Works and Settlement.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter includes details about the research methodology used in this study. The study was based on the field survey of the village, traditional and post-disaster houses; a questionnaire survey and informal interviews which are presented in the following pages.

The study consisted of the following procedure:

A literature survey was conducted in order to define the research problem and gain information about rural settlements, rural heritage, some principles about making additions and alterations to traditional houses, and constructing new settlements in the light of the rural heritage guides like VDS and ERHOG.

A Field Survey was conducted in Güzelöz Village which lasted for 3 days between 14th to 16th July 2008. The village was analyzed according to the guidance of VDS and ERHOG which were explained in detail in Chapter 2 and then, an evaluation according to the ERHOG and VDS criteria was conducted for both for types of houses regarding the building layout, building orientation, domestic set up, building types, character and materials of residential buildings.

During the survey, some of the traditional and contemporary houses were marked on the cadastral map of the village to understand general built environment character of the village. Also date and the materials of construction; the size; the details of buildings which were considered typical for the village; and additions were recorded to understand whether there was any variety in building styles and

materials used in individual buildings or groups of buildings or not. In old settlements, traditional houses were studied, measured and their architectural drawings were prepared by the author, because there was no documentation available for them. Architectural drawings of post-disaster houses were obtained from Kayseri Provincial Directorate of the Ministry of PWS. All photographs were taken by the author.

A comparative analysis was made between the level of satisfaction for both the traditional houses and post-disaster houses (PDH) by using information which were obtained from the questionnaire survey and informal interviews.

One-to-one interviews were conducted by the author. In order to understand reasons behind making new pattern of settlement and what the meaning of being modern was for the villagers, because most of them had migrated from Güzelöz Village to big cities, especially Kayseri, Adana, Ankara and Istanbul. After they retired from their job, they returned to the village or they still lived in the big cities but came to the village for short periods. Questionnaires were filled by the residents of traditional houses and contemporary houses who have experienced life in traditional houses, and by beneficiaries of post-disaster houses. A questionnaire survey (Appendix A) was carried to obtain such intangible aspects of such as: the reasons for choosing to renovate, reshape and make an addition to traditional houses or build a new structure; why people now choose to build outside of the original village center; use of interior and exterior spaces; and to assess the local character of the rural buildings and what is important for the residents about their village. The questionnaire was adopted from the one prepared by Neşe Dikmen for her PhD dissertation entitled “A Provision Model and Design Guidelines for Permanent Post-Disaster Housing in Rural Areas of Turkey Based on an Analysis of Reconstruction Projects in Çankırı.”

During the execution of this study, AutoCAD 2005 and Adobe Photoshop CS2 softwares were used to draw the plans, elevations and sections of houses.

CHAPTER 4

RESEARCH MATERIALS

The survey was carried out in Güzelöz Village, Kayseri to determine the distinctive features of the traditional buildings, extensions and alterations in traditional houses, and the new settlement whose plan was prepared by the General Directorate of Disaster Affairs (GDDA) at the Ministry of PWS and new houses whose plans were prepared by the architectural office, Göktem Proje and Uygulama, and were approved by Kayseri Provincial Directorate of the Ministry of PWS. In this regard, general information about Güzelöz Village obtained from published sources were presented in Chapter 2, while housing types and their general characteristics of them, the results and discussion of evaluation about the distinctive “character” of the village, which was related to the needs of local people, and interpretation of new requirements through careful integration and balance of the local and the new features are presented according to the principles of VDS and ERHOG in this chapter.

The study comprised the following materials:

- Photographs, which were taken by the author during the visit to the study area,
- The architectural characteristics of the built environment which are documented during the field study,
- Survey of a traditional house based on photographs and measured drawings,
- Survey of PDHs prepared by the architectural office, Göktem Proje and Uygulama, and approved by Kayseri Provincial Directorate of the Ministry of Public Works and Settlement,

- Survey of the traditional houses and modifications, survey of modern and post-disaster houses in the village based on photographs and measured drawings,
- Survey of the architectural characteristics of the village, settlement and buildings.

4.1. Case Study Village: Güzelöz

The study was conducted in Güzelöz Village in Kayseri because the Department of Rural Areas of General Directorate of Technical Research and Implementation (GDTRI) at the Ministry of PWS has a project which is called “Determination of Local Architectural Features, Preparing Guide Book and Producing Architectural Projects” and Kayseri was selected as a pilot city. Besides, the Ministry of PWS determined four villages in Kayseri to relocate some of villagers to newly built settlement because their houses are threatened by falling boulders. One of these villages is Güzelöz Village in which the location of the new settlement is close to the old one and visitors who come to the village in the first instance see these buildings (Figure 4.1 and 4.2). Hence, they have changed the traditional appearance of the village. Therefore, this village was chosen as the case study area.



Figure 4.1. Location of the new settlement.



Figure 4.2. A view from the new settlement to the old one.

Güzelöz Village is now a mix of traditional and modern housing areas. Most modern houses were built near traditional houses or over the collapsed ones, as shown in Figure 4.3.

Güzelöz village is not diverse as far as into economic activities are concerned. Agriculture and livestock play an important role in the village. The villagers cultivate potatoes mostly. Caves are still used as cold storage to store agricultural products and as stables. Apart from these economic activities, some of the villagers have lived and worked in big cities in the past. After they retired, they returned to the village or they still live in big cities but seasonally come to the village. These people are not involved in farming or animal husbandry. While agriculture and livestock is important, other sources of income such as rural tourism have not developed much. Only two families are interested in rural tourism and use their houses as bed and breakfast facilities and a restaurant, tourism has not been developed in their area in spite of the fact that in the immediate vicinity of and inside the village there are historic churches which are dated mostly to the archaic

period and 13th century, and the village is so close to the famous touristic village of Soğanlı. As mentioned before, this region is rich in wall paintings and is a continuation of the cave architecture of Cappadocia.

Although the village is not under the direct influence of metropolitan areas and large cities, there is tendency in their life-style towards “being modern” because of the villagers who have lived or are living in cities. This lifestyle affects the use of spaces, spatial organization of houses and used materials.



Figure 4.3. A view of traditional and contemporary houses.

4.2. Survey of the Built Environment

Places have a character which makes them unique and the character of a place includes the character of the people, their employment and their social

organization; hence, a village will have a character different from a city because of these vary reasons.



(a)



(b)



(c)

Figure 4.4. Caves are integrated with the built-up sections of the houses
(a), (b) and (c) display the ground floors of houses.

The traditional part of Güzelöz Village was formed by close relation of buildings with topography. It can be stated that buildings have been located that none of them prevent the view and the sun of the others. The old settlement was located in line with the topography on the northern slopes of the hill and the newly settlement was spread out on the flat land in the south. In old settlement houses were carved out of the rock or built from large cut stones. In other words, it is a settlement where caves are fully integrated with the built up parts of the houses (Figure 4.4).

4.2.1. Streetscape

The traditional buildings in Güzelöz and the subtle variations between them are important in both creating interesting streetscapes and enriching visual character of the village. The buildings which are uniform in heights, and built with rubble and cut stone as the main construction materials contribute to the creation of a harmonization and compatible streetscape.



Figure 4.5. Terraced houses tend to abut on the street.

While the upper parts of the village, façades of houses share common design features, towards the lower parts the streetscape was destroyed by extensions and alterations and especially newly built houses which replaced the traditional ones without using appropriate materials and details. Also with introduction of the hipped roof, the overall coherent character of the streetscape was lost.

The streets in the upper part of the village have an organic character and are quite narrow which is appropriate for pedestrians and animals but not for modern vehicles. Monotony of these narrow streets is somewhere interrupted either by garden walls or by setting back from the street line.



Figure 4.6. a) Entrance of ground floor is directly from the street, and b) entrance of first floor is from the back of the house and from the upper street.

The majority of houses tend to abut on the street, especially terraced ones as shown in Figure 4.5 above and while ground floors of these houses have separate direct entrances from the street, generally entrances of first floors in terraced houses are from the back of the house and from the upper street as shown in Figure 4.6 above. The houses are either grouped together in threes or twos or stand alone. Mostly

they do not have front gardens so, generally, the houses define the edges of streets and the pedestrian paths. Generally courtyards were formed after a new house was built near the existing one. A few of them have a front, back or side garden but are not surrounded on all sides by the garden (Figure 4.7). These gardens are mostly small and have high walls which prohibit eye contact between public and private open spaces.

