

World Heritage Sites in Turkey: Current Status and Problems of Conservation and Management

Türkiye'deki Dünya Mirası Alanları: Koruma ve yönetimde güncel durum ve sorunlar

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Abstract: Turkey, being signatory of the World Heritage Convention since 1983 has nine natural and cultural World Heritage sites inscribed on UNESCO World Heritage List. Out of these, seven heritage sites have cultural while two have both natural and cultural mix features. The World Heritage in Turkey is facing several problems due to poor management and current land use issues like almost of the developing countries. Most problems of these sites are local or based on specific issues while few are in common at all places. In order to ensure effective management and protection of these sites in Turkey, there is a strong need to formulate new management strategies and policies, after determining and analyzing the current status and related issues in these areas. Therefore, a project was conducted during 2007- 08 under title of "Determination of Current Status of the World Heritage Sites in Turkey". In this project Turkey's nine World Heritage sites has been thoroughly analyzed according to specific format to find out the current status and associated problems in this concern. Research findings have provided bases to develop effective management policies and strategies for protection of Turkey's World Heritage in terms of future.

Keywords: World Heritage, World Heritage Management, UNESCO, Turkey

Öz: Türkiye Dünya Mirası Konvansiyonu'nu imzaladığı 1983 yılından beri doğal ve kültürel özellikteki dokuz alan UNESCO Dünya Mirası Listesinde yer almaktadır. Bunlardan yedi miras alanı kültürel özellikte iken iki tanesi ise doğal+kültürel özellikte (mix type)dir. Hemen bütün gelişmekte olan ülkelerde olduğu gibi Türkiye'deki Dünya Mirası da çeşitli yönetim ve güncel arazi kullanımlarından kaynaklanan sorunlarla karşı karşıyadır. Bu sorunların bir bölümü tüm Dünya Mirası Alanlarında ortak olmakla birlikte her miras alanının kendine özgü sorunları da mevcuttur. Türkiye'deki Dünya Mirasının korunması ve etkin yönetiminin sağlanması için öncelikle bu alanlardaki mevcut durum ve sorunların saptanması, elde edilen bu güncel verilere dayalı olarak yeni yönetim stratejisi ve politikalarının belirlenmesi zorunludur. Bu amaçla 2007-08 yıllarında yürütülen "Türkiye'deki Dünya Mirası Alanlarının Güncel Durumlarının Saptanması" konulu proje kapsamında Türkiye'deki dokuz Dünya Mirasının güncel durumları, belirli bir format uyarınca sorgulanmış, bu alanların mevcut durumu ve sorunları saptanmıştır. Araştırma sonucunda elde edilen bulgular Türkiye'deki Dünya Mirasının korunması ve etkin yönetimi için geliştirilecek politika ve stratejilere temel oluşturacaktır.

Anahtar kelimeler: Dünya Mirası, Dünya Mirası Yönetimi, UNESCO, Türkiye

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1. Introduction

The United Nations Educational, Scientific and Cultural Organization (UNESCO) seeks to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity. Cultural heritage refers to monuments, groups of buildings and sites with historical, aesthetic, archaeological, scientific, ethnological or anthropological value. Natural heritage refers to outstanding physical, biological and geological formations, habitats of threatened species of animals and plants and areas with scientific, conservation or aesthetic value (UNESCO World Heritage Centre, 2008a:3).

In a destructive or even decaying scenario of global worthy natural and cultural assets due to slackness in maintenance, unplanned urbanization and development activities, UNESCO laid the foundation of an international agreement known as *World Heritage Convention* for the sake of humanity, by mobilizing international community. This Convention has been acknowledged in UNESCO General Conference Meeting held in Paris on 16 November 1972, putting emphasize on working together at national levels as prerequisite on World Heritage issue on priority basis (Ahunbay, 2006:17; UNESCO World Heritage Centre, 2005a).

The World Heritage Convention has achieved a great deal during the three decades of its existence. Today, it is among the foremost international tools of conservation, and certainly among the best known. The success of the Convention is demonstrated by the almost universal membership (185 out of 191 current Members States of the United Nations are signatories or ‘States Parties’ to the Convention) and the large number of listed sites under its protection (890 sites in 148 countries as of 2009). Seldom has an international treaty based on a proactive approach by Member States been more successful.

Beyond these numbers, the World Heritage Convention has been able to achieve an even greater success: it has entered into the hearts and minds of millions of people, providing a tangible demonstration of the power and effectiveness of international cooperation. As a result, its impact has grown over time, inspiring ever greater involvement by governments, communities and individuals, universities, foundations and private sector enterprises (UNESCO World Heritage Centre, 2007a:17).

Almost all States Parties have by now submitted Tentative Lists. New categories for World Heritage sites have also been promoted, such as the categories of cultural landscapes, itineraries, industrial heritage, deserts, coastal-marine and small-island sites and transnational nomination (UNESCO World Heritage Centre, 2008a: 15).

According to World Heritage Convention, ratified by the participant countries in 1972, World Heritage sites are globally significant natural and cultural assets, which are protected, developed and managed for well being of mankind. UNESCO World Heritage Center (UNESCO WHC) is a sole authority to determine any area with unique natural and culture traits as World Heritage Site. The applicant countries prepare field documentations to be analyzed by UNESCO WHC, and in case of fulfilling sufficient criteria of requirements the area is declared as a World Heritage Site. UNESCO WHC is authorized to announce and advertise, however, participant country is bound to manage and monitor the related activities by her own. Moreover evaluation is made with help of UNESCO WHC bodies based on jointly prepared periodic reports about the field area.

To be included on the World Heritage List, sites must be of outstanding universal value and meet at least one out of ten selection criteria. The criteria are regularly revised by the Committee to reflect the evolution of the World Heritage concept itself. Until the end of 2004, World Heritage sites were selected on the basis of six cultural and four natural criteria. With the adoption of the revised Operational Guidelines for the Implementation of the World Heritage Convention, only one set of ten criteria exists. Nominated properties shall meet one or more of the following criteria (UNESCO World Heritage Centre, 2007a: 41):

- i. represent a masterpiece of human creative genius;
- ii. exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;
- iii. bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
- iv. be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
- v. be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;
- vi. be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria);
- vii. contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
- viii. be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;
- ix. be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;
- x. contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

World Heritage is perhaps the most significant recognition that can be given to a site's natural and/or cultural values. While many sites on the list are already protected under national legislation, listing engenders an international profile, fostering international scrutiny and providing cooperative mechanisms that support conservation management. World Heritage areas are designated over a range of land tenures. This does not change the ownership or application of national, provincial or local laws; but it does limit the scope of activities permitted in those areas-these must not threaten the universal, natural and cultural values of the area (Lockwood et al., 2006: 90).

Inscription of countries having areas of natural and / or cultural values on List of World Heritage Sites have some concrete and abstract but positive prospects. First of all, it appears constructive and impressive for a country to be included in such a prestigious list of places. In addition development of various economic activities, based on these sites, (for example, tourism, etc.), provide necessary financing for protection and management of these sites. Moreover these sites may play an important role from time to time to make a serious contribution to the economy of that country. Because of these reasons many countries want to register their own numerous areas of natural and/or cultural importance on List of World Heritage Sites. As of 2009, a total of 890 World Heritage Sites have been registered on behalf of 148 countries. Distribution of these sites according to their properties is given in Table 1.

Table 1: Number of properties inscribed on the World Heritage List

Type of property	Total number
Cultural properties	689
Natural properties	176
Mixed cultural and natural properties	25
Total	890

Source: UNESCO World Heritage Centre, 2009a.

Turkey, starting from 1985 through 1998, has inscribed 9 areas on World Heritage List (Figure 1). Features related to these areas are given on table 2.

Table 2. World Heritage Sites in Turkey and their properties

World Heritage	Year	Type of property	Province
Historic Areas of Istanbul	1985	Cultural	Istanbul
Goreme National Park and the Rock Sites of Cappadocia	1985	Mixed	Nevsehir/Kayseri
Great Mosque and Hospital of Divrigi	1985	Cultural	Sivas
Hattusha: The Hittite Capital	1986	Cultural	Corum
Mount Nemrut	1987	Cultural	Adiyaman
Hierapolis- Pamukkale	1988	Mixed	Denizli
Xanthos – Letoon	1988	Cultural	Antalya/Mugla
City of Safranbolu	1994	Cultural	Karabuk
Archaeological Site of Troy	1998	Cultural	Canakkale

Source: UNESCO World Heritage Centre, 2009b.

In Turkey, World Heritage Sites (WHS) experience a number of tribulations arising from management and current land use issues; this situation is not much different from almost all developing countries. Besides common issues like inadequate management and lack of policy formulation, some areas possess specific problems of their own nature. In general, for effective management of these areas, it is necessary to deal with various issues on priority basis such as lack of management plans, lack of coordination between area management institutions and concerning parties, deficiency of funding, limited foreign investment, insufficient social awareness and unsatisfactory promotion and advertisement. There are few basic factors that raise these problems such as inadequate data about present scenario of WHS, outdated information and statistics and absence of rehabilitation activities under a specific plan. It is compulsory to find out updated conditions of the areas to make practical decisions for efficient management in future. However, if participation is accepted as a fundamental principle then it is necessary to determine the parties, to measure public awareness and type of decision maker's approach towards WHS should be put in place. Resultantly a general policy and strategy for the World Heritage Sites may be generated in future.

Besides, formulation of successful policies and strategies for WHS by mean of identification of goals and methods may enables to provide more effective protection of these areas along with expected social and economic benefits.

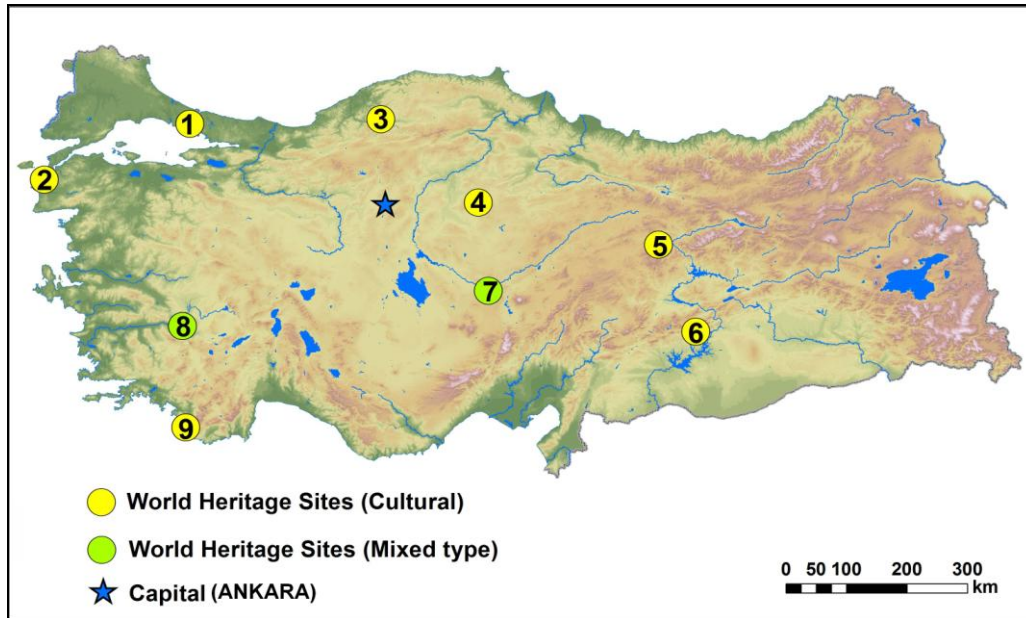


Figure 1. World Heritage Sites in Turkey:

- (1) Historic Areas of Istanbul; (2) Archaeological Site of Troy; (3) City of Safranbolu; (4) Hattusha: The Hittite Capital; (5) Great Mosque and Hospital of Divrigi; (6) Mount Nemrut; (7) Goreme National Park and the Rock Sites of Cappadocia; (8) Hierapolis- Pamukkale; (9) Xanthos – Letoon

In order to protect WHS of Turkey and to ensure effective management, it is necessary to identify the present situation and related problems of these areas at first. It is also required to make new strategies and policies, on the basis of up to date facts and figures, for preservation of these sites in a flourishing manner.

2. Scope and Purpose

The purpose of this study is to highlight the issue of protection of World Heritage Sites in Turkey. The study was undertaken in a critical manner by the authors on behalf of UNESCO National Commission for Turkey, which evaluated the decisions taken for in a project known as “*Determination of Current Situation of the World Heritage Sites in Turkey*”. In this project, current status and coupled issues of Turkey's nine World Heritage Sites has been analyzed thoroughly under a particular layout (Somuncu, Yiğit and Bölükbaşı-Ertürk, 2007; Somuncu, Yiğit and Şenyurt, 2007; Somuncu, Yiğit and Kılıççöte, 2007; Somuncu and Yiğit, 2007; Somuncu, Yiğit, Şahin-Güçhan and Kabasakal-Coutignies, 2007; Somuncu, Yiğit and Gürkan, 2007; Somuncu, Yiğit and Aslan, 2007; Somuncu, Yiğit and Çörtük, 2007; Somuncu, Yiğit and Yoldaş, 2008 ;UNESCO Türkiye Milli Komisyonu, 2009: 21-22; Zal and Aydınuraz, 2008: 29-30).

3. Methodology

Research was carried out, by using methods such as field observation, interview and evaluation of available resources. This research was conducted separately for each of nine World Heritage Sites in three phases. Before conducting fieldwork, related sources were scanned, topography maps, arial photos and satellite images of the area were obtained in advance and assessments were made as preliminary work. Following this during 2007 and 2008, planned fieldwork was conducted on nine World Heritage Sites. During fieldwork in World Heritage Sites, deep observations and investigations were made and photographs of related areas were taken. Besides, face-to-face meetings and interviews were also conducted with different stakeholders such as decision makers, facilitators, and local benefactors. All collected data was evaluated and the results were reported (Somuncu, Yiğit and Bölükbaşı-Ertürk, 2007; Somuncu, Yiğit and Şenyurt, 2007; Somuncu, Yiğit and Kılıççöte, 2007; Somuncu and Yiğit, 2007; Somuncu, Yiğit, Şahin-Güçhan and Kabasakal-Coutignies, 2007; Somuncu, Yiğit and Gürkan, 2007; Somuncu, Yiğit and Aslan, 2007; Somuncu, Yiğit and Çörtük, 2007; Somuncu, Yiğit and Yoldaş, 2008). These reports were compiled in which management and protection issues regarding World Heritage Sites were emphasized foremost. Moreover, these issues were discussed in a workshop participated by all stakeholders to maximize the outputs (Zal and Aydınuraz, 2008: 29-30). The report containing results from the field work in nine World Heritage Sites and results obtained from the workshop collectively have been published (UNESCO National Commission of Turkey, 2009).

4. Results

Inclusion of sites on the World Heritage list is an important step in ensuring their protection but does not, on its own, guarantee that the sites will meet the commitment to protection, conservation, presentation and transmission to future generations that designation as World Heritage entails. Despite the best efforts of countries, many World Heritage sites remain under pressure (Hockings et al., 2008: 8). In Turkey, significant problems arising from various causes regarding protection and management of World Heritage Sites has also been identified (Somuncu and Yiğit, 2009; 2008a; Somuncu, Yiğit and Bölükbaşı-Ertürk, 2007; Somuncu, Yiğit and Şenyurt, 2007; Somuncu, Yiğit and Kılıççöte, 2007; Somuncu and Yiğit, 2007; Somuncu, Yiğit, Şahin-Güçhan and Kabasakal-Coutignies, 2007; Somuncu, Yiğit and Gürkan, 2007; Somuncu, Yiğit and Aslan, 2007; Somuncu, Yiğit and Çörtük, 2007; Somuncu, Yiğit and Yoldaş, 2008). These problems can be divided into two main groups. The problems related to national World Heritage management system that are common problems found in all World Heritage Sites of Turkey are included in first group. The second group comprises of field-level problems which are specific to each World Heritage site and are different in nature from each other.

4.1. Issues Related to National World Heritage Management System

Problems, arising from the inadequate management system, associated to National World Heritage persist in Turkey's nine World Heritage sites registered on UNESCO World Heritage List. Steps towards solution of management system's flaws and faults, based on described issues, through appropriate tools and techniques, must be taken as a whole. Focal areas regarding these issues including, management plan; administrative structure; buffer zone; financial resources; visitor management; information vulnerability and promotion deficiency; social awareness regarding World Heritage Sites; protection activities; communication and cooperation between stakeholders related to World Heritage Sites protection and protection activities; monitoring; and staff problems; must be seriously considered.