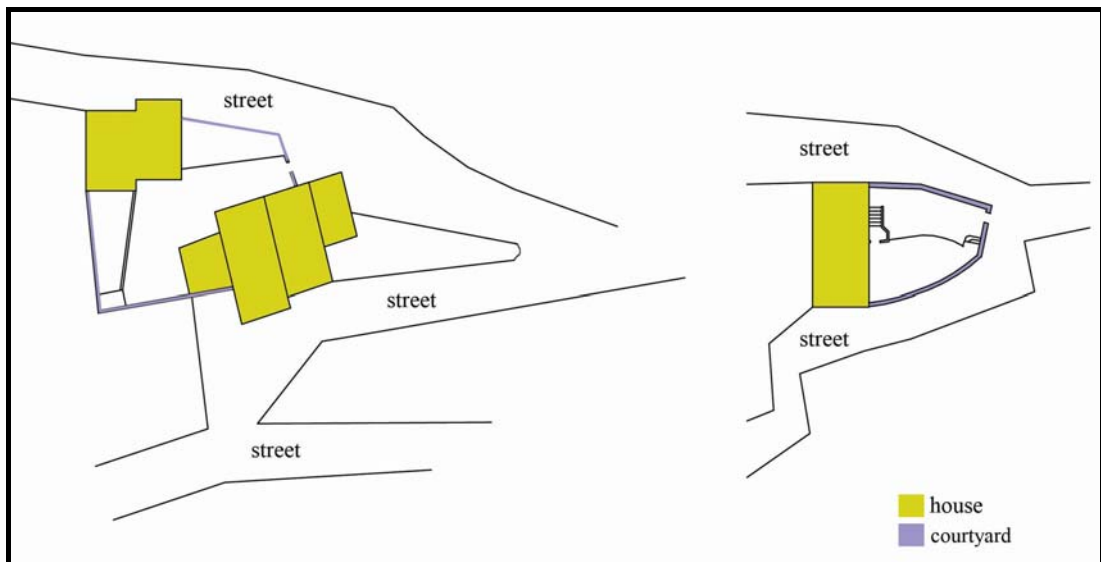
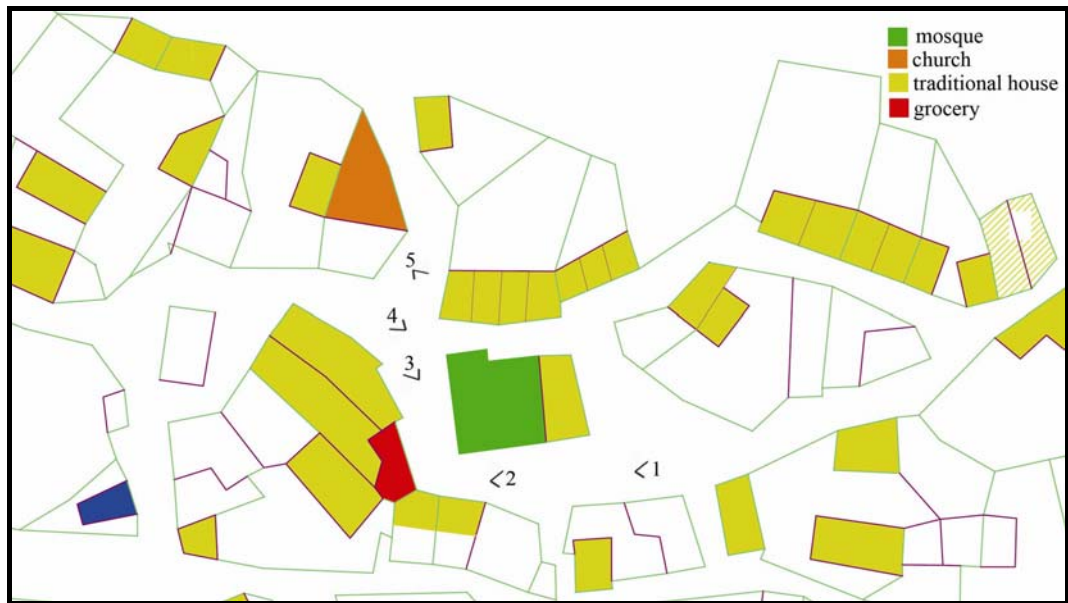


Figure 4.7. Formation of courtyard.

In the older part of the village, because of topography, climatic conditions and introverted life style, a village square did not evolve in the proper sense. The church, the coffeehouse and the grocer were located far from each other, and the mosque, which acts as a focus of the village, is at the center of the traditional area. The new mosque is used as a meeting place for men. All of these public buildings are arranged on either sides of the main road. Narrow streets continue around the mosque without widening as shown in Figures 4.8 and 4.9.



(a)



(b)



(c)

Figure 4.8. a) Plan of the village square showing the narrow streets and the communal buildings around the old mosque, b) old mosque, and c) church.

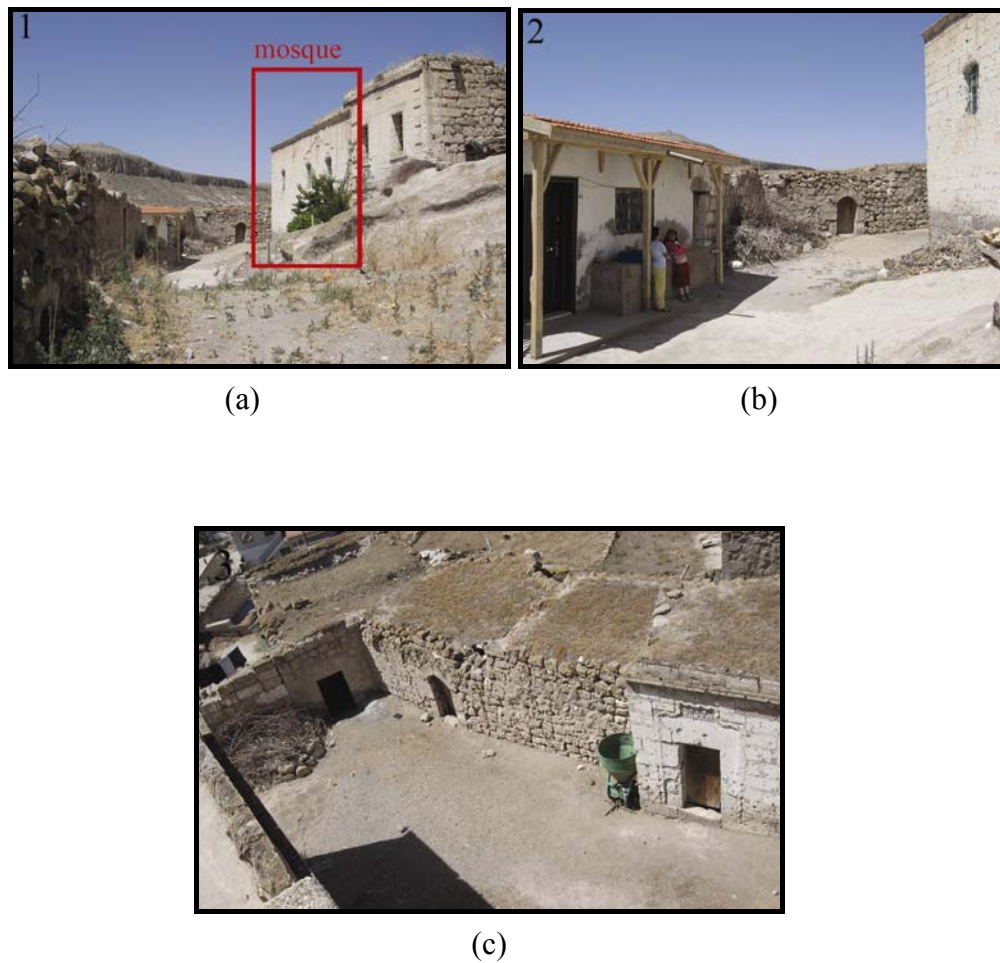


Figure 4.9. (a), (b) and (c) showing narrow access roads to the old mosque.

4.2.2. Buildings

There are not many variations in non-domestic buildings types from farms to offices, shops, garages, library, hairdressers and workshops etc. A grocer, a school and some religious buildings currently exist in the village. There are not many variations in dimensions, arrangements and details of the buildings.

The majority of the buildings within the village are classified as vernacular residential buildings style and they determine the distinctive character and

ambiance of the village. In this regard, general characteristic of traditional houses such as, use of spaces, development of the façade, decorative elements, heating facilities, roofs, and building materials are given in the following pages.

4.2.2.1. Traditional Houses

In the old part of the village, there is a single residential building style which typifies the area (Figure 4.10). The houses in the old part of the village are dated from the end of 18th to 1970s.



Figure 4.10. Typical residential building style.

Traditional houses are generally simple in form and design. They come together harmoniously because of a sympathetic relationship in terms of style, scale, material, height, windows shape and door proportions. This relationship has a major contribution to the satisfying visual impact as shown in Figure 4.11. These features are also typical in similar sized rural villages within near neighborhoods. The important feature of this building design is that it is convenient to adopt it for new developments.



Figure 4.11. A view from the old settlement.

In earlier time people used to live in the carved rocks and then, with the increasing demands of a family for another room such as with the extension of the family by marriage, a new room was carved adjacent to an existing one and interior corridor

or hall was created, or a new room was constructed in front of these caves as a one storey house. Later, at the beginning of the 19th century villagers began to build a second storey on top of the cave dwellings as shown in Figure 4.12. These two storey houses have a single space on both the floors and separate entrances to both the levels with an exterior stair. These stairs are either fitted into the wall or placed separately (Figure 4.13).

In the later period, houses were integrated according to changing needs. For example, in the traditional part, houses were made larger by modular addition. When the houses were not enough for a family, they combined the semi-detached or detached houses. They built a transition part or just opened a door in between the two to use them as one house as shown in Figure 4.14.

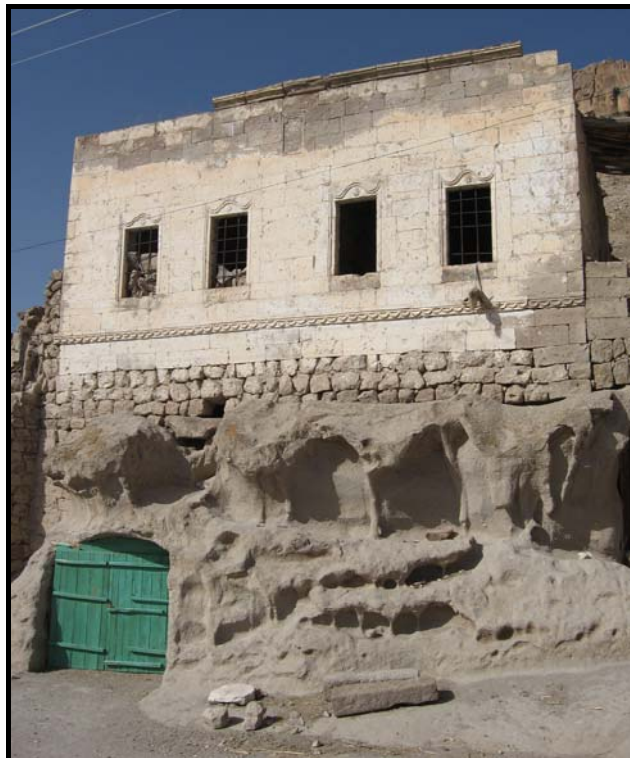
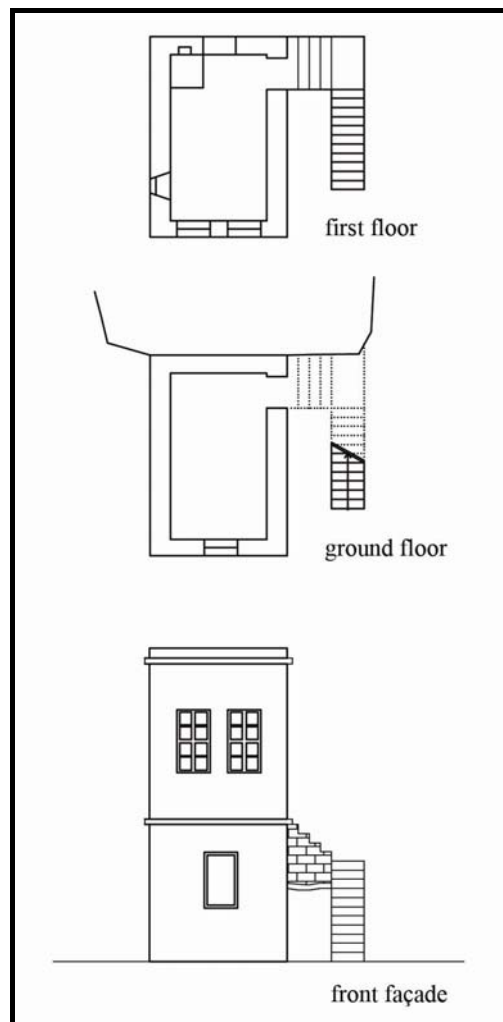


Figure 4.12. Second storey is on top of the carved space.