4.1.1. Management Plan

Article 4 of the *World Heritage Convention* states that the duty of ensuring the protection and conservation of the World Heritage belongs primarily to the State Party and that the State Party will do all it can to this end, to the utmost of its own resources and, where appropriate, with international assistance and co-operation. Therefore, the prime responsibility for the management of the sites remains with the States Parties.

The World Heritage Committee has always been extremely respectful of the sovereign rights of the States Parties, the State Party's management responsibility and the particular conditions and characteristics of each State Party and site. It has deliberately refrained from imposing specific management practices and requires, for cultural properties, adequate legal and/or contractual and/or traditional protection and management mechanisms. For natural properties, the Committee is more specific and requires a management plan. The revised *Operational Guidelines* proposes an appropriate management plan or other management system for all sites.

These formulations recognise that there is diversity in management systems and that a management system for a particular World Heritage property is dependent on its specific circumstances.

It recommends however that common elements of a management approach should include:

- A cycle of planning, implementation, monitoring, evaluation and feedback;
- A thorough understanding of the property;
- The full involvement of partners and stakeholders;
- The allocation of necessary resources;
- Capacity-building; and
- An accountable and transparent system showing how a property is to be managed.

It also states that any management approach should include a mechanism for periodic reporting on a six-year cycle (UNESCO World Heritage Centre and ICCROM, 2004: 34).

Except the Hierapolis-Pamukkale World Heritage Area proper management plan does not exist for maintenance of any of the World Heritage sites in Turkey. Although a management plan has been prepared for Hierapolis-Pamukkale in 2002 but this plan has not yet implemented (Akan Mimarlik, 2002). It is observed that lack of an appropriate management plan is the most important obstacle in effective management and protection of WHSs.

4.1.2. Administrative Structure

Several government and non-government institutions are responsible for managing a single World Heritage Site. Lack of necessary communication and cooperation between these institutions is making the situation very confusing and problematic. Because, each of these institutions or authoritative departments works under their own rules and regulations in the field of management. For example in Hattusha, The Hittite Capital, two different departments have authority for management of the area. Being an archaeological and World Heritage Site the Ministry of Culture and Tourism while at the same time being a national park the Ministry of Environment and Forests is responsible for management of this area. Both the ministries have formulated the laws and regulations for management of area according to their own authorities and responsibilities. However, this situation often leads to multi-dimensional confusions and problems in terms of authority and responsibility for area management (Somuncu, Yiğit and Şenyurt, 2007: 36). Same problem exists in Goreme National Park and the Rock Sites of Cappadocia (Somuncu and Yiğit, 2007: 44).

4.1.3. Buffer Zone

Buffer zone is intended to protect World Heritage sites from negative influences. In other words, it represents a zone, that in itself is not of outstanding universal value, but that may influence a World Heritage site. The importance of the environment for the object must be properly recognized to be able to define a suitable perimeter as well as required protective measures for the buffer zone (Martin and Piatti, 2009: 12).

In Turkey no World Heritage Sites have any buffer zone. World Heritage Sites that are located in the tourist vicinity are facing serious problems due to increased number of tourists, urbanization and construction activities around the area. This situation puts increased pressure on WHSs that lead to destruction of these areas.

4.1.4. Financial Resources

Available financial resources for conservation and development of World Heritage are not sufficient for all areas. Each year specific amount of funds is allocated by the state for development of these areas. However, these allocated resources are inadequate to meet the needs of areas compared to their importance.

4.1.5. Tourism/Visitor Management Plan

Protected areas, particularly World Heritage sites, are some of tourism's main attractions, and are subject to growing visitation. The inscription of a site on the World Heritage List brings an inevitable and welcomed awareness and curiosity about the site and its outstanding values. It also increases the various activities that are proposed at the site and the number of tourists who visit it. When these are well planned for and organized respecting sustainable tourism principles, they can attract important funds and in kind contributions to the site and to the local economy (UNESCO World Heritage Centre, 2008a: 21).

There is no appropriate public use plan (tourism/visitor management plan) for World Heritage Sites in Turkey. Thus tourists are not forced to visit the area in a careful and restricted manner. This situation increases the risk of damage to historical ruins and natural values of importance (Somuncu and Yiğit, 2008b:401).

4.1.6. Information Vulnerability and Promotion Deficiency

Recognition of an area as World Heritage Sites and its inscription on UNESCO World Heritage List is possible by proper written and visual documentation. However, lack of recognition, orientation and even insufficient information signs in Turkey's all World Heritage sites, is a problem in itself. This situation results in meager emphasize upon high standards of these valuable sites that are not highlighted in proper fashion.

4.1.7. Social Awareness regarding World Heritage Sites

For too long, heritage has been dealt with in an isolated manner and by small groups of specialists. Progress has been made, particularly in the natural heritage sector, to open this up and to bring the valuation, conservation and management of heritage into a closer relationship with the communities. This is crucial, not only to facilitate heritage conservation but also to strengthen the Convention and the relevance of the World Heritage List (UNESCO World Heritage Centre, 2006a: 29).

Local people can only play an active role in conservation and management of World Heritage sites if they are aware of its value. During the field work in nine World Heritage Sites face to face interviews were conducted with a total of 418 people from different interest groups local people and visitors (excluding interviews with public officials). Local people living and working inside or near

the World heritage sites or local and foreign tourists in the area were questioned whether they have any information about the status of area as World Heritage Site, in which they reside or visit. The results obtained are shown in Table 3 (Somuncu, Yiğit and Bölükbaşı-Ertürk, 2007: 26; Somuncu, Yiğit and Şenyurt, 2007: 24; Somuncu, Yiğit and Kılıççöte, 2007: 22; Somuncu and Yiğit, 2007: 22; Somuncu, Yiğit, Şahin-Güçhan and Kabasakal-Coutignies, 2007: 51 ; Somuncu, Yiğit and Gürkan, 2007: 9; Somuncu, Yiğit and Aslan, 2007: 44; Somuncu, Yiğit and Çörtük, 2007: 13; Somuncu, Yiğit and Yoldaş, 2008: 20).

Out of a total 418 people who were interviewed 104 people were living in the vicinity of WHS and remaining 314 people were foreign and local tourists. It was identified that 27.88% of the local people who live or work inside the area know about the status of the area as WHS. While 72.11% of the people were not aware of or had an idea about this issue.

Table 3. Social awareness regarding World Heritage Sites

World Heritage	Interviewed persons		Knowledge of Local People		Knowledge of Tourists	
	Local people	Tourist	Yes	No	Yes	No
Historic Areas of Istanbul	5	62	-	5	33	29
Goreme National Park and the Rock Sites of Cappadocia	15	92	1	14	21	71
Great Mosque and Hospital of Divrigi	11	4	-	11	1	3
Hattusha: The Hittite Capital	18	53	6	12	29	24
Mount Nemrut	11	16	1	10	4	12
Hierapolis- Pamukkale						
Xanthos-Letoon	27	6	4	23	1	5
City of Safranbolu	17	26	17	-	6	20
Archaeological Site of Troy	-	55	-	-	49	6
Total	104	314	29	75	144	170

Local people residing within surrounding areas of historical and natural importance are poorly aware of their values and protected status. This situation creates a major shortcoming in process of preservation of World Heritage Sites.

On the other hand tourists presented a different situation. In nine WHS 45.85% of 314 tourists had prior knowledge about the status of the area; however, 54.14% had no idea about the situation. Majority of tourists who had prior knowledge about WHS included foreign visitors.

Like local population, tourists' knowledge about the characteristics and nature of the area is of great importance for the protection of the area. Because, World Heritage Sites not only in Turkey but all over the world, at the same time function as major tourist attraction areas and face serious problems due to visitors pressure over there. Therefore, it is of great importance in terms of protection that tourists who visit the area should know the importance of the area they visit.