(a)



(b)

Figure 4.13. a) Front view, b) separate entrances to both the levels and place of the stair. (Appendix B: Cadastral Map, 117/4)



(a)



(b)



(c)

Figure 4.14. Examples to shown how two detached houses were combined
a) with a double storey connection, b) an arch way, c) rooms to connect the two.

Although some semi-detached houses seem to be one from the façade, they belong to different families who are related. These houses have separate entrances. One is from the front façade and the entrance of the other house is from back façade as shown in Figure 4.15. Again, when one house is not enough for a family, they buy the one next door and join the two together as shown in this figure.



(a)

(b)

Figure 4.15. Entrances from different façades

a) entrance of the right hand side house, b) entrance from the back façade of the left hand side house.

a) Use of Spaces

The traditional house has a single room which is on the first floor and a kitchen which is on the ground floor. The single room of the house is used for the different daily activities of occupants like; sleeping, sitting, bathing, dining, etc. Some of the objects which are needed for these activities are brought into the room and removed when the activities are completed or some of them are stored in open or closed built-in cupboards which are placed into one or two walls of a room. For instance; beds which are put on the floor at night, are stored in the morning in the built-in cupboards, which are also used for storing lamps, books, crockery *etc.* (Figure 4.16).

While western style furniture is not commonly seen in the traditional houses, their use is widespread in new houses. In traditional houses, fixed seating platforms, which are called '*sedir*', are used. They are generally fixed at the periphery of two walls. The platforms are 25 to 35 cm high and 70 to 80 cm in width. Cushions and

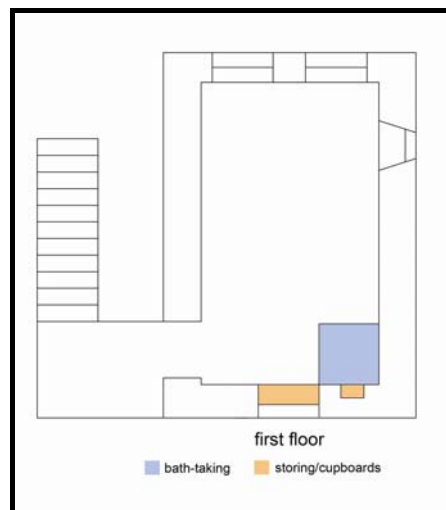
pillows are put on them to sit. In contemporary houses, western living style has been adopted to some extent, especially by villagers who have lived in cities and who are well-to-do.



(a)



(b)



(c)

Figure 4.16. a) View of bathing space, b) open and closed built-in cupboards
c) plan of bathing area and storages.



(a)

(b)



(c)

Figure 4.17. Views from food preparation and storage spaces;
a) kitchen, b) fireplace, c) niche to store potatoes.

The ground floor is devoted to the service area in traditional houses. A stable, storage areas and barn *etc.* are present. Many of the family activities, such as, baking, cooking, preparation of food for winter storage, are carried out on ground floor and especially in the cave rooms as shown in Figure 4.17 above. For instance; the women of Güzelöz Village prepare and store dough of bread in cold caves and

bake their bread in the outdoor communal ovens which is stored in the caves (Figure 4.18). These communal ovens are not present in the new settlement. Referring to local interviews and questionnaires, the villagers want to build a new oven there, however; they do not know where to put the dough and bread for storage.



Figure 4.18. a) Communal oven, b) Storage for dough of bread.

b) Development of the Façade

As mentioned before, until the 1920s houses were generally single-storey and their windows were too small because of security, climatic conditions and heating problems. During the later period, due to changes in the needs of house owner and improvement in heating conditions, an upper storey was added to houses and the windows of the upper levels were made larger than ground floor ones. With the increase in the proportion between windows and a room, the new floor became lighter and more open to the exterior than the ground floor.

Variations of side hung casement timber frame windows are dominant in the older part of the village and they are subdivided into smaller lights by muntins and mullions as shown in Figure 4.19. However, use of different size and the type of sash is seen in different periods. While windows were grouped in twos with narrow window openings and curved line patterns were used as decorative borders until 1960s, during 1960s and later period one window with wide opening was preferred on the first floors. Between 1920s and the beginning of 1940s, the height of window's opening was shorter than the one which was used between end of 1940s and 1950s.



Figure4.19. Typical side hung casement timber frame window.

At first, severe winter conditions necessitated the use of small openings but with introducing new heating system this problem was solved. Hence, it was now possible to have, there occurred the need of finding a non-interrupted view also, the

window openings became wide and the number of opening decreased to one. Narrow window openings emphasized the verticality; however after 1960s with the use of wider openings verticality was no longer emphasized. Use of iron grills at the outside is also mostly seen in the older part of the village. Front façade is simple and mostly symmetrical. Ground and first floor windows tend to be vertically aligned along the central axis.

Placement of simple wooden doors is varied. It is either in the middle and vertically aligned with windows or at the left or right side of the façade. Upper parts of the doors had arches but they were not decorated like the windows.

c) Decorative Elements

Over and around the windows, and the horizontal strip which splits two levels are decorated with up to three rows of sculpted pattern such as; some geometrical figures, fans, stars, weather vanes and plant patterns which show the wealth of the house owner, and style and skills of the builders and craftsmen. Generally, use of color is not seen (Figures 4.20-4.22).



Figure 4.20. Details from façade elements;
(a) decorative elements over the windows, and (b) decorative elements around the windows.



(a)



(b)

Figure 4.21. Details from façade elements
(a) and (b) are the horizontal strips which split two levels and are decorated with sculpted patterns.



(a)



(b)

Figure 4.22. a) The shelf between the windows and some decorative arches over the windows, and b) inside decorative element.

During different periods, different approaches to the use of decorative elements could be perceived for instance; change in choice of elements, and decrease in their complexity and use; after the 1960s, façade decoration of houses was abandoned.

d) Heating Facilities

Although winter conditions were very harsh in Güzelöz, there was no need for heating insulation. The underground cave houses are warm enough in winters and cool enough in summers. Therefore, heating problem was solved by a hearth which was used mostly for cooking as shown in Figure 4.23. However, in rooms constructed aboveground, a similar hearth on the ground floor was not enough to heat the room above (Figure 4.24). Due to lack of heating devices, in the traditional houses there are no chimneys. With the introduction of stoves, the house owners opened a hole on the front façade of the house or on the roof and use a flue-pipe of the heater as a chimney, as shown in Figure 4.25.

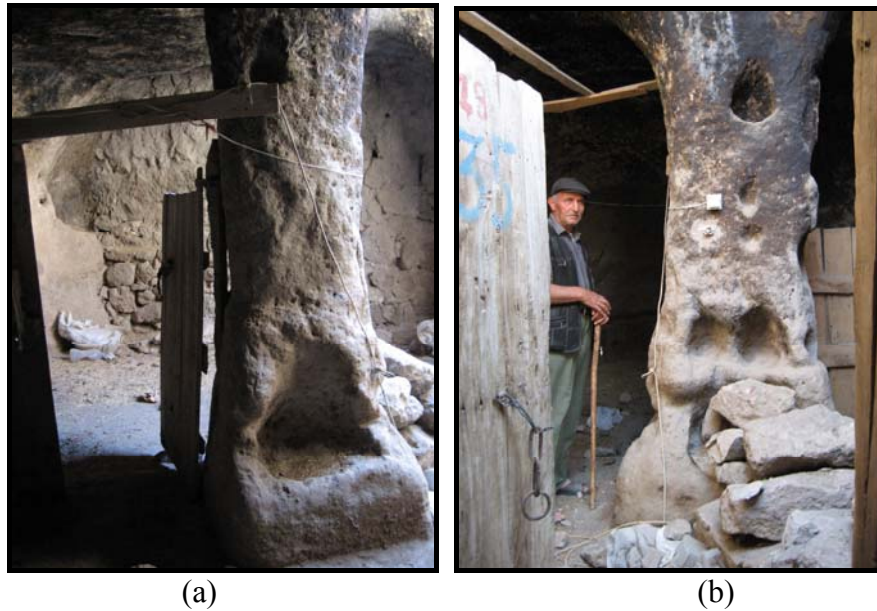


Figure 4.23. In the underground cave houses, a hearth in the middle was used to heat the house; (a) and (b) display the views of a heater.



Figure 4.24. The hearth which was on the ground floor failed to heat the first floor.



(a)



(b)

Figure 4.25. A hole on the façade (a) and a hole on the roof (b) are used for the flue-pipe.

e) Roofs

An earth covered timber flat roof is the traditional roof style (Figure 4.26). There remain some examples within the upper part of the village that it is essential to preserve and maintain as important historical features. However, when it is necessary to replace the original surviving roofs, it is important to respect the local tradition in style and materials, although the use of thatch and earth in new developments is probably no longer practical. The materials used to construct a traditional flat roof were timber beams, covered with branches and finished with compacted earth as shown in Figure 4.27. Later, the branches were replaced by straw mats and timber planks to avoid dust and leakage and timber began to have more convenient shapes such as square or rectangular (Figure 4.28).



Figure 4.26. View of a typical roof.



Figure 4.27. The materials used to construct a traditional flat roof are timber beams, branches and compacted earth.



(a)



(b)



(c)



(d)

Figure 4.28. Development of the roof;
a) timber beam, branches, b)timber beams and straw mats, c)timber beams with circular section and timber planks, d) timber beams with square section and timber planks.

f) Building Materials

Within the historical parts of the village, stone and timber are the two basic materials used for building a house. Houses are composed of single rectangular prism with an earth covered timber flat roof and are constructed of stone masonry. Referring to the villagers, stones were taken out from quarries at the mountain where the village set out. This stone is called “*keyrek*” by the villagers because of its softness. They are easily cut and shaped and after contact with air they harden so, they turn into a very resistant construction material. Because of being found abundantly, shaped easily, and being appropriate to climatic conditions of the region in terms of proving thermal insulation, this construction material has become an architectural tradition. This tradition continued until the end of 1970s and provided local employment. Houses were generally designed and built according to customs by using materials most conveniently materials available by masons, as well as, to the opinions, desires and requirements of the house owner. However, nowadays, there are not masons in the village.



Figure 4.29. Thick stone wall of a traditional house.

The thickness of walls varied with the age of the structure and position of the walls. For instance; front façade is generally thinner than side façades. The thickness of walls ranges from 45-80 cm (Figure 4.29). Thicker walls compose of cut stone with rubble stones and mud infill the space between inner and outer walls which provide perfect thermal insulation of rooms.

Dates of construction of the houses were written with Arabic or Latin numerals on the stone which is in the middle of uppermost row (Figure 4.30).

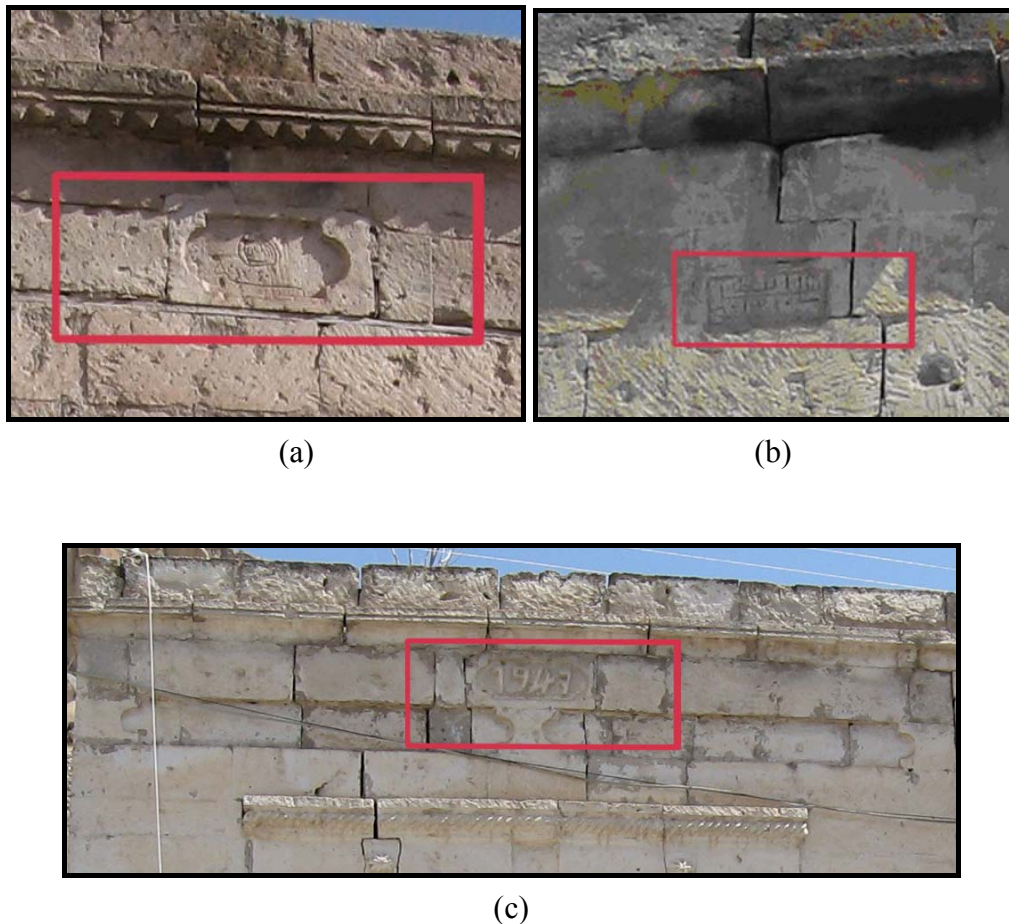


Figure 4.30. Date of construction with Arabic and Latin numerals inscribed on the façade of the building; a) Hijri year: 1210, which corresponds to the Gregorian year: 1796, b) Hijri year: 1240, which corresponds to the Gregorian year: 1825, c) Date of construction (1947) inserted on the façade.

4.2.2.2. Extensions and Alterations in Traditional Houses

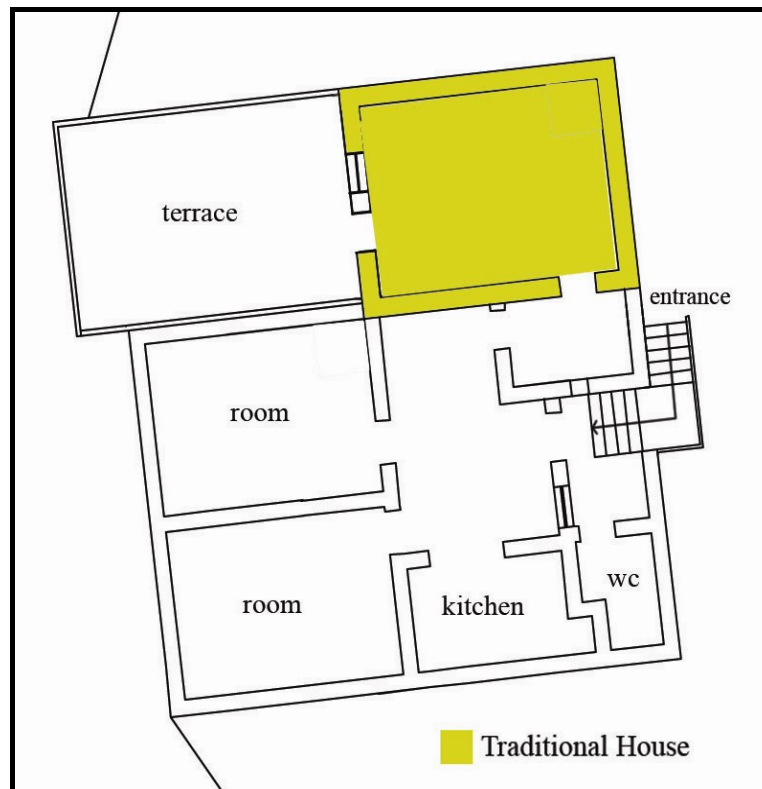
Apart from new development, extensions and alterations have a major effect on general appearance of the buildings and the village. The attempts to modernize traditional buildings normally retain the character of the original building and its adjacent buildings. In the village, some of the owners of traditional houses repaired and extended their houses in recent years. Due to these changes which did not respect the style, proportion, and choice of materials of the traditional houses, some of the houses lost their originality, as shown in Figures 4.31-4.33.



Figure 4.31. Façade of traditional house and its extension.



Figure 4.32. Extensions constructed without completely blocking traditional house.



(a)



(b)



(c)

Figure 4.33. Additions and alterations in a traditional house; a) Plan showing additional spaces, b) Southern façade, c) Western façade showing the older portion on the left hand side and the extension on the right hand side. (Appendix B: Cadastral Map, 127/2)

Most of the fenestration is still in its original size, but the material of some of window frames have been replaced with PVC ones as shown in the Figure 4.34. Also, fenestrations of extensions were not compatible with the original ones in terms of material and size (Figure 4.35).



Figure 4.34. Photo showing the replacement of original timber window frames with PVC ones.



Figure 4.35. Space between two traditional houses was built up to combine them into one.

The flat roof is characteristic of buildings in Güzelöz, however, it has some functional problems such as; leakage and dust, hence, they have to be repaired every year. Due to the difficulties of the maintenance and usage, some of the flat earthen roofs have been replaced by concrete slabs or pitched tiled roofs or some inappropriate materials like aluminum as shown in Figure 4.36. Also these replaced roofs are various in terms of direction of slope which has a negative effect on the façades (Figure 4.37).



Figure 4.36. Flat roofs replaced with a single hipped roof to cover five houses.



Figure 4.37. The directions of the roof slope and its material are different in these two houses.



(a)



(b)

Figure 4.38. a) U-shaped stair blocks entrance of the ground floor, and b) the landing of the stair blocks the window.

One of the most complained and changed part of the traditional house is the stairs. The straight type stair has been replaced by U-shaped stair because the slope of straight stair is inappropriate for elder people. However, in general, these

alterations do not match the existing building in terms of materials; and sometimes these alterations block some of its functions. For instance, newly constructed U-shaped stair became obstacle in front of the ground floor entrance and the landing blocks the window, as shown in Figure 4.38 above.

In the village, there are also some examples which are compatible with the scale and design of the original elements, and respect the building's character as show in Figures 4.39-4.41. In this house, extension was constructed with the same material as that of the traditional house and it retains the scale, form, proportion, and roof shape as the original house. The main façade was not affected by the extension which was constructed in harmony with the streetscape. Due to the architectural integrity of the extension with the house and formation of the extension within a courtyard, the extension has little impact on the street. Only one façade of the extension can be seen from the street as the continuation of the courtyard wall.