4.1.8. Communication and Cooperation Between Stakeholders Related to World Heritage Sites Protection and Protection Activities

World Heritage properties are of Outstanding Universal Value and should be conserved and managed to the highest possible standards. They should serve as examples and best practices for the conservation and management of the entire cultural and natural heritage in the States Parties and the

region. For this to become reality, it is indispensable that all interest groups have a clear understanding of World Heritage concepts and the implications of World Heritage designation on the conservation and management practice at the property (UNESCO World Heritage Centre, 2006a: 37). Effective management usually includes engaging with stakeholders who influence (both positively and negatively) the site's values, and who may be dependent on the site's resources. This requires involving parties other than managers in assessment processes to gain additional perspectives on the World Heritage site and its management. Local communities are a particularly important stakeholder group to engage (Hockins et al., 2008: 28).

It is observed that there is lack of adequate communication and cooperation among stakeholders working for preservation of World Heritage Sites. Some protection activities are faulty to the extent that they could be discussed in academic circles. Concerning conservation and development of Heritage areas, stakeholders' issues must be approached with the same interest. Joint efforts and cooperation must be considered as basic conditions regarding this issue.

4.1.9. Monitoring

Monitoring is collecting information on indicators repeatedly over time to discover trends in the status of the World Heritage site and the activities and processes of management (Hockins et al., 2008: 102). In the World Heritage Sites, there is no official monitoring activity to check the effectiveness of management programs.

4.1.10. Staff Problems

Shortage of official staff dealing with protection and management activities in WHSs is another problem. Therefore, necessary measures must be taken in terms of both security and identification of problems in related areas to minimize any undesired vulnerability by locals or tourists.

4.2. Site Level Issues

Some of the problems related to national WHS management system are due to site level issues. Each of the World Heritage Area has its own particular problems. These problems are compiled under title of "*Site Level Issues*", to show difference in problems for each World Heritage Area. These sites and related problems are mentioned below in order of risk for more specific solutions:

4.2.1. Historic Areas of Istanbul

Strategically located on the Peninsula between the Balkans and Anatolia, the Black Sea and the Mediterranean, Istanbul has been associated with the major political, religious and artistic events for more than 2000 years. The cultural heritage of Istanbul is shaped by its location as a strategic entrance to Anatolia, central Asia and the Middle East on the one hand, and to Europe on the other. The city of Istanbul, which was built at the crossroads of the two continents, was the capital of three great empires: The East Roman, The Byzantine and the Ottoman. During these periods emperors and sultans, drawing upon the wealth of their realms, embellished the city with palaces, temples, churches and mosques, other public buildings and structures.

The Historic Areas of Istanbul, inscribed in the World Heritage List in 1985, are composed of four main areas: The Archaeological Park, Süleymaniye Mosque and its associated Conservation Area, Zeyrek Mosque and its associated Conservation Area, Land Walls of Istanbul, located in the historical peninsula (Figure 2).

The Historic Areas of Istanbul was inscribed on the UNESCO World Heritage List under cultural criteria C (i), (ii), (iii), and (iv):

- Criterion (i) The proposed cultural property includes unique monuments, and masterpieces of universal architecture such as St. Sophia which was built by Anthemios of Tralles and Isidoros of Milet in 532-537 and the Süleymaniye mosque, a masterpiece of Sinan architecture;
- Criterion (ii) Throughout history, the monuments in the city's center have exerted considerable influence on the development of architecture, monumental arts and the organization of space, both in Europe and in Asia. Thus, the 6,650 meter terrestrial wall of Theodosius II with its second line of defences, created in 447, was one of the leading references for military architecture even before the mosaics of the palaces and churches of Constantinople influenced the Eastern and Western art;
- Criterion (iii) Istanbul bears unique testimony to the Byzantine and Ottoman civilizations;
- Criterion (iv) The Palace of Topkapi and Sulaymaniye mosque with its annexes (Caravanserail, madrasa, medical school, library, hammam, hospice, cemetery, etc.) provide the best examples of ensembles of palaces and religious coplexes of the Ottoman period (UNESCO World Heritage Centre, 1985a).

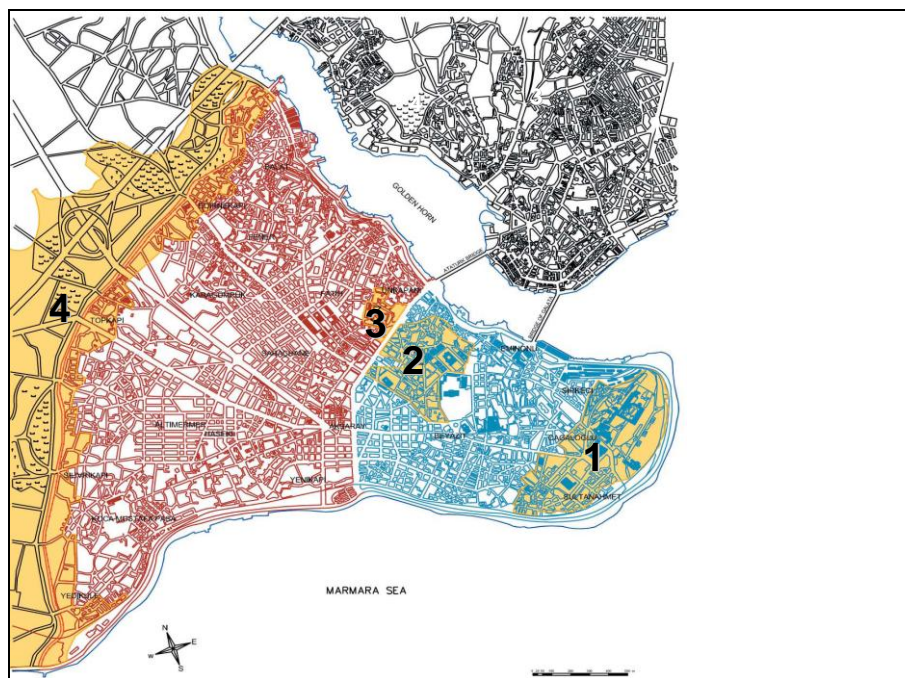


Figure 2. The present World Heritage boundaries, as redefined in 1998-9 in collaboration with the UNESCO World Heritage Centre. The four core areas (numbered and indicated in buff) are (1) the Archaeological Park of Sultanahmet, (2) Süleymaniye, (3) Zeyrek and (4) the Land Walls of Theodosius (UNESCO World Heritage Committee, 2006:11).

Historical Areas of Istanbul has been facing serious threats and problems since their inscription on World Heritage List. These threats along with nature and size of the problems today in Turkey make them highest degree risk areas on World Heritage Sites list.

All problems related to national world heritage management system are found in Historical Areas of Istanbul on the World Heritage List. Besides, field level serious threats and challenges are also found there. Major threats related to this issue are as follows:

4.2.1.1. Ottoman-period timber structures are in danger

Historical timber houses are found in Süleymaniye and Zeyrek areas which are located within World Heritage Site. Some of the timber houses in Süleymaniye and Zeyrek have been restored for protection and conservation. However, the majority of timber houses are under threat because of

several reasons such as omission, negligence and fire (Photo 1-2). Even portions of these houses, depending on these causes have disappeared. Some timber houses have lost their original structure due to the inappropriate restoration work. Some houses have been completely demolished and replaced by imitations made up of different materials.

In 2006, many areas from World Heritage Sites of the historical peninsula including Süleymaniye, Topkapı Palace and surroundings were designated as areas under restoration within the extent of a law number 5366 entitled as "Law of preservation, restoration and sustainable use of damaged original historical and cultural assets". Announcements were made for restoration of these areas and determined boundaries of these areas have been published in the Official newspapers of different dates. As a result, a large part of historical peninsula has become the area under restoration. In these areas, serious problems persist during implementation of restoration activities.



Photo 1. A section of timber houses in historical peninsula has been restored. (M.Somuncu)



Photo 2. Lots of historical timber houses have been neglected and abandoned. (M.Somuncu)

Article 7 of this law emphasizes legal obligations for Turkey in accordance with international law. According to this article the administration related to implementation of restoration work in those areas of historical peninsula that have been inscribed on World Heritage List must comply with the provisions of World Heritage Convention. However, in Süleymaniye, which has been announced as the area under restoration, demolition has been made by the company named KIPTAS related to the Metropolitan Municipality which has purchased some of these houses for restoration purpose. Although the demolishing of structures with unsuitable texture has been reported, but it has been observed that some traditional structures have also been disappeared. However, as it has been emphasized in UNESCO / ICOMOS Joint Review Mission report too, imitate construction should be avoided for restoration of the historical texture (Somuncu, Yiğit and Gürkan, 2007: 35; UNESCO World Heritage Committee, 2006: 43).