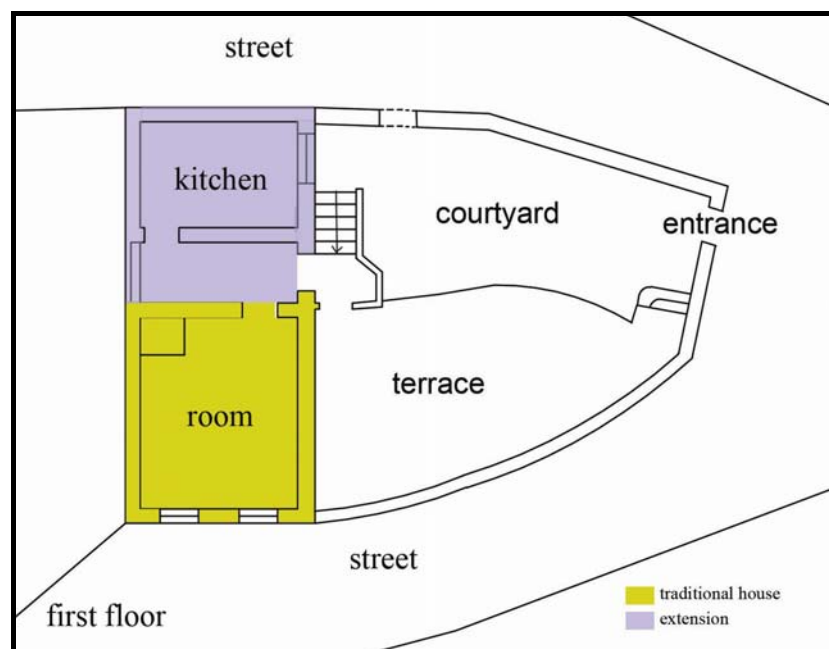


Figure 4.39. Plan showing additional spaces. (Appendix B: Cadastral Map, 111/9)



(a) (b)
Figure 4.40. a) Façade of the house, and b) New materials used for the construction.



(a) (b)



(c)

Figure 4.41. Interior views of spaces added to the traditional house showing modern amenities; a) new kitchen reflecting traditional life-style, b) washing facility in entrance hall, c) built-in cupboard.

4.2.2.3. Post-Disaster Houses

The new settlement has 22 PDH built on the same plan. At the time of the research, the PDHs were unoccupied and were still under construction. Some of the beneficiaries have expressed the wish to use them seasonally, while the rest of the houses will be used permanently.

The PDH covers an area of about 70 m². It is a single storey house (Figure 4.42). The house includes an entrance hall, kitchen, two small rooms, living room, bathroom and a WC on the ground floor. The original plan, elevations and sections of the PDH were given in Chapter 2 and will be presented with alterations in the following pages.



Figure 4.42. View of the post disaster house.

Although project of the PDH were prepared by an architectural office, these houses are not very different from the “Typical Designs” of the Ministry of PWS. During the design process, although the villagers made suggestions and tried to discuss the design of the houses to reflect their life-style to the new houses, these ideas and wishes were not taken into account. Also, the villagers did not have chances to add something special like the decorative elements of traditional houses.

The new development which is on the fringe of the village differs in scale, density, design and materials from the traditional settlement. Single-storey PDH was constructed of reinforced concrete and hollow bricks (hollow clay blocks). These materials are not found locally like stone, however, as the villagers said that they are more practical than stone in terms of duration of construction and obtaining them. In addition to this, it is difficult to find craftsmen for stone masonry. On the other hand, one of the aims of VDS is to use of traditional local materials where feasible in order to create consistency with existing structures.

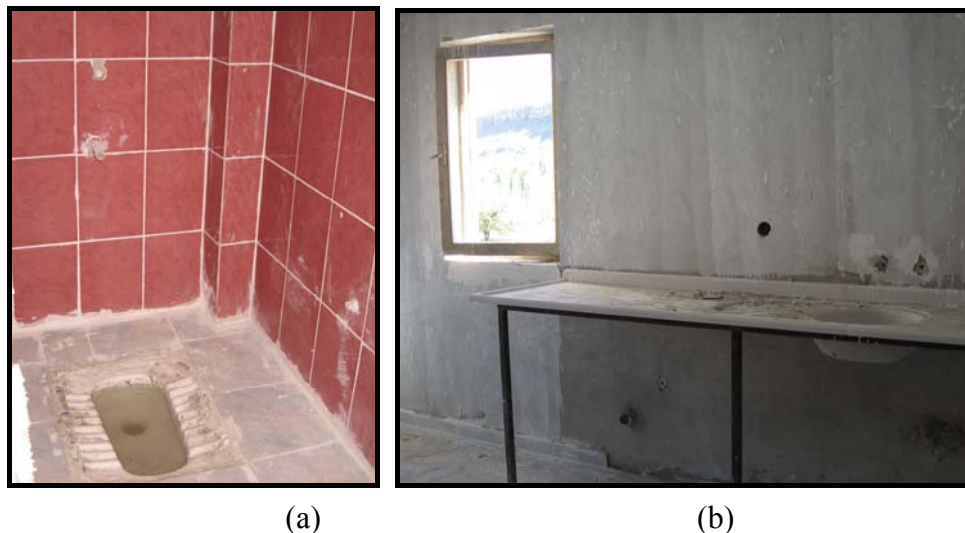


Figure 4.43. Modern amenities in the post disaster houses built by the Ministry of PWS; a) toilet and, b) kitchen

These houses have a positive aspect in terms of having a bathroom, a toilet and a kitchen as separate spaces inside the house (Figure 4.43). As mentioned before, villagers complain about these spaces in traditional houses. Therefore, they are satisfied with these spaces.

Windows of the PDH are compatible with traditional ones in terms of material, size and shape. Wood was preferred for the window frame, although there is a tendency towards to replace wooden frame with PVC ones both in traditional and contemporary houses in order to solve heating problems. It is necessary to think twice while using PVC because of its aesthetic and environmental disadvantages.

Unlike windows, doors are not compatible with the traditional ones and local context. Inappropriate use of urbanizing features like steel door was not prevented in some of the PDHs as shown in Figure 4.44.

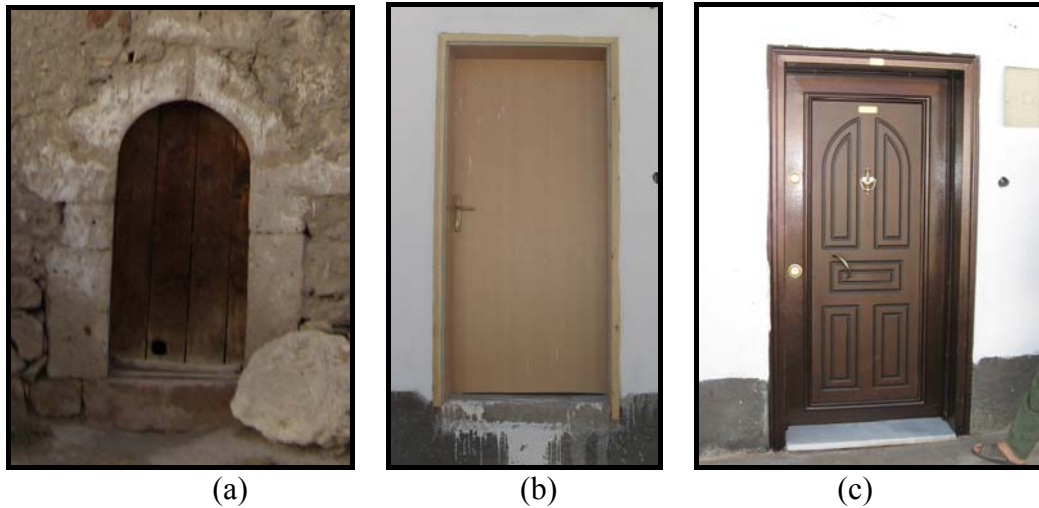
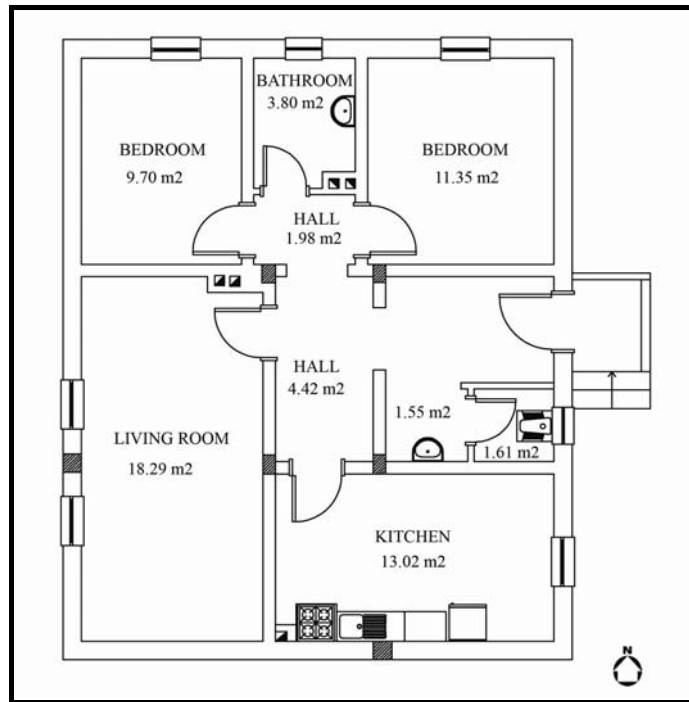
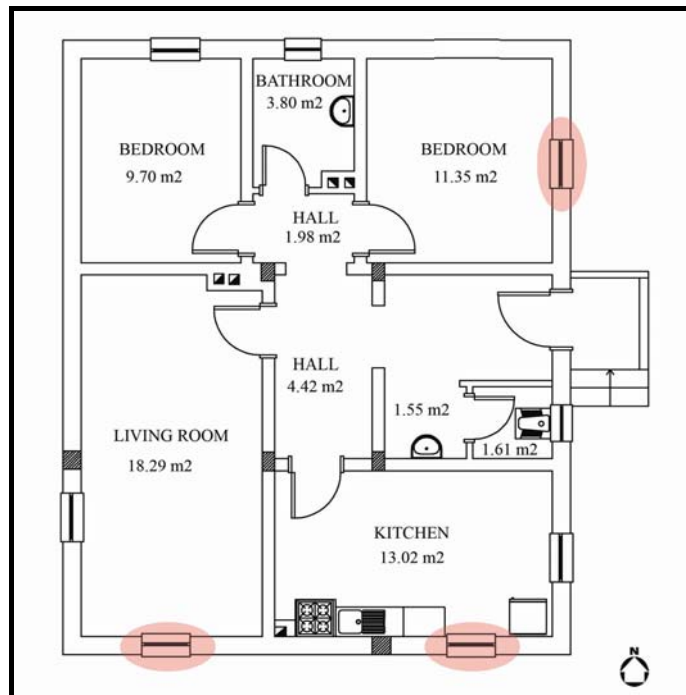


Figure 4.44. Different styles of doors in the residential buildings of Güzelöz Village; a) Arched timber door of traditional house, b) Standard timber door of the PDH, and c) Steel door installed by the owner of a PDH.