4.2.1.2. Restoration of the land walls

Istanbul's city walls extend for more than 20 km. The city walls of Istanbul suffered severely from natural disasters especially from earthquakes, since their construction in the fifth century and have been restored for 1500 years (Çılı et al., 2007: 40) (Photo 3). In recent period, a large part of the restoration work in the land walls is not in accordance with international standards (Photo 4). This case has been consistently stated by the World Heritage Committee since 1994 (UNESCO World Heritage Committee, 2006:20). In addition, this case has been continuously emphasized in UNESCO /

ICOMOS Joint Review Mission reports and it is demanded that restoration work should be in compliance with international standards (UNESCO World Heritage Committee, 2006:20, 2008:20). Another problem in this regard is that a large part of World Heritage asset of the walls and surroundings are not being protected in worthy manner. It is not enough only to restore the walls. It is important to provide care and protection of the area after the restoration as well (Somuncu, Yigit and Gürkan, 2007:27). Thus, a symposium was arranged on 20-22 January 2007 to highlight the importance of this issue and discuss it on scientific basis. At the end of symposium a declaration was published on the issue of protection and conservation of city walls (Istanbul Metropolitan Municipality, 2007:89).



Photo 3. The land walls of Istanbul suffered severely from natural disasters especially from earthquakes. (M.Somuncu)



Photo 4. Part of the land walls under restoration work. (M.Somuncu)

4.2.1.3. Intervention and effects in important architectural and archaeological monuments

An extension to the Four Seasons Hotel over the archaeological remains of part of the Great Palace of the Roman and Byzantine empires is planned as a result of downgrading protection from an “archaeological park” to an “urban and archaeological site” in the new “Development for Conservation Plan” (UNESCO World Heritage Committee, 2006:24). Implementation has made concerning this issue and in the area of archaeological park next to the old hotel, a new building has been built. This practice is incompatible with the nature of World Heritage Sites and creates an objectionable situation. Thus, in review reports of UNESCO/ICOMOS Joint Review Mission inaccuracy in this issue has constantly remained under attention (UNESCO World Heritage Committee, 2006:25; 2008: 32).

Restoration work practices in some small-scale structures like mosques and churches were of low quality and not in accordance with international standards. This situation caused irreparable problems to monumental structures.

4.2.1.4. Impact of new large-scale development proposals on the World Heritage property and its setting

In historical Istanbul, a large number of planned large-scale construction and infrastructure projects are found. Foremost projects include the Golden Horn metro bridge, Galataport Project, Dubai Tower and the planned construction of high buildings in Haydarpaşa. However, these large-scale projects that would be seen from the historical peninsula will distort the visual integrity of World Heritage Sites of this region. In the planning stage of these projects visual impact assessment studies based on topographic analysis were not performed. The event of the projects carried out without visual

impact assessment will deteriorate the visual and historical integrity of the World Heritage areas and silhouette of historical city of Istanbul (Somuncu, Yiğit and Gürkan, 2007: 14; UNESCO World Heritage Committee, 2006:33; 2008: 9).

Besides the existence of problems related to historical areas of Istanbul as discussed briefly there are also many threats and problems based on small-scale structures (Somuncu, Yiğit and Gürkan, 2007; UNESCO World Heritage Committee, 2006; 2008).

Armed conflict and war, earthquakes and other natural disasters, pollution, poaching, uncontrolled urbanization and unchecked tourist development pose major problems to World Heritage sites. These can threaten the very characteristics for which a site was originally inscribed on the World Heritage List. Dangers can be ‘ascertained’, referring to specific and proven imminent threats, or ‘potential’, when a property is faced with threats which could have negative effects on its World Heritage values (UNESCO World Heritage Committee, 2008: 17).

Over the last half-century, Istanbul has undergone a tumultuous transition from an ancient metropolis to a sprawling megacity, growing from just over 1 million inhabitants in 1945 to an estimated 12.5 million today. (EMBARQ, 2009). Therefore, Istanbul is a city where planning, transportation, urban aesthetics and urban conservation problems have been under discussion for many years. The Historic Areas of Istanbul World Heritage Site is a large and complex property suffering significant problems of inner-city decay and neglect. Consequently, Istanbul’s rich heritage at risk and also it face to face inscription on the List of World Heritage in Danger.

Most recently, these threats have resulted in World Heritage Committee decisions at its 27th, 28th, 29th, 30th, 31st, 32nd and 33rd sessions and requests for progress reports from the State Party to enable the Committee to review a potential inscription of the property on the List of World Heritage in Danger (UNESCO World Heritage Centre, 2004a: 80; 2004b: 124; 2005b: 89; 2006b: 109; 2007b: 107; 2008b: 132; 2009c: 156). State Party prepared and submitted 6 progressive reports on the state of the conservation of the site in 2004, 2005, 2006, 2007, 2008 and 2009. Final decision will be taken in 2010 (Somuncu, Yiğit and Gürkan, 2007; TMMOB, 2006; UNESCO World Heritage Committee, 2008: 7).

4.2.2. *Goreme National Park and the Rock Sites of Cappadocia*

Considering tourist characteristics of a constrained area as per needs of present, a section of the Cappadocia region was inscribed on UNESCO World Heritage List in 1985 according to criteria, i, iii, v, vii and was placed at 357th order as “*Goreme National Park and the Rock Sites of Cappadocia*”.

- Criterion (i) Owing to their quality and density, the rupestral sanctuaries of Cappadocia constitute a unique artistic achievement offering irreplaceable testimony to post-iconoclast period Byzantine art;
- Criterion (iii) The rupestral dwellings, villages, convents and churches retain the fossilized image, as it were, of a province of Byzantine Empire between the 4th century and the Turkish invasion;
- Criterion (v) Cappadocia is an outstanding example of a traditional human settlements which has become vulnerable under the combined effects of natural erosion and, more recently tourism;

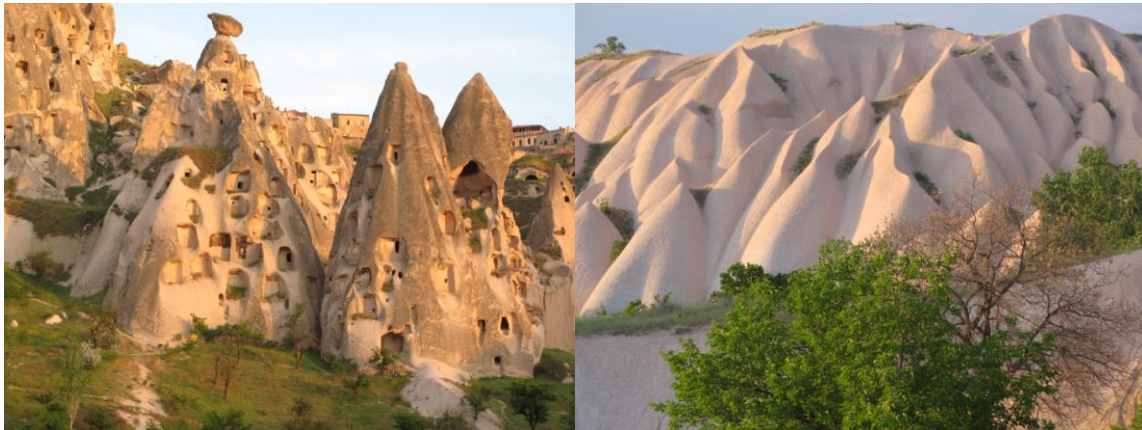


Photo 5. Old settlements inside the fairy chimneys are best examples of the cultural landscape. (M.Somuncu)

Photo 6. Badlands topography formed due to erosion on the tuff. (M.Somuncu)

- Criterion (vii) The Göreme Valley meets criteria (vii) for natural properties as it contains unique natural features and displays a harmonious combination of natural and cultural landscape element (UNESCO World Heritage Centre,1985b) (Photo 5-6).

Sections of Cappadocia region on the World Heritage List includes the Goreme National Park, Derinkuyu and Kaymakli Underground cities, Karain, Karlik and Yesiloz in Nevsehir Province and former settlement areas of Soganlı village in Yesilhisar district of Kayseri province.

The damage of natural and cultural structures in Goreme National Park and the Rock Sites of Cappadocia is most important issue to be considered (Photo 7-8). Distortion, cracking and collapse has occurred due to weathering in “*Fairy chimneys*” and churches of the valley along with other valuable sites of historical and natural importance. In the rock churches, incorporated as cultural valuables, man-made destruction cannot be avoided. In spite of prohibition of new construction activities in the area, construction of illegal buildings (construction of new sites by cutting off the rocks and specific house encroachments) has damaged natural and historical texture. At the same time, in the area of visible terraces of Goreme Valley, development of tourist service areas contrary to the natural and cultural identity has resulted in increased polluted scenery. In the Underground City of Derinkuyu various problems such as electricity, water and sewage systems of the upper settlements and the infrastructure in destructive manner has been noticed. Besides, constructions at the upper part of Derinkuyu Underground City have put significant strain for underground city with risk of collapse. As Turkey’s one of major tourist regions, intense visitor pressure in this area has also increased demolition of World Heritage Site (Somuncu and Yiğit, 2007).

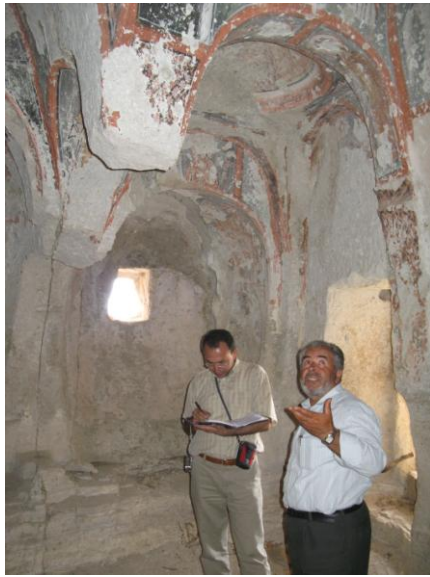


Photo 7. Some of historic buildings and frescoes have been damaged by local people. (M.Somuncu)



Photo 8. On March 6, 2007, 3 people died and one person got serious injuries due to rock fall at Temenni Hill in Urgup. (M.Somuncu)

4.2.3. Great Mosque and Hospital of Divrigi

Great Mosque and Hospital of Divrigi was inscribed on UNESCO World Heritage List in 1985 according to criteria, “cultural” i, iv and was placed at 358th order:

- Criterion (i) A unique artistic achievement, this cultural property in itself represents one of Islamic architecture’s most beautiful built spaces (Photo 7-8-9-10);
- Criterion (iv) The Divrigi Mosque is an outstanding example of Seldjukian mosques in Anatolia having neither a courtyard, colonnades nor an uncovered ablutions basin but which (owing perhaps to the harshness of the climate) organizes all religious functions in an enclosed area. A charitable foundation, the contiguous hospital, makes an already exceptional ensemble even more interesting thanks to a princely command (UNESCO World Heritage Centre, 1985c).



Photo 9. Divrigi Great Mosque and Hospital. (M.Somuncu)

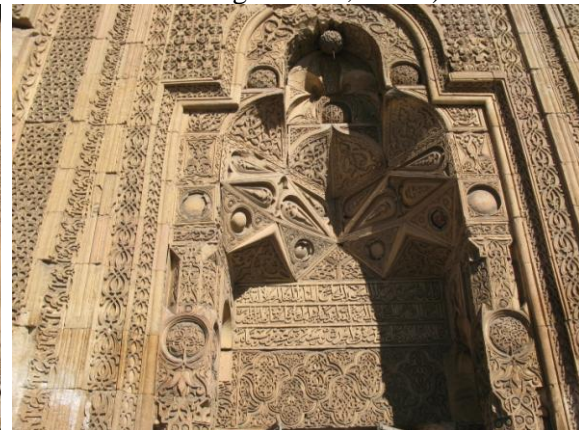


Photo 10. Details of Great Mosque from Western Crown Gate. (M.Somuncu)



Photo 11. Great Mosque Northern Crown Gate. (M.Somuncu)



Photo 12. Hospital Crown Gate. (M.Somuncu)

World Heritage Site of Great Mosque and Hospital are situated in Divrigi district center of Sivas Province in Central Anatolian Region of Turkey. Mosque, adjacent hospital and tomb within hospital are found in a planned rectangular block shape building. On the southwest slope of the hill where the castle Divrigi is located, a flat surface has prepared artificially. Various repairs, modifications and encroachments have been made to Divrigi Great Mosque and Hospital like other structures that were constructed in Anatolia in 13th century. This site is among one of Turkey's nine World Heritages that are under high-risk. Layout stabilization issues, humidity and salinity problems, structural problems such as deterioration of stones are found at the site as a result of destruction within time or weak restoration activities. Construction of concrete-made section adjacent to eastern sidewall with immobile drainage system has caused water logging in structures that leads to damage of rocks. It is important to solve site level problems for protection of the only monumental remains of Divrigi Great Mosque and Hospital. Lose or extinction of remains is expected unless appropriate solutions of these problem (Somuncu, Yiğit, and Kılıççöte, 2007).

4.2.4. Hattusha: The Hittite Capital

The World Heritage Site of Hattusha is located within boundaries of Bogazkale district in Corum province Central Anatolian region. One of the most important power of former Onasya, capital of the Hittite Kingdom, the Hattusha was established in mid 17th century and its presence continued until the early 12th century BC. The architectural works of art belonging to 13th century BC, illustrate magnificence of that era. Developed before 2000 BC, the ancient city of Hattusha was inscribed in UNESCO World Heritage List in 1986 under criteria i, ii, iii, and iv. World Heritage inscription criteria:

- Criterion (i) The city's fortifications, along with the Lions' gate and the Royal Gate and the Yazilikaya rupestral ensemble together with its sculptured friezes, represent unique artistic achievements as monument;
- Criterion (ii) Hattusha exerted dominating influence upon the civilizations of the 2nd and even the 1st millennium B.C. in Anatolia and Northern Syria;

- Criterion (iii) The palaces, temples, trading quarters and necropolis of this political and religious metropolis provide a comprehensive picture of a capital and bear a unique testimony to the disappeared Hittite civilization;
- Criterion (iv) Several types of buildings or architectural ensembles are perfectly preserved in Hattusha: the royal residence, the temples and the fortification (UNESCO World Heritage Centre, 1986).

Hattusha has also been inscribed on UNESCO Memory of the World List in 2001 after excavation of the cuneiform tablet archives now found in the archaeological museums of Ankara and Istanbul. There is a historical National Park known as Bogazkoy-Alacahoyuk in Hattusha World Heritage Site. In 1931, the Germans started excavation of area that is still ongoing. Andreas Schachner, President of the German Archaeological Institute, is conducting excavation works at present.

Serious security vulnerability has found in the site area. This situation creates various threats and risks to Site area. Keeping in view the conditions, illegal excavation activities are most important. Risk of destruction activities in valuable remains by people with bad intention is another threat to the site. There is no proper visitor management plan in the site area. Therefore tourists do not visit the site in restricted manner in order to ensure safety and security. This situation increases the risk of damage to ancient ruins.

People living in 199 households in protected area face various problems. This situation results in non-cooperative attitude of local people towards protection activities conducted in the site. One of the most important threatening issues to Hattusha is continuation of mining activities close to site area. In spite of declaring as protected site, Ministry of Energy and Natural Resources has been granted two licenses for conducting excavations in the region in search of minerals. These activities have been halted by the Ministry of Culture and Tourism in order to protect the site area. Grazing activities on large and small scale are being conducted in the site area although prohibited by law. In addition to this, ancient area is being used as transition way in order to shift lots of animals to other pastures. Certainly, this situation is in contradiction with the properties of the site area. Moreover, environmental pollution caused by grazing activities can damage Hattusha ancient remains (Somuncu, Yiğit and Şenyurt, 2007).