(a)



(b)

Figure 4.45. The original plan (a) and the altered plan on which newly placed windows were marked (b).

The locations of some windows were changed in the PDH. For instance, while on the original plan on the south façade there are no windows but on this altered plan, there are two windows on the named façade as shown in Figure 4.45 above. Due to the lack of windows on the south façade, there are some questions about whether this project was designed according to design criteria of this site and the features of the village or not.

CHAPTER 5

RESULTS AND DISCUSSION

Results of the survey of the physical environment and its assessment according to VDS and ERHOG, as well as results of the questionnaire survey are given in the following sections. The village and houses are assessed according to the aspects of building layout, orientation, domestic set up, building types, character of residential buildings and materials by using the questions of VDS and ERHOG.

5.1. Assessment of the Built Environment thru VDS and ERHOG

In this section, the VDS and ERHOG evaluation system which are explained in Chapter 2, are used to assess traditional and post-disaster houses. Questions related to the built environment only are answered for the following assessment criteria: building layout; orientation; domestic set up; building types; character of residential buildings; and materials. The results are shown in Tables 5.1-5.3. The aim of this study is to understand which general characteristics of the village and its houses were carried over and adopted in the new development.

As it can be understood from the Tables 5.1- 5.3, none of the local architectural features of Güzelöz Village were re-interpreted by providing a balance between innovation and local character to guide the new development. The new development could be a step towards regenerating the areas/settlements without completely abandoning the rural heritage of the village/region.

Table 5.1. Evaluation of the rural built heritage in Güzelöz village.

Assessment Criteria	Evaluation
1. What are the architectural features of the buildings?	- in harmony with topography, - uninterrupted views and sunlight, - cut out of hillside - made of local stone
2. Do the buildings belong to several periods?	Yes
3. If yes, it is possible to retrace their architectural development?	Yes
4. Do the architectural features have a practical role, a social or religious significance or are they merely ostentatious?	Yes
5. Have they changed over time?	Yes
6. Are they still used today?	Yes
7. If not, why (new, more efficient or economic techniques)?	n/a
8. Is the farm or residential house typical of the region?	Yes

Table 5.2. Evaluation of building types, character of residential buildings, materials of residential buildings in the traditional core of the village and the new development area.

Assessment Criteria	Traditional Core of the Village	New Development Area
Building Types		
1. Are types of building seen?	Yes	No
2. Do buildings differ in height, size, density?	Yes	No
3. Are there any key buildings that help orientate you or provide important focal points?	Yes	No

Table 5.2 continued

Assessment Criteria	Traditional Core of the Village	New Development Area
Character of Residential Buildings		
1. Are buildings 1 or 2 storey or more?	double storey	single storey
2. Are they terraced, detached, attached?	all types	detached
3. Do they have flat roofs, pitched roofs, dormer windows, extensions, porches?	flat roof, no dormer windows and no porches	pitched roof, no dormer windows and no porches
4. Are their frontage flat, protruding, simple detailed?	flat and decorated	flat and simple detailed
Materials of Residential Buildings		
1. What materials have been used?	Stone, timber, compacted earth, mud	concrete, hollow clay blocks, timber, floor tiles
2. Are they traditional?	Yes	No
3. Where have they come from?	local	nearby cities
4. Are they well preserved?	Yes	n/a
5. Is it simply the material which gives the place its character or the way in which it is used?	Both	n/a
6. Is the form and proportion of buildings more important than materials?	Yes	No
7. How are modern materials used?	improper use in new alteration and extensions only	for the whole building but not in harmony with the general character of the village
8. Could they be used more effectively?	Yes	Yes

Table 5.3. Evaluation of building layout, building orientation and domestic set up in both the traditional core of the village and the new development area.

Assessment Criteria	Traditional Core of the Village	New Development Area
Building Layout		
1. Are building frontages on the road or are they set back from the road?	on the road	set back from the road
2. What are the sizes of the plots - are there front gardens, back gardens, provision for car parking?	small plot size, no front or back gardens, no provision for car parking	large enough for facilities, front and back gardens, no provision for car parking
Building Orientation		
1. Is the orientation of buildings a local characteristic?	Yes	No
2. While deciding orientation of buildings, did people take account need for sun, shade and shelter from prevailing weather?	Yes	No
Domestic Set Up		
1. Are parts of the house specifically allocated to men, women or children?	No	n/a
2. Which room is preferred for gatherings?	room on the first floor	living room
3. What is each person's role in the family?	cooking, cleaning, care of children done by women	
	animal husbandry, farming done by men	
4. Has this changed?	No	No
5. Has allocation of the rooms changed to adapt to current lifestyles?	Yes (with extensions)	n/a

5.2. Questionnaire Survey and Informal Interviews

There are 138 families in the village of Güzelöz but most do not live there permanently; therefore it was not possible to get a representative sample of the population. However, from the literature survey we know that the results of the limited survey are compatible with those made on a larger scale elsewhere. Besides most of the beneficiaries of the PDH live in other cities therefore it was not possible to conduct them for the survey. A comparative analysis was done for the various features/characteristics of the PDH and traditional house in the village which is presented in the following pages.

A total of 11 questionnaires were filled by the residents of Güzelöz Village. Six of them lived in traditional houses and were beneficiaries of the PDH and all of them planned to relocate. Five of them were residents of the traditional houses but not beneficiaries of PDH. Two of them had made alterations, while three of them had built extensions to their old houses.

Six of the 11 respondents have extended families. With regard to their occupations, 8 of the respondents have retired from their jobs in big cities but 3 of these 8 are still working on their farms, 2 of the respondents earned their livelihood by farming and animal husbandry. Since most of the respondents have lived in big cities and have come back to their village after retiring, they came back to their village, therefore, they are familiar with the urban life-style.

The responses of a total of 11 questionnaires relating the level of user satisfaction in traditional house are presented in the chart below in Figure 5.1.

It can be said that majority of respondents prefer to live in traditional stone houses especially because of better heating conditions and natural light if they could have the advantages of contemporary houses such as; ease of cleaning and maintenance,

and proper kitchen and bathroom. The major reason for abandoning the traditional house is the desire to have better sanitary facilities.

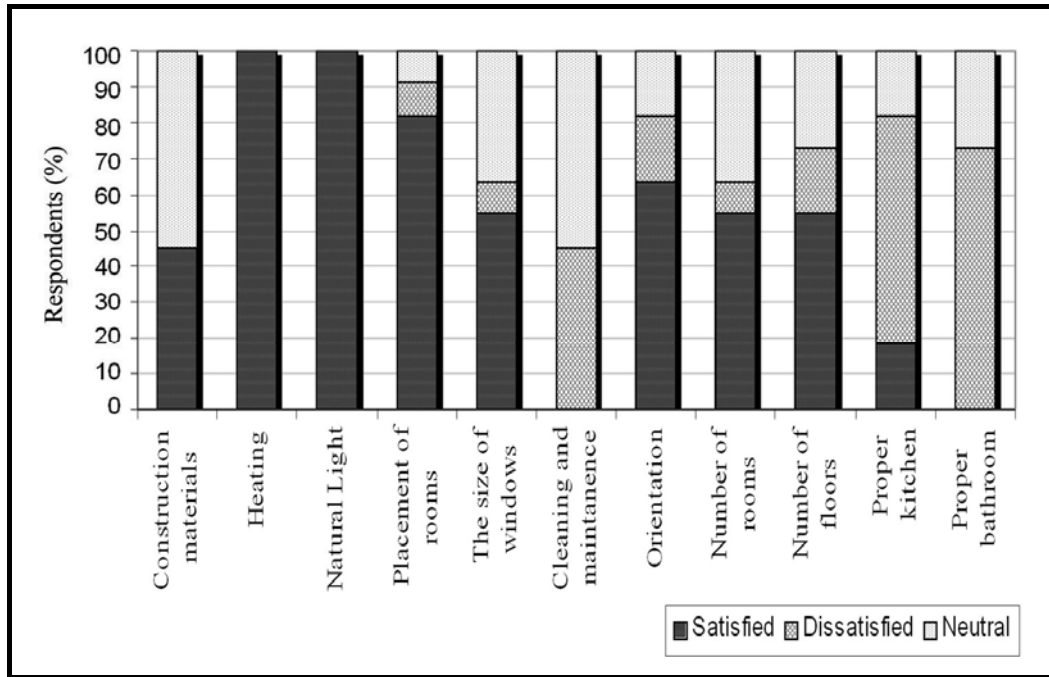
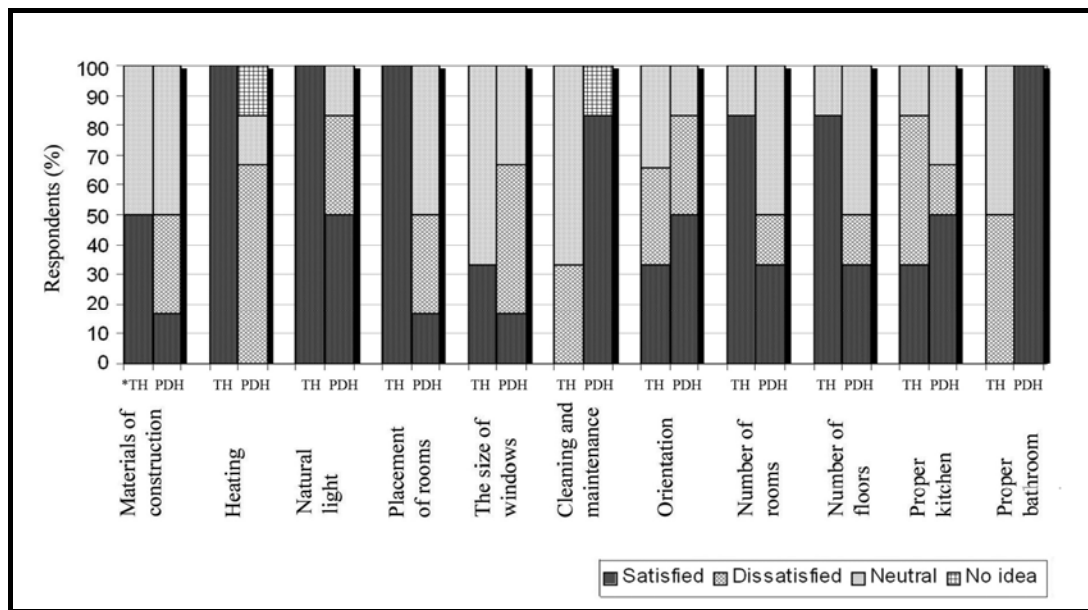


Figure 5.1. Levels of satisfaction of all the respondents with the various features of the traditional housing in Güzelöz village.

To evaluate level of user satisfaction with traditional house and PDH, questions regarding their likes and dislikes were asked. A summary of their answers is presented in the chart below in Figure 5.2.

When discussing user satisfaction with regard to the PDH, it can be said that although beneficiaries have not lived in the PDH yet, they are satisfied with ease of cleaning and maintenance and the provision of a proper bathroom and kitchen. However, they are dissatisfied with the materials of construction, the placement of rooms, the size of windows, and number of rooms and floors; and suspicious of the

heating efficiency of the PDH. On the other hand, even though cleaning and maintenance, and proper bathroom are more problematic, they are satisfied with heating, natural light, placement of rooms, number of rooms and floors in their traditional houses.



*TH: traditional house

Figure 5.2. Levels of satisfaction of the respondents with the various features of the two types of housing in Güzelöz village

According to responses related to the PDH, the beneficiaries want to alter their PDH in order to adapt it to their life-style. As plot size of new houses are big enough to facilitate the necessary spaces; such as: storage, stables, barn, sheds etc, the owners want to re-arrange the spaces with the houses gradually, because the present PDH do not fully answer their needs. The reasons for (dis)satisfaction with certain features of the PDH are explained in more detail below:

- *Materials of construction:* The respondents evaluated materials of construction in terms of heating, cleaning, maintenance and health. While 5 of them are satisfied with the materials of construction, 6 of them are dissatisfied. The respondents criticize the materials used for the ceiling and floors in the PDH in terms of heating efficiency and their health. While the ceiling and floor in PDH are concrete slabs, those in traditional house are timber. The respondents explain that timber and stone are healthier than concrete and brick. Therefore, they are proposing to cover the floor and ceiling of PDH with timber planks.
- *Heating:* all of the respondents state that it is easy to keep traditional house warm in winter. Although they have worries about heating conditions of PDH, this drawback is compensated for by a modern bathroom and kitchen.
- *Orientation and location:* The respondents state that the location of PDHs is not good, especially as the mosque, which is the meeting place of the villagers, is not easy to reach. They do not like the placement and orientation of the rooms in the PDHs as they face north, and the houses are exposed to wind.
- *Cleaning and maintenance:* Respondents are satisfied with the materials of construction in PDHs, because they are easier to clean and maintain compared to the ones in traditional houses.
- *Number of floor:* Especially the women of the village complain about the external staircases because they have to use it many times during the day for daily life activities. Also, the slope of straight stair is inappropriate for elder people to perform daily life activities.
- *Number of rooms:* The respondents state that number of rooms in PDH is not enough for an extended family.

- *Proper kitchen:* Although respondents are satisfied with the proper kitchen in PDHs, they complained about its location in the house because while the rooms face north, the kitchen faces south.
- *Proper bathroom:* All of the respondents complained about the bathrooms in the traditional houses due to the lack of separate space for bathing. As mentioned before the bathroom is in the room as a niche while the one in the PDH is a separate room.

The villagers also complained about the toilet facilities of their traditional houses as they are located outside the house, adjacent to the garden wall, the periphery of the courtyard or under the staircase as shown in Figure 5.3.

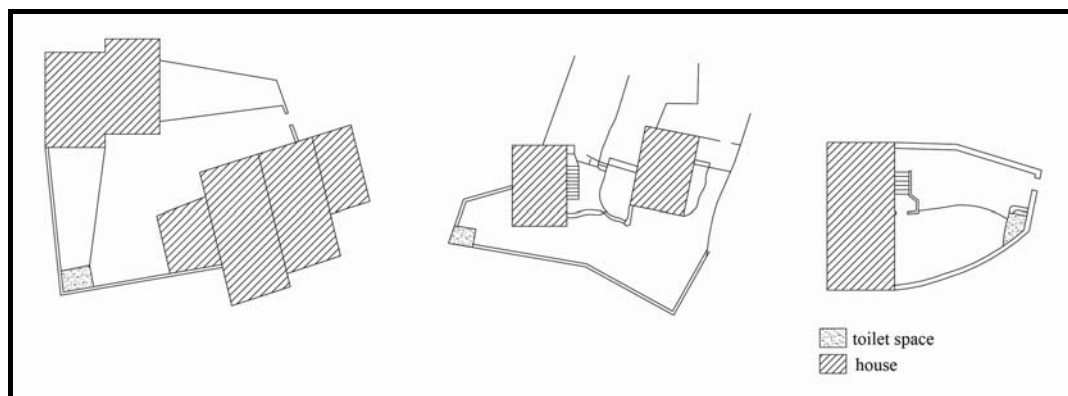


Figure 5.3. The toilet spaces and houses whose construction dates range from 1940s to 1970s.

Mostly, the aim of the extensions is to solve the problems related to sanitary facilities and kitchen like how they saw in cities (Figure 5.4). As mentioned before, all the women of the village complained about these spaces and this create willing

to move to the PDH which remedy these problems by designing a bathroom, a toilet and a kitchen within the house.



(a)



(b)



(c)

Figure 5.4. Modern amenities provided in a traditional house by adding new spaces; a) kitchen, b) bathroom, and c) washbasin and laundry facilities at the end of the corridor.

During the informal interviews, the women of the village complained about the inconvenience of having to carry articles of daily use from one floor to the other because of necessity of using stairs and passing from hot place to cold one during winter when it is cold outside and warm inside. That is one of the reasons to create willing to move to the PDH which is one storey.

In brief, in Table 5.4, while, in the first row, advantages and disadvantages of traditional house are listed, in the second row, advantages and disadvantages of PDH are listed.

Table 5.4 The advantages and disadvantages of both the traditional and the post disaster house.

Types of House	Advantages	Disadvantages
Traditional House	<ul style="list-style-type: none"> * heating efficiency * good in terms of health * providing spaces for different facilities 	<ul style="list-style-type: none"> * lack of sanitary system and utilities * lack of privacy * stone masonry is time consuming
Post-Disaster House	<ul style="list-style-type: none"> * good sanitary system * easy maintenance and cleaning * practical to construct * single storey * proper kitchen and bathroom * faster to build 	<ul style="list-style-type: none"> * inappropriate planning for the requirements of the villagers * using inappropriate construction materials for the local environment * lack of local identity

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

In this study, a survey is carried out to understand the ideas behind the abandoning traditional customs in construction and assess the rural cultural heritage in the village of Güzelöz, Kayseri, by using the tools; “Village Design Statements” and “European Rural Heritage Observation Guide” (ERHOG). While ERHOG is generally used to guide studies and observations related to heritage features, and classify and describe heritage elements, VDS is used to define the distinctive character of a village and its surrounding countryside, guide the planning process of new developments. Briefly, both of them are prepared to ensure that the features of an area that give character to a village will not change too much or wear off in a few years.

6.1 Conclusion

The research helped to investigate planning tools that can be used to guide new developments, while respecting rural cultural heritage, distinctive characteristics of the traditional buildings, and understanding priorities and needs of villagers related to make alterations and extensions. The results of previous studies related to PDH and their planning process are similar with those in this study. Findings of this study also validate results of previous studies. Therefore, this system must be used as a guideline for new developments. The conclusions which resulted from this study are given in the following sections.

6.1.1 Traditional Houses

In Turkey, most of the rural areas and traditional buildings lose their distinctive characteristics under the pressure of the globalization and industrialization like in the village of Güzelöz. The latest inappropriate additions contribute to the general lack of cohesion in the built environment of the village of Güzelöz. The owners of traditional houses want to make alterations and extensions to the traditional houses or completely abandon their dwellings and adopt the PDHs for reasons of obtaining better sanitary utilities and proper kitchen.

6.1.2 Alterations and Extensions

For the villagers, being modern means adopting an urban life-style. They are dissatisfied with some of the spatial problems in their traditional houses and they believe that the solution is to build houses like in cities by completely abandoning traditional plan types. Therefore, apart from the houses which were newly constructed, they made alterations and extensions which are incompatible with the original materials and main features of the traditional houses. As a result of this process, there remain few specific references which will be a base for new development. However, the villagers have an important duty to recognize their region's potentials and they can do it better than the others. Therefore, the features which are valued by the local community should be sensitively preserved and enhanced to achieve one of the prerequisites of sustainable rural development; in this way create attractive residential environment can be created by carrying forward the sense of the place.

6.1.3 New Development

The new development should complement the old and cause minimal impact on the existing environment. However, in this situation scale and balance of the design of

new settlement in terms of the distinctive character of the area and the immediate vicinity are not taken into consideration.

Streetscapes created within newer residential settlement along the edge of the village contrast with the streetscape which is in the traditional part of Güzelöz. New settlement is tend to be isolated from the rest of the village, with just one point of access and no alternative footpath to traditional part of the village. This new development consists of one style and type of house that is repeated and forms a uniform appearance.