4.2.5. Mount Nemrut

World Heritage Site of Mount Nemrut is located within the boundaries of Karadut village, Kahta District, Adiyaman Province in Southeastern Anatolia Region. The site preserves sacred space (Hierethesion) build by King of Commagene Antiochus-I on the mountain top along with tomb-sanctuary known as Tumulus that is surrounded by huge statues, stone slabs with bas-relief figures and inscriptions. UNESCO has inscribed Mount Nemrut to World Heritage List since 1987 under criteria i, iii, and iv:

- Criterion (i) The tomb of Antiochus I of Commagene is a unique artistic achievement. The landscaping of the natural site of Nemrut Dag is one of the most colossal undertakings of the Hellenistic epoch (some of the stone blocks used weigh up to nine tons);
- Criterion (iii) The tomb or the Hierotheseion of Nemrut Dag bears unique testimony to the civilization of the kingdom of Commagene. Antiochus I is represented in this monument as a descendant of Darius by his father Mithridates, and a descendant of Alexander by his mother Laodice. This semi-legendary ancestry translates in genealogical terms the ambition of a dynasty that sought to remain independent of the powers of both the East and the West;
- Criterion (iv) More so than the tombs at Karakus and Eski Kahta, the tumulus at Nemrut Dag illustrates, through the liberal syncretism of a very original pantheon, a significant historical period. The assimilation of Zeus with Oromasdes (the Iranian god Ahuramazda), and Heracles

with Artagnes (the Iranian god Verathragna) finds its artistic equivalent in an intimate mixture of Greek, Persian and Anatolian aesthetics in the statuary and the bas reliefs (UNESCO World Heritage Centre, 1987).

The sacred site of Antiochus-I covers an area of about 2.6 hectares (26,000 m²) while diameter of Tumulus is approximately 140 meters located on a height of 2206 meters. A part of excavations and research works throughout the history on World Heritage Site has lead to negative consequences. Especially, after the year 2001, intervention to the statues made by research team under supervision of Prof. Dr. Brijder without the necessary preliminary research work, has created serious problems in terms of protection of the site. Deterioration of statues and steles is increasing due to external factors (Photo 13). Therefore, the steles have been removed from West Terrace of Tumulus to Laboratory (Photo 14). Actual height of Tumulus has reduced due to dispersal of original material of slag towards eastern and southern walls. In terms of transportation the road and pathways in the World Heritage Site has made with materials inappropriate to the climatic conditions of the region. Besides, these are maladjusted with natural environment in terms of colors and textures that creates unpleasant presentation for visitors to the area. There are also several buildings made for various purposes in the site area characterized as temporary, permanent, and remains. Presence of these structures that are discordant with environment damages the impression of site. Tourists coming to the area visit the site in unrestricted and undefined fashion (e.g. climbing on statues and Tumulus) put serious harm to historic ruins. Besides, every year at the occasion of festival in World Heritage Site held with large participation, dispersal of visitors to all areas of ancient remains gives serious damage to the environment. (Somuncu, Yiğit, Şahin-Güçhan and Kabasakal-Coutignies, 2007).

4.2.6. Xanthos-Letoon

Located within the borders of Antalya and Mugla provinces of the southwestern region of Turkey, Xanthos-Letoon, was inscribed on UNESCO World Heritage List on 484th number in 1988 according to criteria ii and iii:

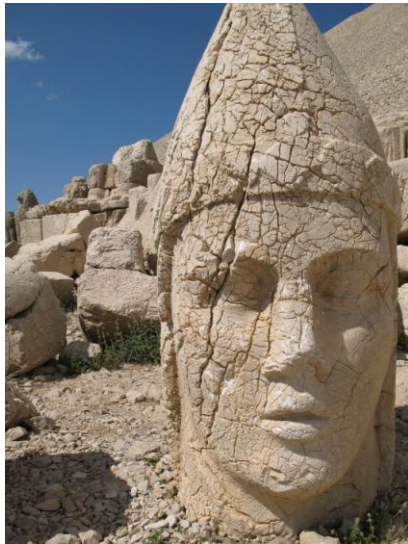


Photo 13. Deterioration of some statues is increasing due to external factors. (M.Somuncu)



Photo 14. The steles have been removed from West Terrace of Tumulus to Laboratory. (M.Somuncu)

- Criterion (i) Xsanthos directly influenced Lycia throughout Antiquity, as can be seen for example at the archaeological sites of Yatara or Pinara. However, it also considerably influenced the neighboring provinces. The Halicarnassus Mausoleum, which the Ancients ranked as one of the Seven Wonders of the World, is a direct descendant of Xanthos' Nereid Monument;
- Criterion (iii) Xanthos and Letoon bear exceptional testimony to the Lycian civilization, both through the many epigraphic texts found on the 2 sites as well as by the remarkable funerary monuments preserved there or originating from the area (UNESCO World Heritage Centre, 1988a).

The most important and largest city of the Lycian region, Xanthos, was established on high cliff adjacent to eastern bank of Xanthos River (the River Spouse) mentioned with the same name in ancient ages. Letoon, a sacred place of Lycian Union, is found in the west side of river Spouse drainage at a distance of 4 km from Xanthos. Parallel to the historical development of Xanthos, in this religious center, festivals of Lycian Union were celebrated and, priests of area showed their high esteems to the Bishop of Lycian Union (Courtils, 2003).

The city of Xanthos is divided into two parts by roads that connect eastern and northern Villages from town of Kinik. This situation primarily causes of security vulnerability to the areas. Besides, shudder caused by passing heavy vehicles on the roads adjacent to site area damages the historical ruins. Moreover the security services are inadequate in terms of protection of the World Heritage Site. Residential areas and greenhouses surround the Sacred Place of Letoon so that effective protection activities cannot be operated between World Heritage Site and other important areas of concern in an interconnected manner. Therefore, World Heritage site faces serious environmental stress in this miserable condition. Rise of underground water table in the area is source of damage of Heritage site by covering it with stagnant water. As a result of rising water table, tall aquatic plants have enclosed a large segment of the site area. This situation has created an unpleasant image along with making access of visitors hard to the historical remains (Somuncu, Yiğit and Çörtük, 2007).

4.2.7. Hierapolis-Pamukkale

Hierapolis-Pamukkale World Heritage Site is located about 20 km north of Denizli province Center in the Aegean region of Turkey. This site, with travertine and the ruins of the ancient city of Hierapolis, is Turkey's most prominent natural, historical and tourist valuable asset. Hierapolis-Pamukkale, Heritage Site was inscribed on World Heritage List in 1988 according to the criteria iii and iv first, then criteria vii (Before natural iii):

- Criterion (iii) Hierapolis is an exceptional example of a Greco-Roman thermal installation expressly established on an extraordinary natural site. The therapeutic virtues of the waters were exploited at the various thermal installations which included immense hot basins and pools for swimming. Hydrotherapy was accompanied by religious practices, which were developed in relation to local cults. The temple of Apollo, which includes several Chthonian divinities, was erected on a fault from which noxious vapors escaped. The theatre, which dates from the time of Severus, is decorated with an admirable frieze depicting a ritual procession and a sacrifice to the Ephesian Artemis. The necropolis, which extends over 2 kilometers, affords a vast panorama of the funerary practices of the Greco-Roman epoch;
- Criterion (iv) The Christian monuments of Hierapolis, erected between the 4th and the 6th centuries, constitutes an outstanding example of an Early Christian architectural group with a cathedral, baptistery and churches (Photo 15). The most important monument, situated outside the north-west wall of the city, is the martyrium of St. Philip. At the top of a monumental stairway, the octagonal layout of the building is remarkable because of its ingenious spatial organization. Radiating from the central octagon are chapels, polygonal halls and triangular rooms which combine to culminate in a square structure encircled by rectangular cells bordered with porticoes;

- Criterion (vii) to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance (UNESCO World Heritage Centre, 1988b) (Photo 16).



Photo 15. The ancient city of Hierapolis. (M.Somuncu)



Photo 16. Pamukkale travertine terraces. (M.Somuncu)

Despite the need to close the traffic in site area, the asphalt road that passes through the cemetery (necropolis) over the ancient remains is continuously in use. In the east of site area, categorized as first

degree protection site at the top of ancient theater lies an illegal settlement known as "*Oren Mahallesi*". Judicial process related to this settlement area was started about 20 years back but still continuing without any resolution. Archaeological excavation work has led to slow progress due to short duration and presence of hard travertine layers in the area.