The aim of the preparation of typical designs of the Ministry of PWS is to save time after a disaster. However, during the preparation process local features and needs of local people of different regions are not taken into consideration and the Ministry has tried to solve the problems of different regions with the same solutions. Local features, architectural traditions and cultural heritage, which are unique to a specific region, are some of the components of strengths and potentials of a region to sustain their future development. Therefore, there are no universal solutions to overcome obstacles, *i.e.* the solution which is good for a region can not be appropriate for another one. In light of this argument, it can be said that standardized monotype construction techniques and materials, and typical designs are inadequate to solve the building problems of rural areas.

6.2 Recommendations

Designing with creative interpretation of traditional features is important to carry forward important and improvable characteristics of tradition. It is necessary for new developments to follow good practices and solutions in terms of respecting local setting, and reflecting scale, the traditional styles, materials and design features of surrounding buildings. It is essential to design new development in ways that respect local character, as well as contribute the rural economy, provide some local employment and arouse local craftsmanship.

While new development is planned by taking cues from traditional style with respecting and reflecting the main features and details of traditional buildings, well-thought plans identify key facilities, solve the problems that need to be tackled and demonstrate how distinctive character and features can be preserved. Besides, another important aim of new development is to search for contemporary potential of traditional styles and local materials for creative interpretation. However, the application of standard housing design and layout take precedence over all these design considerations for the local authorities.

It is also recommended that essential to give local people an opportunity to influence new development in order to reflect the best aspects of the building tradition, form, proportion, materials and details as they exist, while welcoming modern techniques, materials, and energy conservation.

Consequently, knowledge and experience of the villagers which have been acquired during centuries should not be ignored, while proposing new development, and make alterations and extensions to features, which constitute existing character of a village. It is more meaningful to take them a step further by understanding the logic behind this heritage, utilizing contemporary techniques, perceiving contemporary requirements for the benefit of present and prosperity.

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APPENDIX A

QUESTIONNAIRE

1. Köyün adı:
2. Parsel numarası:
3. Şu anda
 - a) afet konutu verildi ama oturmayı düşünmüyorum ()
 - b) afet konutu verildi, oturacağım ()
 - c) afet konutu verilmedi, verilirse oturacağım ()
 - d) geleneksel konutta oturuyorum ()
4. Yaş:
5. Cinsiyet: Kadın () Erkek ()
6. Geçiminizi neyle sağlıyorsunuz?
Çiftçilik () Hayvancılık () Emekli () Diğer ()
7. Vasitanız var mı? Evet() Hayır ()
Modeli: Traktör () Otomobil () Kamyon () At Arabası ()
8. Geleneksel konutta yaşayan kişi sayısı:
Aile Yapısı: Çekirdek aile (), Büyük aile ()
9. Geleneksel konutla ilgili bilgiler:
Kat sayısı :
Oda sayısı:
Alt kat: Üst kat:
Taşıyıcı sistemi:
10. Yemeğinizi çoğunlukla nerede pişiriyorsunuz?
Fırın () Ocak () Tandır () Soba () Başka ()
11. Evinizi neyle ısıtıyorsunuz?.....
12. Geleneksel konutta ahır durumu: Var () Yok ()
Konumu: Evin zemin katında (), Eve bitişik (), Evden ayrı bir yapı ()

Taşıyıcı sistemi:.....

13. Sahip olduğunuz hayvanlar:

	Hayvan Türü	Sayısı
Büyükbaş		
Küçükbaş		
Kümes		

14. Geleneksel konutu kim yaptı: Kendim () Usta () Bilmiyorum () Diğer ()

15. Geleneksel konut şu an ne durumunda? Kullanılıyor () Boş () Yıkıldı ()

16. Ne kadar zamandır bu evde oturuyorsunuz?.....

17. Geleneksel konutta kalmanız için sebepler:

.....

18. Geleneksel konutun en çok sevdiğiniz yanları:

.....

19. Geleneksel konutun en çok şikayet ettiğiniz yanları:

.....

20. Konutunuzun size göre en önemli özelliği nedir?

.....

.....

21. Konutunuzda değişiklik yaptınız mı? Evet (), Hayır ()

Konut içi ():.....

Cephe ():.....

Ekler ():.....

22. İmkânınız olsaydı konutunuzda değişiklik/ daha fazla değişiklik yapar mıydınız?

Evet (), Hayır ()

Konut içi ():.....

Cephe ():

Ekler ():.....

23. Konutunuza ek yaptığınızda sizin için hangi kriterler daha öncelikli oluyor?

.....

.....

24. Elinizde olsa nasıl bir konutta yaşamak isterdiniz?

.....

.....

25. Afet konutu ve/ veya geleneksel konut ile ilgili düşünceleriniz nelerdir?

	a				b			
	Geleneksel konut				Yeni konut			
	Hiç Memnun Değil	İdare Eder	Çok Memnun	Yok	Hiç Memnun Değil	İdare Eder	Çok Memnun	Yok
1.Yapı malzemeleri								
2. Yapım sistemleri								
4. Isınma								
5. Güneş görme								
6. Odaların yerleri								
7. Pencereilerin büyüklüğü								
8.Temizlik/bakım kolaylığı								
9.Komşuluk ilişkileri								
10. Evin yeri/konumlanması								
11. Kat sayısı								
12. Oda sayısı								
13. Düzenli mutfak								
14. Uygun banyo								
5. Ahır								
6. Genel Olarak								

26. Afet konutların yerleri uygun mu? Evet () Hayır ()

27. Bu konutlar için bir arazi önerebilir misiniz, neden?

.....

.....

28. Afet konutlarının problemleri nedir sizce?

Afet konutu ailemizdeki herkesi barındırmak için yeterli değil (),

Toprağıma uzak (),

Afet konutu güvenli değil (),

Geleneksel konutta kullandığım bazı mekanlar afet konutunda bulunmuyor ():

Ahır (), Kiler (), Depo (), Diğer ()

Yeni yerleşim bölgesi hayvan yetiştirmek için uygun değil (),

Afet konutu için ayrılmış olan parsel yetiştirdiğim hayvanları barındıracak
büyüklükte ahır yapmaya uygun değil (),

Diğer ()

29. Şu anda afet konutunda oturuyor olmayı tercih eder miydiniz?

Evet (), Hayır ()

Neden?:.....

30. Afet konutlarının beğendiğiniz yanları nelerdir?

.....

31. Afet konutlarının beğenmediğiniz yanları nelerdir?

.....

APPENDIX B

CADASTRAL MAP

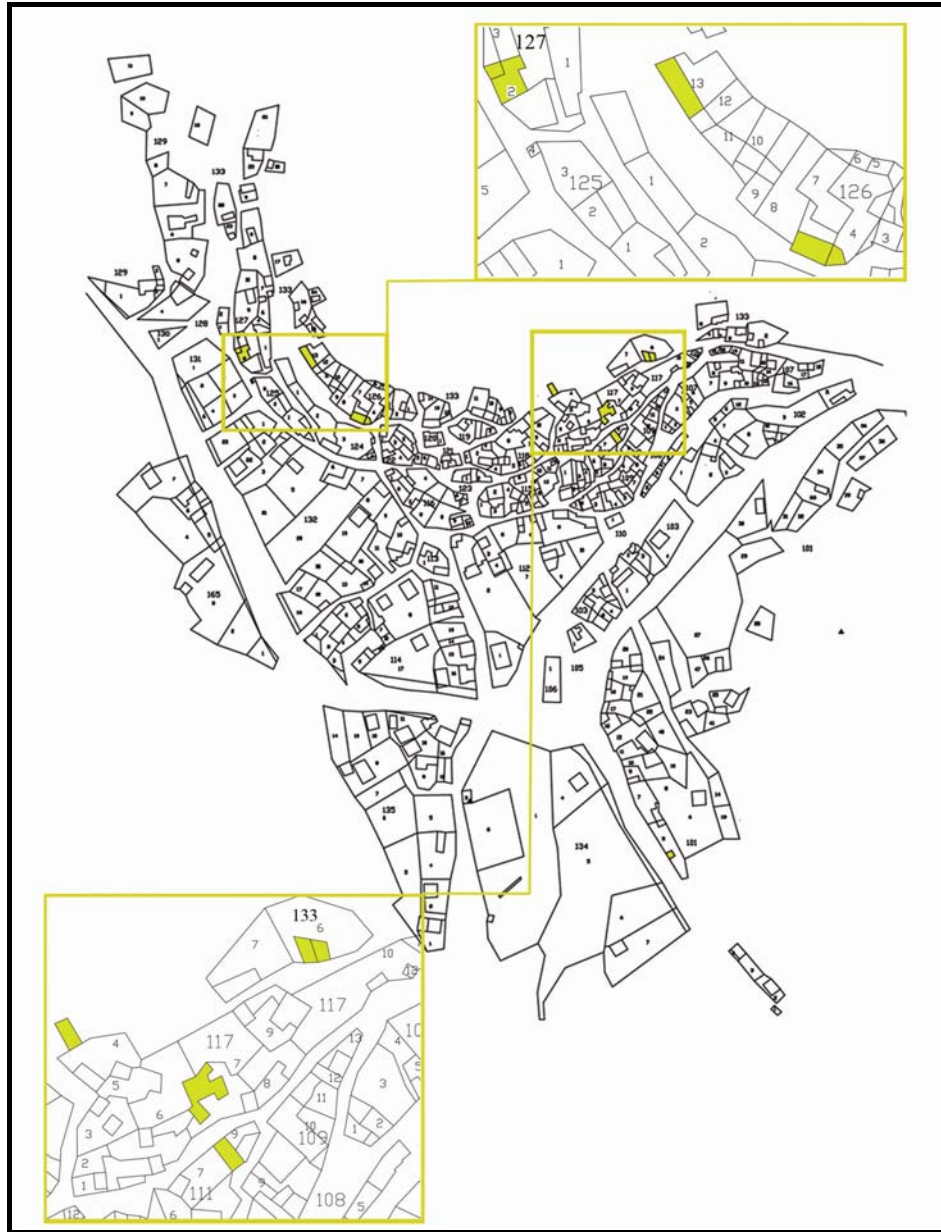


Figure B.1. Cadastral map of the Güzelöz village redrawn by the author.