One of the most striking problems of the area is absence of management plan related to life-giving water from travertine. Moreover, the thermal water flow that feed travertine has decreased as compared to previous times. Flow of thermal water that feeds the travertine has decreased from 360 lt/sec to 273 lt/sec. If flow rate of water decreases further due to natural or human factors (illegal drilling, etc.) the future of travertine would be in danger just as in past years. In the area of travertine an inclination or bend is found in the whitish front side of travertine due to continuous circulation of water everywhere. However, in a natural environment, in terms of lithological as well as vegetation, the creation of colors contrast makes the area more attractive (Somuncu, Yiğit and Yoldaş, 2008).

4.2.8. City of Safranbolu

Safranbolu, particular to Turkey and World in general, is one of the best examples of preservation of environment formation of human historical settlements. Based on a very old history and rich culture, the city was a center of economic prosperity during strongest period of Ottoman Empire. Safranbolu of present era is a unique city that represents all traditional characteristics of Turkish social life by depicting its original historical and cultural environment. There are a total of 1123 protected structures in the city including historical houses, monumental and religious buildings. Significance of the city starting from the academic level of interest gained international attention with the announcement of its protected status in 1976. The city was inscribed on World Heritage List according to criteria ii, iv, and v:

- Criterion (ii) By virtue of its key role in the caravan trade over many centuries, Safranbolu enjoyed great prosperity and as a result it set a standard in public and domestic architecture that exercised a great influence on urban development over a large area of the Ottoman Empire;

- Criterion (iv) The caravan trade was for centuries the main commercial link between the Orient and Europe. As a result, towns of characteristic type grew up along its route. With the coming of railways in the 19th century, these towns abruptly lost their *raison d'être* and most of them were adapted to other economic bases. Safranbolu was not affected in this way and as a result has preserved its original form and buildings to a remarkable extent;
- Criterion (v) The collapse of the caravan trade had a catastrophic effect on Safranbolu. Its proximity to the Karabük steelworks has given it a new socio-economic role, but it is still vulnerable to external pressures, and so continuous efforts must be made to preserve the traditional townscape (UNESCO World Heritage Centre, 1994).

Construction activities in areas adjacent to the boundaries of site exert serious pressure upon World Heritage Site (Photo 17). There are some difficulties related to protection and restoration work in Safranbolu. Apathetic stance towards protection of buildings prevails in the area due to disputes among partners or migration of property owners to other areas (Photo 18).

Some inhabitants of area cannot be benefited from public resources in terms of restoration work opportunities. These people cannot make restoration work themselves due to lack of sufficient facilities. Tourism activities with positive outcomes also put negative stress on protected area. Intended modifications made by tourism services within, outside and around the historical buildings is main element of this stress.

Some problems related to restoration work are also found in the area. For example, due to lack of appropriate experts, non-specialists have conducted all restoration work during recent years. Sometimes this situation can make irrevocable damage to the structures. Conservation efforts are being conducted through individual format instead of integrated manner. As a factor of threat, air pollution in Safranbolu and Karabuk, in terms of future of World Heritage Site cannot be ignored (Somuncu, Yiğit, and Bölükbaşı-Ertürk, 2007).



Photo 17. New structures around WHS show discrepancy with the historic city. (M.Somuncu)



Photo 18. An abandoned historic mansion. (M.Somuncu)

4.2.9. Archaeological Site of Troy

Archaeological site of Troy have been inscribed on World Heritage List prepared by UNESCO World Heritage Committee with 849th number since 1998. That this property be inscribed on the World Heritage List on the basis of criteria ii, iv, and v:

- Criterion (ii) to exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on development in architecture or technology, monumental arts, town planning or landscape design;
- Criterion (iii) to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
- Criterion (iv) to be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance (UNESCO World Heritage Centre, 1998).

Archaeological Site of Troy is located at the southern entrance of the Dardanelle's Straits in the western end of Anatolia. The region was known as Troas in ancient times while nowadays it is defined, as Biga peninsula. The region is found at meeting place of continents of Asia and Europe near eastern Mediterranean, Aegean and Marmara seas. These area posses mix characteristics of Eastern and Western civilization after cultural diffusion for a long time. On the other hand, foundation of modern archeology was laid with endorsement of excavations activities since 19th century in this area. Continued excavation history for more than 130 years has led to the emergence of different residues in different periods in site area. Particularly, damage of sandstones used in the Hellenistic and Roman Period constructions more quickly due to effect of weathering by natural conditions has created major problems for the protection of remains of that period. Ruins specific to Troy are multi-layer therefore conservation and restoration is difficult in this area. In World Heritage Site there is lack of suitable footpaths that forces tourists to walk on original ruins, causing damage in some places. Environmental management activities of services sector at entrance are incompatible with attributes of Troy. The project of museum for exhibition of archaeological findings of Troy was started in 1990s but still not finalized (Somuncu, Yiğit and Aslan, 2007).

5. Conclusion and Recommendations

Keeping in view the universal natural and cultural value of World Heritage Sites, a total of 890 sites have been inscribed on UNESCO World Heritage List. Indeed, inscription of countries in this list provides prestigious position at international level. Protection and development of historical and natural assets within boundaries of these sites is obligation of concerning state. Countries having World Heritage Sites are liable for maintenance of these sites as signatory of World Heritage Convention (UNESCO, World Heritage Centre, 2005a). Besides, UNESCO also monitors the efforts conducted to accomplish this responsibility as international binding.

Turkey became participant country after signing the World Heritage Convention in 1983. Various Institutions, organizations and individuals relevant to World Heritage Sites in Turkey are making serious efforts for protection and development of these sites in appreciative way. Some of the stakeholders are aware of importance of activities for protection of these areas. There are some flaws and deficiencies in observation of related laws and administrative measures. Ongoing described issues are outcome of these vulnerabilities regarding protection of World Heritage Sites. Keeping in consideration the potential of country, it is possible to overcome these issues. Necessary measures have been taken after analysis during fieldwork and interviews with stakeholders regarding protection and development of World Heritage Sites of Turkey. Recommendations and suggestions has made in the light of prepared reports based on collected data during a workshop participated by all stakeholders. These can be outlined as:

- Fundamental reason of the problems related to World Heritage Sites is lack of adequate *Management Plan*. It is necessary to prepare appropriate management plans with effective implementation for nine World Heritage Sites of Turkey in order to deal with above discussed issues specific to these sites. Moreover, authoritative influence of more than one institution on management activities might create complexity and confusion regarding implementation. It is

required to establish an institution specific to these issues to carry out management practices related to these sites such as conservation and development more quickly and effectively. Participatory and holistic approach to prepare management plans for World Heritage Sites is necessary to deal the related issues more efficiently.

- Conservation and protection measures can be strengthening by identification of buffer zones for prevention of construction activities in the adjoining areas to World Heritage Sites. Because, buffer zones are an important tool for conservation of properties inscribed on the World Heritage List. All along the history of implementation of the World Heritage Convention, the protection of the “surroundings” of the inscribed properties was considered an essential component of the conservation strategy, for cultural and natural sites alike (Martin and Piatti, 2009:9).
- It is essential to develop and implement an efficient *Visitor Management Plan* in the framework of Management Plan for these sites. In this way visitors are required to travel in an informed and restricted manner by improving their knowledge, attitudes and behavioural variation towards protected status of the area. Thus, many historical ruins and natural values can be protected from harmful effects due to increased number of visitors.
- Strong efforts should be made to increase the awareness of local population living in the vicinity of World Heritage Site about significance of the site. For this purpose, information regarding values and benefits of the sites must be advertised in effective mode. Participation of relevant institutions, agencies and organizations to arrange public training programs on conservation activities can contribute a lot in this concern. It is not possible to conduct conservation activities in a steady manner, without support of the local population.
- Problems concerning these issues can be resolved more easily and promptly by formulation of continuous active protection measures and constant supply of financial resources.
- World Heritage Sites of Turkey with most prominent historical and natural values are important source of attraction for a large number of foreign and domestic tourists. Inscription of these areas on UNESCO World Heritage list has further increased their prestige and magnetism. Therefore, it is important to emphasis qualities of these nine World Heritage Sites in a distinctive fashion. It is important to consider written, visual and audio materials more attentively to highlight the features of sites. It is necessary to increase promotional activities in steady manner and at least half of tourism revenue should be spared for protection and management of these sites.

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